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PREFACE

"Ask someone to tell you the story of the blind men and the elephant, and they'll tell you a tale of six men, each of whom touched a different part of an elephant, unable to see what their hands were resting on. Asked to describe what they had touched, the man who felt the side of the elephant said, "I touched a wall," and the man who felt the elephant's tusk said, "I touched a spear." The six men argued among themselves--was it a snake, a cow, a piece of rope? Only when they worked together, sharing their different ideas and experiences, were they able to discover the truth.

National Academies defines interdisciplanary research as "a mode of research by teams or individuals that integrates information, data, techniques, tools, perspectives, concepts, and/or theories from two or more disciplines or bodies of specialized knowledge to advance fundamental understanding or to solve problems whose solutions are beyond the scope of a single discipline or area of research practice." The fields of business and economics are very suitable for interdisciplinary research. For this reason, we decided to create a global conference that feature research that spans to more than one discipline. We are very happy to repor that the first Globa Interdisciplanary Business-Economics Advancement conference attracted 163 very interesting papers from a diverse variety of fields within the areas of Business and Economics from 40 different countries. We thank our contributors and reviewers for making GIBA a truly global conference. The USB-stick also includes the abstracts and full papers with the program.

GIBA 2014 aimed to bring together researchers, scientists, scholar and scholar students to exchange and share their experiences, new ideas, and research results about all aspects of Business and Economics, and discuss the practical challenges encountered and the solutions adopted. University of South Florida Sarasota-Manatee, USA is proud to sponsor GIBA 2014 Conference. We would like to let you know that we plan to produce three conferences each year, one in the America continents, one in Europe/Africa and one in the Asia. We look forward to seeing you in Istanbul in July 2014 or Bangkok in February 2015.

Once again, we would like to thank all of our authors and reviewers for their contribution to GIBA 2014.

Co-Editors

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Table of Contents

GIBA 2014 Conference Proceedings

GIBA 2014 Conference Proceedings

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Crisis Forecasting in Ask and Bid Prices Formation Systems in Case of Precious Metals

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Abstract

We proposed the nonlinear dynamic model of the formation of the market prices of precious metals based on the econophysic considerations. This model is a system of three ordinary differential equations relating the time dependence of elasticity, variations of bid and ask prices; it is similar to the Lorenz system. The areas of the dynamic stochasticity in experimental data were found with the comparing of the experimental and the theoretical ask and bid prices. These areas are the precursors of the crisis mode in the form of dynamic chaos.

Keywords: Bid And Ask Prices of Gold, Nonlinear-Dynamic Price Formation Model, Dynamic Chaos.

Introduction

The world economy as a macrostructure and the economy of the enterprise as a microstructure in today's market conditions is daily exposed to various types of risks that can both positively and negatively affect all of us. The reason for this is that the economy as a macrostructure (process) consists of a set of threads that operate in different directions. The outstanding representatives of the opposing directions are the traders with the different objectives in the market. They are called "bulls" and "bears". "Bulls" expect the price increasing, while buying a particular asset cheaper and trying to sell it more expensive. On the contrary "bears" expect the price decreasing, signing a contract or put option.

Any event that occurs on the world stage can be the reason for a successful play of any party, but often the market players themselves initiate the cause for a profit (speculation). Often the certain position in the market, coupled with adverse random events, causes the stress of the market, which then develops itself into a crisis, manifested by the sharp fluctuations in the prices values and subsequent oscillations with the different amplitudes due to attempts of the market players to stabilize the market. Therefore the risk analysis is so important.

The special position among the risks for the most businesses take market risks associated with the prices of various goods, services, financial instruments, and etc. Thereby one of the major problems is the choice of a mathematical model for the evaluation, analysis and forecasting of time series values in the conditions of the crisis market, characterized by sharp fluctuations in prices.

When forecasting the prices in the conditions of the crisis market we can face a number of problems and the major one - the inability to adequately predict values. The reason for this is the fact that many of today's the most commonly used models are either strictly deterministic or stochastic. Both of them have their strengths and weaknesses.

Strictly deterministic models put at the forefront the crisis causes; herewith the estimation is often conducted exclusively on the previous values of the time series. It ignores the fact that the events that lead up to the crisis and, accordingly, to a burst of sharp fluctuations in market prices often have both causal (deterministic) and random character. Besides mathematical toolkit for the study of causal relationships within the time series is very narrow and cumbersome.

Stochastic models are usually based only on the randomness of events. Thereby the main tool is the generation of the random numbers with a particular distribution (often normal). Causal relations are often neglected in stochastic models (as a contrast to deterministic ones), because all the events happened in the market usually define as random. However, such models are very simple in construction and flexible to use.

A number of researchers analyzed some financial series and showed that these series can be described by the linear differential equations of finite order. Central place in the field of the nonlinear dynamic time series

analysis takes the problem of the constructing the mathematical model for the observed data, which is known as "reconstruction of dynamical systems" in nonlinear dynamics (Wang and Xu, 2006; Petrov *et al.*, 2003; Petrov *et al.*, 2002). The resulted empirical model can be used for a multitude of tasks, including the prediction, management, reconstruction of the non-linear characteristics, diagnostics of the interaction systems. Numerous methods for constructing models are developed, including the non-linear differential and difference equations. However, the examples of the successful application of these methods to simulate real economic processes are scarce. The most significant problem in solving such problems - the lack of a priori information about the mathematical structure of the dynamical system that generate the given time series. Usually the right parts of the reconstructed systems of the differential equations are the non-linear function series expansions. The parameters of such systems are evaluated by the special algorithms. The significant drawback of this approach is the lack of the detailed analysis of the economic substance of a number of members of the functional and, therefore, the control parameters of the system.

We attempted to eliminate this shortcoming by constructing the nonlinear dynamic model that describes the dynamics of the elasticity of the ask and bid prices, with the following approbation of this model in predicting the pre-crisis regimes in the precious metals market.

Nonlinear Dynamic Model of Price Formation

While constructing the non-linear dynamic model of a price formation on the precious metals market we assumed that the basis of the price formation dynamic is a basic dynamic structure that allows the mathematical formalization. We believe that the precious metals market is homeomorphic to the dynamic systems of the hydrodynamic type from the standpoint of macroscopic flows of a capital, goods and services in the phase space of the economic dynamic system. Therefore if the interacting counter flows arise in such systems then usually the phenomenon of generalized turbulence that generates the crisis modes of state development of such dynamic systems arises. Successful application of the hydrodynamic formalism for the economic system modeling can be seen in (Chen, 1988; Cai and Huang, 2007; Serletis and Shintani, 2006).

Let's determine the functions and variables of the state that will be used in the mathematical model of the non-equilibrium precious metals market:

- $Y_1(t)$ – localized variety of ask function;

- $Y_2(t)$ – localized variety of bid function;

- $X_1(t)$ – locally varying ask price;

- $X_2(t)$ – locally varying bid price;

- $Y_1^{(0)} = Y_2^{(0)} = Q_0$ – equilibrium values of the demand and supply functions in an equilibrium state of market;

- $X_1^{(0)} = X_2^{(0)} = P_0$ – equilibrium values of the ask and bid prices in the equilibrium state of the market $R = \langle P_0, Q_0 \rangle$;

- $[Y_i(t) - Y_i(t-1)] \equiv \delta Y_i(t) \equiv y_i, (i = 1,2)$ – volume variations of demand and supply near the equilibrium state $R = \langle P_0, Q_0 \rangle$;

- $[X_j(t) - X_j(t-1)] \equiv \delta X_j(t) \equiv y_j, (j = 1,2)$ – ask and bid prices variations near the equilibrium state $R = \langle P_0, Q_0 \rangle$;

- $F_1(x_1, x_2)$ – function of aggregated demand to aggregated product market as a function of various kinds of prices;

- $F_2(x_1, x_2)$ – function of aggregated supply to aggregated product market as a function of various kinds of prices.

If the variations x_1 and x_2 and the prices are small, then with a good degree of accuracy, we can get the Onsager relations in the matrix representation that relates the extensive (y_1, y_2) and intensive (x_1, x_2) variables

$$\vec{y} = \widetilde{A}\vec{x} \tag{1}$$

In matrix equation form (1): $\vec{x} = (x_1, x_2)$, $\vec{y} = (y_1, y_2)$, $\widetilde{A} = \begin{pmatrix} \dfrac{\partial F_1}{\partial x_1} & \dfrac{\partial F_1}{\partial x_2} \\ \dfrac{\partial F_2}{\partial x_1} & \dfrac{\partial F_2}{\partial x_2} \end{pmatrix}$.

Economic dynamic should induce a temporary change in variation price $\vec{x}$ in virtue of deviation of demand $Y_1(t)$ and supply $Y_2(t)$ from their equilibrium value $Y_1^{(0)} = Y_2^{(0)} = Q_0$. Approximately this dynamic can be represented in a system of ordinary differential equations form:

$$\frac{d\vec{x}}{dt} = \widetilde{K}\vec{y} \tag{2}$$

where $\widetilde{K}$ – matrix of the dynamic conjucture of the market.

Simultaneous solution of the equations (1) and (2) gives the equation that describes the nonequilibrium dynamics of economic-dynamic system:

$$\frac{d\vec{x}}{dt} = \widetilde{L}\vec{x} \tag{3}$$

where $\widetilde{L}(t) = \widetilde{K}\widetilde{A}$ is a matrix that defines the dynamics of the considering dynamic system.

We represent the vector-matrix equation (3) as a system of two differential equations with two unknowns:

$$\begin{aligned} \frac{dx_1}{dt} &= L_{11}x_1 + L_{12}x_2 \\ \frac{dx_2}{dt} &= L_{21}x_1 + L_{22}x_2 \end{aligned} \tag{4}$$

where L_{ij} – elements of the matrix $\widetilde{L}$.

Let's make the economic and non-linear dynamic analysis of the system (4). If in the second equation of the system (4) $x_1 \cong 0$, then $\dfrac{dx_2}{dt} \cong L_{22}x_2$. Since $X_2(t)$ relaxationly approaches to P_0, then $L_{22} < 0$ and the relaxation time $X_1 \to P_0$ is $\tau_{12} \cong 1/|L_{22}|$. Near the state of dynamic equilibrium $|x_1| \cong |x_2|$ should also appear the states $\dfrac{dx_2}{dt} \cong 0$, which is possible if $|L_{22}| \cong L_{21} = 1/\tau_2$. Therefore, up to the first order (by x_1 and x_2) second equation (4) becomes:

$$\frac{dx_2}{dt} \cong -\frac{1}{\tau_2}(x_2 - x_1) \qquad (5)$$

Similar arguments regarding the coefficients of the first equation of system (4) lead to the fact that $L_{11} = 1/\tau_1$, where τ_1 – the characteristic relaxation time $X_2 \to P_0$. If $|x_1|$, $|x_2|$ sufficiently small, then $L_{12} = const$. In this case the solution of (4) will be a noisy relaxation oscillations near the equilibrium position $R = \langle P_0, Q_0 \rangle$.

As the amplitude of variant deviations $X_1(t)$, $Y_2(t)$ from $R = \langle P_0, Q_0 \rangle$ increases variations of ask and bid prices x_1 and x_2 start "hitching up" to each other. The simple nonlinear interaction between supply and demand appears in the system (4). Consequently, there is a relationship between the variables x_1 and x_2 that expresses the elasticity of x_1 on the x_2.

Let

$$L_{12}(t) = L_{21}E_{12}(t) \qquad (6)$$

where E_{12} – the elasticity of x_1 on the x_2.

For convenience of the further computer simulation let's renormalize all the values of (4) and introduce the dimensionless time T:

$$T = \frac{t}{\tau_1}, dT = \frac{dt}{\tau_1} \qquad (7)$$

Multiplying (5) to τ_1 and taking into account (7) we obtain the following equation:

$$\frac{dx_2}{dt} = -\sigma(x_2 - x_1) \qquad (8)$$

where $\sigma = \frac{\tau_1}{\tau_2}$.

Factor σ shows the way the speeds of the relaxations $X_1, X_2 \to P_0$ relate to each other, so it represents the relative sensitivity to changes in market ask and bid prices. If $\tau_1 < \tau_2$, there is a lag reaction effect of ask price for rapid change in the bid price, which leads to a certain dynamic effects.

Taking into consideration (6) and (7), the first equation (4) takes the form:

$$\frac{dx_1}{dt} = -x_1 + \tau_1 L_{21}E_{12}(t)x_2 \qquad (9)$$

Value $E_{12}(t)$ will be regarded as an independent dynamic variable, represented in the following form. The essence of nonequilibrium dynamics of the market allows us to conclude that nonlinear differential equation for $E_{12}(t)$ approximately has the following form:

$$\frac{dE_{12}(t)}{dt} = -eE_{12}(t) + kx_1x_2 \qquad (10)$$

where k, e > 0 – invariables, $e = 1/\tau_E$, τ_E – characteristic relaxation time $E_{12}(t) \to E_{12}^{(0)}$, $E_{12}^{(0)}$ – elasticity in the equilibrium system state.

We obtain the following equation by defining $C = \tau_1 L_{21}$, $K = \tau_1 k$, $\beta = \tau_1/\tau_E$ and multiplying (10) to τ_1:

$$\frac{dE_{12}}{dt} = -\beta E_{12} + K x_1 x_2 \tag{11}$$

Now we introduce some characteristic scale of elasticity λ, and with this in mind, the new redefined values:

$$\rho = \frac{E_{12}^{(0)}}{\lambda}, z = \rho - \frac{E_{12}}{t}, x = \sqrt{\frac{K}{C}} x_1, y = \sqrt{\frac{K}{C}} x_2, \dot{x} = \frac{dx}{dT}, \dot{y} = \frac{dy}{dT}, \dot{z} = \frac{dz}{dT} \tag{12}$$

Considering (12) the system of the ordinary differential equations takes the form:

$$\dot{x} = -\sigma(x - y)$$
$$\dot{y} = \rho x - y - xz \tag{13}$$
$$\dot{z} = -\beta z + xy$$

System (13) and the control parameters (σ, β, ρ), known as the Lorenz system (Hirsch et al., 2003), describe the dynamics of the variations of ask and bid prices, as well as the dynamics of elasticity. Lorenz system describes the dynamics of many physical systems - convection in a layer convection in a circular tube, single-mode laser, and the economic system. While researching the price dynamics we use classical parameter values $\sigma = 10$, $\beta = 8/3$.

We point out the main features of the solution of the Lorenz system (Hirsch et al., 2003) without the detailed conclusions.

Stationary points of the system are:

$$O = (0,0,0), O_1 = \left(\sigma\sqrt{\rho-1}, \sigma\sqrt{\rho-1}, \rho-1\right), O_2 = \left(-\sigma\sqrt{\rho-1}, -\sigma\sqrt{\rho-1}, 1-\rho\right) \tag{14}$$

Point O is stable for $\rho < 1$ (low elasticity in equilibrium) and unstable (cease to be an attractor) for $\rho > 1$ (Fig. 1a). From the point of view of the classification of the stationary points, with $\rho < 1$ is a stable node and $\rho > 1$ – the saddle-node. Consequently, the concept of the equilibrium price makes sense only at a low elasticity.

1a. $\rho = 0.8$	1b. $\rho = 10$	1c. $\rho = 24.06$
1a. $\rho = 28$	1d. $\rho = 100$	1e. $\rho = 166$
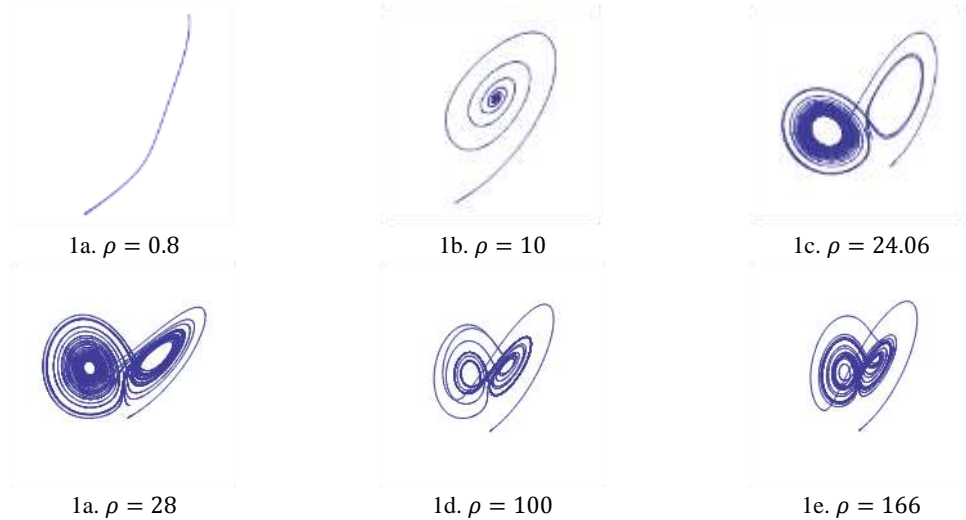
Fig. 1. Lorenz system trajectories

Stationary points O_1 and O_2 exist for $\rho > 1$.

15

Phase trajectories spirally converge (damped oscillations) to points O_1 and O_2 for $1 < \rho < 13.927$ (Fig. 1b). If the trajectory leaves the origin, then after making a complete turnaround from one of the stable stationary points it comes back to the starting point (for $\rho > 13.927$). There are two homoclinic loops, for which the trajectory goes out and comes in the same position of equilibrium. When $\rho > 13.927$, the trajectory comes into the one of two stable points depending on the direction. Homoclinic loops convert to unstable limit cycles. When $\rho = 24.06$ trajectories asymptotically approach the unstable limit cycles (Fig. 1c). When $\rho \geq 28$ chaotic "jumps" of the representing phase point from the one attracting center $O_1 \leftrightarrow O_2$, to another appear in the system (Fig. 1d). Such "jumps" and "winding" the phase trajectory on the centers of gravity O_1 and O_2 are very complex and can't be computed analytically. As $T \rightarrow \infty$ the net of the phase trajectory fills a special area near the attracting centers O_1 and O_2, which is called a strange attractor (Lorenz attractor).

When $\rho \in (98,100)$ system moves into a self-oscillation mode. Thus decreasing this parameter leads to the observing of the transition to chaos through a sequence of period-doubling (Fig. 1e). There is another scenario for the transition to chaos - transition to chaos through intermittency, which is observed in the system with $\rho \approx 166$. Intermittency is the alternation of smooth (laminar) and irregular areas (turbulent) regions (Fig. 1f).

Results and Conclusions

The problem we solve needs the comparison of the theoretical and the experimental data (taken from Bloomberg system) of ask and bid prices for gold. The aim is to compare the experimental and the theoretical data with the particular algorithm of minimization of the residuals. In this case the input are the values $x[i]$, $y[i]$, $z[i]$ ($i=0\ldots$n-1), the output - $x[i+1]$, $y[i+1]$, $z[i+1]$ ($i=0\ldots$n-1). Thus the given problem reduces to the problem of the ρ, β, σ parameters computation, that were calculated with the method of steepest descend. In this case, the criteria:

$$\begin{cases} x[i] - \widetilde{x}[i] \rightarrow \min \\ y[i] - \widetilde{y}[i] \rightarrow \min \\ z[i] - \widetilde{z}[i] \rightarrow \min \end{cases} \qquad (14)$$

where $\widetilde{x}[i], \widetilde{y}[i], \widetilde{z}[i]$ - the values, that were calculated with the system (13).

During the optimization (14) we calculated the values of ρ, β, σ parameters. These parameters can't be constant because of instability of the market system, so in this case it is necessary to pick out the intervals of the parameter comparative constancy. Parameter ρ is the control parameter of the system (13), which defines the system dynamic character (determinated or stochastic). We distinguished the intervals of the determinacy and the dynamic chaotic state of the system (13) solution. If $\rho \in (0, 23.7), (99.2, 99.5), (146, 165)$ and $\rho > 215$ then we can see the regular (determined) relations of the ask and bid prices and time. If $\rho \in (23.7, 99.2), (99.5, 146)$ and $(165, 215)$ then the chaotic relations of the ask and bid prices and time can be observed. Thereby we considered the big variety of the pre-crisis intervals and did not limit ourselves with the considering of the intermittency areas and the double period areas.
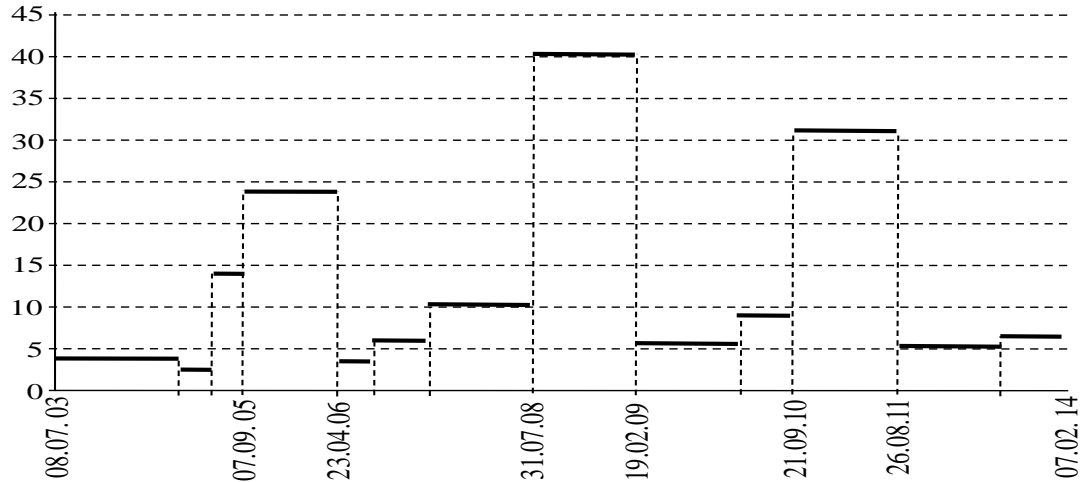
Fig. 2. ρ parameter constancy intervals

The algorithm of the fragmentation of the experimental relation ρ(t) to the intervals of ρ parameter constancy is the following. The first aim is to form the first constancy interval $\rho = \rho_1$ with the sequential adding of the experimental values $\rho(t_1), \rho(t_2), ..., \rho(t_m)$. The criteria of the necessity of adding $\rho(t_{m+1})$ to the first interval is the constancy or the insignificant ρ_1 value variation.. If the variation is significant then we can start considering the second parameter constancy interval and etc. The diagram of the ρ parameter constancy intervals and the appropriate values of this parameter for the observing market ask and bid prices is presented on the Fig. 2. This diagram gives us the opportunity to define the intervals with the determined and the chaotic dynamics of the market prices.

For the better visibility the values the ρ parameter, that is relative to the chaotic dynamics, are presented on the chart with the time series of the ask and bid prices (Fig. 3)

Fig. 3. The dynamics of the ask and bid prices of gold and the intervals of stochasticity

17

Generally we detected four areas of the dynamic stochasticity in the experimental values of the ask and bid prices of gold that precede the crisis states (significant variety of the price) in the gold market (25.04.2006, 19.02.2009 и 26.08.2011).

Discussion

Despite the number of assumptions underlying our model of ask and bid prices formation for the precious metals market, this model allows to predict the pre-crisis regimes in this market with a good accuracy. We think that the main direction of the improvement of the model firstly should be associated with the transition from the hard to soft type of the system of formation of the market prices. In this case it is necessary to take into the account the time dependence of the control parameters: $\sigma=\sigma(t)$, $\beta=\beta(t)$, $\rho=\rho(t)$. In subsequent researches we plan to establish the explicit form of the relations of the control parameters of the time corresponding to a particular experimental time series of prices using neural network modeling. Ask and bid price formation model that is enhanced in this way and its subsequent computer implementation is going to be effective information system of the early detection of the crisis modes of the market.

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The European Common Single Market in the Context of Taxation

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Abstract

Formation of a single market is one of the main priorities during the integration process of the European Union. For this purpose it was planned to unify tax rules throughout the entire Community. The main question of this paper is, whether the European Union has been meeting the objective of single market. It focuses on a question, whether the tax systems converge in the context of tax burdens and tax rates. Beta and Sigma convergences are used for meeting the goal of the paper. The results suggest evidence of a convergence in the field of tax burden and tax rates during the analyzed period. The results also highlight the fact of a possible influence of EU integration as well as of globalization and tax competition issues.

Keywords: Convergence, Tax burden, Tax rates,EU, Beta convergence, Sigma convergence

Introduction

Currently, the European Union is a unique community that combines both economic and political partnerships. The first step in European integration consisted in strengthening economic cooperation between The Member States whose goal was to establish a single market. That means free movement of goods, persons, services, and capital (The European Commission, 2010) and a common currency, the euro (Helísek, 2013 for a detailed discussion on that issue).

If a country wants to join the European Union, first, it needs to go through accession negotiations. Basically, it is an agreement on how and when the candidate country adopts and implements rules and procedures of the contemporary members of the Community. However, the negotiations also include financial matters (e.g. contribution of the new member into the EU budget) or possible transitional measures and exceptions. As a result, the original purely economic-oriented cooperation gave birth to a community that is now cooperating in a number of areas. Among others, these include the tax policy that – through harmonization – can contribute to the creation of a single market by eliminating distortions that arise by transitions between individual Member States.

Tax-coordination, as a tool for avoiding the emergence of very diverse politics, and tax-harmonization, as a tool for approximation of tax rates, has been a subject of much debate since the beginning of the European integration. The issues of coordination, approximation, and harmonization of tax systems in the EU are discussed, for instance, in (Kubátová, 2010) or (Láchová, 2007), who make readers familiar with various directives and regulations that affect the tax systems of the Member States.

Reuven (Reuven, 2010) believes that convergence is a positive phenomenon because it reduces the scope of "unfair" tax arbitrage for the price of higher transaction costs. All Member States would be able to benefit from the single tax system and no distortions would emerge. However, tax convergence has supported as well as opponents. Kubátová (Kubátová, 2004) classifies as positive prevention of tax evasion or facilitating of free movement but she also points out the tax convergence allows governmentsto waste of public finance or sustains "police state" due to requesting of information. Cultural dissimilarities and freedom of adopting tax legislation, which are based on different structures, are the main arguments to reject the convergence of taxes. Another negative aspect is a loss of tax competitiveness of individual Member States (Mach, 2004).

Despite this, the European Union has been still trying to harmonize taxations, what should help in creation of the single market. This aim leads to one tax system entire the Community where all Members will have the same advantages.

This paper aims to verify whether there is a convergence between the tax systems of the Member States in terms of convergence of tax burden, tax mixes and tax rates of the Member States and whether the EU meets its main objective.

The Beta-convergence is used to verify the objective of this paper (Barro, 1992). It is usually used for analysis of gross domestic products (Baumol, 1986) or (Boyle, 1999). Esteve studies the tax burden with the six main subdivisions of the OECD tax classification for 1967-1994 by using unit root tests with a change (Esteve, 2000). Delgado deals with the total tax burden in 1965-2004 taking several benchmarks and their results suggest a reduced number of convergence paths (Delgado, 2006).

Data

The source of the data is secondary information provided by the OECD (OECD, 2012) and European Commission (European Commission, 2007 and 2012). Tax mixes are divided in classes according to the OECD classification, and the missing data was left out for the purposes of the following analysis.
Used currency is The United States dollar for the reason that Euro has not existed in all reference period.
To analyze the convergence of tax rates was used only a limited period of time due to unavailability of data. These time periods are mentioned always and the time periods are longer than ten years as well. The only limitation of that is that speed of Beta convergence is not comparable.

Methodology

The aim of this paper is to analyze whether there is convergence in the area of tax burden and tax mixes in the EU countries. A *tax burden* is understood as the overall tax burden, which is determined as a proportion of the total tax revenue (social contribution included) to GDP.

In other words, it is a macroeconomic indicator which reflects the overall level of tax burden. The *tax mix* refers to the structure of the tax burden, or, alternatively, what is the share of individual taxes in the total tax revenue. This indicator may be used, for instance, in examining whether a country tends to prefer direct or indirect taxes.
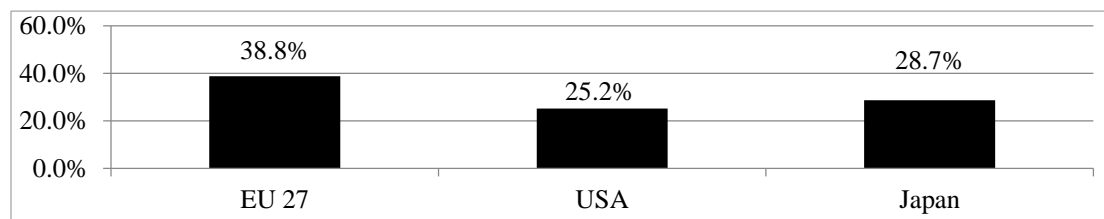
Fig.1 Tax burden (incl. SSC) in the EU, US and Japan in 2011 (%)

The paper uses abbreviations for the individual groups of taxes. TB denotes tax burden, TOI stands for taxes on income and gains (number 1000 in the classification of OECD), SSC for social security contribution (2000), TOW for taxes on payroll and workforces (3000), TOP for taxes on property (4000), TOG for taxes on goods and services (5000), OT for other taxes (6000).

Structure of Tax mix in the Czech Republic			
Taxes on income (TOI)	20.34%	Tax on wages (TOW)	1.75%
Social security contribution (SSC)	44.06%	Tax on goods and services (TOG)	33.84%
Other taxes (OT)	0.01%	Tax on property (TOP)	<0.00%

Tab. 1 Example of the tax mix of the Czech Republic in 2011

The term "*European Union*" includes 27 Member States. Croatia was not included in the sample due to missing data. Using *purchasing power parity* rate (PPPs) estimates an amount of money thus has the same purchasing power in different countries

However, the consideration of tax revenue as a proportion of GDP provides limited information as no insight is given as to whether, for example, a high share of capital taxes in GDP is a result of high tax rates or a large capital tax base. These issues are tackled through the presentation of *implicit tax rates* which do not suffer from this shortcoming. The important thing is the statutory tax rate may includes, in addition not only nominal tax rate but temporary, permanent rates or any additional relief as well, is also levied in various countries in various levels of governments and their construction is different in the EU countries. Statutory tax rates cannot negotiate the role of objective indicators for mutual international comparisons (Blechová, 2008), (Szarowská, 2008). This indicator is useful to monitoring the convergence of tax rates on corporate income tax.

The *net personal average tax rate* is a measure of an employee's total wage-based tax burden. It is the sum of personal income tax plus employee social security contributions, less cash benefits as a percentage of gross wages. The net personal average tax rate is represented diagrammatically bellow.
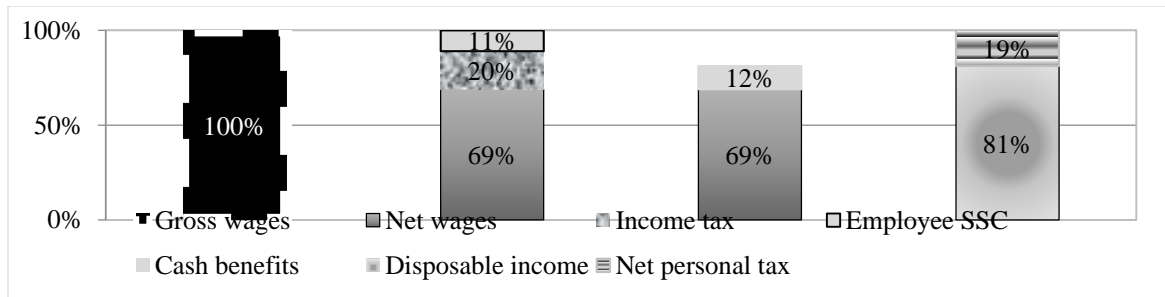
Fig.2 The net personal average tax rate

The methods used were the causal analysis and synthesis of the information obtained, as well as induction and deduction, the application of which results from the need to create an objective and systematic quantitative description of the issue. Other methods for meeting the objective are specified below.

Arithmetic Mean

The mean was used to determine average values for the whole EU (27 Member States considered).

Beta Convergence

This method was used also in Barro (1992), Rivero (2006), Furcedi (2005) or Slavík (2007). The Beta convergence considers growth of variables in dependence on the initial values (the so-called "Barro regression"). The concept of convergence focuses on the fact that countries with initial values which are more different from the European average approach it faster than countries with values closer to the average. In this case, the paper deals with the approximation of the tax burden and tax rates of individual countries to the European average values. This approach allows for estimation of the annual growth rate or rate of β-convergence.

$$\ln\left(\frac{y_t}{y_0}\right) = \alpha + \beta \ln(y_0) + \varepsilon \tag{1}$$

where *t* is the last year of the analysis (2011), 0 is the initial year of the analysis (1965 or the year of a country's accession to the EU), y represents the value of tax mixes in different time periods or the tax burden, α is a level constant, β is the regression coefficient whose significant negative value indicates the Beta convergence (in other words, approximation of observed variables), and ε is a random component.

The equation (1) expresses the growth rate of the tax mix / tax burden (left side of the equation), which depends on its initial level (y₀), or more precisely on its difference from the average level in the EU. Twenty observations were used for both variants, and the missing values were abstracted. Furthermore, it should be emphasized that the Beta convergence is a condition for the Sigma convergence, where the Sigma convergence uses absolute values. However, this relationship does not have to work conversely (Slavík, 2007).

Sigma Convergence

The Sigma convergence is based on the development of variance in time. This variance can be analyzed using various indicators; here, it is the standard deviation.

In statistics and probability theory, the standard deviation (often denoted by the Greek letter sigma σ) is a measure of the deviations from the average (mean) value. A low standard deviation indicates that the data points tend to be very close to the mean (also called expected value); a high standard deviation indicates that the data points are spread over a large range of values. The standard deviation is the most widely used measure of variability. Therefore, the lower the standard deviation, the higher the convergence will be.

$$\left| \sigma = \sqrt{\frac{1}{n} \sum_{i=1}^{n} (a_n^i - E(a)^2)} \right| \tag{2}$$

where σ is the standard deviation, a_i is the amount of the tax mix of *i*-th year and *n*-th state, *E(a)* represents the arithmetic mean of the EU. The Sigma convergence is constructed in order to obtain additional information about the development of the Beta convergence, which is not able to provide this information (Slavík, 2007). The smaller the standard deviation the higher the convergence (and vice versa).

Results

European Tax Burden And Tax Mixes

	TB	TOI	SSC	TOW	TOP	TOG	OT
β	-0.879	-0.537	-0.262	-0.529	-0.394	-0.905	-0.619
t	-7.563	-3.622	-1.956	-1.911	-3.151	-4.675	-2.61
P-value	$< 10^{-4}$	0.002	0.065	0.098	0.005	$< 1,6 * 10^{-4}$	0.026
R^2	0.751	0.422	0.168	0.342	0.343	0.535	0.405

Tab. 2 Beta convergence of fiscal pressure in the EU area in 1965 – 2011

The summary of the results is provided in the tables above. The negative slope of coefficient β represents the convergence of the *tax burden*. The coefficient of determination even points to the fact, that the initial values in the model are able to explain about 75% of the variance rate of convergence in the analyzed period. The analysis of tax burden presents the convergence of variables during the entire period. It means the approximation of tax burden in the Member States during 1965 - 2011. The table above shows the convergence over the whole period between 1965 and 2011 both in groups of tax mixes as well. It means tax burden and its structures converged.
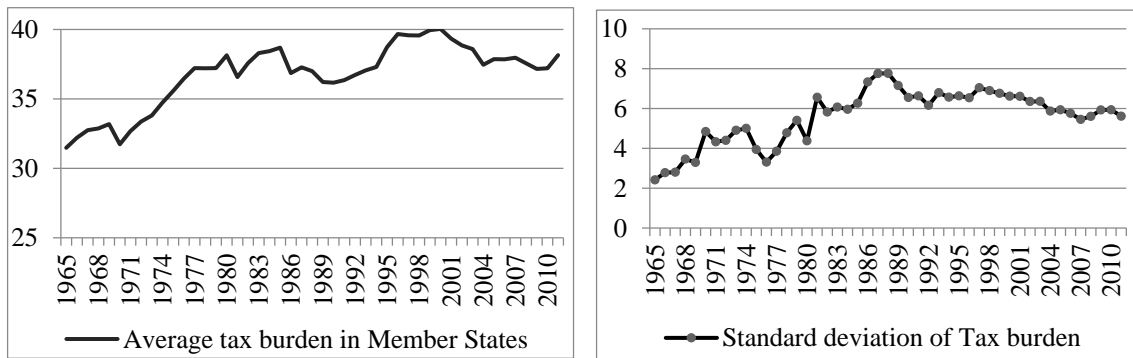
Fig.3 Sigma convergence of tax burden in the EU during 1965 – 2011 (tens of %)

As mentioned above, Sigma convergence completes the picture of Beta convergence and is used in order to obtain additional information about the development of the Sigma convergence in the analyzed periods. Large values of the standard deviation indicate a larger level of divergence and vice versa. An increasing tendency of the curve

indicates a divergence, while a decreasing tendency reflects the convergence of tax burden, tax mixes and implicit tax rates.

Since the mid-1980s, the European area has been a "high tax" zone. As can be seen from Graph 3, the increase in the overall tax levels of tax burden took place in two successive waves. The increase of total revenue as a share of GDP was driven, with a lagged effect, by the rapid growth of government expenditures that began in the 1960s and continued until the mid-1990s. While differing in size and composition across countries, the general growth of expenditures was mainly the result of increased social transfers in the 70s and 80s, which were triggered by political measures taken a decade earlier, as well as by the need to confront a sharp economic slowdown and an increasing level of unemployment that followed the first and second oil price shocks.

Graph 3 presents the change in the growing trend of the standard deviation in 1987 as well, from which point there is convergence of the overall tax burden in the EU. It is caused, inter alia, by tax competition (Eckstein, 1964) that was begun by Ronald Regan in the USA (CNN MONEY, 2010) and by Margaret Thatcher in the United Kingdom (BBC, 2014).

Interesting is the end of the analyzed period as well (the period of 2007 – 2011), when the global economic crisis shocked the EU and taxations diverged. The crisis (together with measures of fiscal policy adopted in the countries) had a strong impact on the level and composition of tax revenue in 2009-2011, although the first effects had already become visible in 2008. It should be noted, that even when using accrual methods of recording, the effects of changes in legislation or economic activity tend to have a delayed impact on tax revenue. In 2011, tax revenues in terms of GDP increased substantially, which was due to absolute tax revenues, but nominal GDP growing less than tax revenues. This reflects pro-active tax measures taken by Member States during the last years to correct their deficits. This recovery in tax revenues can at least partly be attributed to active revenue raising measures in some Member States such as increases in the VAT rate and the introduction of new taxes, such as additional taxes on financial institutions (bank levies, surtaxes, and payroll taxes), air passenger duties and property taxes. Should any specific historical events occur, the tax burden increases in the whole Community, however, a divergence of individual states' tax systems may occur as well.
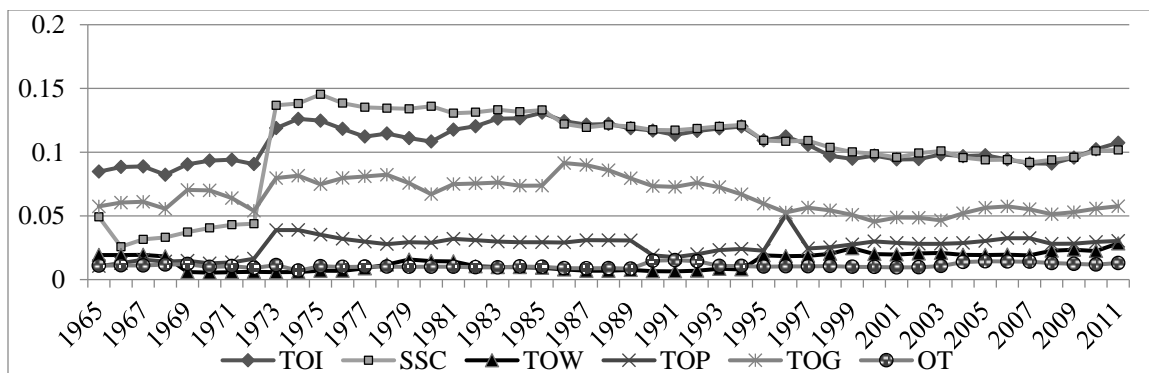
Fig.4 Sigma convergence of Tax Mixes in the EU during 1965 – 2011 (%)

Until 70s, there is noticeable divergence in the tax mixes of social security contributions (*SSC*), taxes on income (*TOI*), indirect taxes (*TOG*). Reasons for are the same that for tax burden, oil shocks and special legislative arrangements. Until 1985 the divergence turns into convergence. The reason for turnover in indirect tax mixes may be the mandatory introduction of value added tax in the EU Member States as well, which took place in the 1980s.

According to the Sigma convergence, the tax mixes of property taxes (*TOP*) and other taxes (*OT*) do not meet the convergence objective, however, in this case, it is not possible to claim that there is divergence as the Sigma convergence is not a condition for confirmation of the Beta convergence, which was not refuted in these taxes in the period 1965 – 2011 (Slavík, 2007).

European Tax Rates

	Corporate income tax rates 1995 – 2011		Social contribution rates 1981 - 2011			Personal income tax rates 2000 - 2011	
	statutory	implicit	employer	employee	self-employed persons	statutory	marginal
β	-0,466	-1,137	-0,745	-0,198	0,025	-0,764	-0,777
t	-1,652	-2,725	-2,656	-0,981	0,193	-2,306	-2,635
P-value	0,111	0,016	0,020	*0,352*	*0,849*	0,038	0,022
R^2	0,098	0,347	0,352	0,097	0,002	0,290	0,367

Tab. 3 Beta convergence of personal income tax rates, corporate income tax rates and social contribution rates in the European Union

In the period of 1995 - 2011 the approximation of *statutory tax rates on corporate* income Beta convergence verified. A more appropriate measure for comparing the tax burden of corporations appears to be an effective corporate tax rate (*the implicit tax rate*). It this case, Beta convergence is confirmed at the significant level and the convergence is also faster than at the statutory tax rate level (Beta coefficient has got higher negative value).

Dependency is not significant and the level of significance is higher than 35 % at the rates *of social security contributions for employees*. Next subject of the analysis was the Beta convergence of *the rates of social security contributions for employers and self -employed persons as well*. The rates for employers showed convergence. It was verified as the significance level non exceeded 2%. Differently, the significance level was high in the rates of social *security contributions for self-employed persons*. Therefore, neither here it can verify convergence of these rates in the EU during the analyzed period. In contrast of taxes, which are harmonized in the EU, social insurance is a subject of coordination only (Široký, 2010). It means for example that they are only appointed criteria determine the country where the insured has to participate in the system of social insurance (European Commission, 2004). However, the method of Beta convergence verified the convergence of social contribution rates at the level of employers during thirty years of 1981 – 2011.

	Net average tax rates of personal income tax rates during 2000 - 2011							
	67 % average earnings-single	100 % average earnings-single	167 % average earnings-single	67 % average earnings 2 children - single	100 % average earnings 2 children - single	100 % average earnings 2 children + 33 % other incomes - couple	100 % average earnings 2 children + 67 % other incomes - couple	100 % average earnings + 33 % other incomes - couple
β	-0,187	-0,19¨2	-0,187	-0,514	-0,202	-0,0608	-0,161	-0,087
t	-2,380	-2,197	-2,380	-2,167	-3,270	-0,415	-1,467	-0,957
P-value	0,028	0,041	0,028	0,053	0,005	*0,683*	*0,159*	*0,351*
R^2	0,229	0,203	0,23	0,3	0,386	0,009	0,102	0,046

Tab. 4 Beta convergence of net personal average tax rates during 2000 - 2011

To verify whether tax rates of personal income tax converge, several viewpoints were examined. The analysis of statutory tax rates and marginal tax rates was performed at fist. The convergence was confirmed there, nevertheless as mentioned above; the statutory tax rates do not provide an objective view of the tax burden. It is the reason *for net personal average tax rates*[1] were analyzed during the same period as well. These rates were established for different income groups of employees in their specific social situation. The analysis confirmed the convergence of net personal average tax rates for all tax-payers whose earn an average wage or less, regardless of childless or wedded. In contrast, the convergence was not verified for the high-income residents who earn more than the average wage of their Member State[2].

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[1]Description see chapter 3. Methodology.

[2]Exceptions are only unmarried individuals whose income represents 167% of the average wage. At this level the convergence was verified as well.

	Value added tax rates 1967 - 2011		VAT Registration limits 2000 - 2011
	standard	reduced	
β	-0,802	-0,973	-0,859
t	-13,866	-4,322	-6,186
P-value	$< 1*10^{-5}$	$< 2,3*10^{-4}$	$< 2*10^{-5}$
R^2	0,885	0,438	0,732

Tab. 5 Beta convergence of value added tax rates during 1967 - 2011

In the context of indirect taxes, the tax harmonization is at high level there and it was not surprising when Beta convergence results presented convergence of *standard VAT rates and the reduced VAT rate* in the EU Member States as well. The results of the Beta convergence were similar only the speeds of convergence were different.

The convergence of *registration limits* to VAT was the object of analysis as well because oftax optimization of a future taxable person. Registration limits were monitored in USD in current prices of PPPs[3] for comparable results. There was even the convergence confirmed as well and it means the turnover from which it is necessary to register to VAT in the EU converges.

Rates of excise duty										
	alcohol	mineral oils - oil	mineral oils – industrial oil	mineral oils – oil for heat	beer	sparkling vine	still vine	tobacco	cigarettes	cigars
β	-0,890	-0,933	-0,997	-0,725	-0,487	-0,172	-0,024	-0,043	-0,108	0,010
t	-10,902	-15,715	-3,336	-2,640	-4,297	-1,808	-0,335	-0,314	-0,860	0,056
P-value	$<1*10^{-5}$	$<1*10$-5	$<5*10^{-3}$	0,019	$<4*10^{-4}$	0,098	0,747	0,762	0,402	0,957
R2	0,875	0,943	0,443	0,317	0,506	0,229	0,016	0,012	0,042	$<4*10^{-4}$

Tab. 6 Beta convergence of excise duty rates during 2000 – 2011

The *excise duty rates* were the next object of monitoring. These rates are imposed in fixed rates therefore the USD in current prices of PPPs[4] was used for comparable results. The excise duty rates on mineral oils and alcohol were imposed on 1,000 liters. The excise duty levied on beer the tax rate is per hectoliter of beer on the degree of alcohol, on tobacco the tax rate is to 1000 g, on cigarettes the tax rate is for one piece and on cigars the tax rate is for 1,000 pieces. Beta convergence confirmed the convergence of all excise duty rates with exceptions of still wine, cigarettes, cigars and tobacco. Result of that is nearly based on different historical positions of Member States for these goods[5].

Sigma convergence was abstracted for the tax rates, because of different time period and a lucidity of the paper.

Conclusion

The results presented use the traditional neo-classical methods for finding out convergence of tax systems of European countries. The paper deals with the question of whether the European Union fulfils the objective of a single market also in the field of tax policy. In that area based on all assumptions, there should be convergence of tax systems of the Member States, with aim to eliminate distortions arising from the transition between individual Member States.

To meet the objective the methods of the Beta and Sigma convergence were used. The Beta convergence between 1965 and 2011 of the group of all 27 Member States confirmed the existence of convergence of tax burden and tax mixes (graded according to the OECD classification) as well. The Sigma convergence completes the overall picture of convergence of the tax mix and tax burden. In the tax burden, in this case

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[3]Descriptions see chapter 3. Methodology.
[4] Description see chapter 3. Methodology.
[5] For example, France and Sweden have got absolutely contradictory attitude towards the vine.

(using the Sigma convergence), convergence was confirmed since 1985, as well as in the tax mix of income taxes and indirect taxes.

However, since the convergence of the tax burden and its structure do not imply the convergence of the overall taxation, it also performed an analysis of tax rates. The Beta convergence verified the convergence of statutory corporate income tax rates and the same results presents for personal income tax rates, where statutory and marginal rates converged as well. But it is not objective evidence, therefore implicit tax rates were analyzed for corporate income tax and net average tax rates of personal income tax established for different income groups of employees in their specific social situation as well. These tax rates converged according to Beta convergence during analyzed periods as well. Only exceptions are high-earnings taxpayers in couples. The convergence of social security contributions rates of employers and indirect tax rates (VAT registration limits included and excise duty rates) was verified with small exceptions too.

The result of the analysis is the statement that the taxations have been converging in the European Union throughout the entire analyzed period of 1965-2011. The evidence of a convergence of tax burden, tax mixes and tax rates can be seen as a proof of that hypothesis. EU Member States were successful in performing the task of unification and creation of a single market without distortions, from which all Members would benefit. However, it should be noted that there is no academic consensus over the question whether the convergence of tax systems is the right way, considering the aspects of different economic structures and political preferences together with national fiscal autonomies of Member States, as well as their different needs and objectives (Emerson, 1992).

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Bitcoin's Future in Derivatives Markets

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Abstract

While virtual, bitcoins have come up to be part of real life. For the last several months they have gained popularity and appeared in the economic news and analyses. Regulators and analysts started discussions about the essence of bitcoins, their legality, and need of regulation. While most of the officials do not accept them as "money", it is possible to use them for payments in more and more places, as well as to trade them on several exchanges. Furthermore, financial markets do not sleep and different derivatives on bitcoins are already created and offered to investors willing to bet on their future. The purpose of this paper is to present the essence of bitcoins, the reasons for their recent fame, their current place in the economy and their prospects, as well as the derivative products that are invented and the impact they could possibly have on the bitcoin market.

Keywords: Bitcoin, Currency, Trade, Derivatives

Introduction

As its founder Satoshi Nakamoto[6] defines it, Bitcoin is a decentralized peer-to-peer version of electronic cash. Since its inception in Bitcoin has gained increased acceptance as a means of payment and as a recognized asset in currency exchange markets, as evidenced by the assignment in 2013 of "XBT" as its ISO currency[7] code. About 12.6 million units are currently in circulation, according to Bitcoincharts.com which are now accepted by an increasing number of merchants for the payment of a wide variety of goods and services and which can be exchanged for more than 18 other currencies.

The story

The idea of anonymous digital currency is not a new one. Chaum was a pioneer in this area publishing his paper[8] in 1982 and introducing the concept of electronic cash. Ever since then, lots of academics and economists have delved into this matter to improve the efficiency of e-cash use and the security of the related transactions. So far, none of these ideas have ever been close to face the popularity Bitcoin has already gained. Despite a lot of critiques and pessimism, Bitcoin has undoubtedly seen tremendous success since its creation. Naturally, the following questions arise: "What makes Bitcoin so successful? Is it going to shine only temporary or to follow a stable trend in its development? Does it have the potential to prove itself a currency or a speculative investment?". Bitcoins are generated through a process called mining. It resembles the mining process of real commodities like gold for example because each new additional unit is extracted slowly and requires an increasing effort. The mining process involves a peer-to-peer computer network engaged in solving complex mathematical problems. At the time of writing the total number of possible bitcoins that can be mined is fixed at 21 million. Limiting the number of bitcoins in circulation solves a problem central to any currency: how to control its issuance and limit the supply. At the same time, a requirement specific to all online transactions — the presence of a trusted third-party intermediary to prevent

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[6] The name is supposed to be used as pseudonym for a programmer or group of programmers

[7] In this paper we will refer to Bitcoin both as a currency (and use the term "bitcoins" for the currency units) and as a payment system (and use the term "Bitcoin") without implying any opinion about its essence as it is not the purpose of this paper.

[8] Chaum., D., Blind signatures for untraceable payments. Proc. Crypto, 1982

users from spending the same unit of currency over and over – is no more needed. In order for a transaction to be executed, it has to be confirmed, which means to be validated and checked against double spending. Bitcoin does this by distributing the public ledger of digital transactions among all the users of the system via the peer-to-peer network that plays the role of an intermediary.

Advantages and Disadvantages

The major advantages that make Bitcoin attractive for users are:

- Lower transaction costs

Bitcoin has a completely decentralized architecture, without any institution serving as a trusted entity. The lack of third-party intermediary makes the Bitcoin infrastructure for payments and transfers substantially simpler and much cheaper for users than those of traditional payments systems such as Paypal, Western Union and credit/debit cards. The reason is that the latter perform the functions of a trusted third-party intermediary which validates the electronic transactions and merchants pay them significant fees in order to do so. This obvious and short-term benefit to using Bitcoin averages in at 1% transaction fees, as compared with the aforementioned financial institutions at 2-4%. The implications of the low cost transactions are wide ranging from micro-payments to peer-to-peer to international money transfers.

- Increased anonymity

Those who look for a higher degree of privacy may feel more comfortable using Bitcoin for their commercial and financial transactions. It is often described as an anonymous currency because it is possible to transact in bitcoins without disclosing any personally identifying information. The risk of identity theft could also be diminished under certain circumstances like using a new address for each transaction to avoid transactions being linked to a common owner. However, achieving perfect anonymity with Bitcoin may be complicated or even impossible, as the system maintains a permanent and complete historical track record of all Bitcoin transactions containing details about the amounts and encrypted identities.

- Low inflation risk

One of the biggest problems with the fiat currencies around the world is inflation. Inflation is generally defined as a monetary phenomenon causing a drop in the currency value (in terms of the amount of goods and services it can buy) which occurs when there is an excess aggregate supply of the currency over the aggregate demand. In most countries, governments (or their central banks) regulate the money supply and quite often an inappropriate monetary policy actions are causing serious inflation problems. However, there is no government or central bank regulating the supply of bitcoins. The design of Bitcoin attempts to mimic the supply of precious metals in that the system will create a finite supply of the currency, which is set to grow at a constant diminishing rate over time determined by the mining activity until it reaches a total amount of 21 million units in circulation. In order to achieve this target, the incremental supply of new bitcoins is fixed to decrease geometrically, with a 50% cut every 4 years. Given the fixed Bitcoin supply, the only possibility for inflation to occur is the demand for Bitcoin to decline relative to the constant amount of bitcoins in circulation. The proponents of Bitcoin see its predictable and finite supply as a way to protect its value from profligate governments or central banks policies.

There are a number of factors that undermine the usefulness of Bitcoin. Below are listed the most important ones:

- Price volatility

So far, Bitcoin is an investment which volatility outstrips anything else on the market. Bitcoin's unstable price compromises its role both as a store of value and as a medium of exchange. Since its inception in 2009, Bitcoin has been subject to sharp swings in its value. It is not unusual the dollar price of Bitcoin to move 10% or more on a daily basis including days when the price moved 190% from that day's highest to the lowest level. During 2013 price fluctuation has reached its highest level. During March and April, Bitcoin's price soared from about $50 up to $350, and then bounced back to around $70. The last quarter of 2013 also was a period of extremely high price volatility with the Bitcoin's price climbing from below $50 in September

to above $1,200 in the beginning of December, and down to near $800 by mid-December. This is a price pattern more typical of a speculative investment than a currency. It suggests that the Bitcoin market is currently being driven by speculative investors and not by the supply and demand of customers and vendors who use bitcoins. The problem with having the Bitcoin network dominated by speculators is that this will deter users from spending them - just the opposite of what would be needed for a currency to perform successfully its function as a medium of exchange.

- Built-in deflation

There are expectations that a possible widespread use of Bitcoin would cause the demand for Bitcoin to surpass largely its supply (since the total number of bitcoins is capped at 21 million in the long run), thus boosting tremendously Bitcoin's price. While almost any central bank in the world can increase the number of currency units in circulation in order to support economic growth, in the case of Bitcoin the only possibility for growth would be a currency appreciation. The consequence of that appreciation is that the Bitcoin price of goods and services would fall continuously causing deflation. This long-term deflationary bias will hinder Bitcoin's use and will cause a drop in the current level of transactions, as there will be a strong incentive to accumulate bitcoins and not spend them.

- Security breaches

Traditional financial products have strong consumer protection mechanisms while Bitcoin has no such safety net. The two major security challenges regard wallet services and Bitcoin exchanges. Basically there are two ways to store bitcoins. An individual can store the keys to his bitcoins on a desktop or mobile wallet of his own. This option leaves him vulnerable to hardware or software malfunctions, failures, technical problems and user error. Or he can delegate this function to a third-party called web-based wallet. Online wallet services are potentially exposed to the same security risks as individuals, though the idea is they do a better job in protecting against them. Customers also need to worry about the credibility and competence of those who operate the Bitcoin exchanges. There has already been a long list of reports about hacker attacks and lost client funds because of alleged security breaches. Adding to this, the most popular and once biggest bitcoin exchange, Mt.Gox. filed for bankruptcy protection in February 2014 after revealing that it had lost about 850,000 bitcoins. The exchange is likely to be liquidated after it has been denied a civil rehabilitation procedure (the equivalent of bankruptcy) in Japan. The much smaller online Bitcoin bank Flexcoin also was forced to close its virtual doors in March 2014 after it had reported a loss about $600,000 worth of the digital currency in a hacker attack.

- Not legal tender

The traditional currencies are legal tender and by law can be used as a medium of exchange. Unlike fiat money, nobody is under any obligation to accept bitcoins as a means of payment and it has no intrinsic value. Therefore, it will have value only until users believe it has. The lack of a hard money backstop, would make Bitcoin disappear very quickly should perceptions of its usefulness decline. Repeated periods of price volatility and further cyber-attacks which lead to security breaches and put customer and investor money in danger will certainly imperil this perception even as Bitcoin does offer many benefits.

Regulation

The increased popularity and interest toward Bitcoin made it necessary for regulatory authorities to take position about it. Governments around the world are struggling with how to classify or regulate the Bitcoin "phenomenon". At the beginning the focus was on the essence and definition of Bitcoin (whether it meets the requirements to be declared a currency) but then it has moved on security issues aiming to regulate the activities of Bitcoin exchanges and providers of new methods of transmitting payments.

With regard to its regulating efforts the most active country are the USA. In March 2013, FinCen[9] issued regulatory guidance subject to which is any person or entity that puts into circulation or allow payments in virtual currency. This means that the so-called Bitcoin miners as well as all merchants that accept payments in bitcoins are subject to the federal regulations. Another provision of the guidance is that anyone operating

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[9] FinCen stands for the Financial Crimes Enforcement Network, which is a part of the Treasury Department

an exchange for virtual currencies would be considered to be executing a money transmitting functions. In light of the Bank Secrecy Act provisions, that designation obliges exchanges to collect all relevant information about customers, in order to prevent transactions through anonymous accounts. New York financial regulators also have been working on a response to Bitcoin. They are currently accepting applications to operate exchanges for Bitcoin and other digital currencies and intend to propose a set of rules for virtual-currency firms by mid-2014. At the same time the Federal authorities are targeting criminal misuse and applying money-laundering rules to virtual currencies amid growing concern that these are being used to fund illegal activities. In its first substantive ruling of the issue the Internal Revenue Service announced in March 2014 that Bitcoin would be treated as property, not currency, for tax purpose and the same rules would be applied that are used to govern stocks and barter transactions.

Bitcoin has attracted the scrutiny of regulators in China. After a boost in trading in 2013 the country became the world's biggest trader of Bitcoin. This raised fears that China's capital controls and financial stability may be endangered by the virtual currency. As a result China has taken a particularly firm stance in an attempt to control the Bitcoin use within its jurisdiction. In December 2013 China's central bank banned the country's financial institutions and payment companies from managing Bitcoin transactions, including but not limited to give pricing in Bitcoin, buy and sell the virtual currency or insure Bitcoin-linked products. Several media have reported that further harsh regulations are under consideration. These include banks to be banned from letting Bitcoin companies holding accounts, basically totally shutting them off from the financial system[10].

The European Banking Authority (EBA) issued a warning in December 2013 on a series of risks deriving from buying, holding or trading virtual currencies such as Bitcoins. The EBA outlined the risk that there is no regulatory protection for consumers using virtual currencies as a means of payment and they may be at risk of losing their money[11]. It also questioned the stability of the virtual currency value in the future. Meanwhile, EBA will consider further all relevant aspects associated with virtual currencies, in order to decide whether these can and should be subject to regulation and supervision.

A lot of European governments and large financial institutions have also expressed their opinion about Bitcoin. Not surprisingly, Scandinavian regulators are more than suspicious toward Bitcoin, as they have set some of the world's strictest banking standards. No authority in the region recognizes Bitcoin as a currency or even as a form of money. With regard to tax issues, Sweden's tax authority is set to treat Bitcoin as art. The tax department of Norway has decided to treat Bitcoin as a taxable asset, while Finland plans to treat it as a commodity. Some of Scandinavia's and Baltic region biggest banks have issued statements warning clients to think twice before using Bitcoin.

Still, Nordic regulators do not intend to impose any restrictions on its use as they share the opinion they can not stop people using Bitcoin. It is the opinion of Denmark's Financial Supervisory Authority that the expansion of digital currencies is inevitable and regulators need to be prepared to take the necessary actions. They are currently in the process of drafting proposals for lawmakers in an effort to protect consumers and businesses.

Bitcoin Derivatives

Having seen the extreme volatility in the value of Bitcoin during the last year, it was only a matter of time before they became an area for further speculation. The risks inherent to holding an asset that exhibits such an unstable price pattern (as shown on the graph below) would keep users away from it and hinder its development.

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10 Weisenthal, J., China May Be Preparing Harsh New Regulations On Bitcoin, April 2014, available at http://www.businessinsider.com/chinese-bitcoin-regulations-2014-4
[11] EBA Warning to consumers on virtual currencies, December 13 2013, available at http://www.eba.europa.eu/-/eba-warns-consumers-on-virtual-currencies

BTC/USD Price

Fig.1. BTC/USD historic price volatility
Data source: http://bitcoincharts.com

Several exchanges have already made it possible for investors to monetize this volatility by giving them the opportunity to bet on Bitcoin via derivatives markets. But it is not only speculators that would benefit from the existence of Bitcoin derivatives. In general, derivative markets tend to make prices of the underlying assets more stable rather than less. This could enhance the wider acceptance of Bitcoin by vendors that accept payments in Bitcoin as derivatives would give them the price security they need. Currently, there are several exchanges and online trading platforms that offer Bitcoin derivatives trading, but there are also new players that are exploring the opportunities of this market niche.

- **Bitcoin futures** – at the moment of writing the ICBIT.se exchange offers futures contracts on Bitcoin against two currencies – US dollar (BTC/USD futures) and Chinese Yuan (BTC/CNY futures), and one commodity – oil (OIL/BTC futures). The exchange had also had in its product mix futures contracts on gold and S&P index with a settlement in bitcoins but these had expired in 2013 and currently are not part of the futures family of the exchange. For example, the June 2014 contract on Bitcoin against US dollar (BTC/USD - 6.14) is currently going for around $541 and a long/short position on this contract would mean that on the settlement date (20.06.2014) an investor would have to buy/sell 1 bitcoin at a price of $541 regardless of the current market price on that date.

  There are two problems that are worth mentioning. These are the apparent lack of liquidity and the steepness of the futures curve. The lack of liquidity is evidenced by the relatively small volume and open interest on the active futures contracts. For example, for the mentioned BTC/USD - 6.14 futures contract the total volume is around 65 600 and the open interest is around 23 350 contracts. A direct consequence from the lack of liquidity are the wide bid-ask spreads which combined with the steep futures curve, make hedging an open Bitcoin position not cheap.

  Besides the above described problems, it is the counterparty risk which undermines mostly the usefulness of ICBIT futures as a hedging mechanism. ICBIT claims that it provides clearing services and operates a margin system with upper and lower limits within a trading session that are similar to any major futures exchange. The problem is that this derivatives market is neither as standardized nor as transparent and secure as it might seem. While ICBIT states that it is acting as a clearing house, it does not play the role of a final guarantor for the clearing process, with the results of the clearing process still highly dependent upon the exchange's ability to effect margin calls where required; should that process fail due to counterparty risk from individual traders, the exchange does not guarantee to make up the difference[12]. Thus, the exchange acts as counterparty only up to the moment when it decides it won't because it has no mechanism for getting funds from traders on the losing side of contracts which it holds. So, despite the appearance of standardization and clearing services, the

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[12] Mulhauser, G., Bitcoin Derivatives, Liquidity and Counterparty Risk, May 2013, www.psychologicalinvestor.com

lack of regulator that stands behind the futures exchange, leaves investors trading futures on ICBIT without a clearing house guarantee and still exposed to a counterparty risk.

Bitcointalk.org is full of complaints from traders who claim they have lost money wrongly on ICBIT exchange. They accused the exchange of manipulation of the order book, irregularities in the twice-daily marking-to-market procedure, lack of transparency in forced liquidations and more. Without the regulation needed to enforce the clearing house functions and supervise its activities, trading futures in order to hedge against changes in the value of Bitcoin is equivalent to substituting currency risk for counterparty risk.

Undoubtedly, futures are useful for businesses trying to protect their cashflows from currency fluctuations, but investors and speculators who view Bitcoin more as an asset than as a currency per se, are probably more interested in options rather than futures for hedging risk. Next, we are going to present several online exchanges that offer options or option-like products on Bitcoin.

- **Bitcoin option spreads** - Predictious, the Dublin-based prediction market, recently introduced a product named Bitcoin Option Spreads. The basic mechanism resembles that of a binary options - the payoff is either some fixed amount of cash for getting the "bet" correct or nothing for getting the "bet" incorrect. The Bitcoin Option Spreads are structured as a binary bet such that the value of each bet will be worth either 0 or 10 upon expiring. The customer makes a bet in the form of prediction that the Bitcoin price will be either equal to or higher/lower (according to the type of option) than the offered strike price at the mentioned hour and date. If the prediction was correct, the investor will receive a fixed payout. Should the prediction be incorrect, the investor will not receive anything and will realize a loss in the amount of his investment. Therefore, the amount of profit or loss in this derivative product is preset and known in advance.

As an example we can look at one of the Bitcoin Option Spreads, traded on Predctious.com, the bet being that Bitcoin price will (or will not) be more than $1500 on Thursday January 1st 2014 at 12:00am. If an investor believed it will close above $1500, he can "buy" the contract at 7.16 (and should the bet be proven correct, the investor will be paid 10 - thus gaining 2.84). If he believed it will close at or below $1500, he can "sell" the contract at 1.50 (and should the bet be proven correct, the investor will realize a profit of 1.50 (the price received for selling the contract) and pay out 0.00).
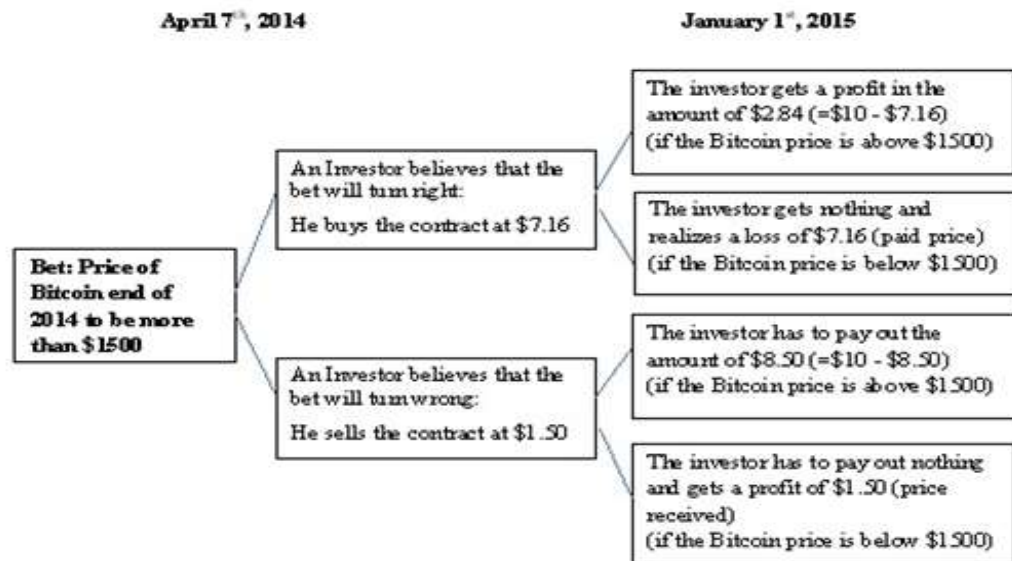
Fig.2. BTC/USD historic price volatility
Data source: www.predictious.com

The online trading platform offered by IG Markets was the first to announce Bitcoin binary options trades in 2013 but several months later they had been discontinued. The Anyoption trademark platform is the other provider that enables Bitcoin binary options trading which is still available. The platform is operated by a company named Ouroboros that is regulated by the Cyprus Securities Exchange Commission. The Cointures online exchange has also launched this product under the name event options. The investors "buy true" or "buy false" a specific event title and upon expiration receive either the specified payout or nothing.

- **Bitcoin options** - Atlas ATS has announced at the end of March 2014 the launch of their new platform, Atlas 2.0, which is a Financial Information Exchange (FIX) protocol digital asset exchange. It has been launched in Hong Kong and North America and its creators claimed it is the first to trade options on Bitcoin. The exchange now offers two types of option contracts - call and put options, which give the owner the right to buy and sell, respectively, the underlying crypto-currency at a fixed price (strike price) on a given expiration date. For example, one BTC Call 550 May 2014 option would give its owner the right to buy one bitcoin at a price of $550 on May 31 and one BTC Put 650 Jun 2014 option would give its owner the right to sell one bitcoin at a price of $650 on June 30. To get the respective rights, the investor has to pay the quoted option price. Fees on options trades follow the add/remove (a.k.a. maker/taker) model. The rebate earned when adding liquidity is 0.1% and the fee for removing liquidity is 0.3%. The fee base that is used to charge fees and credit rebates is the average of two numbers: the last price of the underlying and the option price. For example, when buying one BTC Call 550 May 2014 for $100, and the last price of BTC is $500, fee base is (500 + 100)/2 = 300. The "maker" earns $0.30 and the "taker" pays $0.90. Option strike price does not affect fee base.

The traded volume and open interest for options with the closest expiration date are of negligible amount, and close to zero for options with further expiration dates. Considering that the Bitcoin options are quite fresh on the market, the have a long way to go.

- **Bitcoin swaps** – Tera Group Inc. has announced the creation of a framework for buying and selling swaps linked to Bitcoin that would allow investors to hedge the risk from holding the virtual currency. The two major catalysts for the success of Bitcoin framework are technology improvement (in order to guarantee the security of the transactions) and business drivers (to stimulate more vendors to accept Bitcoin payments). For Bitcoin to become more widely accepted, merchants need protection against sudden drops in price which can wiped out their entire profit margin. The basic idea behind the swap is that the owner, for example a merchant who accepts bitcoin as a form of payment, can protect against a potential decline in the virtual currency's exchange rate against other currency.

Tera Group Inc. announced recently that it has already drafted the terms for a planned multi-million dollar swap between two U.S. institutions, which would hedge the value of Bitcoin against U.S. dollars. Although the particular transaction is not subject to regulation, Tera Group Inc. is actively seeking permission from the U.S. Commodity Futures Trading Commission (CFTC) to offer a similar swap instrument for trading on its CFTC-regulated platform Swap Execution Facility (SEF) established pursuant to the Dodd-Frank Act.

Swaps usually refer to an exchange of series of cash flows (floating vs fixed payments) on a predefined dates in the future and not a single cash flow exchange. That is why the swap can be defined as a series of forward contracts. However, the information about the Tera Swap released in the press implies that it would be more proper to define the transaction as a forward contract.

An example of how such simple non-deliverable forward swap agreement works is shown below:

• Parties A and B enter into a 30-day agreement with each other over the price of Bitcoin with a notional principal 1000 Bitcoins, where Party A (a speculator) believes the price will rise in 30 days while Party B (a merchant) seeks protection in case the price falls.

• Bitcoin's price at the start of the contract is $550, and this value is set as the "fixed" leg price of the agreement. Bitcoin's price at the end of the contract in 30 days is known as the "floating" leg price.

• At the expiration of the swap in 30 days the parties to the swap use a settlement price derived as an average of the prices from several bitcoin exchanges to determine the payoff of the trade. Suppose that the price of Bitcoin has fallen and the respective average settlement value is $480. This means that Party A (speculator) will pay Party B (merchant) $550 000 (1000*fixed price of $550) locked by the agreement, while Party B pays Party A $480 000 (1000*floating price of $480).

The other possibility for a swap that could be applicable to the case of Bitcoin is a kind of credit-default swap. The mechanism of such a swap would guarantee that whatever happens to the value of the currency, the party buying the hedge will be locked in the value of Bitcoin for the life of the swap. The other party either gets the premium as a profit if the value of Bitcoin rises, or realizes a loss if it falls below the fixed price.

● **Bitcoin CFDs and Margin Trading**

Contracts for differences (CFDs) and margin trading in bitcoins are also available but currently both come with problems of their own.

• BTC.sx presents itself as the world's first Bitcoin derivative trading platform (being the first platform to offer leveraged trading, in their own words), As of 21st of January 2014 the company announced it has brokered over $35 million in trades since its foundation and is preparing for more growth as its user base passes 3300 active users. BTC.sx provides an opportunity for trading Bitcoin on 10-times leverage, allowing investors to deposit only 10 percent of the amount they trade. The final payout is determined with the help of the following formulas[13]:

Payout Long (BTC) = (Open - ((Open^2) / Close)) x Bet per Point

Payout Short (BTC) = (Open - ((Open^2) / Close)) x -Bet per Point

For example, a long position with a buy price $460 (46000 points) and a bet size of 0.002 BTC/pt (which requires deposit of 2 BTC) will result in the following payout if the close price on liquidation is $470 (47000 points): Payout = (46000 - ((46000^2) / 47000)) * 0.002 = 1.96 BTC.

Here comes the first difference with normal CFDs - the BTC.sx system is settled only in Bitcoin, no fiat currency balances are involved.

The multiplier effect will be exactly the same on losses, however losses can never exceed the initial deposit. If we take a look at the case of an investor making a losing bet, here will come the second difference with normal CFDs. In normal leveraged trading, if an investor's position is losing money to the point where the entire deposit is wiped out, he will receive a margin call and can still maintain his position by depositing more money. BTC.sx does not function like this. While the exchange is essentially providing a margin loan to cover the cost of the open market position and charging interest on the loan, the absence of margin calls gives the exchange the right to automatically close an investor's position on a drop of just 10 percent, even if the investor has additional bitcoins available to keep his position open. Thus, during periods of high volatility and fast changing price, the investor has no guarantee at what price his exit order will be executed. This could be a possible concern for investors willing to trade CFDs on Bitcoin.

• Bitfinex offers margin trading, for example, but lending rates for both U.S. dollars and bitcoins are extremely volatile and not known in advance. The reason is that the exchange itself does not act as a counterparty and margin lending comes out of a small pool of liquidity offered by other users. When the investor executes a margin trade, he effectively borrows from peer liquidity providers at the best rates available at that moment. Demand for borrowing U.S. dollars to buy bitcoins appears to be significantly higher than demand for borrowing bitcoins to short. At the time of writing this paper the effective annual percentage rate for borrowing U.S. dollars is around 24% and the corresponding Bitcoin borrowing rates just over 3.65%.

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[13] https://www.btc.sx/about/faq

- While margin trading is not yet active on US-based CampBX.com, they claim it will be enabled on their platform when platform liquidity crosses a preset threshold (the amount is undisclosed). Once the service is activated, an interesting feature will be that users will not pay any interest on the margin used at CampBX. Instead, a flat 2% commission rate will apply to all margin trades upon execution (not order placement).

- Larger players in the traditional CFD market have also entered the BTC market, most notably Plus500 which provides CFD on BTC vs. USD with conventional features, including initial and maintenance margin requirements, and margin calls respectively. The leverage that could be used is 17:1. The Ireland-based Ava Trade also provides the opportunity for trading CFDs on BTC. When first introduced, leverage was capped at 5:1 and now AvaTrade has raised it up to 20:1.

Conclusion

Bitcoin is a financial innovation that could lead to beneficial and potentially revolutionary developments in the existing financial system. While it is hindered by some poor characteristics, the core design could support a sound decentralized currency if done in the right manner. One of the keys to the future widespread acceptance of Bitcoin is greatly reducing the volatility of the price. The natural answer to managing volatility risk is a well-functioning derivatives market. While spot trading in bitcoin is quite liquid, the derivatives markets in bitcoin are still fairly untested, relatively new, and fairly low volume. Over time, Bitcoin derivatives markets should become deeper, more standardized, and more liquid, reducing hedging costs. The development and sophistication of derivatives market on Bitcoin may be the milestone in its evolution and acceptance as a mainstream payments system with significant advantages over existing competitors.

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Acknowledgements

GAAP Influence on Bid-Ask Spreads and Share Turnovers

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Abstract

The convergence of accounting standards is being promoted worldwide. The U.S. Securities and Exchange Commission (SEC) enacted Securities Act Release No. 33-8879, that became effective March 4, 2008 for financial statements with year ends after November 15, 2007, which allows foreign private issuers (FPIs) to file financial information with the SEC that is prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB) without reconciliation to United States (US) generally accepted accounting principles (GAAP). This study examines the relationships between bid-ask spreads and share turnovers as proxies for information asymmetry and liquidity and the world zones where the entities are incorporated of FPIs that utilize various forms of GAAP for filing with the SEC for the period 2007 through 2010. The analyses are conducted utilizing descriptive statistics, a Kruskal-Wallis nonparametric test, and multivariate analysis of variance (MANOVA) tests. It was found that there was a statistically significant difference in bid-ask spreads and share turnovers as proxies for information asymmetry and liquidity based on the type of GAAP utilized for filing and the world zone of the country of incorporation.

Keywords: IFRS, GAAP, Foreign Private Issuers

Introduction

Information is essential to the success of the world's capital markets and is primarily provided through the financial statements. However, financial information is not useful if it is not understood even if it is relevant, reliable, and comparable (Financial Accounting Standards Board, 2002). Different countries developed differing accounting systems as a result of different cultures, legal systems, and languages. Information contained in financial statements is subjective, primarily determined by the individual entity's reasons for issuing financial statements. The true economic reality of an entity cannot be determined based on the financial statements, only a version of the economic reality (Alexander & Jermakowicz, 2006).

Business and finance have become increasingly global evidenced by the increase in multinational entities and the expansion of capital markets around the world. However, a universal system of accounting has not been adopted. While International Financial Reporting Standards (IFRS) have been adopted by many countries, many countries have adopted their own version of IFRS. In addition, the United States (US) which has dominated the world's capital markets for many years has not adopted IFRS. Work on the convergence of accounting standards internationally has been ongoing for many years; however, full convergence may not occur for many years, if ever.

While an understanding of the various accounting standards is essential for the efficiency of the global markets, home bias has also been shown to exist in the capital markets and may not be eliminated through an understanding of the accounting standards utilized. Home bias refers to the phenomena of investors that heavily weight their portfolios with domestic assets rather than following classical portfolio theory, which recommends that a diverse portfolio should consist of securities that represent the international market to maximize risk-adjusted returns (Ahearne, Griever, & Warnock, 2004). Studies conducted by Suh (2004) and Bradshaw, Bushee, & Miller (2004) have confirmed the existence of home bias by institutional investors.

The enactment of Securities Act Release (SAR) No. 33-8879 that became effective March 4, 2008 for financial statements with year ends after November 15, 2007 provides an opportunity to analyze the impact of the use of various accounting standards on bid-ask spreads and share turnovers, utilized as indicators of information asymmetry and liquidity, in the US markets while also considering the impact of the country of incorporation. SAR No. 33-8879 allows foreign private issuers (FPIs) to file financial information with the

U.S. Securities Exchange Commission (SEC) prepared utilizing IFRS as issued by the International Accounting Standards Board (IASB) without a reconciliation to US generally accepted accounting principles (US GAAP) (US SEC Rule, 2008).

A summary of the theory related to the study is presented in Section 2. The methods and procedures utilized in this study are provided in Section 3, followed by the results of the study in Section 4. Conclusions are provided in Section 5.

Theory

The abilities to raise additional capital and to reduce the entity's cost of capital are two factors that motivate companies to obtain listing on a foreign securities exchange (Choi & Meek, 2008). While companies that cross-list on exchanges may gain many benefits such as risk premium reductions and access to more developed capital markets (Bradshaw et al., 2004), many companies do not cross-list their securities on foreign markets due to the additional costs of having to utilize different accounting principles and meet additional financial reporting and auditing requirements (Cheney, 2007; Saudagaran & Biddle, 1995). Risks that companies face in listing on foreign exchanges include accounting risk and home bias (Bradshaw et al., 2004).

Accounting risk includes the risk that accounting standards may not be followed or be incorrectly applied, and that investors may not understand the accounting principles utilized in developing the financial reports (Epstein, 2009). Accounting standards are one component of information that influences the price and liquidity of an entity's stock. The selection of accounting standards can influence the cost of capital through the impact on the quality and quantity of the information that a firm provides to outside parties (Easley & O'Hara, 2004). While the US has some of the most stringent filing requirements (Ahearne et al., 2004), foreign firms that cross-list in the US, especially those from countries with poor investor rights, have greater growth opportunities (Doidge, Karolyi, & Stulz, 2004). The preparation of financial information utilizing multiple forms of GAAP can be costly for companies; if companies can prepare financial information utilizing one set of GAAP, for example IFRS as issued by the IASB, and are able to utilize the same information in their home country as well as on foreign exchanges, a substantial savings could be realized.

Research has indicated that investors exhibit a home bias (Ahearne et al., 2004; Bradshaw et al., 2004; Suh, 2004). Home bias refers to the phenomena that investors prefer to invest in domestic stocks versus international stocks even though a diverse portfolio would maximize risk-adjusted returns (Ahearne et al., 2004). Home bias is a result of investors preferring to invest in entities that are familiar or have familiar characteristics such as accounting standards (Bradshaw et al., 2010). Ahearne et al. (2004) found that reduced bias was exhibited toward foreign entities that came from countries that had strong regulatory environments and chose high accounting standards. It was surmised by Suh (2004) that information asymmetry, investor optimism, and other unobservable factors could impact home bias based on a study of international portfolio recommendations made by global financial institutions in *The Economist* from 1989 through 1999. It was found that the recommendations had a home bias even though transaction costs and other observable barriers to international investments did not impact the recommendations.

Bradshaw et al. (2004) found evidence that US institutions utilize conformity to US GAAP as an important consideration for initial investment decisions in non-US firms in research that analyzed the accounting methods utilized by non-US firms in which US institutional investors made investments for the period 1989 through 1999. The authors did find that once an investment was made in a non-US firm and the investor developed a familiarity with that firm, accounting choice was not considered as a factor in further investment decisions. Bradshaw et al. also found evidence that a cross-listing premium existed. The authors surmised that for many foreign entities, listing in the US increased the quality of investor protection, and that the controlling shareholders of companies that list in the US convey their commitment to limit any benefits that could accrue from control of the entity. Bradshaw et al. noted that home bias resulted in low US investment in non-US firms, which could have a negative economic impact on foreign firms that seek to raise external capital due to the amount of capital US institutions control.

Hau and Rey (2008) found that US investors exhibit the highest degrees of home bias based on a study of mutual fund holdings for the period 2001 through 2002. Khurana and Michas (2011) found that the mandatory

adoption of IFRS by countries reduced home bias exhibited by US investors based on a regression analysis. The sample was selected from foreign security portfolio holdings by US investors as reported by the US Treasury and spanned 33 countries that had a mandatory adoption of IFRS during the period 2003 through 2007. The regression analyzed US home bias measured by comparison of investment in a foreign market to the world market capitalization weight.

Ahearne et al. (2004) found that home bias is not just related to irrational behavior of investors, but can be partially explained by barriers, both direct and indirect. The authors found that home bias is influenced by information costs. The study provided direct evidence that barriers to foreign investment for US residents are reduced if the foreign entity either issues public debt in the US or lists on a US exchange using data from surveys of residents' foreign securities holdings conducted by the US. The authors noted that foreign entities that issue debt or equity securities in the US have lower transaction costs, better settlement, and increased investor recognition. In addition, the information costs to investors are reduced, creating a more attractive investment for US investors. The study found that lower bias was exhibited for entities that chose high accounting standards and whose home countries had strong regulatory environments. These results indicate that the credibility of the information, derived from laws and their enforcement, is important to investors.

This study examines the differences in bid-ask spreads and share turnovers of FPI in the US based on GAAP utilized for filing with the SEC and world zone. The hypotheses are:

H_0: There will be no difference in bid-ask spreads and share turnovers for FPIs that list on US stock exchanges that utilize various forms of GAAP from different world zones for the years 2007 through 2010.

H_1: There will be differences in bid-ask spreads and share turnovers for FPIs that list on US stock exchanges that utilize various forms of GAAP from different world zones for the years 2007 through 2010.

There should be minimal impact on bid-ask spreads and share turnovers between FPIs that file financial reports using different forms of GAAP if the information in the reports is understood. Bid-ask spread has been considered a measure that specifically measures information asymmetry (Leuz & Verrecchia, 2000). Information asymmetry is the result of the belief that various parties have different information and is a component of the cost of capital. In the capital markets, information asymmetry results in reduced liquidity and a higher cost of capital (Chang, D'Anna, Watson, & Wee, 2008). If US investors are not as well informed about GAAPs other than US GAAP then bid-ask spreads and share turnovers will be different based on the GAAP utilized for filings with the SEC.

Leuz (2003) noted that information asymmetries should decrease between investors and firms as disclosure is increased, resulting in increased market liquidity and reduced cost of capital. Leuz utilized the monthly average of all bid-ask spreads and the median daily turnover as proxies for information asymmetry and market liquidity. Chen and Sami (2008) utilized trading volume to analyze the information value of the reconciliation of non-US GAAP to US GAAP by FPIs in the US markets. Daske, Hail, Leuz, and Verdi (2008) utilized bid-ask spread as one of four proxies for liquidity in their study of the impact of the implementation of mandatory IFRS reporting in 26 countries. Eleswarapu, Thompson, and Venkataraman (2004) utilized the bid-ask spread to analyze information asymmetry in their study of the impact of Regulation Fair Disclosure enacted by the SEC in 2000. Libby, Mathieu, and Robb (2002) utilized bid-ask spreads and the number of shares specialists were willing to buy or sell at specific bid-ask prices as proxies of information asymmetry in a study of the effect of earnings announcements on information asymmetry. Chang et al. (2008) utilized analyst following, number of institutional shareholders, share turnover, market capitalization, and bid-ask spread as variables in analyzing information asymmetry of disclosure quality of investor-relations programs.

Information asymmetries create reduced liquidity in securities and impact the market prices of securities as a result of perceived risk by less-informed investors of a lack of information and a potential for loss as a result of not having similar information to more informed investors. However, the impact of information asymmetries may vary due to differences in legal institutions, effectiveness of enforcement, the primary capital markets, competition, compensation, ownership, governance structure, and operating characteristics "across firms, industries, markets, and countries" (Hail, Leuz, & Wysocki, 2010, p. 359).

A smaller bid-ask spread implies less information asymmetry, and share turnover should increase as information asymmetry decreases. While trading volume can be influenced by other factors, share turnover has been utilized as a measure of liquidity (Leuz & Verrecchia, 2000).

Methods/Procedures

An alphabetical listing of foreign companies registered with the SEC as of December 31, 2010 was obtained from *Foreign Companies Registered and Reporting with the U.S. Securities and Exchange Commission* (US SEC, 2013). A total of 970 firms were included in the listing. A sample size table from The Research Advisors (2006) was utilized and an appropriate sample size of 394 was determined utilizing a population of 970 at a confidence level of 99 percent with a margin of error of 5 percent. To obtain the sample, a k-in-1 systematic sample was utilized, selecting every third, fifth, and seventh item which resulted in a sample size of 415. The company name, the country where the company was incorporated, and the market where the company's securities were listed was collected.

Each selection was then searched for on Electronic Data Gathering, Analysis, and Retrieval (EDGAR) database. No data was found for 24 of the companies. The SEC filings of the remaining 391 selections were reviewed on EDGAR to determine what method of GAAP was utilized for the time period 2006 through 2010 based on the GAAP identified in the auditors' report. GAAP was categorized as: US GAAP, IFRS issued by the IASB, and non-US GAAP with reconciliation to US GAAP. The forms of GAAP are nominal variables and were coded as 0 for US GAAP, 1 for IFRS, 2 for Other, or 3 for No Filing.

Each selection was then coded based on the market where the securities were listed. Selections listed on the New York Stock Exchange (NYSE) were coded 0 and the remaining selections were coded 1. The selections that were listed on the NYSE were selected and the bid-ask spreads and share turnovers on a monthly basis for the years 2007 through 2010 were obtained from CRSP®, The University of Chicago Booth School of Business. The variable for bid-ask spread was calculated based on the monthly average of daily spread between bid and ask price. Share turnover was calculated based on the ratio of mean volume of shares traded to shares outstanding. The data was calculated (or derived) based on data from the database of Center for Research in Security Prices (CRSP®), The University of Chicago Booth School of Business ©2012.

The selections were then coded based on country of incorporation as one of six world zones identified. The world zone is an independent variable that is a nominal variable and was coded as 0 for North America, 1 for Britain, 2 for Continental Europe, 3 for South America, 4 for Asia, and 5 for other.

To test the null hypothesis that there were no differences in bid-ask spreads and share turnovers for FPI based on method of GAAP utilized for filing and world zone, the full set of data was initially loaded into SPSS and descriptive statistics and a Kruskal-Wallis nonparametric test of independent samples were utilized. The descriptive statistics for the sample indicated that the distributions had a wide dispersion and a large number of outliers. The values for skewness and kurtosis, except for the bid-ask spread for IFRS, indicated distributions that were highly skewed and peaked. In addition, the percentile values had a wide dispersion that indicated a large number of outliers. Also, the histograms showed narrow, peaked distributions of the data. The histograms of the data indicated that while the distributions were similar, the data did not meet the assumption of normality required for a multivariate analysis of variance (MANOVA) test. Therefore, a Kruskal-Wallis Test was performed to test the null hypothesis that there were no differences in bid-ask spreads and share turnovers for FPIs that chose to file financial reports using different forms of GAAP in their filings with the SEC. The results of the Kruskal-Wallis test showed a statistically significant difference for both bid-ask spreads and share turnovers, of .015 and .000 significance, respectively.

The data were then separated into three separate databases based on method of GAAP utilized and analyzed utilizing descriptive statistics, indications of dispersion, and boxplots. Since MANOVA is sensitive to outliers, the outliers were identified and removed through successive analysis of the percentiles and boxplots of the datasets. After the data were cleaned of outliers, the absolute values for skewness and kurtosis were all less than 1.00, which indicated that the distributions approximated normality. The percentile values of the cleaned data were much less dispersed than the original data and indicated a more normal distribution. Histograms indicated distributions that approximated normality. Boxplots of the data indicated that the data had been cleaned of outliers. The boxplots also indicated differences in the distributions between US GAAP,

IFRS, and Other GAAP for bid-ask spreads and share turnovers. The elimination of outliers resulted in the deletion of 682 cases from US GAAP, 531 cases from IFRS, and 764 cases from Other GAAP. This resulted in a total of 1,540 cases for US GAAP, 1,226 cases for IFRS, and 1,790 cases for Other GAAP. The three individual databases were then merged into one database that resulted in a sample of 4,556. Box's Test of Equality of Covariance Matrices was significant indicating that an assumption of MANOVA had been violated; the covariance matrices are not homogeneous. However due to the large sample size, it is assumed that the results of the MANOVA are robust despite the violation of the assumption.

Data was analyzed utilizing SPSS for the period 2007 through 2010 to determine if there were statistically significant differences among the data utilizing world zone and the form of GAAP used for filing based on correlation coefficients and other statistical tests. The hypothesis was tested at .05 level of significance. The data were analyzed using descriptive statistics, a Kruskal-Wallis nonparametric test of independent samples, and MANOVA.

A MANOVA was utilized to analyze if there were differences in bid-ask spreads and share turnovers between the world zones of the companies and methods of GAAP utilized by FPIs for financial reporting. The use of MANOVA allowed for the testing of differences among the groups and limited the potential for error by testing all variables and their relationships simultaneously (Cooper & Schindler, 2008). However, MANOVA only provides evidence that there is a correlation between the data sets. The results of a MANOVA do not provide evidence that there was causation between the data sets. Assumptions of normality and homogeneity of variance are included in the statistical tests. If normality and homogeneity of variance do not exist, the statistical tests are expected to be robust despite violations of these assumptions.

Results

A MANOVA was utilized to test for statistically significant differences based on the various world zones identified where the FPIs were incorporated and the form of GAAP utilized for filing for independent variables; bid-ask spreads and share turnovers were treated as dependent variables. The mean scores are provided in Table 1.

The results of the MANOVA were significant for world zone influence, method of GAAP, and the interaction of world zone influence and GAAP. The results for all tests were significant at $\alpha = .05$, with an observed power of 1.000. Table 2 provides a summary of the multivariate test values.

The results of the between subject tests are provided in Table 3. The results are all significant at $\alpha = .05$. The partial eta squared results indicate that world zone has more influence than GAAP on bid-ask spreads and share turnovers. However, the interaction of both effects is greater than the individual effects on the bid-ask spreads.

The results of the post hoc tests for the MANOVA were mixed. However, post hoc tests provide the results for the individual analysis of variables rather than the interaction effect of the variables as tested in the MANOVA. The least significant differences noted in the post hoc tests were for the bid-ask spreads between North American and Continental European world zones and British and Asian world zones.

Conclusions

The research analyzed whether there was a difference in bid-ask spreads and share turnovers for FPIs based on the method of GAAP utilized for filing and the world zone of incorporation. The null hypothesis, H_0, was rejected based on an analysis of the data utilizing descriptive statistics, a Kruskal-Wallis Test, and MANOVA. The results of the study indicate that there is a difference in bid-ask spreads and share turnovers based on the interaction of world zone influence and method of GAAP utilized for filing.

A limitation of the study is that a sample of FPIs was utilized and the selections may not be reflective of the entire population of FPIs. Another limitation of the study is that the impact of economic influences, such as the financial crisis that occurred in the late 2000s, was not controlled. Additional limitations to this study include home bias due to factors other than financial reporting, other forms of disclosure utilized by FPIs, and self-selection of FPIs to register with the SEC. The literature on home bias maintains that the information

provided by the entities is only one component of home bias. Therefore, even if the same standards are utilized there could still be differences in bid-ask spreads and share turnovers as a result of other factors of home bias. Financial reports are only one form of disclosure; many companies maintain websites and provide information in other ways. As a result, bid-ask spreads and share turnovers may be impacted by the availability of other information. As FPIs self-select to register with the SEC and be subject to US regulations, these entities may be familiar to US investors, which also may impact bid-ask spreads and share turnovers.

A delimitation of the research is that historical data was utilized for the study. Also, the research is based on FPI in the US capital markets. Therefore, generalizations to the future and other capital markets may not be appropriate.

Table 1. *Mean Scores by GAAP of World Zone Influence*

Dependent Variable	Influence	GAAP	Mean	Std. Error	95% Confidence Interval	
					Lower Bound	Upper Bound
Bid-Ask	North American	US	.0243231	.00068328	.0229789	.0256672
		IFRS	.0204321	.00114033	.0181380	.0227261
		Other	.0309267	.00054166	.0298641	.0319893
	British	US	.0332553	.00074620	.0317883	.0347223
		IFRS	.0330137	.00091679	.0312100	.0348173
		Other	.0758633	.00702062	.0456561	.1060706
	Continental Europe	US	.0304509	.00121728	.0280514	.0328503
		IFRS	.0284575	.00069120	.0270995	.0298154
		Other	.0398069	.00223281	.0353549	.0442590
	South American	US	.0330709	.00143948	.0302187	.0359230
		IFRS	.0232396	.00125385	.0207585	.0257207
		Other	.0493977	.00132267	.0467935	.0520018
	Asian	US	.0299807	.00090301	.0282029	.0317586
		IFRS	.0423019	.00139168	.0395521	.0450517
		Other	.0203749	.00140487	.0175583	.0231915
	Other	US	.0326318	.00094107	.0307767	.0344870
		IFRS	.0286131	.00203585	.0245495	.0326767
		Other				
Share Turnover	North American	US	6.55730	.247731	6.06996	7.04464
		IFRS	4.02110	.551835	2.91096	5.13125
		Other	4.86006	.107831	4.64853	5.07159
	British	US	7.82223	.239744	7.35091	8.29354
		IFRS	8.85272	.348813	8.16648	9.53896
		Other	7.23700	.719211	4.14249	10.33151
	Continental Europe	US	6.45661	.326718	5.81259	7.10062
		IFRS	12.67560	.321915	12.04315	13.30805
		Other	6.48997	.292875	5.90600	7.07395
	South American	US	8.51200	.422012	7.67584	9.34816
		IFRS	9.28116	.392355	8.50476	10.05756
		Other	6.52481	.234868	6.06239	6.98723
	Asian	US	7.58377	.207970	7.17432	7.99323
		IFRS	13.74162	.625312	12.50607	14.97718
		Other	8.34807	4.38645	7.46864	9.22750
	Other	US	6.19680	.294415	5.61641	6.77718
		IFRS	9.74276	.484782	8.77514	10.71039
		Other				

Table 2. *Multivariate Test of World Zone Influence*

Effect		Value	F	Hyp df	Error df	Sig.	Partial Eta Squared	Observed Power[a]
Intercept	Pillai's Trace	.460	1929.879[b]	2	4538	.000	.460	1.000
	Wilks' Lambda	.540	1929.879[b]	2	4538	.000	.460	1.000
	Hotelling's Trace	.851	1929.879[b]	2	4538	.000	.460	1.000
	Roy's Largest Roo	.851	1929.879[b]	2	4538	.000	.460	1.000
World Zone	Pillai's Trace	.062	28.954	10	9078	.000	.031	1.000
	Wilks' Lambda	.939	29.172[b]	10	9076	.000	.031	1.000
	Hotelling's Trace	.065	29.389	10	9074	.000	.031	1.000
	Roy's Largest Roo	.055	49.903[c]	5	4539	.000	.052	1.000
GAAP	Pillai's Trace	.034	39.164	4	9078	.000	.017	1.000
	Wilks' Lambda	.966	39.279[b]	4	9076	.000	.017	1.000
	Hotelling's Trace	.035	39.393	4	9074	.000	.017	1.000
	Roy's Largest Roo	.028	63.277[c]	2	4539	.000	.027	1.000
World Zone *GAAP	Pillai's Trace	.096	25.363	18	9078	.000	.048	1.000
	Wilks' Lambda	.906	25.430[b]	18	9076	.000	.048	1.000
	Hotelling's Trace	.101	25.496	18	9074	.000	.048	1.000
	Roy's Largest Roo	.068	34.255[c]	9	4539	.000	.064	1.000

[a] Computed using alpha = .05.

[b] Exact statistic.

[c] The statistic is an upper bound on F that yields a lower bound on the significance level.

There is much potential for future research, both quantitative and qualitative. Further research on differences in liquidity and information asymmetry for FPIs listed on US exchanges could be conducted to gain a better understanding of what influences the differences between liquidity and information asymmetry of US companies and FPIs. Further research could be conducted on the form of GAAP FPIs utilize for filing with the SEC and the GAAP mandated or allowed for filing in their home country. Another potential for future research could be qualitative research to analyze why companies choose a certain form of GAAP for filing purposes in the US. In 2011 Canada mandated the use of IFRS for company filings. Canadian GAAP had been very similar to US GAAP, so there is much potential for research on the impact of the transition from Canadian GAAP to IFRS. As the SEC continues to consider the incorporation of IFRS into the US capital markets, the FASB and IASB continue their convergence efforts, and other finance and accounting events occur worldwide, there will continue to be much potential for future research in the area of global accounting standards.

Table 3. *Between Subjects Tests of World Zone Influence*

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Observed Power[a]
Corrected Model	Bid-Ask	.162[b]	16	.010	33.796	.000	.106	1.000
	Share Turnover	32500.238[c]	16	2031.265	83.845	.000	.228	1.000
Intercept	Bid-Ask	.639	1	.639	2132.363	.000	.320	1.000
	Share Turnover	33477.468	1	33477.468	1381.859	.000	.233	1.000
Influence	Bid-Ask	.028	5	.006	18.848	.000	.020	1.000
	Share Turnover	4430.692	5	886.138	36.577	.000	.039	1.000
GAAP	Bid-Ask	.012	2	.006	20.257	.000	.009	1.000
	Share Turnover	2947.764	2	1473.882	60.838	.000	.026	1.000
Influence*GAAP	Bid-Ask	.072	9	.008	26.893	.000	.051	1.000
	Share Turnover	4921.467	9	546.830	22.572	.000	.043	1.000
Error	Bid-Ask	1.359	4539	.000				
	Share Turnover	109963.644	4539	24.226				
Total	Bid-Ask	6.108	4556					
	Share Turnover	394525.459	4556					
Corrected Total	Bid-Ask	1.521	4555					
	Share Turnover	142463.882	4555					

[a] Computed using alpha = .05

[b] R Squared = .106 (Adjusted R Squared = .103)

[c] R Squared = .228 (Adjusted R Squared = .225)

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Access and Barriers to Finance in Turkey: An Exploratory Study

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Abstract

Despite three-decades of reform, it is astonishing to see that one out of two Turkish adults is still excluded from the financial system. Such exclusion is an incredible waste of capital and talent for any country, given the positive effects financial access has on economic growth and poverty reduction. Not surprisingly, this issue has come to the forefront of the agendas of the World Bank, IMF, UN and development agencies in recent years. The high level of exclusion in Turkey is both a great challenge and opportunity. This article explores the level of (and barriers to) financial access in Turkey and draws some policy lessons for the future.

Keywords: Turkey, Financial Access, Barriers, Growth, Emerging Markets.

Introduction

Money and finance have been considered a *sideshow* in traditional economics. In classical theory, capital markets are perfectly efficient and all agents posses full information. Hence, there is no essential function served by financial institutions. Likewise, Keynes never attached much weight to the productive role of financial intermediaries in the economy, except to note the disarray that a collapse of the banking system can cause. Apparently, money was *irrelevant* in classical economics and an *enemy* in Keynesian economics.

However, McKinnon (1973) and Shaw (1973) begged to differ. In their view, there are two kinds of monies, *inside money*, meaning bank deposits supporting private sector loans, and *outside money*, meaning cash outside of the banking system. Economic growth is spurred by creating incentives for people to avoid holding true deadweight assets (outside money such as gold, jewelry and other physical objects that are often prized as inflation hedges) and to instead trust the financial systems and create more inside money. More inside money means more funds are channeled by banks to productive uses, hence more economic growth. Time has proven them right. Finance has been shown to *matter* for countries' economic development. The empirical and theoretical evidence that finance causes growth is so robust that it is available at all levels (country, sector, firms, and households) and supported by various econometric techniques. Furthermore, based on extensive cross country databases, researchers have found a strong and causal relationship between indicators of financial sector development and GDP per capita growth, productivity growth, poverty, firm growth, and entry rates (see Beck and Levine, 2005 for the review of the literature).

Finance is important for several reasons. It promotes growth through raising and pooling funds, thereby allowing more and more risky investments to be undertaken, by allocating resources to their best uses, by monitoring usage of funds, and by providing instruments for risk management. More importantly, finance helps with improving income distribution and poverty reduction (Beck et al., 2004). Clearly, financial development is not only *pro-growth* but also *pro-poor*. More abundant private credit creates a rising tide that lifts all boats but gives a bigger lift to the poorest ones, according to Asli Demirguc-Kunt, a research manager in the World Bank. Hitherto, the empirical literature behind the evidence that finance causes economic growth has used financial sector *depth*, typically measured as the ratio of financial assets (e.g., private credit or liquid liabilities or total deposits) to GDP as the "independent variable". The underlying assumption was that financial depth is a good surrogate for financial development. However, de la Torre et al. (2006) rightly argue that the intricate web of institutional and market interactions at the heart of financial development can hardly be reduced to a single dimension. Financial development, with all of its dimensions, not just financial depth, lubricates and boosts the process of growth. These dimensions include *stability*, *depth,* and *breadth* (access to finance). Of these dimensions, access to finance is a new discovery that has attracted wide attention from the World Bank to the United Nations and from politicians to academicians in a very short time.

Political democracy and market economy are separable concepts, but they tend to converge over the long run. McKinnon and Shaw postulate that private intermediaries operating in a liberalized financial environment (as distinct from government planners) make better use of funds at their disposal. There is much empirical support for their view that financial liberalization leads to financial deepening and fosters a more efficient allocation of investment (Williamson and Mahar, 1998). However, the well known study, "Good-bye financial repression, hello financial crash" (Diaz-Alejandro, 1985), reminds us that the economic stage should be prepared for change before liberalization is put in motion; otherwise the system could become prone to crashes, as demonstrated lately in Chile, Mexico, Russia, and several Eastern and Central European countries. Banks and securities markets cannot function properly unless their institutional foundations are strong. At the very least, we have learned out of experience that sudden financial liberalization can create instabilities when the underlying institutional structure contains serious weaknesses. Thus, the way financial liberalization occurs also matters, particularly for ensuring that financial development rests on sound institutional footings. It seems that what matters the most for growth is not the *form* in which financial services come, but the fact that they are provided in an efficient manner and supported by a proper institutional and competitive environment (Claessens, 2005). In many developing countries, areas where it is obvious that progress can be made in furthering access to financial services are institutional infrastructure improvements. Better legal, information, payment systems, distribution, and other infrastructures are needed in many countries. Governments can play a critical role in creating or strengthening the foundations of a financial system. Inspired by the worldwide trends in the 1980s, Turkey has embarked on a long path to build institutional foundations, open its economy, and liberate its markets. In this article, we will evaluate the current level of financial development and financial access in Turkey as compared to other countries in order to judge the success of financial, institutional, and legal reforms that have been at work for the past three decades in the country.

Access to Finance and Institutional Foundations

Access to finance means the absence of price and non-price barriers to the use of financial services. It measures the degree of dispersion of financial services across a country. Thus, *financial breadth* –who has access to financial services– is at least as important as *financial depth* –what is the size of financial services industry– in determining economic growth.[14] Financial inclusion can promote growth, reduce poverty, and alleviate income inequality. Theoretical studies indicate that frictions in financial markets may hinder broad access and can result in income inequality and poverty traps (Banarjee and Newman, 1993). Market imperfections in the form of informational asymmetries, transaction and contract enforcement costs are especially binding on poor or small entrepreneurs who lack collateral, credit histories, and connections. Lack of access reduces the efficiency of resource allocation and has adverse consequences for growth and poverty alleviation (Galor and Zeira, 1993). Schumpeterian argument tells us that financial development causes growth because it fuels the process of "creative destruction". However, it is through broader access to finance that talented newcomers are empowered and freed from the disadvantages that would otherwise stem from their lack of inherited wealth and absence of connections to the network of more privileged incumbents. Access to finance for large parts of the population is thus seen as essential to level the playing field, expand opportunities beyond the rich and connected, and promote democracy and a market economy (Rajan and Zingales, 2003). Above all, access to financial services is considered "public good" by some authorities, the same as safe water, health services, and education (Peachey and Roe, 2004).

Individuals and firms outside the system are untapped resources, thus representing forgone opportunities for an economy. *Outside money* is a waste and drain from the banking system and often times results from trust issues. The use of this type of money may be reduced by increased confidence that the rules, contracts, and personal and business practices are fair and can be trusted. Unless people have some trust in the rule of law and government, they will not part with their money and lend it to a 'stranger' with productive opportunities. Hence, there is a strong connection between rule of law, confidence in government, willingness to trust nonfamily, and economic well being. In his provocative book, **Trust**, Fukuyama (1995) examined the

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[14] Hanohan (2007) showed that there is a positive but weak relationship between financial depth and breadth measures, indicating that financial depth and access are two distinct dimensions of financial development and play different roles in affecting economic growth.

importance of interpersonal trust in making societies and economies work. In *low trust societies,* he found that the extended family is the only social unit that inspires trust, and any dealings beyond the family or tribe requires great care. Modern economies are so complex that they cannot function well without known, enforceable rules that protect arm's length relationships in the marketplace. In environments with weak institutions and lack of trust, contract writing and enforcement is difficult and publicly available information is inadequate. Agency problems tend to be alleviated with mechanisms between private parties that rely heavily on personal relationships, fixed collateral, and group monitoring, which hinders financial and economic development to a large extent. Arm's length financing frees borrowers from the encumbrance of using collateral and personal connections, yet necessitates the prompt and unbiased enforcement of private contracts by a third party (governments and/or courts). Hence, in integrated economies, dealing with strangers is inevitable and requires a commonly accepted rule of law by established governments. Thus, the vast gains from broad participation in financial markets depend on the establishment of strong institutions and enforcement of credible laws (Beim and Calomiris, 2001).

As of 2009, Turkey is the 15th largest economy in the world and the 6th largest in Europe (IMF). However, Turkey has bigger aspirations for the future. In 2023, it will celebrate its 100th anniversary as a republic. In many circles, Turkish politicians boastfully express their wishes that by then they want to see their country among the 10 largest economies. Turkey is currently about a $700 billion dollar strong economy. To play in the giants' league, the economy should surpass the 1 trillion dollar threshold, requiring the national output to rise about 50% until then. Regardless of whether this ambitious goal is achievable or not, one thing is certain that Turkey needs more labor, capital, technology, land, and entrepreneurs to support such a "great leap forward". The cardinal obstacle facing Turkey is a shortage of capital. An export oriented economy and FDI bring in some required additional funds. However, this is neither sufficient nor reliable.

Whether money or talent or nature or knowledge, developing economies tend to underutilize *all* their resources. By 2008, the size of the entire Turkish banking industry is around half a billion dollars. This is below the size of a mid-size bank in the EU. The ratio of bank assets to GDP is about 70% in Turkey, whereas it is 900% in Luxemburg, 600-700% in Ireland and the UK, and 200% in Italy and Greece. Lower inside money in Turkish banks means insufficient funds to support the intended growth. This could be a product of the country's prosperity level or the public's attitude to financial institutions. Where is the money then? We know that "above ground money" should be either in banks or in securities markets. Turkish bond markets are literally inexistent and the stock market occupies less than 5% of the financial system. Obviously, money did not migrate to markets. One plausible explanation for the miniscule size of the Turkish banking system is that there are substantial drains from the system. Lack of trust in the financial system might have induced people to keep their money under mattresses or in alternative forms of value storage, foreign currencies, gold, or other jewelries. A country with historical goals needs every 'lira', every talent, and every positive NPV project, however small. Thus, financial inclusion is an important and critical policy variable for Turkey. Then, some questions become vital. What is the level of financial exclusion in Turkey? Why are many individuals and firms operating underground? What obstacles are they facing in accessing financial services? What could be done to broaden access and 'domesticate' idle resources? It is worthwhile to examine how far three-decade long economic reforms have been successful on these key fronts.

The Level of Banking Sector

Outreach in Turkey

World Bank publishes overall financial access levels for many countries, as developed by Hanohan (2007), and indicators of financial access and use, as developed by Beck et al. (2006). *Financial access* is measured by the percentage of adults with a financial account (checking, saving, insurance, investment, or loan account) in a bank or a similar formal financial institution in a country. One should note that *financial access* and *financial use* are not the same things. People might have access to financial services but might decide not to use them, either due to socio-cultural factors or high opportunity costs. Beck et al. (2006) used the following indicators for *financial access:* 1) number of bank branches per 1,000km^2 [*geographic branch penetration*]; 2) number of bank branches per 100,000 people [*demographic branch penetration*]; 3) number of bank ATMs per 1,000 km^2 [*geographic ATM penetration*]; 4) number of bank ATMs per 100,000 people [*demographic*

ATM penetration]. For *financial use,* they adopted these variables: 1) number of loans per 1,000 people [*loan accounts per capita*], 2) average size of loans to GDP per capita [*loan-income ratio*]; 3) number of deposits per 1,000 people [*deposit accounts per capita*]; average size of deposits to GDP per capita [*deposit-income ratio*]. Geographic penetration variables are proxies for the average distance for a potential client from the nearest physical bank outlet. Demographic penetration indicators are a proxy for the average number of people served by each physical bank outlet. Higher loan and deposit accounts per capita indicate greater use of financial services. However, higher loan or deposit income ratios indicate that banking services are more limited in use, because they are likely only to be affordable to wealthier agents. Utilizing the data collected by the World Bank, Table 1 shows the overall level of financial access and bank outreach in Turkey vis-à-vis world statistics.[15]

Overall financial access level for Turkey is 49%, indicating that about half of the Turkish population does not have any account in a financial institution, somewhat validating the extreme levels of capital flight from the system. Global access average is 41% and median is 32%. Turkey is between 50%-75% quintiles globally in terms of access. To be exact, its ranking among 157 countries is 26. However, this does not mean that there are 25 countries above Turkey. In fact, there are 46 countries ahead of Turkey, as many superior countries have equal access levels. There is universal access in Netherlands (100%). However, in Tanzania and Nicaragua, only 5% of the population has access to financial services. Average access is 90% for the OECD countries and 26% for developing nations. Among the EU countries, Turkey's access level is the lowest, except for Romania. Table 1 also provides the level of financial development (depth) as measured by the ratio of private credit to GDP in 2003. Turkey's financial depth ratio is 17.1%. The average financial development is 57% for the world, 163% for the USA and 159% for Switzerland. In terms of financial development in 2003, Turkey seems to lag behind 75% of the countries. These causal observations imply a close association between financial access, depth, and economic growth. It also reminds Turkey of the distance it needs to travel to catch up with the more advanced countries.

Financial access is closely related to the proximity of bank outlets and affordability of financial services in a country. Turkey has 7.81 bank branches and 16.54 ATMs per 1,000 km^2. Bahrain, Belgium, Malta, Netherlands, and Singapore have more than 120 branches per 1,000 km^2; Korea, Malta, Bahrain, Japan, and Singapore have more than 253 ATMs for the same area. The global averages (medians) are 30.2 (4.9) and 13.0 (10.5), respectively. Turkey's ranking is 44/103 for branch penetration and 38/94 for ATM penetration. As for demographic penetration, 8.5 branches and 18 ATMs serve 100,000 people in Turkey, whereas, 96 branches in Spain, 2,643 ATMs in Singapore serve the same number of people. Global averages (medians) are 13.9 (8.4) and 28.4 (16.7), respectively. The ranking of Turkey for demographic penetration is 48/103 for branches and 39/94 for ATMs. These observations indicate that the level of both geographic and demographic penetration in Turkey is not on par with more advanced economies.

As for the availability of the most widely used financial services (loans and deposits), per 1,000 people, there are 265 loan and 1,114 deposit accounts in Turkey. This indicates that there is more than one deposit account per capita. However, because more than half of the Turkish population is unbanked, the implication is that some individuals and firms have more than one account with banks. Global averages (medians) are 199 (81) and 944 (529), respectively. Turkey's rank is 13/44 for loan accounts and 20/54 for deposit accounts. In terms of loan usage, the champions are Greece (776), Poland (774) and Israel (710), whereas in deposit usage, the leaders are Austria (3,120), Belgium (3,080) and Denmark (2,706). In Albania, there are just 4 loans per 1,000 people. Turkey is above average in terms of both loan and deposit accounts. The top 25% of the countries have 305 loan accounts and 1,500 deposit accounts per 1,000 people. The average size of loans to income is 0.65 and the average size of deposits to income is 0.68 in Turkey. This places her below 75% of the countries. The lower these ratios, the more affordable and accessible these services are. In Bolivia, average size of a typical loan is 28 times greater than the average income, which probably keeps many potential borrowers at bay. However, in Poland, the loan size is only one-third of the average income. In terms of the deposit income ratio, Turkey is in the middle, with 68%. This ratio is 931% for Madagascar, 4% for Iran and 7% for Russia.

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[15] The overall access statistics reflect the latest available data in 2007 and banking sector outreach data come from 2003-04.

Table 1. Financial access and banking sector outreach measures in Turkey

	Turkey	World						
Access Variables	Score	Mean	Min	25%	50%	75%	Max	# of obs
% Access	49	41	5	20	32	56	100	157
Ratio of private credit to GDP (1999 to 2003)	0.171	0.6	0.0	0.2	0.4	0.9	1.6	92
# of bank branches per 1,000 km^2	7.81	30.2	0.1	1.7	4.9	21.4	636.1	103
# of bank ATMs per 1,000 km^2	16.54	75.8	0.1	1.6	10.5	38.7	2642.6	94
# of bank branches per 100,000 people	8.5	13.9	0.4	3.8	8.4	15.2	95.9	103
# of bank ATMs per 100,000 people	18	28.4	0.1	5.2	16.7	40.7	135.2	94
# of loans per 1,000 people	264.51	198.5	4.4	50.1	80.6	305.4	776.5	44
# of deposits per 1,000 people	1,114.23	943.9	14.5	291.0	528.9	1545.3	3120.0	54
Average size of loans to GDP per capita	0.65	5.6	0.3	2.1	3.7	6.4	27.9	44
Average size of deposits to GDP per capita	0.68	1.6	0.0	0.4	0.7	1.7	9.3	54

Source: World Bank (2008).

Barriers to Financial Access in Turkey

Despite the fact that Turkey has come a long way, the financial system is still in its infancy. Turkey is a mediocre country in terms of financial access and development, with half of the population outside the financial system. Market frictions such as transaction costs and asymmetric information necessitate the existence of financial institutions. These frictions may limit the extent to which financial institutions can reach out to clients. Barriers like high minimum deposit balances, minimum loan amounts, and fees can lead to exclusion by making these services unaffordable for large segments of the population. Using back-of-the-envelope calculations on income distribution, Beck et al. (2006) demonstrated that fees to maintain checking accounts effectively prevent more than 30% of the population from using such services in 10 of the 58 countries in their sample (more than 50% in several African countries). The limited breadth and depth of the Turkish financial sector imply that there must be some barriers to bank access and use. In this section, we will examine the likely barriers. World Bank researchers have developed a number of indicators of barriers to financial access and categorized them into three different dimensions: 1) *Physical access* refers to the points of service delivery. 2) *Affordability* means the costs in terms of minimum balances and fees that bank customers need to pay to obtain financial services. 3) *Eligibility* refers to the criteria (in terms of documents or other requirements) that determine who can access financial services and who cannot. Using the survey results collected by the World Bank, we created Table 2, showing the barriers to *deposit services*; Table 3, displaying the barriers to *consumer* and *mortgage loans*; Table 4, exhibiting the barriers to *business* and *SME loans*; and Table 5, summarizing the barriers to *payment services* in Turkey in comparison to other countries. The purpose is to uncover the reasons behind the level of repression in Turkish financial markets and institutions in terms of access.

To open an account, banks in many countries require various documents on top of ID cards such as recommendation letters, wage slips, and proof of domicile. The most severe barriers to open a deposit account in Turkey seem to be bureaucratic (Table 2). The average number of documents demanded is 3.20 for a checking account and 2.40 for a savings account in Turkey, substantially greater than the world averages (2.49x2.13) and medians (2.53x2). In addition, the costs of using these services appear to be above the world average, especially for savings accounts. This may limit the affordability of these services for the wider public. Annual maintenance fees, as a percentage of average income, are 0.30% for a checking account and

0.14 % for a savings account in Turkey. On the other hand, responding Turkish banks do not impose any minimum amount to open or maintain an account, which is good for financial access. Table 3 and 4 display the indicators of physical access, affordability, and eligibility for 4 different types of loans – consumer, mortgage, business, and SME loans. The most important barriers to consumer and mortgage loans in Turkey seem to be affordability constraints. Fees paid by Turkish customers for a housing loan reach 2.16% of the minimum loan amount. This is at least twice the amount paid by the residents of more than 50% of the countries in the world. The minimum amount of a mortgage loan is 165% of the average income in Turkey, which is also much more than the typical resident of the world (144%). As Table 5 shows, Turkish residents are not exposed to excessive fees in terms of making payments. The cost of wiring $250 internationally is 6.34% of the wired amount, which is close to the world median.

Table 4 summarizes the barriers to business and SME loans. It seems that Turkish firms face sizable cost and bureaucratic obstacles in doing business. Fees charged on business and SME loans in Turkey are above the world medians. Days to process loan applications are about 14 days in Turkey, whereas it is 11 days for the median country. World Bank conducts two surveys to measure the barriers to business across the world, World Business Environment Survey (WBES) and Investment Climate Survey (ICS). In these surveys managers are asked about the obstacles they face in their operation and growth, including several questions related to the financial system. According to the WBES results, 36% of all firms around the globe rate financing a major obstacle, 27% moderate, 18% minor, and 19% no obstacle for their growth. Evidently, 81% of the respondent firms see finance as an obstacle (with varying degrees). The World Bank survey on Turkish firms was done in 2008. We construct Figures 1.A to 1.E to summarize the findings. Turkish firm managers claim that the main obstacle they face for growth is access to finance. 26% of all Turkish firms rate access to finance, 18.21% tax rates, 17.52% political instability as the major barriers for their growth potential (Fig 1.A). It is also clear that Turkey faces more severe finance constraints than its income and geographical counterparts in Eastern Europe and Central Asia (Turkey is also among the OECD countries that bear the highest finance obstacles). It is also obvious that *domestic firms* are suffering more from finance hardships than *foreign firms* operating in Turkey (Fig 1.B). Small firms and firms in countries with poor institutions use less external finance, especially less bank finance. Evidently, among the different sized firms, *SMEs* are more constrained in Turkey. While only 10% of large firms report finance as their main obstacle to growth, 16% of small firms rate finance as the main obstacle (Fig 1.C). *Export oriented* firms are less restrained financially (Fig 1.D). Most of the firms that consider finance as the major barrier operate in the *service sector* (Fig 1.E). As compared to industrial firms, service firms posses less tangible assets to pledge as collateral to support a loan application. The quality of legal systems, property rights and the presence of mechanisms for reliable information are especially important for small firms (Beck et al., 2005).[16] Our results demonstrate that all kinds of firms are facing important barriers to financial access in Turkey, but finance constraints are more acute for the SMEs. An environment conducive for small firms to grow and/or act bigger is essential for long term growth. With further legal, institutional, and economic reforms, Turkey may take important steps towards her goal of joining the major world economies on the shoulders of small, but vibrant entrepreneurs.

What Explains the Variations in Access to Finance?

Explanations of the lack of access fall into two dimensions: financial institutions' specific factors and barriers from the overall institutional environment. Beck et al (2005) in their empirical analysis explored such factors and barriers to explain cross-country variations in access to finance. Their correlation and regression results show that financial access indicators are significantly and positively associated with conventional indicators of economic development (GDP per capita) and financial development (private credit, liquid liabilities, and bank deposits to GDP). They also find that geographic access to banking services is positively correlated with population density. Expectedly, access to financial services is greater in larger economies. These results

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[16] Institutional environment matters more for SMEs than households. Better protection of property rights increases external financing of small firms significantly more than that of large firms, mainly due to more bank and equity finance. It also appears that substitutes to bank finance are imperfect; e.g., small firms do not use disproportionately more leasing or trade finance compared to larger firms (Claessens, 2005).

somewhat reflect *economies of scale* in the provision of financial services. Another noteworthy finding is that where access is wider, firms report lower financing obstacles.

Moreover, even after controlling for country size and density, the authors detected important associations between financial access and other country traits and policy variables. In particular, they find that a better communication and transportation infrastructure is closely associated with greater access. Countries with better developed institutions enjoy greater levels of financial access. Quality of credit information sharing systems is positively associated with measures of access to bank outlets, whereas, restrictions on banks' activities and entry requirements are negatively correlated with access. They also reported that government ownership of financial intermediaries does not necessarily mean greater access and more concentrated banking systems are unexpectedly associated with more usage of financial services. Foreign banks do not directly increase access, nonetheless, their very existence pushes local firms to look downward and reach more customers. Interestingly, the effect of outreach does not systematically vary across firms of different size.

Table 2. Barriers to deposit services in Turkey

	# of banks responding	Deposit market share (respondents share)	Physical access — Locations to open deposit account (out of 3)	Affordability — Minimum amount to open checking account (%GDPPC)	Minimum amount to open savings account (%GDPPC)	Minimum amount maintained in deman account (%GDPPC)	Minimum amount maintained in savings account (%GDPPC)	Annual fees checking account (% GDPPC)	Annual fees savings account (% GDPPC)	Eligibility — No. of docs. to open checking account (out of 5)	No. of docs to open savings account (out of 5)
Turkey	3	50.14%	2.20	0.00	0.00	0.00	0.00	0.30	0.14	3.20	2.40
World	193	48.25%	2.14	11.09	7.79	3.85	5.65	2.36	0.55	2.49	2.13
Minimum	1	4.63%	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
5%	1	13.68%	1.50	0.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
Median	3	44.56%	2.00	0.62	0.88	0.00	0.45	0.30	0.00	2.53	2.00
95%	5	89.08%	3.00	57.17	45.26	14.23	31.36	11.69	3.38	4.15	3.92
Maximum	6	100.00%	3.00	141.84	70.92	123.77	73.83	26.63	7.79	4.57	4.72
# of obs		69	70	70	70	70	69	70	70	70	70

Source: World Bank (2008).

Table 3. Barriers to loan services: consumer and mortgage loans in Turkey

	Number of banks responding	Loan market share (respondents share) 2004	Physical access	Affordability				Eligibility	
			Locations to submit loan applications (out of 5)	Minimum amount consumer loan (% GDPPC)	Fees consumer loan (% min. loan amount)	Minimum amount mortgage loan (%GDPPC)	Fee mortgage loan (% min. loan amount)	Days to process consumer loan applications	Days to process mortgage loan applications
Turkey	3	38.33%	4.15	11.83	0.95	165.37	2.16	2.94	5.00
World	193	45.19%	3.23	56.79	3.07	428.58	3.70	4.58	12.68
Minimum	1	5.61%	1.77	0.00	0.00	0.00	0.00	0.73	1.00
5%	1	14.43%	2.00	0.03	0.00	0.00	0.01	1.00	1.67
Median	3	43.17%	3.05	13.63	1.08	143.77	1.09	2.94	9.45
95%	5	80.46%	5.00	215.50	6.16	1631.76	9.11	14.10	33.70
Maximum	6	100.00%	5.00	1153.17	109.24	5157.40	109.24	20.71	70.63
# of obs		75	76	75	75	72	73	75	73

Source: World Bank (2008).

Table 4. Barriers to loan services: business and SME loans in Turkey

	Number of banks responding	Loan market share (respondents share out of total system)	Physical access Locations to submit loan applications (out of 5)	Affordability Minimum amount business loan (% of GDPPC)	Fee business loan (% of min. loan amount)	Minimum amount SME loan (% of GDPPC)	Fees SME loan (% of min. loan amount)	Eligibility Days to process business loan applications	Days to process SME loan applications
Turkey	3	38.33%	4.15	74.26	1.94	18.57	1.41	13.75	4.61
World	193	45.19%	3.23	2259.06	4.73	337.58	4.67	12.68	11.03
Minimum	1	5.61%	1.77	0.00	0.00	0.00	0.00	1.00	1.00
5%	1	14.43%	2.00	0.00	0.00	0.00	0.00	1.99	1.99
Median	3	43.17%	3.05	55.28	1.26	39.86	1.28	10.64	9.09
95%	5	80.46%	5.00	9845.42	15.54	1876.04	16.13	31.54	31.54
Maximum	6	100.00%	5.00	64216.77	100.35	3141.17	100.35	50.00	43.26
Count		75	76	74	76	74	76	76	76

Source: World Bank (2008).

Table 5. Barriers to payment services in Turkey

	Number of banks responding	Deposit market share (respondents share out of total system) 2004	Cost to transfer funds internationally (% of $250)	Amount of fee for using ATM cards (% of $100)
Turkey	3	50.14	6.34	0.00
World	193	48.25	6.63	0.17
Minimum	1	4.63	0.12	0.00
5%	1	13.68	1.01	0.00
Median	3	44.56	6.34	0.00
95%	5	89.08	14.75	0.42
Maximum	6	100.00	20.00	5.70
Count		75	75	75

Source: World Bank (2008).
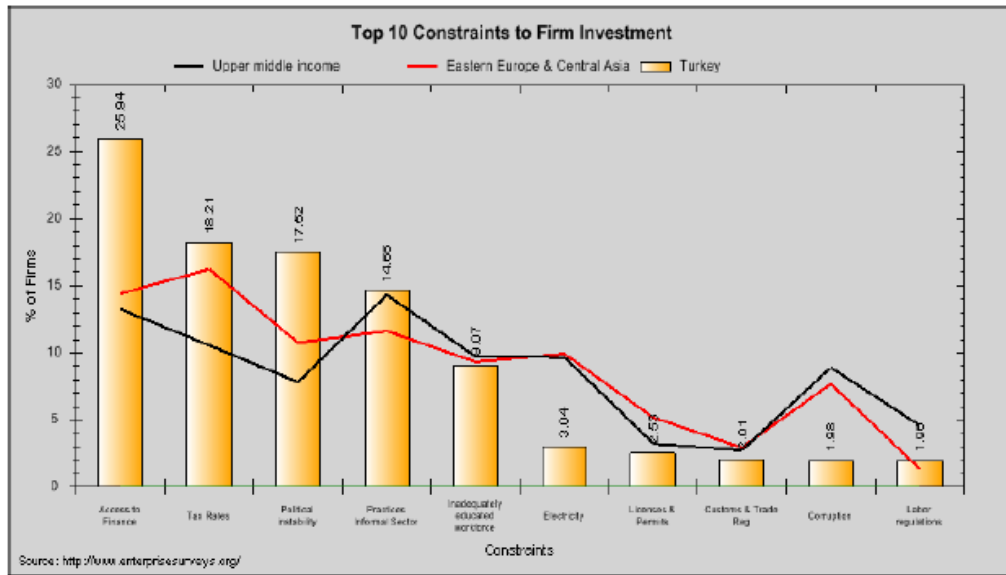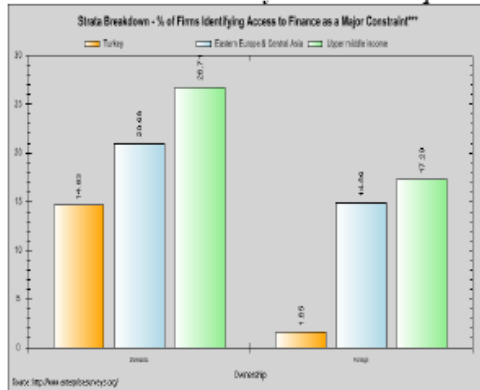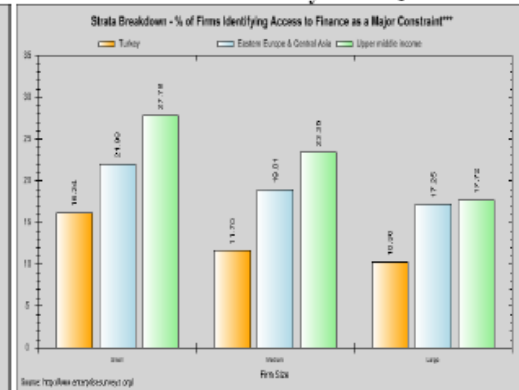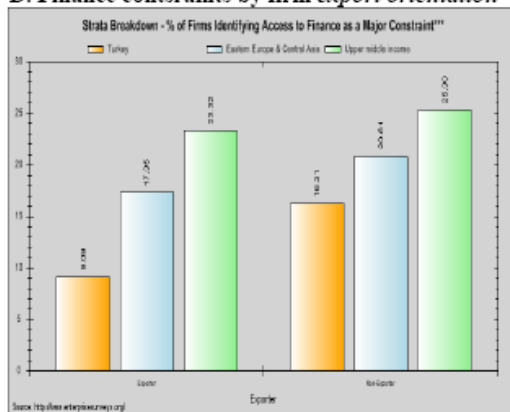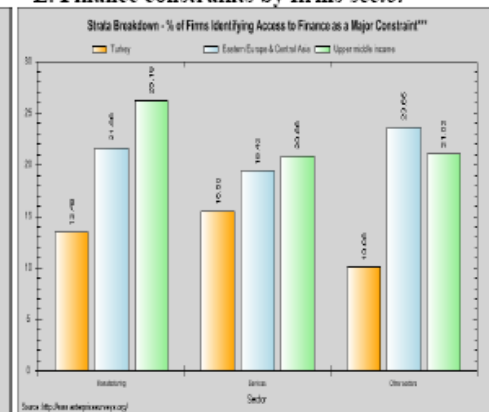
Fig. 1. A Top 10 constraints to firm investment in Turkey.

In a follow up paper, Beck et al. (2006) examined the variations in *barriers* to bank access and use around the world. Specifically, they investigate indicators of 'physical access', 'affordability' and 'eligibility' barriers to deposit, loan and payment services. They found that banks in more economically and financially developed economies impose lower barriers. Barriers are negatively correlated with financial outreach and with lower financing obstacles. They concluded that bank size and the existence of physical infrastructure in a country are the most important determinants of barriers. In particular, they reported that larger banks demand lower minimum balances to open a checking account, charge lower checking and savings fees, require fewer documents to open accounts, impose lower minimum loan amounts for SMEs and consumer loans, need fewer days to process loans, and are more likely to accept loan applications through non-traditional delivery channels such as phone or the Internet. This

57

is also another indication of *scale economies* in delivering financial services. Hitherto, empirical and theoretical literature has not attached much weight to the relationship between infrastructure, input costs, and financial depth and breadth. However, their paper's findings suggest that the quality of the physical infrastructure, such as communication and electricity networks, influences banking costs and can explain a significant chunk of cross country variation in barriers to financial access. Furthermore, they presented some institutional evidence that in more competitive, open and transparent economies, and in countries with better contractual and informational frameworks, banks impose fewer barriers. Again, despite the fact that foreign banks themselves seem to charge higher fees than local counterparts, in foreign dominated banking sectors, fees are lower and it is easier to open bank accounts and to apply for loans. Whereas in government dominated systems, bank clients may pay lower fees but face greater restrictions in terms of where to apply for loans and how long it takes to have applications processed. In other words, cheap public financial services come with lower quality. Apparently, these findings yield significant implications for policy reforms to reduce barriers and expand access to financial services.

Concluding Remarks and Policy Suggestions

More than half of the Turkish adult population is unbanked. In other words, the fraction of adults with an account in any financial institution in Turkey is less than 50% (World Bank, 2008). Isik (2009) also reports that there are wide variations and inequalities in access to finance across regions and provinces within Turkey. This implies that access to financial services is still a privilege in Turkey, confined to only wealthier and more connected segments of society. However, in advanced countries, the issue of financial exclusion has been eradicated from the public sphere, like malaria and tuberculosis of the past. The level of financial access is 100% in Netherland, 99% in Sweden, 97% in Germany and 96% in France and Canada. The average inclusion in the OECD countries is over 90%. However, Turkey, which is an accession country to the EU, is lagging behind all the member countries, except for Romania, in terms of access to and use of financial services. Recent theoretical and empirical literature shows that financial development (depth) and financial access (breadth) are not only pro-growth but also pro-poor in both absolute and relative terms. The countries with more developed financial systems both in terms of depth and breadth tend to have higher growth rates, alleviate poverty, and mitigate income inequality faster. If examined from a fine angle, the excluded represent forgone opportunities to expand the economic pie and individual slices for everyone, including the included.

So, what can be done to broaden access to financial services and raise opportunities for all in Turkey? Before answering this vital question and outlining policy prescriptions, one first should ask another vital question. What are the reasons for the financial exclusion? We need to remember that *use* of financial services is distinct from *access* to financial services. Non-users of formal financial services are either voluntarily or involuntarily excluded. Some people may opt out using such services voluntarily although they have no access issues. Voluntarily excluded people may choose not to use financial services for cultural or religious reasons or simply they may refuse to use them due to lack of need or demand. On the other hand, some people are involuntarily excluded; i.e., they wish to use financial services but they cannot access them for various reasons. Some people are screened out by banks because they do not qualify due to high risk or insufficient income. In some extreme cases, people are refused by lenders for no other reason than their ethnic background, gender, religion or age. Sometimes, financial institutions may lack adequate transaction technology or infrastructure to accommodate the people at the fringes, as serving them now may be prohibitively costly and risky. Lastly, some people simply cannot afford financial services due to high minimum balances/fees, or current services may not be tailored to their needs. Thus, policymakers who wish to expand financial access probably may not be able to do much if certain people are rightly excluded due to their high chance of default. However, they can certainly take some actions against discrimination, insufficient informational and contractual infrastructure, and high provisional costs of financial services.

In this study, when we examine barriers to bank access in Turkey as compared to other countries, we find that Turkish residents or firms do not particularly face excessive barriers in terms of physical access (proximity of branches or ATMs, or availability of on-line or phone services etc.). In terms of convenience, Turkey is actually better than more than half of the countries around the world. It seems that Turkish residents can access bank outlets easily, but they prefer not to use them. Then, what excludes one out of two Turks from accessing financial services? For involuntary exclusion in Turkey, four possibilities may exist: affordability, insufficient income and high risk profile of potential clients, discrimination, or weak contractual and informational frameworks. To answer the question, we must trace money in Turkey. Total assets of Turkish banks as of 2008 are around $500 billion dollars. This

is about three thirds of the national income. Turkey lags all credible EU countries in depth. Monies of modern societies are either channeled by financial institutions or financial markets. Turkish financial markets do not seem to be the secondary address for the money. One cannot help but ask then, if money is not kept in banks or markets, where is it? It seems that money has fled the financial system; either it is parked in unproductive financial assets such as gold or jewelry, kept under mattresses, or just taken abroad. Then, the subsequent curious question is why money is escaping from the system?

Part of the flight from banks may spring from socio-economic reasons. Religious or cultural concerns may still keep away some groups from the 'mundane' financial institutions; despite the fact that the spread of zero-interest financial institutions in Turkey in recent years has notably shrunk this unbanked segment of the society. More can be done on this front by introducing more financial services and products compatible with religious concerns. Islamic jurists could be called into service to mitigate the theological concerns of the pious and help invent new products to domesticate still untapped funds. As for discrimination, there are some concerns in certain circles that rural money is collected and loaned in urban areas like Istanbul, Ankara and Izmir. Moreover, holding banking structure is still a prevalent organizational form in Turkey. Various major banks are under the control and ownership of the giant industrial holdings. Many entrepreneurs are complaining that they are turned down by some banks if they have projects to enter a business line or industry where the parent company of the bank is doing business as well. As for injustices on the basis of religion, gender, age, or ethnicity, it is hard to judge without concrete evidence. We need more investigation. However, the bureaucracy of opening an account or obtaining a loan in Turkey is much more problematic as compared to other countries, since Turkish banks demand more documents from clients and take more time to process loan applications. This red tape could be some, albeit weak, sign of discriminatory tendencies. Legislations in the U.S. like the Community Reinvestment Act, which bars *red-lining* certain regions, and the Equal Credit Opportunities Act, which prohibits discrimination, could be enacted to protect the innocent. Also, employing bank clerks speaking local dialects, or representing some ethnicities could help. Alternatively, the real problem could be a matter of poverty or financial illiteracy, not access, for certain groups. Then, financial or general education policies gain importance.

The large capital drain from the Turkish financial system also signifies the trust issues inflicting the whole society. Cash is still the most prominent payment instrument. Check payments are not common. Thus, people carry big stacks of cash around to settle daily transactions. Furthermore, one half of the Turkish banks have failed in 2000-01. Hence, the severe anorexia of Turkish citizens to deal with banks may be engraved in their psyche after a number of very costly and frequent mass bank failures, resulting mainly from outright fraud of bank owners and managers. The lack of an effective legal and contractual system that will timely resolve conflicts between economic agents may be keeping many Turks at bay. Market frictions like information asymmetries and agency problems can only be overcome by constructing a credible legal system, effective oversight, prudent regulations, transparent government and corporations, reliable accounting and auditing practices, and market discipline. Moreover, inflationary fears of the past could still be in the public subconscious, which might be encouraging the holding of outside money like gold. Then, prudent macroeconomic policies become instrumental. There are also some signs that many banking services are not affordable for an average Turkish citizen. Fees charged on savings accounts, mortgage, business, and SME loans are considerably above world medians. This can be the result of weak competition among Turkish banks. According to many pundits of financial development and access, public efforts in the long run should be geared towards improving the *enabling institutional environment*, where all agents would feel safe to play and deal with strangers. However, for those who are impatient and suffering from reform fatigue, the best medicine in the short run is a *stiff competitive environment*, which encourages self discipline in everyone.

Acknowledgments

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Exchange Rate Sensitivity: How Receptive are the Philippines Bilateral Trade Flows to Real Depreciation of Peso?

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Abstract

Conventional approach of evaluating the significant of exchange rate depreciation and trade balance has been focused on aggregate data. Due to aggregation bias and lack on import and export prices have led to studies using import and export values. This paper examines the import and export values of the Philippines and its 12 trading partners. Using quarterly data and applying the Auto Regressive Distribute Lag (ARDL) model, evidence shows that real depreciation Philippines' Peso is sensitive to trade balance in the short run. In the long run, two trading partners are significant for both export and import partners.

Keywords: Philippines, Auto Regressive Distributed Lags (ARDL), Currency depreciation, Trade Balance

Introduction

Exchange rate depreciation or devaluation has been a focus of discussion not only among economist but with policy makers as well. Introductory economic textbooks theoretically discuss any devaluation or depreciation of exchange rate will have an advantageous impact on a nation trade balance. Earlier studies of devaluation focused on elasticity approach in which, to have a successful devaluation, summation of export and import elasticity has to be greater than one or also known as the Marshall-Lerner (ML) condition[17]. This empirical condition led to the estimation of import and export demand equations where trade volumes are reverted to measure income and relative prices. Since this paper is on Philippines, literature reviews will focus on this nation. Miles (1979) employed pooled cross section using annual aggregate data (1956-1972) on 14 countries (inclusive Philippines). He found that devaluation did not improve trade balance. However, devaluation helps balance of payment through capital account. Himarios (1985) using time series ordinary least squares on 10 countries and found that 90% improves their trade balance from devaluation. Bahmani-Oskooee and Malixi (1992) using Almond lag structure investigate 13 less developed countries[18] using aggregate quarterly data (1973-1985) and found support for trade improvement from devaluation in the case of Brazil, Greece, Korea and India. In addition, Lal and Lowinger (2002) assessed Philippines as well as six East Asian countries[19] using Johansen cointegration approach and impulse response function. They utilized aggregate quarterly data (1980-1998) and found evidence that real effective exchange rate improved trade balance in the long run. Since these studies employed aggregate data, they may suffer from aggregation bias. As such, empirical studies have evolved from employing aggregate data to bilateral data. Recognizing aggregation bias, Bahmani-Oskooee and Kantipong (2001) employ Auto Regressive Distributed lags (ARDL) model with quarterly bilateral data (1984-1997) to evaluate the relationship between Thailand and five of its largest trading partners. They found favorable effects on trade balance from exchange rate devaluation in the short-run as well as long-run in the case of USA and Japan[20]. Bahmani-Oskooee and Harvey (2012) argue that this method may not expose the profound element to currency depreciation or devaluation[21]. As such, the approach of this paper is to evaluate the impact of depreciation from inpayments (export) and outpayments (import) of Philippines trade volume with its trading partners[22]. Following introduction, this paper is arranged as follows, Section II presents the

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[17] Some of the studies using ML condition are Goldstein and Khan(1976), Haynes and Stones(1983a,1983b), and Bahmani-Oskooee and Niroomand (1998). All of these empirical studies utilized aggregate data.

[18] Brazil, Dominican Republic, Egypt, Greece, India, Korea, Mexico, Pakistan, Peru, Philippines, Portugal, Thailand and Turkey

[19] Indonesia, Japan, Korea, Malaysia, Philippines, Singapore and Thailand.

[20] Some of the studies using disaggregated data are Bahmani-Oskooee and Harvey (2006, 2009).

[21] Recent additions to these studies are Bahmani-Oskooee and Goswami (2003), Bahmani et. al. (2005a, 2005b), Bahmani-Oskooee and Harvey (2012, 2013) and Goswami and Ahmed (2010).

[22] Refer to figure 1 for Philippines peso against U.S. dollars.

model and methodology. Section III informs the empirical results. Section IV is the conclusion of the study. Data and sources are presented in the Appendix.

Fig 1 (Peso/USD)
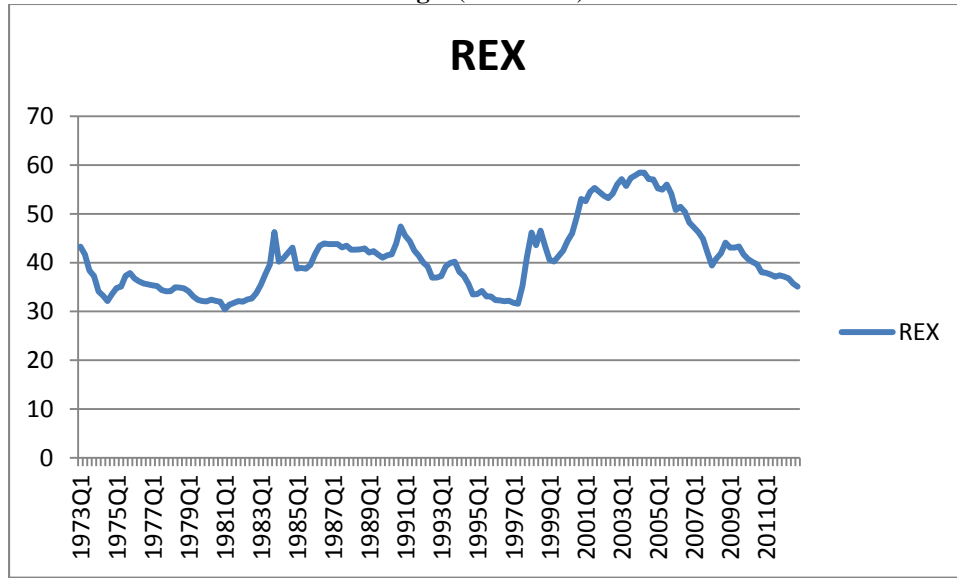
The Models and Methodology

Following Bahmani-Oskooee and Goswami (2003) and Bahmani-Oskooee and Harvey (2012), the estimation of Philippines' long run trade flows with its trading partners using the following approach. As indicated in equation (1) and (2), it is assume that Philippines's long run bilateral inpayments and outpayments with its trading partners accommodate the following forms[23]:

$$LogEX_{i,t}^{PHY} = \alpha + \beta \, LogY_{i,t} + \chi \, LogREX_t + \mu_{i,t} \tag{1}$$

In equation (1), the dependent variable, *EX*, is Philippines's export value or inpayments is assumed to be dependent on its trading partners' income, Y_i and the real exchange rate, *REX*. It is assumed that β is positive since an increase in Philippines's trading partners income will lead to an increase in export. As for REX[24], it is expected to be positive given that a real depreciation of Philippines's peso will result to higher export earnings.

$$LogIM_{i,t}^{PHY} = \delta + \omega \, LogY_{PHY,t} + \rho \, LogREX_t + \xi_{i,t} \tag{2}$$

Likewise, in equation (2), Philippines's import dependent on its own income Y_{PHY} and real exchange rate, REX. It is estimated that ω to be positive while ρ to be negative. Since this paper investigates both long run and short run effects, it will incorporate short run dynamic into equation (1) and (2) in error correction models. As such, following many accepted literatures, this paper will follow Pesaran et. al.'s (2001) Autoregressive Distributed Lag (ARDL) approach as specify in equation (3) and (4).

$$\Delta \log EX_{i,t}^{PHY} = \alpha' + \sum_{k=1}^{n1} \gamma_k' \Delta \log EX_{i,t-k} + \sum_{k=0}^{n2} b_k' \Delta \log Y_{i,t-k} + \sum_{k=0}^{n3} c_k' \Delta \log REX_{i,t-k}$$
$$+ \gamma \log EX_{i,t-1} + b \log Y_{i,t-1} + c \log REX_{i,t-1} + \psi_t \tag{3}$$

$$\Delta \log IM_{i,t}^{PHY} = \kappa' + \sum_{k=1}^{n1} \phi_k' \Delta \log IM_{i,t-k} + \sum_{k=0}^{n2} e_k' \Delta \log Y_{PHY,t-k} + \sum_{k=0}^{n3} f_k' \Delta \log REX_{i,t-k}$$
$$+ \phi \log IM_{i,t-1} + e \log Y_{PHY,t} + f \log REX_{t-1} + \sigma_t \tag{4}$$

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[23] Most studies use nominal imports and nominal exports as the dependent variables in their models since import and export prices are not available at bilateral level to deflate the nominal trade values.

[24] Refer to Appendix A for definition of REX

Equation (3) and (4) evaluate both short-run and long-run coefficient in a single equation. Following Pesaran et. al. (2001), equation (3) and (4) are estimated by using the OLS technique and then applying F-test for joint significance of lagged level variables. If F- statistics is above the upper bound, then it indicates variables are cointegrated[25]. If F-statistics lies below the upper bound, I(0), signify indefinite and may require ancillary test. With ancillary test[26], this paper will use the long-run coefficient estimates and form an error correction term (ECM). It is lagged to one year and re-estimates using the original requirement. A significant negative coefficient indicating cointegration and further shows that the variables are return towards a long-run equilibrium. The establishment of cointegration allows me to evaluate short-run real depreciation of exchange rate. The short run effect of depreciation is determined by the sign and size of C'_K (3) and f'_K value in (4) while the long run effects are obtained from C (3) and f (4) after normalization.

Empirical Results

Using quarterly data 1973I-2011 IV, equation (3) and (4) are estimated using ARDL model[27]. Following Pesaran et.al. (2001), each model is estimated by imposing 12 lags at each first difference and utilizes the Akaike's Information Criteria (AIC) to select these optimal lags length. After which, F-test is conducted at the optimal lags. The results of optimal lags and F-test are shown in Table 1.

Table 1: F-test for cointegration

Panel I: Exports (inpayments)				Panel II: Imports (outpayments)		
Partner	Optimal Lags	F-test		Partner	Optimal Lags	F-test
Australia	5,2,2	8.18		Australia	3,0,3	6.19
Canada	5,1,0	11.85		Canada	4,5,0	5.56
China	5,6,1,	6.10		China	3,2,0	4.39
Hong Kong	8,1,5	5.39		Hong Kong	5,4,0	4.78
India	3,0,11	9.24		India	4,5,4	5.59
Indonesia	1,3,0	6.65		Indonesia	2,4,1	8.72
Japan	2,0,0	4.22		Japan	9,7,4	2.63
Malaysia	1,1,0	4.38		Malaysia	11,0,7	4.53
Singapore	11,4,0	3.29		Singapore	2,0,0	10.57
South Korea	5,3,0	5.78		South Korea	4,8,0	5.39
UK	4,4,1	3.75		UK	4,4,4	6.99
USA	12,2,0	8.07		USA	5,4,0	3.49

Note: In Panel I, the case for Australia indicated an optimal lag of 5, 2, 2. This specifies that the AIC selected 5 lags for Δ Log $EX_{i,t}$; 2 lags for Δ Log Yi ; 2 lags for Δ Log REX. The upper bound critical value of the F-test for co-integration at the 10% level of significance is 4.14.[Pesaran et.al (2001, Table C1,p 300)]

As shown in panel I, cointegration is supported in 10 cases[28] with the exception of Singapore and U.K. Similarly, 10 cases of imports (panel II) are cointegrated except for Japan and U.S.A. However, an alternative method to cointegration will be presented later. To proceed with the analysis, this paper will assume cointegration among the variables so this approach can retain the lagged level variables. It is based on the assumption that a vigorous results that support cointegration i.e. error correction term. To ascertain the short-run response of the trade flows to depreciation, Table 2 shows only the short run coefficients for the real bilateral exchange rate. In the case of inpayments (Panel I), Australia, China, Hong Kong, India, Indonesia and Japan demonstrate at 10% level these countries has at least one short run coefficient is significant. As compared to import model (Panel II), Australia, Indonesia, India, Japan, Malaysia and U.K are significant. These results show that real depreciation of peso has short run effect on both models.

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[25] Pesaran et al (2001) tabulated F-test critical value notwithstanding whether these variables are I(1) or I(0). As such, there is no pre unit root testing.

[26] Following Bahmani-Oskooee and Harvey (2013)

[27] The financial crisis in 1997 is taken into consideration with an inclusion of a dummy variable. The dummy variable for export models are significant in the case of Australia, China, Hong Kong, Indonesia, South Korea and Singapore while none of the import models were affected. These results indicate that Asian financial crisis seems to have an impact on Philippines 's export with its trading partners

[28] Greater than 4.14 upper bound critical value

Table 2: Short-Run Coefficient Estimates of Real Bilateral Exchange Rate

Panel I: Export model (Inpayments)

Lag Selected by AIC

Partner	ΔLn RE_t	ΔLn RE_{t-1}	ΔLn RE_{t-2}	ΔLn RE_{t-3}	ΔLn RE_{t-4}	ΔLn RE_{t-5}	ΔLn RE_{t-6}	ΔLn RE_{t-7}	ΔLn RE_{t-8}	ΔLn RE_{t-9}	ΔLn RE_{t-10}
Australia	0.27(0.94)	0.50(1.75)									
Canada	-0.08(0.77)										
China	-0.88(1.82)										
Hong Kong	0.45(1.31)	-0.68(2.09)	-0.50(1.53)	-0.75(2.24)	0.56(1.66)						
India	-0.66(0.35)	-3.05(1.56)	2.74(1.42)	-4.08(2.10)	5.76(2.97)	1.39(0.70)	0.004(0.002)	3.08(1.62)	1.55(0.85)	-6.72(3.69)	5.08(2.71)
Indonesia	0.29(1.82)										
Japan	0.12(1.86)										
Malaysia	-0.14(0.63)										
Singapore	-0.16(0.72)										
South Korea	0.02(0.11)										
UK	0.25(1.07)										
USA	-0.09(1.39)										

Panel II: Import Model (Outpayments)

Lag Selected by AIC

Partner	ΔLn RE_t	ΔLn RE_{t-1}	ΔLn RE_{t-2}	ΔLn RE_{t-3}	ΔLn RE_{t-4}	ΔLn RE_{t-5}	ΔLn RE_{t-6}	ΔLn RE_{t-7}	ΔLn RE_{t-8}	ΔLn RE_{t-9}	ΔLn RE_{t-10}
Australia	0.35(1.15)	-0.33(1.10)	-0.64(2.17)								
Canada	-0.07(0.45)										
China	0.03(0.67)										
Hong Kong	0.04(0.36)										
Indonesia	0.91(2.45)										
India	-0.15(0.21)	-0.76(1.07)	-0.68(0.96)	-1.54(2.15)							
Japan	0.01(0.05)	-0.30(2.05)	-0.04(0.27)	-0.36(2.41)							
Malaysia	-0.92(1.48)	-0.53(0.86)	0.58(0.97)	0.96(1.58)	-0.26(0.43)	1.77(3.02)	0.97(1.63)				
Singapore	-0.33(1.02)										
South Korea	-0.03(0.02)										
UK	0.38(1.20)	0.30(0.96)	-1.09(3.46)	-0.48(1.49)							
USA	-0.06(0.86)										

Note: Figures inside the parenthesis represent absolute value of t-statistics

To address if these short-run effects lead to long run, we need to refer to Table 3[29]. As shown in panel I, the real exchange rate that carries the expected the positive and significant coefficients are China and Indonesia. India, however has a negative coefficient and significant. This result shows that the exchange rate is not a significant determinant in promoting Philippines's export to India[30]. This may be due to the fact that Philippines's exporter adjust its prices and profit margin to accommodate the exchange rate deviation. In addition, demand for Philippines export is inelastic. In Panel II, India and Malaysia are the only two cases that carry the expected negative and significant coefficient. In the export model, each trading partner's income carries its positive and significant coefficient in the case of Australia, Canada, China, Hong Kong, Indonesia, India, Singapore and South Korea. However, in import model, only China, Indonesia and India carry the expected positive and significant coefficient. As stated earlier, we still retain the lagged variables even if there is no cointegration, due to additional support from error correction term (ECM_{t-1}). We utilized the long run coefficient estimates from Table 3 in creating an error correction term and substitute the linear combination lagged level variables in ARDL models (3) and (4) by lagged error correction term. Bahmani-Oskooee and Brooks (1999) showed that significant lagged error correction term in an error correction model is an efficient way to establish cointegration. Indeed, both panels I and II (Table 3), shows a negative and significant coefficient models in most cases[31]. In performing diagnostic test, the Lagrange Multiplier (LM)[32] majority of these estimated models are free from serial correlation.

Table 3: Long-Run Coefficient Estimates with diagnostic test

Panel I: Export Model

Partner	Log Y_i	Log Rex	Adj R^2	ECM_{t-1}	LM	Reset	CUSUM	CUSUM SQ
Australia	1.01(2.38)	0.36(0.80)	0.24	-0.24(3.70)	2.29	0.24	S	US
Canada	3.13(3.24)	-0.61(0.85)	0.35	-0.12(2.62)	4.46	6.31	US	S
China	1.59(4.32)	2.77(7.78)	0.15	-0.28(2.83)	24.60	6.94	S	US
Hong Kong	1.96(3.63)	1.05(1.24)	0.31	-0.14(2.29)	6.23	0.31	S	US
Indonesia	1.22(3.28)	1.08(1.86)	0.12	-0.27(4.77)	4.67	0.12	S	US
India	0.28(2.37)	-3.25(2.80)	0.43	-0.43(3.70)	9.08	0.33	S	US
Japan	-0.45(0.11)	3.85(0.67)	0.10	-0.03(0.82)	1.62	0.04	S	US
Malaysia	0.86(1.35)	-1.28(0.61)	0.07	-0.11(3.48)	39.53	5.28	S	US
Singapore	1.54(6.01)	-0.92(0.68)	0.18	-0.18(2.46)	5.59	0.18	S	US
South Korea	0.84(2.25)	0.11(0.11)	0.19	-0.17(3.19)	5.55	1.83	US	US
UK	2.38(0.87)	-2.58(1.10)	0.19	-0.04(1.76)	3.03	0.19	S	US
USA	2.55(0.34)	-9.87(0.26)	0.45	-0.01(0.27)	1.97	6.90	S	S

Panel II: Import Model

Partner	Log Y_{PHY}	Log Rex	Adj R^2	ECM_{t-1}	LM	Reset	USUM	SUMSQ
Australia	.73(1.16)	.14(0.29)	0.25	.05(0.99)	6.19	0.45	S	S
Canada	.39(1.45)	0.51(0.46)	0.21	.14(2.33)	14.09	2.01	S	US
China	.51(3.65)	.13(0.70)	0.07	.23(3.21)	28.14	4.88	S	US
Hong Kong	.89(0.33)	.51(0.47)	0.17	.03(0.69)	4.72	0.66	S	US
Indonesia	.36(3.27)	0.37(0.75)	0.17	.21(4.55)	6.58	1.06	S	US
India	.81(2.65)	3.17(3.12)	0.28	.15(1.99)	3.58	3.21	S	US
Japan	.26(0.38)	.63(2.82)	0.09	.07(2.96)	0.78	1.23	S	S
Malaysia	.69(0.69)	3.11(1.65)	0.30	.12(2.26)	17.34	0.78	S	US
Singapore	.39(0.09)	7.96(0.74)	0.23	.04(1.28)	17.36	0.23	S	US
South Korea	.07(0.03)	0.07(0.02)	0.21	.04(1.78)	9.24	2.16	S	US
UK	.20(0.69)	.31(0.76)	0.31	.07(1.37)	6.46	1.63	S	S
USA	.52(0.08)	6.36(0.30)	0.13	.01(0.33)	2.98	0.06	S	US

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[29] Table 3 shows the long run coefficient for real bilateral exchange rate (REX), long run partners' income (Y_i), long run Philippines's income (Y_{PHY}) and diagnostics test.

[30] A similar explanation in the case of Philippines's export to Japan that is positive and significant. This is mostly due to the fact that the Philippines's demand for Japan's product is inelastic.

[31] In the case of USA, both F-test and ECM_{t-1} test do not support cointegration in the import demand model. In addition, none of the long run coefficients are significant. In the case of UK, export demand model, despite the F-test is not significant, the auxiliary test (ECM test) shows it is significant.

[32] LM is the Lagrange Multiplier test for serial correlation distributed as χ^2 with 4 degrees of freedom. The critical value is 9.49 at the 5% level of significance. Most models have less than critical value.

Note: Figures inside the parenthesis represent absolute value of t-statistics. (a) LM is the Lagrange Multiplier test for serial correlation distributed as χ^2 with 4 degrees of freedom. The critical value is 9.49 at the 5% level of significance; (b) RESET is the Ramsey's test (χ^2 with 1 degree of freedom) for functional misspecification. Its critical value at 5% level of significance is 3.84

In addition, Ramsey's RESET[33] test also proved that in most cases the models are correctly specified. Lastly, a stability assessment for short-run and long-run coefficient estimates by applying CUSUM and CUSUMSQ[34] test to the residuals of error correction models (3) and (4). The test shows that majority of CUSUM test are stable while the case of CUSUMSQ most models are unstable.

Among all of Philippines's major trading partners, in the long-run, the role of exchange rate is more significant to its Asian partners. Evidence shows that Philippines's exports improve from depreciation of its exchange rate mainly from China and Indonesia. Similarly, in its outpayments, an appreciation of peso improves its import from India and Malaysia. Focusing on real exchange rates, the average significant elasticities for export is 0.2 while import elasticity is -1.22. This implies that a 1 percent of real depreciation of peso will improve Philippines overall trade balance by 1.24 percent. As a whole, China shows an important partner to Philippines since excluding China will result in an inelastic demand for Philippines's export.

Summary and Conclusion

Empirical research between trade balance and exchange rates has evolved over the years. Earlier research focused on using aggregate data which may suffer from aggregation bias. As such, most recent studies have shifted focus to bilateral data approach. Since there is lack of data on import and export prices at bilateral level, few studies have utilized nominal imports and export trade values. In the case of Philippines, it is an extension to current literature by examining the impact of real depreciation of Philippines' peso on its inpayments as well as outpayments from 12 of its trading partners. The main finding of this paper is that both imports and exports models show 50% of Philippines trading partners are significant in the short-run. In the long-run, however, only 2 trading partners from both models are significant. Empirical evidence further shows there are no regularity among countries of studies. For example, 1% increase in real depreciation of Philippines' peso will result in an increase of inpayments from China by 2.77% and 1.08% from Indonesia. Concurrently, trade balances with China and Indonesia will increase by 2.77% and 1.08%, respectively. However, should policy makers introduce tariff of 1% to both nations (China and Indonesia), it will not be effective. Future research in this area should disaggregate trade data by employing imports and exports at the commodity level which may strengthen the empirical findings of inpayments and outpayments.

Appendix A

Data Definitions and Sources

Quarterly data over the period 1973: I-2011: IV comes from the following sources:

1) Direction of Trade Statistics of IMF, (CD-ROM).
2) International financial Statistics of IMF.

Note that due to data limitations, the study period for China was restricted to 1983:1 to 2008: IV and Hong Kong 1981:1 to 2011: IV

Variables

EX_i = Philippines's export value to trading partners. [Data are collected from source (1)]
IM_i = Philippines's import value from trading partners. [Data are collected from source (1)]
Y_{PHY} = Index of Philippines's real GDP (Data are collected from source (2))
REX_j = Bilateral real exchange rate between Philippines 'Peso and each of its trading partner's, i,

currency. It is defined as $(P_i * \bullet\ NEX_i / P_{PHY})$, where P_i is the CPI of country i, P_{PHY}

Philippines's CPI and NEX_i is the nominal bilateral exchange rate defined as the number of

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[33] RESET is the Ramsey's test has χ^2 with 1 degree of freedom for functional misspecification. At 5% critical value, the level of significance is 3.84. Majority of these models have critical value less than 3.84.
[34] Conventional practice of presenting CUSUM and CUSUMSQ test are with graphs. Since there are large numbers of graphs, graphical presentations of these tests will be available upon request.

Philippines's peso per unit of partner *j's* currency. Thus, an increase in *REX* is a reflection of real depreciation of peso

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Determinants of Foreign Direct Investments in Turkey

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Abstract

Direct foreign investment (FDI) has enormously increased and contributed to economic growth and development in the countries where it has invested since the 1950s. Although Turkey has remarkable potentials for foreign companies to invest, it has failed to attract them. In this study, we considered regional factors, such as economic, political, and geographical factors,that affect the FDI.The aim of this paper is to explore the location determinant of the FDI in Turkey. With this in mind, we specifically analyzed the impact of Turkey's fiscal problems on the FDI. Moreover, we utilize the monthly data from 2005 through 2013. In addition, we performed the Engle-Granger cointegration test among the variables used in the paper. As a result of our econometric examination regarding the market size hypothesis, we find a statistically significant positive relationship between the GDP of Turkey and the FDI. Furthermore, our findings show that a negative relationship between the FDI and domestic debt, external debt, and foreign exchange rates, respectively. Our estimated results strikingly revealed that Turkey's debt burden has a statistically significant negative impact on the FDI.Our estimated results show that our hypotheses regarding the effect of the FDI on the GDP of Turkey and the impact of the debt burden of Turkey on the FDI are indeed supported by the data.

Keywords: Foreign Direct Investments, Economic Growth, Tax Burden, and Cointegration

Introduction

Great many economists and politicians have engaged in examining the benefits of the direct foreign investment in developing countries since 1950s. Although many of the developing countries, including Turkey, have failed to attrack the FDl at an acceptable level, it is undeniable that the FDI has brought enourmous benefits to the host countries. Amoung the many of the benefits of the FDI are new technology, know how, managerial skills, training the labor force, reliving balance of payment problems, and contributing to economic growth and development can be considered as undeniably positive factors. In addition, the politician in the developing world have changed their attitude towards the FDI.

The needs of the devloping countries for the FDI arises from not only of the lack of the domestic saving over their budgets but also of their desire to increase their productive capacity. At least in theory, it is well known that foreign campanies operate more efficiently and produvtivily than the domestic companies. In other words, given the superıority of the foreign companies, the host counties-the developing countries- can drive many benefits from the FDI. For example, as Lall (1978 and 1997) points out the developing countries can get new technologies through the FDI and recieve positive external benefits like competition among the firms. Furthermore, according to economic theory, the FDI can boost the welfare of the people of the host countries by ıncreasıng economic growth. For example, the FDI can positively raise production, employment, and export. Thus, it reduces need for the foreign currency. However, the empirical evidence does not support this vıew.

In this paper, we examine the reationship among the FDI and domestic and foreign debt – proxy variables for economic and poltical stability- real exchage rate, and gross domestic product indicating the size of the market, in the long-run.

We organize the stduty as follows. Section 2 presents a short review of the related lietrature. Section 3 explains methodology and models. Section 4 explains data and model used in this paper and in the section 5 reports the emprical result. Section 6 presents conclusion of the paper

A Short Review of Related Literature

There are differing views as to the contribution of the FDI to growth and development of developing countries. For example, Ramirez (2006) finds posıtıve contributions of the FDI to the host countries in

the Latin American. Moreover, Wijweera vd (2010) points out increasingly beneficial and positive contribution of the FDI to the economic growth ın the host countries Similarly, Balusubramanyan (1996) shows the beneficials effects of the FDI on the foreign trade in developing countries. A detailed review of the literature relating to the FDI can be found in Chakrabarti (2001).

Altough Turkey possesses not only comparative advantages but also of the regional advatantages to attrack the FDI, it has failed to bring enough foreign investments to derive many of the mentioned benefits. According to Erdal and Tatoglu (2002), interest rate and foreign exchange rate, which are considered political and economic stability in Turkey, has discouraged the FDI. Moreover, İnsel and Sungur (2000) demonstrate a negative relationship among the FDI and credits, cronic trade deficit, interest rates, and domestic borrowing og the government. Batmaz and Tunca (2005) also finds that a negative relation between the interest rates and the FDI. They also find a positive relation among the FDI and the size of the market and the degree of the openness. In one of their study, Tunca et al.. (2013) finds that there is no technological and productivity differences between the domestic firms and the foreign firms. On the contrary, they, in their study, conclude that the domestic firms in Turkey have higher productivity than those of the foreign firms. In a similar study, Dumludag (2009) argues that institutional factors such as judicial system – enforcement mechanism- political and economic stability, the transparency of the legal and regulatory framework, and corruption are the critical factors that explain the behavior the the FDI towards Turkey.

Methodology and Models

The paper employs Engle-Granger (1987) analysis to determine for the log- run relationship between two or more non-stationary variables. Engle and Granger (1987) offer a following procedure to determine if variables are cointegrated.

First, the variables are tested for their order of integration. The Cointegration analysis makes essential that each variables be integrated of the same order. For this reason, we conduct the Augmented Dickey-Fuller (ADF) test to find out the order of integration for each time series.

$$\Delta y_t = \alpha + \theta y_{t-1} + \beta \Delta y_{t-1} + \varepsilon_t \qquad (1)$$

Where ε_t represent white noise error term. According to the ADF test, if the coefficient θ is significant, time series is non-stationary.

If results of the first stage show that each time series have same order of integration $[I(1)]$, then we estimate the log run equilibrium by using the following equtaion (2)

$$y_t = \delta_0 + \delta_1 x_t + u_t \qquad (2)$$

If the variables are cointegrated,the OLS estimator is to be super-consistent (Enders 2004, 336). In order to determine whether the variables are cointegrated or not, we apply the ADF test on the estimated residual, $\widehat{u_t}$, that is obtained from the above equations. If $the\ \widehat{u_t}$ is stationary, the variables are cointegrated.

According Engle-Granger, at the next, to estimate the error-correction model that is identified below equations.

$$\Delta y_t = \varphi + \gamma \Delta x_{t-1} + \beta \widehat{u_{t-1}} + \varepsilon_t \qquad (3)$$

Error correction model identifies how y and x move in the short run consistent with a log run relationship. γ captures the short term effect of x in the prior period on y in the current period. β is the adjustment coefficient and must be negative. It captures the rate at which the system adjust to the equilibrium state after a shock. In other words, it captures the speed of error correction.

Data and The Model

In this study, we use monthly data covering the period 2005 and 2013. All data are collected from the online source of Central Bank of The Republic of Turkey and they are deflated by the producer price index. All variables used in the study are denoted in natural logarithmic form.

The basic formulation of the model that we employed as follows,

$$fdi = f(gdp, dd, ed, exc) \qquad (4)$$

In this paper, we use fdi is measured by foreign direct investment inflow to Turkey. Gdp, representive home country market size, is measured by gross domestic products. In the model, two variables which

internal debt and external debt were used as an indicator of fiscal discipline. Internal debt labelled by dd and external debt labelled by ed. Also it is considerd that both variables representing the economic and political stability. Reel exchange rate is used as auxiliary variable to measure overall economic stability.

The above model, can be estimated in log-linear forms as follows,

$$\ln(fdi) = \beta_0 + \beta_1 \ln(gdp) + \beta_2 \ln(dd) + \beta_3 \ln(ed) + \beta_4 \ln(exc) + \epsilon_t \qquad (5)$$

where β is vector of unknown parameters and ϵ is random error term. The expected signs are; $\beta_1 > 0$, that is gdp has positive impact on fdi and $\beta_2 < 0, \beta_3 < 0, \beta_4 < 0$ that is higher internal debt and external debt and higher exchange rate have negatively impact on fdi.

Empirical Results

We first conducted the ADF on both the level and first fdifferences of the series to examine the volatility. Findings are presented in Table 1. We also used Akaike Information Criteria (AIC) test to check the lentgh of delay which is important in the ADF test. According to Table 1, the hypotheses relating unit root can't be rejected when the level of data are used. However, when we performed the same test on the first differences of the log of the variables, we could not accept the null hpotheses. We, therefore, could not reject the alternative hypoyhesesat least at 1 % level of significance. The findinds also indicate all variables used are integrated order of one, I(1).

Table 1. ADF unit root test results

	Level	Lag Length (AIC)	First Difference	AIC (Lag)
fdi	0.7873	5	-10.025***	3
gdp	1.8774	2	-3.5611***	1
dd	-0.4424	1	-7.0937***	0
ed	1.7811	4	-3.9135***	2
exc	-0.0966	4	-5.8790***	3

Note: *** denote significiantly at the %1 level

After we corrected the volatility of the variables, we performed two stage Engle-Granger cointegration test and findings as shown in Table 2. There is a positive relation between the gdp and the fdi. Namely, the estimated coefficient of the gdp is positive and significant.

Table 2. Engle –Granger cointegration test results

	coefficient
dd	-4.2483 (0.9237) ***
ed	-0.4501 (0.2705) *
gdp	3.5682 (1.3196) ***
exc	-0.9938 (1.2835)
constant	15.1916 (22.97)
Adjusted R^2=0.2074	
F = 8.0031*** DW = 1.9319	
ADF test for error term = -4.3955***	

Note: the term in the paranthesis is referred white heteroskedasticity-consistent standart error.
* and *** denote significiantly at the %10 level and %1 level, respectively

Similarly, we found negative relation between foreign direct investment and internal debt, external debt and real exchange rate. But the relationship between fdi and real exchange rate is not statistically significant. However, the obtained results support our expactations. In order to investigate that this estimates represents a long term relationship, we applied ADF test to the error term. As shown the last column in Table 2, the results of ADF test imply that error term of the model is stationary. This results indicate the existence of the long run relationship fdi and other variables.

The results of the Error Corection Model are given in Table 3.

Table 3. Error-correction model results.

	coefficient
Δdd	7.7301 (4.5611)*
Δed	-4.1788 (1.9892) **
Δgdp	1.3796 (5.6776)
Δexc	-8.0317 (3.2179) **
error(-1)	-1.0499 (0.1213) ***
constant	0.0672 (0.0735)
Adjusted R²=0.5394	
F = 25.8328*** DW = 1.9367	

Note: the term in the paranthesis is referred white heteroskedasticity-consistent standart error.
*, **, *** denote significiantly at the %10 , %5 and %1 level respectively

As the results presented in Table 3 indicate, the coefficient of the adjustment, error (-1) , is negative and statistically significant, indicating that the short-run shocks to the long –run equilibrium appear not to last long. The system seems to correct itself of the short-run shocks in a short period of time. In addition, the coefficient of the gdp appears to imply that the size of the market has no effect on the fdi in the short term.

Conclusion

In this paper we examined the factors that affect the FDI in Turkey. We employed monthly data from 2005-2013 to test the our hypotheses relating to the impact of the variables on the FDI. We gathered the data from the Central Bank of Turkey. After discovering the volatility of data, we took natural logarithm and first difference of all variables to obtain the stability of the series. We used the ADF test. We also examined if there are shorth-run shocks to the long –run equilibrium of the system through the Error Correction Model. Our findings appear to prove that our hypotheses are indeed correct.

We found that the coefficient of the gdp has positive and statistically significant; that is,the gdp has positive impact on the fdi. Moreover, the estimated coefficient of the ral exchange rates, due to excess volatility of the exchange rates in Turkey, has a negative effect on the fdi. The inconclusive result relating to the the size of the market seems to imply that the foreign companies may be unwilling to invest in Turkey due to unstable economic environment. The data used in the study support our hypotheses.

All in all, when we consider all factors that we examined in this paper seem to indicate that the policy makers in Turkey has to provide a stable and reliable political and economic environment to attrack the foreign investment.

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How to Build a Smarter Institute: A Perspective from Intellectual Capital Synergy

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Abstract

Similar to human beings, institutes also have their intelligence, which is called Organizational Intelligence (OI). It is associated with the organizational ability to survive, develop and achieve, and could be reflected by both Organizational Intelligence Quotient (OIQ) and Organizational Emotional Quotient (OEQ). Although the existing literature makes many efforts on corporate IQ from different perspectives, key factors of OI is still being argued. This paper focuses on research institutes, which produce new knowledge and take a critical role of intelligence source for our society, analyzes the key factors of their OIQ and OEQ, from a perspective of Intellectual Capital(IC) and its synergy, and builds up an Organizational Intelligence measurement system. Then it takes 9 national research institutes in China as samples to do research. Data shows that the smarter institutes are related with higher OIQ as well as higher OEQ. In case of average-smart institutes, even if around high-IQ employees, the lack of Organizational Emotional Intelligence caused by the incompatibility of structural capital is the major problem to be a smarter institute.

Keywords: Research Institutes; Organizational Intelligence Quotient (OIQ); Organizational Emotional Quotient (OEQ), Intellectual Capital.

Introduction

Organizational Intelligence (OI) reflects how smart an organization is. Just like human cognitive, development and achievements are up to intelligence, OI also has a strong effect on a company's performance and on its chances of survival as well as development potential (Mendelson, 2000). Although researchers define OI differently, ultimately it can be summarized as the strategizing ability through cognitive and achieving strategic goals ability by integrating internal and external resources of an organization.

Any organization does want to be intelligent and able to make appropriate strategic decisions, as well as take right action to achieve strategic goals, however, most organizations have little idea about what OI is and how to measure it. This paper analyzes the key factors of OI, from a perspective of organizational Intellectual Capital(IC), which consists of human capital, structural capital and relational capital, in analogy to the constitution of human intelligence, proposes a set of indicators to measure OI including Organizational Intelligence Quotient(OIQ) and Organizational Emotional Quotient(OEQ), and then it takes 9 national research institutes in China as samples to measure their OI, hoping to provide theoretical basis for improving research organizations' intelligence in our country.

Literature Review

It has been more than 50 years since the concept of OI was brought forward. Literature focuses on OI's definition, elements and factors, OI measurement methods, organizational performance as well as enhancing OI methods and strategies, from perspectives of information science, psychology and knowledge management etc.

The concept of OI was first developed in the area of information management and considered an ability to manage relevant information among the whole organization (Wilensky, 1967). Researchers have proposed different views from perspectives of information management, knowledge management and strategy management. Glynn (1996) defined OI as an organization's capability to process, interpret, encode, manipulate and access information in a purposeful, goal-directed manner. He *et al.* (2010) held the view that OI is the ability to transform individual knowledge to organizational knowledge. Halal (1998) defined OI as the capacity of an organization to create knowledge and use it to strategically adapt to its environment.

Another way to find key factors of OI is to summarize the common characteristics of intelligent organizations. According to Yaghoubi *et al.* (2012), an intelligent organization can handle problems intelligently. Choo (1995) described intelligent organizations as learning ones, which are skilled at creating, acquiring, organizing, and sharing knowledge, and at applying this knowledge to design its behaviour. According to Minch (1996), intelligent organizations at least have the following capabilities: (1) goal-directed behavior; (2) the ability to gather, maintain, and access an organizational knowledge base; (3) the ability to choose and execute actions; and (4) the ability to evaluate the results of actions. Similar to Minch, Schwaninger (2003) considered the most basic characteristics distinguish intelligent organizations are as follows: (1) to adapt to changing situations; (2) to influence and shape their environment; (3) to find a new milieu or to reconfigure themselves; (4) to make a positive net contribution to the viability and development of the larger wholes in which they are embedded. Above all, existing research has interpreted intelligent organizations from different perspectives.

Researchers have proposed OI models to describe key factors of OI, which could be summarized as shown in Table 1. For example, Mendelson & Ziegler (1999) analyzed High-IQ companies in five core principles of the organizational structure of the Information Age; Albrecht (2002) identified an OI model with 7 dimensions. The key factors in Table 1 involve organizational structure, internal and external communication, decision-making mechanism, staff competency, leadership and organizational culture. In general, Intellectual Capital (IC) can cover all those factors above.

Table 1. Literature on Factors of OI

Literature	Factors
Mendelson & Ziegler (1999)	information awareness; decision architecture; internal knowledge dissemination; organizational focus; information age business networks
Ziegler & Slayton (2002)	
Albrecht (2002)	strategic vision; shared fate; appetite for change; "heart"; alignment and congruence; knowledge deployment; performance pressure
Beer (1994)	team syntegrity
André (2006)	organization's domain specific knowledge; strategic market knowledge and culture norms
Lefter *et al.* (2008)	team-learning; organizational culture and leadership
Jung (2009)	human capital; organizational capital and relationship capital
Halal (1998)	organizational structure; organizational culture; stakeholder relationships; knowledge management and strategic processes
Kesti & Syväjärvi (2010)	management capabilities, leadership qualities, organizational culture, organizational process and individual and group skill sets

Structure of Organizational Intelligence

Institute could be regarded as an organism, like a human, so it should have intelligence and could be reflected through OIQ (Michael, 1997; Albrecht, 2002). Based on this point of view, Halal (1998) proposed a contrastive frame about human intelligence and OI.

With the development and perfection of related studies, more and more researchers and managers have agreed that human intelligence rely on not only traditional cognitive intelligence, but also emotional intelligence. In addition, traditional intelligence (also known as IQ) could not explain most of human performance (Zhang *et al.*, 2011). In other word, other than traditional IQ, human intelligence also needs Emotional Quotient (EQ) to express. Similarly, OI could be reflected by OIQ and OEQ (He *et al.*, 2009), in which the former stands for an organization's cognitive competence derived from inherent factors such as genes, the latter stands for the ability of an organization to integrate internal members and communicate with external relationships. Figure 1 shows the corresponding relation of human intelligence and OI.
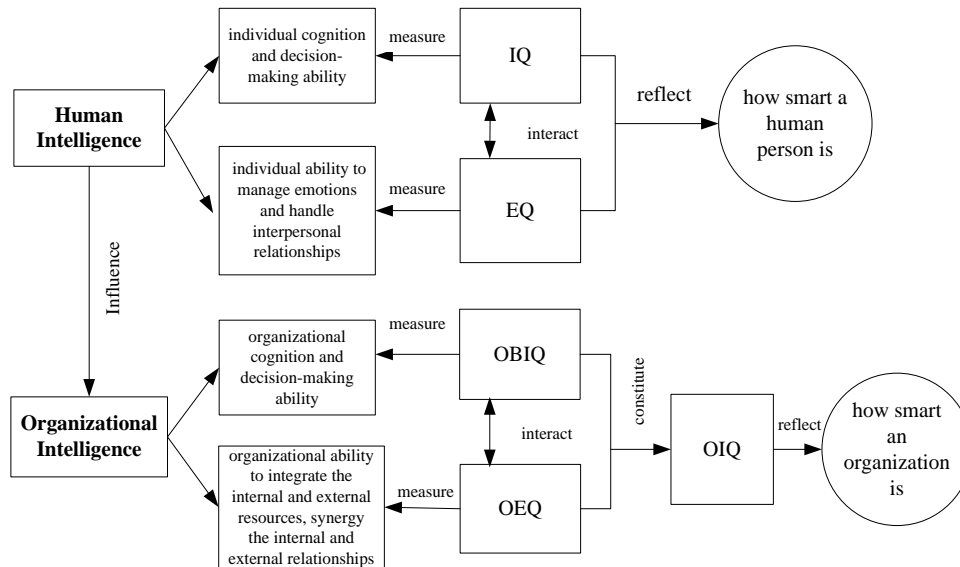
Fig. 1. The Corresponding Relation of Individual Intelligence and OI composition

Although there are many similarities between OI and human intelligence, and we could imitate the measurement methods of human intelligence, they have obvious differences. OI is not the simple sum of human intelligence, it could be improved through changing the organizational structure (Ziegler & Slayton, 2002) .

Intellectual Capital (IC) is the source of the competitive advantage of research organizations, which is made up of human capital, structural capital and relational capital. Human capital is constructed by knowledge and skills owned by personnel to achieve organizations' goals, which is the inherent gene and cognition of the organization and could reflect organizational cognitive ability, namely "OIQ". Structural capital is the structurized and institutionalized knowledge and capabilities embedded within the organizations, which is the ability of organizations to coordinate the relationship between their internal members. Hence, structural capital could express internal emotional intelligence, namely "Internal EQ". Relational capital is the knowledge and ability constructed between organizations and external stakeholders that could bring advantage of resource and information, which is the ability of organizations to deal with external relationships. Hence, relational capital could express external emotional intelligence, namely "External EQ". Thus, three factors of IC could be precisely mapped to OIQ, internal EQ and external EQ of OI (shown as Figure 2). Therefore, measuring OI of organizations could be obtained through measuring their IC.
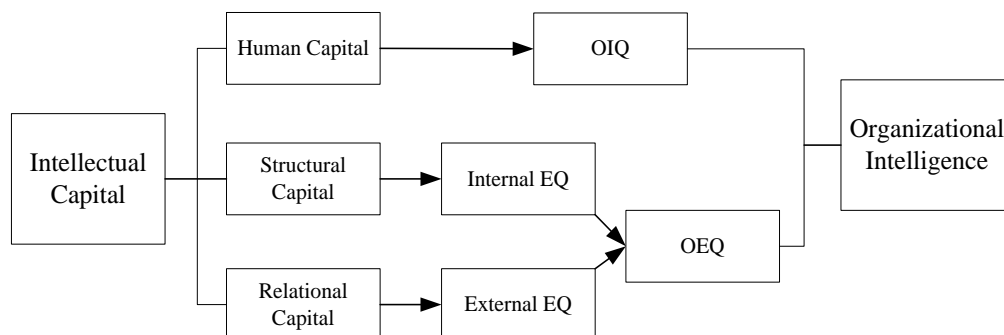
Fig. 2. The Corresponding Relation of OI and IC

Key IC Factors of Research Institutes' OI

Fundamentally, OI reflects the ability of an organization to make and execute strategies. Measuring OI from the perspective of IC, the most important is to identify the key factors of IC which could influence the ability of an organization to make and execute strategies. This paper takes research institutes as samples to explore the key factors of IC, which influence OI.

Key Human Capital Factors of Research Institutes' OI

Human capital of an organization contains knowledge, skills, experience, attitudes, abilities and values (Stewart,1991;Edvinsson & Malone,1997;Sveiby,2001). In research institutes, the carrier of human capital is the strategic leaders and ordinary researchers.

Strategic leaders are the constitutor and pusher of organizational strategies, distinguished strategic leaders are the premise of research institutes with high IQ. According to the views of Elenkov *et al* (2005) and Xi (2008), distinguished strategic leaders should have the following four characteristics: (1)overall, that is, the leaders could utilize and integrate all kinds of resources and have overall views; (2) foresight, that is, the leaders should have the ability to grasp the frontier technology and predict the development of science and technology; (3) creativity, that is, the leaders could constantly innovate ideas and thoughts, adapt to the changes and guide changes; (4) strategic communication skill, that is, the leaders could make the strategies conveyed in the organization and consciously performed. Hence, OIQ depends on the above characteristics (Chen, 2010; Wu *et al*., 2013).

Another factor which influences OI of research institutes is the research capacity of the researchers. Generally, the research capacity of the researchers has an intimate connection with their background knowledge and research experience (André, 2006).

In the implementation of strategies, the combination of clever individuals not always leads to a clever organization (Senge, 2006). Oppositely, intelligent people, when assembled into an organization, will tend toward 'collective stupidity' (Albrecht, 2002). If the intelligence of organization members mutually collide and counteract, the complexion of '1+1<2' or 'Everybody's business is nobody's business 'would appear. Therefore, high-IQ organizations not only needs high-IQ members, but also needs strategic synergy, that is, employees share vision. Only role cooperation of complementation could turn the organization into an organic whole and achieve the vision of the organization.

As the above analysis, this paper describes key human capital factors of research institutes' OI as follows: (1) strategic leadership; (2) research capacity; (3) strategic synergy. Table 2 gives the details.

Table 2. Key Human Capital Factors of Research Institutes' OI

Intellectual Capital	Key Factors	Indicators
Human Capital	Strategic Leadership	Overall; foresight; creativity; strategic communication skill of leaders
	Research Capacity	Knowledge; experience; social skills of researchers
	Strategic Synergy	Shared vision; role cooperation

Key Structural Capital Factors of Research Institutes' OI

The structural capital of a research institute contains material platform, institutional platform and culture platform (Xiao *et al*., 2010), which provide support and motivation for human capital to create value. In the formulation and implementation of strategies, institutional platform and culture platform could significantly facilitate shared vision, coordinate intelligence of employees and stimulate organizations' creativity.

For the formulation and implementation of organizational strategies, the primary and critical institutional element is organizational decision structure. The unknown and uncertainty of scientific world lead to the challenge of research activities, which needs researchers' sense of mission to explore truth and their inspiration about scientific questions. Hence, giving researchers sufficient autonomous right and moderately dividing the right when making decisions are all efficient methods to motivate the passion of researchers and make individual IQ maximally developed. Simultaneously, making rapid response to the change of organizations' internal and external environment, and realizing efficient delivery of information, are all important characteristics of high-IQ organizations. In addition, effective and convenient knowledge sharing system is an important link to facilitate the coordination of organizational members and the accumulation of knowledge. Only the evaluation and incentive system that match the strategic goals could set a specific goal for research activities.

Organizational culture is a common value system of organizational members derived from a long-term accumulation. Researchers usually have characteristics such as independent value, strong independent

consciousness, not go for blind faith to any authority, seeking different in academic research (Hui *et al*., 2008). Hence, only in the environment of equality, freedom and tolerance could make them generate strong sense of ownership; only the organizational style with innovation could stimulate creative inspiration, motivating creative potency and maintaining creative vitality (Sun *et al*., 2006; Ai, 2011).

Based on the ideas above, this paper describes key structural capital factors of research institutes' OI as following two aspects: (1) institutional system; (2) organizational culture. More details are shown in Table 3.

Table 3. Key Structural Capital Factors of Research Institutes' OI

Intellectual Capital	Key Factors	Indicators
Structural Capital	Institutional System	Decision architecture
		Knowledge sharing mechanism
		Strategy incentive mechanism
	Organizational Culture	Equality, freedom, inclusive and innovation

Key Relational Capital Factors of Research Institutes' OI

During strategic formulation and implementation, sponsors and valuators are the most important stakeholders. In China, sponsors for research institutes contain government, enterprises, and other foundations. More than providing funding, they usually influence strategic position, as well as being one of the valuators for research institutes. Other valuators include academic peers, knowledge markets, public society and so on. Smooth communication channel and harmonious relationships with sponsors and valuators is necessary for intelligent organizations. Thereby, the key relational capital factors of OI could be generalized as Table 4.

Table 4. Key Relational Capital Factors of Research Institutes' OI

Intellectual Capital	Key Factors	Indicators
Relational Capital	Relationship with sponsors	Communication; funding intensity
	Relationship with valuators	Interaction; approval

Case Study

The level of OI is a relative concept. For an organization to another, the strategizing ability through cognitive and achieving strategic goals ability by integrating internal and external resources of an organization get stronger, its level of OI is higher. According to the analysis above, this paper suggests a specific approach to measuring OI for research institutes. As shown in Table 5. X_{ji} is the score of the ith organization obtained in the jth factor, X_j is the mean value of the jth factor for the entire samples, both of which would be used to set the standard value of OIQ/OEQ (for example, 1 or 100, etc.). X_{ji}/X_j is the relative score between the jth factor of the ith organization and the mean value of the jth factor, which is the score of IQ/EQ. Besides, $\frac{1}{n} \sum_j \frac{X_{ji}}{X_j} * 100$ stands for the score of OIQ, internal and external EQ, in which n is the number of all elements, this paper select 100 as the standard value in order to comparing easily. What's more, the score of OEQ is the mean value of internal EQ and external EQ, the final score of organizations measured is the mean value of OIQ and OEQ.

This paper sent 508 questionnaires to 16 public research institutes, and 347 were returned, the recovery rate is approximately 68.3%. 326 effective questionnaires were received after getting rid of invalid ones such as incomplete and chaff questionnaires. Taking into account measuring OI should cover the vast majority of members among the organizations, this paper chose nine research institutes whose response rate are more than 50% as samples, and their total number of questionnaires is 237. After assignment to returned questionnaires using Likert Scale fifth, it obtained indicators' scores of the nine sample research institutes, as shown in Table 6. The standard score is the mean value of 326 large samples, the average score of the nine research institutes' OI is 100 and the standard deviation is 3. Institutes whose scores are higher than 103 points (inclusive) are ranked as intelligent organizations, less than 97 points (inclusive) as low intelligence organization, scores between 97 and 103 as average intelligence organizatio

Table 5. Approach to Measuring OI of Research Institutes

Indicators of OI			Scores of Indica-tors	Standard Scores	Relative Scores	Scores of OIQ & OEQ		Scores of OI
OIQ		Strategic Leadership	X_{1i}	X_1	X_{1i}/X_1	$OIQ = \dfrac{1}{n}\sum\limits_{j}\dfrac{X_{ji}}{X_j}*100$		AVERAGE (OIQ, OEQ)
OIQ		Research Capacity	X_{2i}	X_2	X_{2i}/X_2			
OIQ		Strategic Synergy Competency	X_{3i}	X_3	X_{3i}/X_3			
OEQ	IEQ	Institutional System	X_{4i}	X_4	X_{4i}/X_4	$IEQ = \dfrac{1}{n}\sum\limits_{j}\dfrac{X_{ji}}{X_j}*100$	$OEQ = AVERAGE$ (IEQ, EEQ)	
OEQ	IEQ	Organizati-onalCulture	X_{5i}	X_5	X_{5i}/X_5			
OEQ	EEQ	Relationship with funding providers	X_{6i}	X_6	X_{6i}/X_6	$EEQ = \dfrac{1}{n}\sum\limits_{j}\dfrac{X_{ji}}{X_j}*100$		
OEQ	EEQ	Relationship with valuators	X_{7i}	X_7	X_{7i}/X_7			

Table 6. OI of Sample Research Institutes

Sample Organizations	OIQ	OEQ	Results of OI
A	97.63	98.86	99
B	98.77	107.63	104
C	103.07	104.22	104
D	100.50	99.49	100
E	100.69	97.46	100
F	97.30	92.60	95
G	97.06	94.62	96
H	101.86	102.83	103
I	100.54	97.63	100

As Table 6 shows, NO. A, D, E, I are average intelligence organizations, NO. F and G institutes have relative low intelligence, while institutes C, B and H are intelligent organizations which have strong ability of strategy execution. The distribution of sample institutes' OI is similar to the distribution of human IQ, which has been shown in Figure 3, most institutes have general level of OI and a few are above or below average intelligence.
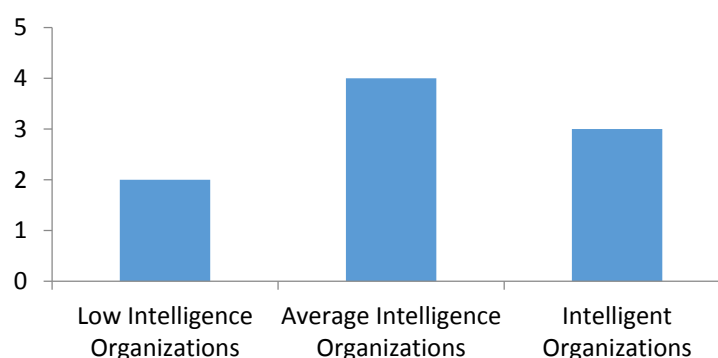
Fig. 3. OI distribution of Sample Research Institutes

As it shows in Table 6, OI is very similar to human intelligence, which needs the combined action of IQ and EQ. The general characteristic of the three intelligent organizations is that they have either both high IQ and high EQ, or outstanding OEQ. Taking organization C and H for example, they not only have relative higher OIQ, but also have relative higher OEQ, which consists of structural capital and relational capital that cooperative with organizational strategy. In addition, for organization B, it does not have obvious advantage in OIQ. However, it could have relative higher OEQ through building cooperative institutional system and organizational culture, through which it could make up the insufficient of OIQ and become a member of intelligent organizations.

Among the nine sample organizations, the general characteristics of the four organizations with average intelligence and two organizations with lower intelligence is that they have neither high OIQ nor high OEQ. For OIQ, although these six organizations all have strong human capital (the average score of these six organizations is 4.23), they are actually "organizations with lower intelligence that made up of wise men", leading to "collective stupidity". The reason lies in two aspects, for one thing is the flaw of organizations leaders in strategic leadership, for another is the insufficient in position configuration and role complementarity for staffs with high IQ. Particularly, among all the components of OEQ, the insufficient in system and organizational culture is very obvious. As shown in Table 7, all the six non-intelligent organizations have lower score than the population in both institutional system and organizational culture (the ratio less than 1, take organization F for example, its higher organizational culture has been submerged by obviously lower institutional system). However, the relative ratio of all the intelligent organizations are large than 1. In a word, for these organizations, the insufficient of OEQ derived from insufficient of organizational structural capital cooperative is the key factor that affects the integral intelligence of organizations.

Table 7. Structural Capital Scores of Sample Research Institutes

Type of Organizations	Sample Organizations	Indicator Institutional System	Relative Ratio to the Sample Mean	Indicator Organizational Culture	Relative Ratio to the Sample Mean
Non-intelligent Organizations	A	3.14	**0.99**	3.23	**0.94**
	D	3.09	**0.97**	3.41	**0.99**
	E	3.10	**0.97**	3.38	**0.98**
	F	3.00	**0.94**	3.51	**1.02**
	G	3.10	**0.97**	3.39	**0.98**
	I	3.04	**0.95**	3.38	**0.98**
Intelligent Organizations	B	3.42	*1.07*	3.58	*1.04*
	C	3.36	*1.05*	3.55	*1.03*
	H	3.36	*1.05*	3.47	*1.01*

Conclusion

Organizational Intelligence (OI) could be reflected by OIQ and OEQ. A smart institute is always associated with high level of OI.

Based on the data collected, intelligent organizations with high OI are related with high level of both OIQ and OEQ, while not-so-intelligent organizations have no significant advantage in either OIQ or OEQ. In the institutes with lower OI level, collective stupidity caused by low OEQ is proved to be the main problem. To be a smarter institute, structural capital with a better institutional system and organizational culture fit to strategy should be figured out.

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Basel III: Will Borrowing Money from Czech Banks Become More Expensive?

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Abstract

In Europe, Basel III is already in force. The very recent European legislative package, comprising Capital Requirements Directive IV (so-called CRD IV) and Capital Requirements Regulation (so-called CRR), has been in force since 1 January 2014. It represents a significant change for bankers because it puts the new global Basel III regulation into practice. A number of effects is expected to follow from the implementation of this package and many of these effects are difficult to estimate. Basel III is likely to bring a number of positives, such as strengthening the quality and quantity of bank capital, strengthening the stability of the banking system and reducing the risk of systematic banking crisis. However, other effects may be less beneficial. Basel III puts significant pressure on profitability and return on equity and it leads banks to increase their risk appetite. Basel III critics argue that it may even destabilize well-capitalized banks in certain countries. Common worry is that foreign parent companies may "suck" capital and liquidity from well-capitalized banks as a result of the worsening financial situation of the parent companies. Last but not least, there is a worry that loans for individual and corporate clients may get more expensive. In our study we aim to analyse the last-mentioned worry: that bank loans may become more expensive. Looking at Czech banks we will pose two key questions: When the capital regulation is tightened, will loans in the Czech banks become more expensive? By how much can lending spreads increase? In order to answer these two key questions we will follow the methodology presented by Bank for International Settlements. We estimate the required increase in banks' lending spreads assuming that banks under regulatory pressure would raise lending spreads to prevent ROE from falling when the capital regulation is tightened. We focus our analysis on six Czech banks that are under regulatory pressure, and are therefore the ones most affected by the increased capital requirement. We find that the required increase in lending spreads to keep ROE from falling totals 6.3 basis points. We conclude that the impact of tightened capital regulation on lending spreads in the Czech banking sector is minor. If shareholders decide to absorb some of the fall in ROE, or they take other measures to prevent a fall in ROE, the potential impact on lending spreads will be even smaller.

Keywords: Basel III; Capital adequacy; Capital requirement; Lending spreads.

Auditor's Reactions on Fair Value Measurements during the Financial Crisis of 2008

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Abstract

This paper examines how the auditors of financial institutions estimate the audit risk from fair value measurement during the financial crisis of 2008. Specifically, the paper tests whether audit fees increase with fair value measurements during the financial crisis period. Using a sample of 191 firm-years for financial firms from 2008 to 2011, the paper presents the following results. First, the results show that audit fees are higher for financial firms with more fair value assets. However, audit fees do not increase with the level 3 fair value assets. Level 3 fair value measurements are unobservable in market or not correlated with market data and less verifiable than Level 1 and Level 2. Second, during the financial crisis, the auditor charge higher fees for the total fair value assets but not for the total fair value liabilities. Overall, the results suggest that auditors put more efforts to control the higher audit risk from fair value assets during the financial crisis. In addition, the results also indicate the deficiency of auditing for fair value liabilities and the level 3 fair value assets.

Keywords: Audit Fees; Fair Value Measurements; Financial Crisis.

Testing the Efficiency of the Investment Sector in Kuwait

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Abstract

This paper investigates the efficiency of the investment sector in Kuwait. The data set covers 40 investment companies listed in the stock markets of Kuwait for 2006–2010. In this study, we use a two-stage approach. In the first stage, we use nonparametric data envelopment analysis (DEA) to estimate investment companies' efficiency in Kuwait. According to the DEA, we investigate whether the technical efficiency of those companies improved between 2006 and 2010. The findings of the first show that investment sector's efficiency had been improved throughout the period of the study with the exception of 2008 due to the financial crisis. Using different specifications, the findings of the second stage suggest that 2008, 2009, and 2010 have had a negative impact on the firms' efficiency in Kuwait. The results confirm the substantial influence of the 2008 global financial crisis on the investment sector in Kuwait. In addition, the results show that factors affecting production efficiency in the investment sector in Kuwait include a firm's sales, a firm's size, the operational structure for a firm, whether Islamic or non-Islamic, and government participation.

Keywords: Efficiency, Investment Sector, Data Envelopment Analysis, Kuwait

Introduction

Efficiency is a basic rule to achieve the economic development objectives of strategic plans in most economies. Market efficiency, however, leads to an increased rate of consumption of the resources used. Therefore, it may lead to more economic growth by increasing the demand for resources. Recently, many developing countries have gradually implemented procedures to develop more regulated sectors through achieving the efficiency objectives in these sectors.

Testing the efficiency in the economy has been highly pronounced since the financial crisis in 2008, as many countries have started to deregulate their economic sectors. The potential impact of testing efficiency is thus the key driver of world output and welfare. For this purpose, the main objective of the Capital Market Authority consists of more regulation of securities trading to boost economic efficiency. In particular, in this paper, we examine the efficiency of 40 investment companies in Kuwait.

In this study, we investigate the efficiency in the investment sector in Kuwait. Studying such a case is important for several reasons. First, the investment sector in Kuwait is affected by the World Trade Organization (WTO) conditions and regulations for more market liberalization. This is because inefficient investment companies are forced out of the market as increased competition keeps only efficient companies in the market. To meet these challenges, company managers and regulators must determine the level and sources of efficiency in the investment sector as an indicator of performance of both the individual company and the industry as a whole. Second, most studies on efficiency have focused on developed countries, such as those of Europe and the U.S., with very few studies examining developing countries, such as Kuwait. Third, the study efficiency features is important in helping policy makers evaluate how the investment sector will be affected by increasing competition and then formulate policies that affect that sector and the economy as a whole.

In this study, we use nonparametric data envelopment analysis (DEA) to estimate investment companies' efficiency in Kuwait. We test predictions of the model using yearly data for 2006 to 2010. In our analysis, we follow the two-stage approach suggested by Coelli, Prasada, and Battese (1998). In the literature on DEA efficiency score measurement, this two-stage approach is the most prominent. This approach uses

the efficiency score, measured by the DEA model, as the dependent variable in a regression model with explanatory variables that are supposed to capture the impact of external factors (Hahn 2005). In the second stage, we use a Tobit model to investigate factors affecting the efficiency in the Kuwaiti investment sector. The findings of the second stage suggest that 2008, 2009, and 2010 had a negative impact on firms' efficiency in Kuwait. The results confirm the substantial influence of the 2008 global financial crisis on the investment sector in Kuwait. In addition, the results show that factors affecting production efficiency in the investment sector in Kuwait include the total revenues, total assets, government participation, and Islamic firm dummy. These second-stage results are confirmed using different specifications of a fixed effect model, a random effects model, and a logit model.

This paper is organized as follows. Section 2 contains a brief survey of the relevant literature. In section 3, the methodology and model specification used in the study are explained. Data descriptions are provided in section 4. The empirical results are explained in section 5. In section 6, the conclusion and policy implications are provided.

Literature Review

Studying the efficiency of the investment sector is important because it may affect the stability of the financial industry and then the effectiveness of the whole economy. In financial research, a huge body of literature focuses on efficiency, including both scale and scope economies, with an increasing focus on X-efficiency.

Efficiency is measured by various methods that estimate the production/cost frontier. These methods include nonparametric DEA (data envelopment analysis), the free disposal hull (FDH) and parametric frontier models, the stochastic frontier approach (SFA), the distribution free approach (DFA), and the thick frontier approach (TFA).

Berger and Humphrey (1997) reviewed 130 studies that related the analysis of frontier efficiency to financial institutions in 21 countries and determined that the efficiency estimates from nonparametric (DEA and FDH) studies are mostly the same as those from parametric frontier models (SFA, DFA, and TFA) except that the nonparametric methods generally yield slightly lower mean efficiency estimates and seem to have a larger spread than the results of the parametric models (Berger and Humphrey, 1997).

Yener Altunbas, Ming-Hau Liu, Philip Molyneux, and Rama Seth (2000) used the stochastic cost frontier methodology to evaluate scale and X-inefficiencies to examine the impact of risk and quality factors on banks' cost in Japanese commercial banks between 1993 and 1996. They found strong evidence of scale economies across a wide range of bank sizes, even for the largest firms. They also concluded that the X-inefficiency estimates vary between 5% and 7% and are less responsive to risk and quality factors. Finally, they suggested that the largest banks can be more efficient in reducing costs by decreasing output rather than improving X-efficiency.

Michael Fung (2006) used DEA in his study to measure the X-efficiency to see if less productive banks were catching up to more productive ones in the U.S. by examining the convergence of productivity among bank holding companies (BHCs). He found that each BHC possesses its own steady-state productivity to which it converges. In other words, differences in X-efficiency between BHCs can create permanent differences in productivity between them. He also concluded that all BHCs are converging to a minimum efficient scale; however, this scale is conditional on the level of X-efficiency. As such, an upper rank of X-efficiency caused by technological improvements, higher management incentives, and further specialized banking activities may enlarge the minimum efficient scale.

Bikker (1999) applied the stochastic cost frontier approach and production approach to some of European banks to measure their X-efficiency. He measured the cost efficiency of banks in nine European countries by using the data for these banks from 1989 to 1997. He found that the least efficient banks are Spanish banks, followed by French and Italian banks. Banks in Germany, the Netherlands, and the U.K. have a mid-range level of efficiency. However, the most efficient banks are in Luxemburg, followed by banks in Belgium and Switzerland.

Allen and Liu (2005) measured the cost efficiency and economies of scale of the six largest banks in Canada using quarterly data from 1983 to 2003. They estimated four econometric models: a time-varying fixed-effects panel model, a stochastic cost efficiency frontier model, a system of seemingly unrelated regressions model, and a time-varying fixed-effects model. Allen and Liu concluded that changes in regulatory policies aided in reducing the banks' production cost. They also found that the inefficiency of Canadian banks is approximately 10 percent, and the ranking of efficiency suggests that larger banks are more cost efficient than smaller banks.

Shanmugam and Das (2004) measured the technical efficiency of 94 banks in India. They applied the stochastic frontier function methodology using panel data for the period between 1992 and 1999. They stated that there are variations in the efficiency among sample banks for four outputs: interest margin, non-interest income, investment, and credit. Shanmugam and Das concluded that 50% of the banks have technical efficiency and that the state bank group and private-foreign group banks are more efficient than other Indian banks.

Yildirim (2002) used nonparametric data envelopment analysis to analyze the efficiency performance of the Turkish banking sector from 1988 to 1999. He chose this period because the unstable macroeconomic environment is at a high level. Yildirim stated that the technical efficiency measure showed large variation with the absence of sustained efficiency gains. He also found that efficient banks are more profitable than inefficient banks. For the period under study, he reported that the instability of the macroeconomic environment had a profound influence on the efficiency measures.

Methodology and Model Specification

The level of efficiency is measured by various techniques that estimate the production cost frontier. Pastor, Perez, and Quesada (1997) stated that the techniques used in estimating the frontier are based on parametric methods when some hypotheses are introduced on the frontier functional form based on their properties, and non-parametric methods are used when observational criteria based on programming techniques are used to construct the frontier. Hence, there are two main techniques used in estimating a frontier: nonparametric data envelopment analysis (DEA) and parametric stochastic frontier analysis (SFA).

Data Envelopment Analysis (DEA)

DEA is a nonparametric method that measures efficiency using linear programming techniques, occasionally called frontier analysis. DEA is a performance measurement technique, first used by Charnes, Cooper, and Rhodes in 1978. According to Berger and Humphrey (1997), DEA is a linear programming technique in which the set of frontier observations are decision-making units (DMUs) for which no other DMU produces as much or more of every output (given input) or uses as little as or less than every input (given output). In other words, DEA is commonly used to evaluate the efficiency of a number of producers or DMUs. The production process for each producer involves using a set of inputs to produce a set of outputs. Each producer has a varying level of inputs and gives a varying level of outputs. The ratio of outputs to inputs is a commonly used measure of efficiency:

Efficiency = output / input

Figure 1 shows a set of DMUs, a, b, c, d, e, f, and g, with each unit consuming a single input x to produce a single output y. We may identify b and e as the most efficient DMUs since they are located on the efficient frontier line, while the DMUs a, c, d, f, and g are inefficient because they appear below the efficient frontier line.

Now let us present a case of one input and two inputs. Figure 2 shows a set of DMUs, a, b, c, d, e, f, and g, with each consuming the same amount of a single input and producing a different amount of two outputs (y1 and y2). Applying the DEA approach to this set of DMUs will identify a, e, g, and f as efficient DMUs because they are on the efficient frontier line. In addition, these DMUs provide an envelope around the entire data set. The DMUs b, d, and c are below the efficient frontier line (within the envelope); hence, they are inefficient.

Charnes, Cooper, and Rhodes (1978) proposed a DEA model (CCR model) with the assumption of constant return to scale (CRS). Later, Banker, Charnes, and Cooper (1984) used an alternative assumption in their DEA model (BCC model), which is a variable return to scale (VRS) (Casu and Molyneux 2003).

Stochastic Frontier Analysis (SFA)

SFA has its starting point in the stochastic production frontier models simultaneously introduced by Aigner, Lovell, and Schmidt (1977) and Meeusen and Van den Broeck (1977). "SFA posits a composed error model where inefficiencies are assumed to follow an asymmetric distribution, usually the half-normal, while random errors follow a symmetric distribution, usually the standard normal. The logic is that the inefficiencies must have a truncated distribution because inefficiencies cannot be negative. Both the inefficiencies and the errors are assumed to be orthogonal to the input, output, or environmental variables specified in the estimating equation. The estimated inefficiency for any firm is taken as the

conditional mean or mode of the distribution of the inefficiency term, given the observation of the composed error term."[35]

Aigner, Lovell, and Schmidt (1977), Battese and Corra (1977), and Meeusen and Broek (1977) independently developed a model to estimate an SFA. The model is denoted in logs as:

$$\ln (y_j) = \ln x_j\, \beta + v_j - u_j$$

where y_j = an output vector for firm j; x_j = an input vector for firm j; v_j = a random error added to the non-negative inefficiency term; u_j = an inefficiency term; and β = is a vector of coefficients that need to be estimated.

The random error term v_j measures error and other random factors affecting the value of the output variable, together with the combined effects of unspecified input variables in the production function. We call the model stochastic because the right-hand side is determined by the stochastic variable:

$$\exp (x_j\, \beta + v_j)$$

The random error term v_j can be negative or positive, so the stochastic frontier outputs vary relative to the deterministic part of the frontier model:

$$\exp (x_j\, \beta)$$

The functional form is needed to estimate the stochastic frontier model, but the specification of a functional form is not practical since the banking industry is a multi-output industry. Thus, a cost frontier can be specified.

The stochastic cost frontier has the following form:

$$\ln c_j = f (\ln y_{r,j},\, \ln c_{ij}) + \varepsilon_j$$

where c_j = the total cost for firm j; $y_{r,j}$ = the rth output of firm j; $c_{i,j}$ = the price of the ith input of firm j; and ε_j = the error term. The error term ε_j consists of two elements, random error term v_j and inefficiency term u_j. The random error term v_j is assumed to have non-negative distribution $v_j \sim N (0, \sigma^2 v)$ and to be independent of the explanatory variables. The inefficiency term u_j is also assumed to have the non-negative distribution $u_j \sim N (0, \sigma^2 v)$ and to be independent of the v_j (Fiorentino, Karmann and Koetter 2006).

In this study, we use nonparametric DEA to estimate investment companies' efficiency in Kuwait with the assumption of a VRS. The reason for choosing DEA is because the SFA requires a large sample size to make reliable estimates (Havrylchyk 2006). On the other hand, DEA works well with a small sample size and does not necessitate knowledge of any functional form of the frontier. This will help us in our analysis due to the small number of investment companies with available data. In addition, DEA does not require a cost minimizing or profit maximization condition, and it does not require any data on prices. This is convenient for those cases in which there are data problems, as in the situation of Kuwait.

Two-Stage Approach

In our analysis, we follow the two-stage approach suggested by Coelli, Prasada, and Battese (1998). In the literature on DEA efficiency score measurement, the two-stage approach is the most prominent. This approach uses the efficiency score measured by the DEA model as the dependent variable in a regression model, with explanatory variables employed to capture the impact of the external factors (Hahn 2005). This approach involves solving a DEA problem in the first-stage analysis. In the second stage, the efficiency score measures derived from the DEA estimations (first stage) will be used as the dependent variable and then regressed upon environmental variables. The coefficients of the environmental variables will be evaluated to investigate how they will affect the efficiency score.

Data Description

The data we apply in our analysis are annual panel data for investment companies listed in the stock markets of Kuwait for 2006–2010. We have excluded companies established after 2010 and companies for which some data were missing. The annual data for all variables are obtained from the Kuwait Stock Exchange Market database (official website). All data are measured in thousands of U.S. dollars. In particular, data for the variables of total revenue, total assets, and net cash flows are constructed from the

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[35]Berger, A.N. and Humphrey. D.B. 1997. Efficiency of financial institutions: International survey and directions for future research. European Journal of Operational Research 98.

balance sheets of each firm in the data sample. Information on the government participation with each firm is obtained from the firm's profile on the official website of the Kuwait Stock Exchange Market. Data for leverage ratios is obtained from the yearly financial ratio statement for each firm at the official website of the Kuwait Stock Exchange Market. Information on Islamic and non-Islamic investment firms is obtained from the firms' profiles on the official website of the Kuwait Stock Exchange Market.

Empirical Results

We present an analysis employing the first-stage method for investment sector efficiency in Kuwait. In the first stage, we estimate the efficiency level of 40 investment companies listed in the Kuwait Stock Market using the data envelopment analysis (DEA) approach to investigate whether the technical efficiency of these companies improved between 2006 and 2010. We also try to determine how trends involving the number of efficient companies and companies with low efficiency scores changed during the period of study.

In the second stage, we regress the efficiency level obtained from the first stage on factors that could influence the efficiency of investment companies by using a Tobit regression model for each year during the period of study. In addition, we will apply data as panel data for four years and use the same Tobit regression model to estimate the coefficients for variables that could influence the efficiency score.

Stage One

To estimate the efficiency levels for investment companies, we used an input-output DEA approach for each year as follows:

Max $\qquad \theta = \frac{Y1+Y2}{X1+X2}$, subject to

Company1 $\frac{Y1+Y2}{X1+X2} \leq 1$ Company2 $\frac{Y1+Y2}{X1+X2} \leq 1$ — — —Company40 $\frac{Y1+Y2}{X1+X2} \leq 1$

where Y1 = earnings per share (EPS). OUTPUT; Y2 = return on assets (ROA). OUTPUT; X1 = capital. INPUT; X2 = general administration expenses. INPUT.

Table 1 in Appendix B presents yearly summary statistics of technical efficiency scores for Kuwait investment companies listed in the Kuwait Stock Exchange. We find that the movement trend of the mean of technical efficiency was quite different during the period of study. However, all the sample companies in each year appeared to be performing reasonably well, with the annual mean of technical efficiency scores for the investment sector ranging between 0.89 in 2006 and 0.43 in 2008. As the table shows, the technical efficiency appeared almost the same in the first two years, 0.89 to 0.88 (2006–2007), and then the efficiency score mean moved in the opposite direction by 50%, reaching 0.43 because of the 2008 global financial crisis happened. The mean of efficiency score increased, however, in 2009, reaching 0.65. In the final year of the sample period (2010), the efficiency score improved to 0.78, which led to a cumulative 12% drop in the mean score in the investment sector during the sample period.

Stage Two

In the second stage, the efficiency score measures derived from the DEA estimations (first stage) will be used as the dependent variable and then regressed upon environmental variables. The coefficients of the environmental variables will be evaluated to investigate how they will affect the efficiency score. After that, the hypothesis will be tested to investigate the strength of the relationship between the efficiency score and environmental variables. To investigate the progress of the efficiency score in the period of study, we compare the average efficiency score for all companies in the sample for each year. Then we estimate the Tobit regression in the following model.

$$\Theta = \beta1\ R + \beta2\ TA + \beta3\ NCF + \beta4\ GP + \beta5\ LR + \beta6\ IF + \text{€i}$$

where Θ = efficiency score; R = revenue; TA = total assets; NCF = net cash flow; GP = government participation; LV = leverage ratio; and IF = a dummy variable (1 if the firm is Islamic and 0 otherwise).

Benchmark Results

Table 2 in Appendix B shows the results for the benchmark model using a pooled ordinary least square (OLS) regression. The table represents the estimation across all firms used in the data sample. According to Table 2, the estimated coefficients for variables of revenues, total assets, and Islamic firm dummy are significant and show the expected sign. Based on Table 2, the coefficient of total revenues is statistically significant at the one percent level with a positive sign. This indicates that, across the data sample, the

higher the total revenue a firm generates, the higher the rate of efficiency the firm can achieve. The relationship is expected, as sales reflect the accelerator effect; therefore, any increase in sales means higher demand for a firm's output, which may lead to an increase in investment and its firm efficiency in production.

The coefficient of the total assets turns out to be statistically significant at the one percent level with a negative sign. Such a coefficient indicates that the higher the total assets the firm can generate, the lower the rate of efficiency the firm can achieve. It is noteworthy that the use of firm size, which is represented by the firm's total assets, can be explained as controlling for other firm characteristics that typically can be important for production. Therefore, a higher value of total assets, which means a larger firm size, may lead to difficulty in efficiently controlling and coordinating a firm's operation when it becomes large. Such a case is achieved under diseconomies of scale.

The coefficient of the Islamic firm dummy is statistically significant at the five percent level with a negative sign. This means that firms that operate according to Sharia law are more likely to achieve less efficiency in production. This suggests that policy makers of Islamic institutional operations are relatively less efficient in utilizing the factors of inputs over the study period.

Extended Results

In Table 2 in Appendix B, the estimated model in column 3 is tested using only the time fixed effect. According to Table 2, the findings of the time fixed-effect technique are robust to the findings of the pooled OLS. This indicates that the main influential factors on production efficiency in the investment sector in Kuwait include the firm's sales, the firm's size, and the operational structure for the firm, whether Islamic or non-Islamic. Aside from these main variables and unlike the findings shown of the pooled OLS, the estimated coefficient of the government participation variable turns out to be statistically significant at the five percent level with a negative sign. The interpretation of the government participation variable can be seen as indicating that the higher government participation or government control over the firm's management is, the lower the firm's efficiency will be. The finding is confirmed by the relationship between the efficiency score and the government participation percentage. Looking at the data, we can see that firms with a high level of government participation in Kuwait achieved low efficiency scores in 2008. For example, the Kuwait Investment Company, with 76% government participation, had an efficiency score of 92% in 2006, and its efficiency score decreased to 25% and 55% in 2008 and 2009, respectively. Another example, Global Investment House, with around 10% government participation, had an efficiency score of 90% in 2006, and its efficiency score decreased to 5% and 25% in 2008 and 2009, respectively.

Interestingly, based on the time fixed effect results shown in Table 2, the coefficients of the time dummy for 2008, 2009, and 2010 are statistically significant with negative signs. However, the coefficient of the 2007 year dummy turns out to be statistically insignificant. This suggests that 2008, 2009, and 2010 had a negative impact on firms' efficiency in Kuwait. This result confirms the substantial influence of the 2008 global financial crisis on the investment sector in Kuwait.

Using different specifications, the results shown in column 4 (in Table 2 - appendix B), the estimated model is tested using only the random effect. According to Table 2, the findings of the random effect technique are robust to the findings of pooled OLS, with the exception of the government participation variable. This indicates that factors affecting the production efficiency in the investment sector in Kuwait include the firm's sales, the firm's size, and the operational structure for the firm, whether Islamic or non-Islamic.

On the other hand, as the dependent variable (efficiency score) consists of ratios varying from 0 to 1, and then constructing a model to explain the dependent variable better is important. The results shown in Table 3 in Appendix B use the generalized linear model (GLM) with a logit link and binomial family regression. Based on Table 3, the results of the logit technique are found to be statistically significant and consistent with findings shown in Table 2.

According to the findings shown in Table 3, the production efficiency in the investment sector in Kuwait can be affected by variables such as the firm's sales, indicated by total revenue, the firm's size, indicated by the total amount of assets, the operational structure of the firm, whether Islamic or non-Islamic, and government participation. It is noteworthy that the estimated coefficient of the government participation variable turns out to be statistically significant at the 10 percent level with a negative sign. This finding is consistent with findings shown in Table 3.

Concluding Remarks

The study investigates the efficiency of the investment sector in Kuwait. In particular, in this paper, we examine the efficiency of 40 investment companies in Kuwait. We test predictions of the model using yearly data for 2006 to 2010. In our analysis, we follow the two-stage approach suggested by Coelli, Prasada, and Battese (1998). The findings of the first stage show that the investment sector's efficiency improved throughout the period of the study with the exception of 2008 due to the financial crisis. Using different specifications, the findings of the second stage suggest that 2008, 2009, and 2010 had a negative impact on the firms' efficiency in Kuwait. The result confirms the substantial influence of the 2008 global financial crisis on the investment sector in Kuwait. In addition, the results show that factors affecting production efficiency in the investment sector in Kuwait include total revenues, total assets, government participation, and the Islamic firm dummy. The results are robust for different specifications using a fixed-effect model, a random-effect model, and the Tobit model.

In addition to the empirical findings of the model tested, the results may be utilized by both monetary authorities and policy makers in establishing the general economic policy in the country. A number of policy implications may be derived from the estimates obtained in the current paper. First, the results show that the investment sector in Kuwait faced a sharp drop in its efficiency in 2008 due to the global financial crisis. This result tells us that there was a spillover effect of the global financial crisis in the Kuwaiti investment market, as companies in this market are highly vulnerable to global shocks. As a result, the investment sector needs to be regulated by, for example, encouraging more company mergers and acquisitions.

Second, to meet the appropriate regulations in the investment sector in Kuwait, monetary authority in Kuwait should take into consideration the WTO conditions for more openness in the economic sector. Therefore, companies in the investment sector should be more efficient to compete with foreign investment companies that decide to enter into Kuwaiti market. Therefore, the need for regulations in the Kuwaiti investment sector is more necessary than before. Third, the study of efficiency features is important to help policy makers evaluate how the investment sector will be affected by increasing competition and then formulate policies that affect that sector and the economy as a whole. Furthermore, monetary policy can play an important role in influencing the efficiency in the investment sector. Therefore, the Central Bank of Kuwait should take a leading role in regulating abnormal financial activity in the Kuwaiti market.

Appendix A. Graphs
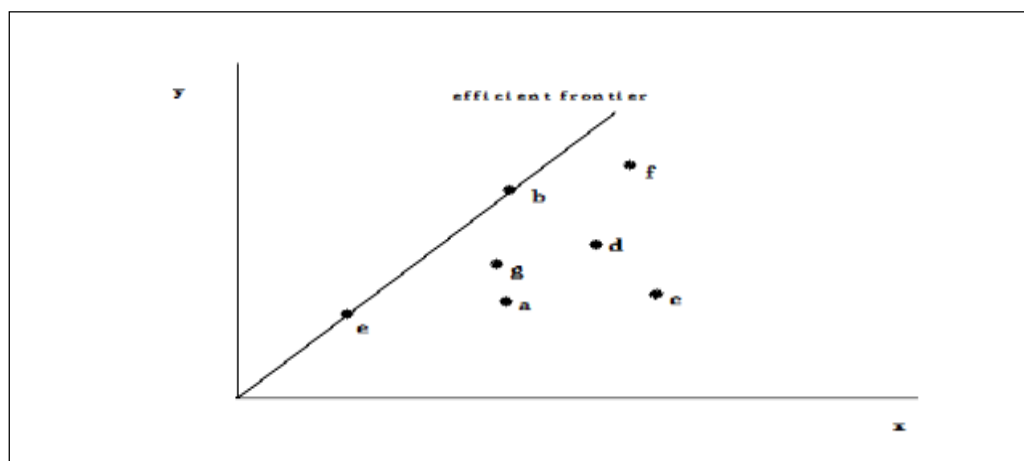
Fig.1 DEA model with single input and single output
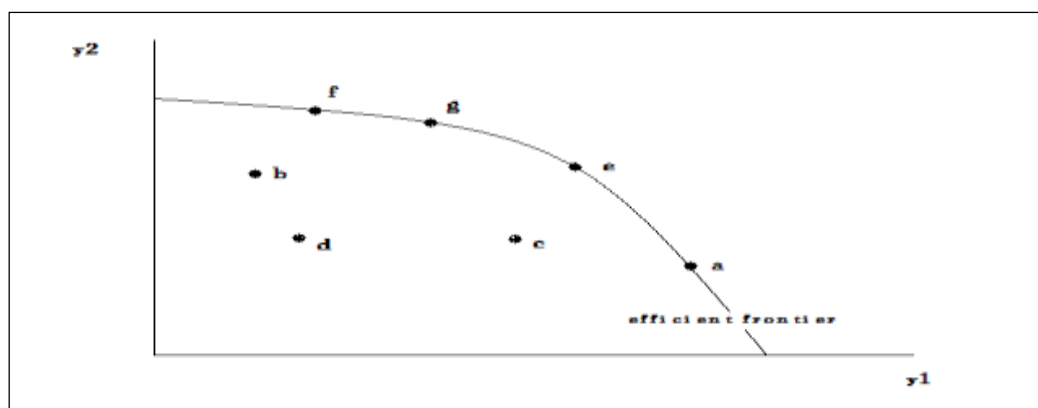
Fig.2 DEA model with single input and two outputs

Appendix B. Tables

Table 1. Summary Statistics of Efficiency Scores for Investment Companies

	2006	2007	2008	2009	2010
Mean	0.893906	0.883537	0.434545	0.652674	0.784087
Median	0.8915	0.871	0.3905	0.608	0.7675
Maximum	1	1	1	1	1
Minimum	0.777	0.739	0.049	0.268	0.529
Std. Dev.	0.060288	0.084251	0.211574	0.17552	0.095782
Skewness	0.31397	0.139985	1.140949	0.613305	0.08191
Kurtosis	2.211145	1.723797	4.325367	3.003407	4.108681
Observations	32	41	44	46	46

Table 2. Benchmark Results: Pooled Sample, Time Fixed Effect, Random Effect

Dependent Variable: Efficiency Score	Pooled OLS	Time Fixed Effect	Random Effect
Revenue	4.23e-07*** (4.46)	2.22e-07*** (3.61)	4.23e-07*** (4.46)
Total Assets	-5.37e-08*** (-5.01)	-3.17e-08*** (-4.60)	-5.37e-08*** (-5.01)
Net Cash Flow	1.40e-07 (0.60)	8.99e-08 (0.62)	1.40e-07 (0.60)
Government Participation	-.0016891 (-1.42)	-.0017534** (-2.38)	-.0016891 (-1.42)
Leverage Ratio	-.000023 (-0.68)	-.0000288 (-1.33)	-.0000236 (-0.68)
Islamic Firm Dummy	-.073246** (-2.30)	-.0750493*** (-3.78)	-.073246** (-2.30)
Year 2007 Dummy		-.0390361 (-1.29)	
Year 2008 Dummy		-.4486125*** (-15.34)	
Year 2009 Dummy		-.2348029*** (-8.06)	
Year 2010 Dummy		-.091468*** (-3.07)	
Obs.	203	203	203
R2/ Adjusted R2	0.1577	0.6659	0.1306

Note: The table reports the t-statistic in parentheses
* Significant at 10%; ** significant at 5%; *** significant at 1%, Robust standard errors (white test)

Table 3. Extended Results: Generalized Linear Model (GLM) with a Logit Link and Binomial Reg.

Dependent variable: Efficiency Score	GLM
Revenue	4.78e-06***
	(3.30)
Total Assets	-4.22e-07***
	(-4.05)
Net Cash Flow	-1.89e-06
	(-0.94)
Government Participation	-.0079412*
	(-1.73)
Leverage Ratio	-.0000497
	(-0.44)
Islamic Firm Dummy	-.4610045***
	(-3.16)
Obs.	203
AIC	.909301

Note: The table reports the Z-SCORE in parentheses
* Significant at 10%; ** significant at 5%; *** significant at 1% Robust standard errors (white test)

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Acknowledgements

Case Analysis of Supply Chain Brand Consolidation in a Consumer and Commercial Credit Dependent Entrepreneurial Venture

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Abstract

This presentation will highlight the critical factors and events which have been utilized to develop a draft for a novel designed for classroom use, which is a fictional account of a business failure based on real life empirical data from the circa 2008 economic collapse in the United States. The specific focus of this two year study is based on branding consolidation within a supply chain and the corresponding impacts on the franchise participants. The account demonstrates how the perception of brand equity can create unrealistic expectations for the entrepreneur. Correspondingly, the analysis focuses on how the perceived benefits of brand equity can contribute to faulty decision making when attempting to compensate for resource challenges and corresponding allocation expectations to attain market objectives. The framework is from an automobile dealership expansion and collapse during a manufacturer distribution network consolidation initiative. The causes of the collapse as well as the misdirected efforts to save the franchise by have been investigated through an analysis of a narrow time frame (2005-2011). Franchisee challenges in the context of corporate ownership changes over a 30 year time frame is analyzed as well as the dynamics of geographic franchisee rights conflicts which developed in the retail trading area. The 2005-2011 time frame traces the product mix expansion of the franchise through the acquisition of all the franchisor brands given the retail network consolidation initiative which was launched. An in depth review of the limited capacity and corresponding impacts of potential insufficient capitalization by the entrepreneur is provided. The interface of credit dependency as a prerequisite for success at the retail level of this industry is also demonstrated through a specific focus on the challenges of securing consumer credit to stimulate inventory turnover during economic crisis, as well as the corresponding financial burdens incurred from an escalating level of interest based costs as inventory turnover became increasingly longer. The study transitions to the entrepreneur attempting to overcome the credit dependent challenges through the acquisition of personal loan financing secured with other commercial property and residential property. The work will conclude with the ultimate closure of the franchise and an explanation of the corresponding personal impacts including potential property foreclosures and the loss of entrepreneurial income sources. The intent of the novel will be to provide a balanced analysis of the risk and reward elements of new venture creation and development for classroom use as a supplemental one case model reading for student analysis. Instructors will have the flexibility to utilize the book in multiple ways. A companion workbook is scheduled for development by a colleague for use by instructors who may prefer to utilize the novel in a more directed manner through specific exercises designed to correlate course content components presented to students through a traditional textbook and corresponding classroom lecture methodology. Attendees will gain insight about critical incidents which may be generalized to a multitude of small business venture scenarios as well as perspectives regarding the utilization of the single case model as a supportive instructional approach when student analysis and application is a desirable course outcome.

Keywords: Branding, Entrepreneur, Supply Chain

Cost Accounting Systems: A Holistic View from the Top

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Abstract

Effective construction of cost accounting systems is a crucial task for companies today. Companies must maintain competitive advantage in pricing, cost, and efficiencies in order to profit while competing on the global stage. Categorizing cost system design elements into decision categories, to be used during the design process, simplifies the efforts and helps the designer both choose and assure that all meaningful elements are considered and compared, in order to create the most impactful and useful system for the company. Suggestions are made in the paper of categories for use during design and a process for use in the design of cost accounting systems. The author also stresses that including the design elements, decision categories and process in a cost accounting curriculum helps students better understand the cost accounting subject with a more holistic and worldview than what may be normally presented in the classroom.

Keywords: Cost Accounting System Process, Designing Cost Accounting Systems, Choosing Cost System Elements

Introduction

Managerial accounting is crucial in the global business environment due to rapidly changing conditions and new technologies. Managerial accounting helps businesses make real-time decisions using both historical, industry, and predictive information. For example, companies must make decisions about how to implement cost systems when opening a new facility in the United States or foreign locations. Sometime investors are interested in the development of cost systems as part of their decision to invest. In one case study, a company assigned overhead costs on one plant-wide rate using direct labor hours as a driver (Northcentral University, 2013). The company produced containers and used the job order method. Investors wanted to see more detail and development in cost management. This paper evaluates the set-up of new cost systems with a holistic design approach. In addition, better ways to teach cost accounting in the classroom by having students consider the design of a sample cost system is addressed in the paper.

In order to understand how managerial cost accounting systems are designed; a designer must consider the various components to be combined during system creation. Thinking of these items as choices to be made from certain buckets or categories simplifies the process. The choices as design elements are considered in the paper. Not only can students in accounting classes benefit from a holistic/worldview look at cost accounting, but practitioners should consider this view for their own use and for ease of communication with others that may not be as familiar with cost accounting. Presenting cost accounting education in ways that students can easily understand using educational methods that give a visual look to the student is imperative and used by some professors to help their students understand the subject more fully (Martin, 2014).

Holistic design consists of identifying unique sets of characteristics to make a whole that are still interdependent in relationship to each other (Malkewitz & Orth, 2008). Holistic design focuses on the most important elements of the design that are then organized to make a whole. For management and cost accounting, a helpful way to look at a system is through the eyes of a designer. Simple constructs versus complex constructs are not necessarily opposite. When the mind has a comfort level for the elements of design, the complexity disappears (Orkerse, 2012). For students of cost accounting, it is useful to build an understanding of cost using design elements. These elements not only help the accounting student learn the intricacies of the individual pieces of a cost system but allow the mind to build the system as a whole while segmenting the pieces into to more easily understandable parts. Just as students of accounting learn systems and cost accounting, management of companies are also students of management/cost accounting. It is helpful for all involved, students and executives alike, to view the holistic design-side of cost accounting systems.

Educational philosophy demands a worldview for today's learner. Learning can be thought of as inputs and outputs. When students take inputs and generate outputs (design), learning occurs (Janzen, Perry, &

Edwards, 2011). If students can learn in this holistic and quantum fashion they can build their own learning. Organizing what is learned into a construct that can be remembered along with the student's individual filter, in design, helps students remember and recall their learning. This type of constructed learning also makes it easier for students to take and apply knowledge to other similar situations. Creative elements in learning and design give students ways to integrate both previous and current knowledge in products that build their future and insure their ability to deliver their future employers meaningful work. Students are best served, if they can understand the development of cost structures in a framework they can apply and then use it to design a system they might use in a workplace environment. Next, the paper looks at the various design elements of developing a cost accounting system including costing systems\inventory, costing types, bucket type, budgeting, other philosophies, and technologies.
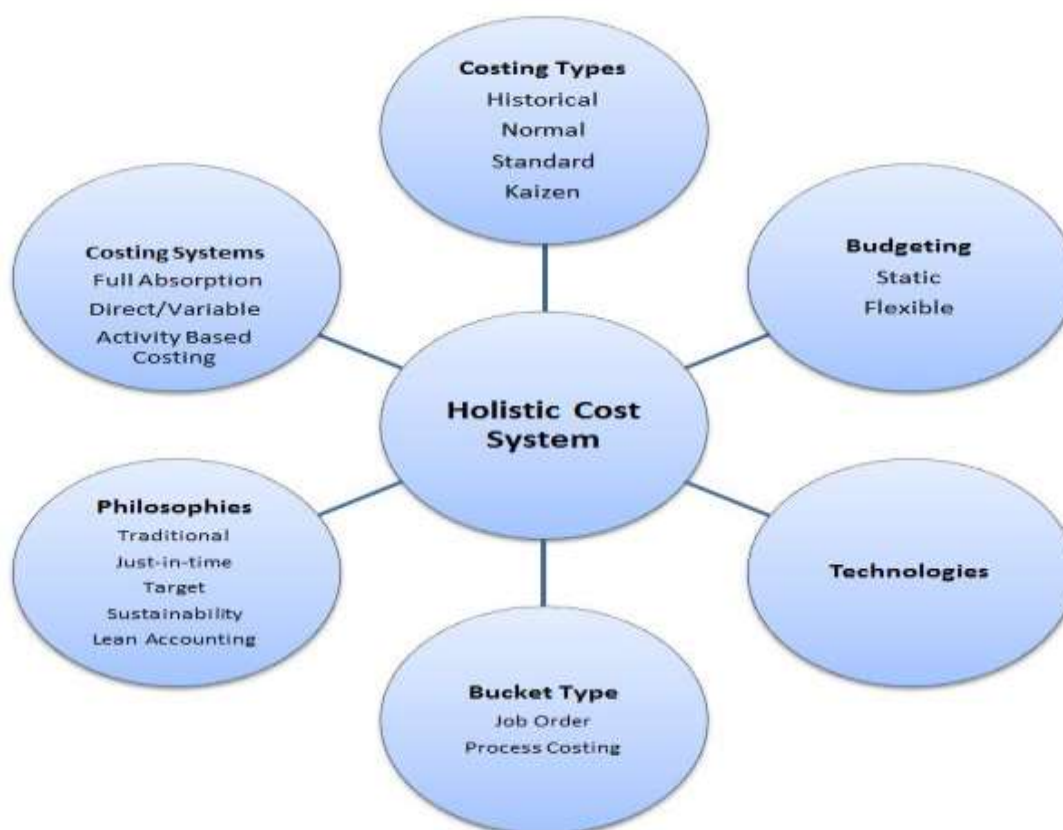
Fig. 1. Design Element Chart

Costing Types

Costing types include historical cost, normal cost, standard cost, and Kaizen costing which are described below.

Historical Cost

One of the jobs of a management accountant is to evaluate performance and help the management make adjustments along the way to improve business outcomes. Performance analysis takes place when the expected results of operations are compared to the actual results from operations (Hilton, 2011). Historical cost when used for setting standards takes the past cost of items to predict their future cost. Using historical cost, in most cases, will not lead to the best results unless the costs of items are static and do not change a great deal. Small changes in product design or production design can change historical costs. Other methods ought to be used along with historical costs for best results. Research has shown that predictive cost estimates for budgeting and performance analysis do indeed affect performance (Mastilak, 2011). When historical costs are more accurate and less volatile, the performance may not be impacted; however, if historical costs are dynamic and volatile using them for performance analysis may not have the intended outcome.

Normal Cost

Normal costing uses the actual/historical costs of manufacturing labor and materials but an estimated overhead rate (Hilton, 2011). If the overhead variance is large it is closed to inventory and if small is closed to cost of goods sold. The normal cost system does not provide for performance evaluation as to comparing to a suggested cost or industry standard.

Standard Cost

Standard costing uses predetermined amounts for manufacturing overhead, materials and labor. Standard costs are beneficial because they help accountants benchmark what costs should look like and then make performance comparisons between projected and actual in order to understand why differences happen and if they are favorable or unfavorable to the company. Information from multiple sources can be used to set standard costs (Hilton, 2011). For best practice standard cost calculations must be developed by those in charge of the processes, including engineers, in order to get the best input. Standard costing ultimately helps evaluate performance but realistic standards must be set. After all, the purpose of standard costs is to allow predictions to occur about various levels of production based on estimated costs in order to evaluate performance and look for improvements (Emilia, Roxana, & Ruxandra, 2008). Industry standards can also be considered. Standard costs have their benefits because they do provide a base for comparison and provide more variance performance analysis than normal costing but may be too simplistic to uncover the detail costing needed for manufacturing activities. In order for standard costs to work in ways that ultimately benefits companies, a lengthier and stable production process is required.

Kaizen Costing

Standard costing focuses on meeting standard targets and eliminating variances. Kaizen costing focuses on a continual cost reduction or improvement during the production process (Ansari, Modarress, & Lockwood, 2005). The practice is to set goals for continual cost reductions. At Boeing six months cycles are used for continuous cost improvements. Work teams are charged with working and meeting goals. The costing strategy must be part of the ethos of the company and an overriding directive (Rof, 2011). Kaizen costing takes the approach of using seemingly insignificant resources and minor increments to make continual change and improvement. Kaizen is about a culture of improvement and was originally developed in Japan. While standard cost sets targets for longer periods in general overall terms, Kaizen Costing is about continuous improvement throughout the process. A focus on cost as a process is useful in setting a culture of continuous improvement.

Costing Systems

Full absorption costing, direct cost/variable cost, and activity-based costing are types of costing systems and are described below.

Full Absorption Costing

Full absorption costing, which is required by United States Generally Accepted Accounting Principles (GAAP), takes all manufacturing costs direct and variable into valuing inventory. When inventory stacks up the manufacturing overhead costs are shown in inventory on the balance sheet (Hilton, 2011). Some believe these overhead costs should be period costs and not be allowed to pile up in an asset account on the balance sheet. However, GAAP requires the matching of income and expense, so GAAP requires this approach. The problem with an increasing asset value left on the balance sheet is the slowed production that caused the increase may not be immediately understood. For this reason, many companies use additional reporting that is called variable costing for internal purposes. In addition, those firms that have a high fixed cost component may be more adversely impacted by only using full absorption and not including variable costing (Seethamraju, Pevzner, & Gupta, 2010). Many factors must be considered when choosing management accounting systems and one major factor is the amount of fixed costs that could possibly show up in a slowing production period.

Direct Cost/Variable Cost

Variable costing only loads inventory with variable manufacturing overhead. Fixed overhead costs are expensed in the period (Hilton, 2011). Under absorption costing fixed overhead is also included in inventory. The variable cost approach is built from the idea of contribution margin regarding separation of variable and fixed expenses. The idea here is that management cannot control fixed costs and should

be focused on what they can control, variable costs. Direct costing looks to future decisions and puts managers in the driver's seat when making decisions about costs; they can influence now (Sorin & Florentina, 2008). Direct costing focuses on sales and profit margin and tends to focus managers controllable part of their jobs. The idea is that fixed costs are in the past and although they are part of the cost of the product the fact of their previous occurrence does not affect what companies can do about the futures in any way, so fixed costs should not be considered in decision analysis.

Activity-Based Costing

Activity-based costing uses "activities" that are part of the manufacturing process to assign costs (Hilton, 2011). Activity-based costing helps more accurately assign costs and overhead to the activities that are driving the costs. Again, activity-based costing is not GAAP compliant, but for internal use. The first part of activity-based costing is to identify the activities to be considered. Activities can be at the unit level, the batch level, product support level, or overall plant level. The next part of the process is to find and identify what makes the costs increase or decrease in the activities, the cost driver. The benefit is a more accurate assignment of costs and overhead to the activities of a company. Many benefits result including more effective performance management. The uses of accounting information in the not too distant past focused more on the historical aspects of reporting; now accounting must be dynamic and react to changing business conditions. Activity-based costing helps accounting take a more meaningful role in the management of a company due to viewing costs in ways that are more realistic. Research has found that the use of activity-based costing leads to better performance for companies (Hardan & Shatnawi, 2013). Granted the approach may not be useful in all companies, because of the cost of implementation and the needs of proper employees to implement and operate the system. Another role of activity-based costing is in deleting activities that do not add value to the process. When activities are considered, management can see just how much each activity costs and make decisions about what the activities really contribute to the profit margin.

Bucket Type

The job order and process costing types are viewed as cost buckets and are described below.

Job Order

Think of job orders as individual jobs that are special ordered either as one unit or multiple units that are customized for a customer (Hilton, 2011). Each job is different and that is why the costs must be accumulated on a job-by-job basis in order to understand the profitability of making the product especially for the customer. Examples of types of products that fit the job order costing structure are custom wedding invitations, a custom wedding ring, or a custom yacht. Normally, the costs that are assigned to the job order are direct materials, direct labor, and manufacturing overhead. Overhead costs are other manufacturing costs that cannot be directly associated with the job. Often times an estimated overhead rate is used so that up-to-date information can be supplied to managers about productivity without the time consuming process of making adjustments for actual overhead expenses until the end of the year. One important part of controlling costs in the job order shop is timing the flow of orders to the factory floor (Lu, Huang, & Yang, 2011). For good inventory control management, customers' order processing should coincide with the due date for the order, thus reducing inventory holding time or eliminating customer unhappiness for late orders.

Process

Process costing is used for manufacturers whose business is to make large batches of similar products like cereal, pharmaceuticals, or gasoline (Hilton, 2011). The products are made by a series of processes like cereal- mixing, baking, and boxing. In order to understand the costs associated with each process and to facilitate performance management of each process the costs are assigned to each process as they occur. In a process cost system, the costs that are added are direct materials, direct labor, and manufacturing overhead. The costs move through the process from raw materials to the first process like mixing and are then transferred to the next process and more costs are added. Because processes are ongoing at the cut-off period like a month or year, different processes may have work that is only partially complete as far as the process, so process cost systems have work-in-process accounts. The balance sheet shows work-in-process and finished goods in the inventory at the cutoff date. Companies use the process costing information in order to manage a company in the global business environment (Dosch & Wilson, 2010). Most executives and managers of process companies find the information invaluable in the day-to-day management of their companies.

Budgeting

Budgeting is part of the accounting process of most all companies today (Hilton, 2011). Budgets are built around estimates using historical, standard costs, or other information to predict what costs might be. Not only do budgets allow for planning and forecasting, they provide the mechanism for performance analysis as time goes forward. Budgets can be static, one forecasted level or dynamic/flexible allowing for various production levels and more in-depth variance analysis due to detail. Budgeting is a multi-departmental activity when best practices are used. Budgeting focuses the company on important goals and gives direction to the business process.

Philosophies

There are various costing philosophies some of which are described below.

Target Costing

Target costing is an approach to product development and design that starts with the target costs of the product, often developed by market research and engineering and then focuses on seeing if a company can make the product in the real world (Kachalay, 2012). Target costing helps eliminate building products that may seem perfect for the market but cannot be made at a cost the market can bear. Target costing lets consumers and the markets drive the products companies make. Target costing is about costing the product for the market and keeping the product marketable in the life cycle. Often times target costing uses standard costs in implementation. Target costing helps companies focus on the consumer and helps insure they will remain competitive in the market.

Just-in-Time

Just-in-time systems can be seen more as a philosophy of production for a company (Kachalay, 2012). The idea behind just-in-time is that no inventory is stored and only produced when needed by the customer. In order for a just-in-time system to work relationships between suppliers and manufacturers must be strong, enduring, and well planned. In the just-in-time system, little raw materials are kept on hand so suppliers must be ready to supply materials when needed immediately. One of the benefits of just-in-time is continual process improvement from focus on no waste production that requires coordination between all players. Companies like GE and Dell have instituted the just-in-time system. Dell is a pioneer in lean manufacturing and product inventory cycle management and is an award winning company for accomplishments in management of supply chain through superior supplier relationships allowing suppliers to manage the raw materials (Craig & Kumar, 2007). Modular manufacturing processes allow flexibility in the manufacturing that continues the focus on customization for the customer.

Sustainable Accounting

Accountants have more to think about than just traditional accounting (Svensson, 2008). Sustainability and accounting have reason to coexist. Accountants and management must understand what company practices contribute to firm sustainability or consider those practices that hamper sustainability. The information and templates society currently considers about the future economy considers an ongoing process of improvement but does not necessarily look at the environment or other factors that may hamper future success. There are many considerations for sustainable accounting including: supplier's life cycle, environmental product concerns, environmental marketing, purchasing concerns with the environment in mind, and life cycle type thinking. The costs of the various considerations should be part of long-term planning in the business cycle and are crucial considerations for management.

Lean Accounting

Lean accounting looks at ways to incorporate many pieces into the idea of value improvement (Brosnahan, 2008). The value stream is managed and adjusted for ways that performance impact the value stream not just the traditional look at departmental type performance measurements. Instead, the company-wide effort is focused on the value stream and the efficiencies of processes. Lean accounting is a popular new take on a philosophy of continual improvement like Kaizen costing, but focuses on the value stream.

Technologies

The technology available for today's accounting systems allows for using data in more flexible and creative ways (Knevezic, Stankovic, & Tepavac, 2012). The system must be structured so multi- users with various purposes can access information for their own uses. Of course, security protocol must be followed as to the amount or type of information each user can access. Management, if necessary, must access systems that provide human resource information, production information, inventory, etc. The system must be flexible enough to allow different queries combining information from various departments. One of the first steps in building an excellent managerial accounting/cost system is having an information system that can supply the data needed by management in real time and flexible ways.

Designs

Knowing the design considerations outlined so far in this paper, the next step is to build a new cost/managerial accounting system. A student in a cost accounting class is charged with designing a cost system for the company in the case or a case study. The student considers various design elements from the costing systems, costing types, bucket types, budgeting, philosophies, and technologies. First, the type of product must be considered. In the case studied, the company sells containers to be manufactured in China (Northcentral University, 2013). They currently use the job order method (Bucket Type) with normal costing assigning overhead at a plant-wide rate. The suggested system for the company is a job order cost system (Bucket Type) with activity-based accounting mixed with a target costing philosophy in product design; of course, full absorption costing must be used for financial reporting. The company should also look to have a just-in-time philosophy in their approach in the process of manufacture and be sure to factor in sustainable type cost information. With the new accounting system using the best up to date technology and a sophisticated standard costing approach and flexible budgeting system, the investors are sure to be pleased. The benefits of each follow.

Design Element – Activity-Based Costing (Costing Systems)

The new plant in China will use activity-based costing instead of the passé normal costing assigning overhead rates with a plant wide perspective. This will require understanding the cost drivers of the activities in the plant and the formation of cost pools.

The benefits are (Tibesku, Hofer, Portegies, Ruys, & Fennemma, 2011):
- More accurate assignment of overhead costs to pools.
- Assign costs based on drivers of activity.
- Improvements and eliminations of unwanted non value adding activities.
- With the elimination of non-value adding activities more time to add value and make improvements to the process.
- More accurate pricing of products related to their true costs.

Design Element- Target Costing (Philosophy)

The new plant in China will use a combination of target costing for product development and activity-based costing for the costing approach. In the past, the company used normal costing with a job order system, but overhead is assigned at a macro level and does not provide the company the clearest picture of cost.
The benefits are (Juhmani, 2010):
- Market driven approach focused on making product competitive.
- Cost controls and reductions are built into the entire product life cycle.
- Can be used along with activity-based costing.
- Focuses on driving the cost from the top (product design) down to the production plant. Assures that a product will actually make it on the market.
- Higher attainment of target costing targets directly correlates to firm performance.

Design Element Just-in-Time (Philosophy)

The new production facility will use a just-in-time philosophy letting suppliers manage raw materials and production material. In order to complete the process, a supplier program will need development that analyzes and assesses supplier's capabilities and flaws (Kachalay, 2012). The system will look at the process of building the suppliers into the entire supply chain eliminating waste and the costs of carrying

inventory. The just-in-time system is driven by orders from customers and production is not begun until an order is received.

The benefits are (Kachalay, 2012):
- Focus on elimination of waste resulting in cost savings.
- Focus on only producing what customers order.
- Focus on building relationships with suppliers and improving delivery and eliminating error in turn providing customers a better product.
- Just-in-time gives management a clearer picture of the manufacturing process because the process must run smoothly in order to produce the best results.

Design Element -Flexible Budgeting and Standard Costing (Costing Types and Budgeting)

Most companies today make the budget a part of their management accounting and costing system (Hilton, 2011). Budgets allow companies to forecast the upcoming year using estimates of possible outcomes and then compare what actually occurs with the budget. In order to bring about the best results from the budgeting process, standard costing is preferred that uses a benchmark prepared by industry experts or the involved staff of the company. Standard cost budgets look at what the standard should be and then variance analysis is completed that allows variations from the standard in direct materials, labor, and overhead. Standard costing is preferred in an industry without rapid change (Badem, Ergin, & Drury, 2013). Many believe that standard costing is not appropriate in the marketplace today where technology changes rapidly. For the company in the case, standard costing should work well since the business of making containers is simple straightforward manufacturing process without many changes. Standard costing is used worldwide with excellent results. In addition, flexible budgets allow various activity levels to be accounted for and projected with ease.

The benefits are (Chenxi, 2011):
- The flexible budget bends with the company's current situation and allows mangers to focus on improvement instead of meeting a static target.
- Better strategic planning due to flexibility in the budget itself. The budget can adjust with the ebb and flow of the company.
- One of the reasons for budgeting is for accounting control. A flexible budget allows the control requirement of accounting to be met in a dynamic way.

Design Element -Technologically Advanced Accounting Information Systems (Technologies)

When instituting a new cost accounting system, a good first step for the company in the case is to evaluate the accounting information system currently in use. Does the system provide the flexibility needed to institute the new cost accounting system (Knevezic, Stankovic, & Tepavac, 2012)? Accounting information systems must be flexible enough to provide the information needed in segments to various users across the organization on a demand basis. The likely case will be that the company will need to institute a newer accounting information system.

The benefits are (Knevezic, Stankovic, & Tepavac, 2012):
- Flexible and on-demand information for managerial decision making; information needs are flexible enough to pull data at the detail needed by managers for various departments and needs.
- Cross departmental uses.
- Allows real use of all information along with accounting information to manage and run the company real time.

Design Element- Considerations of Sustainability (Philosophy)

What a great opportunity to consider elements of sustainability in the new plant. Managers should consider many aspects of sustainability in product manufacture, vendor choice, long-term impact on the environment, and any other concerns they may have in this regard (Svensson, 2008). Sustainability elements should be factored into the strategic plan and considered when choosing suppliers for the just-in- time process.

The benefits are (Svensson, 2008):
- The management has the opportunity to view the life of the company in a true long-term approach.
- The management has an opportunity to manage and fix any problems that may come up.

- Management considers sustainability for all aspects of the company including vendors and suppliers.

Conclusion

The case study company has an outstanding opportunity to remake their cost accounting and management accounting systems with today's best practices in mind. In addition, students of an accounting class can build their learning by holistically designing a cost system. The company should design a flexible budgeting system that considers standard costs for performance analysis and additionally adopt a just-in-time philosophy for the inventory management. The activity-based costing system along with standard costing will help the company better understand their costs instead of using the antiquated normal costing system. The activity-based costing system pools costs in ways that reflect activity and standard costing allows more in-depth variance analysis. With all these changes in mind, two stand-out opportunities emerge. The two standouts are the need for an accounting information system to handle the demands of the new cost accounting systems and the opportunity to consider sustainability in their management decisions. With these new systems and philosophical approaches, the company will be well prepared to meet the demands of business today. Finally, the student who uses the holistic design approach in their learning of cost accounting will be primed to contribute significantly to their profession and future employers.

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Using Econometrics for Analysing the Turkish Inflation: Evidence from the post-2000 Period

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Abstract

In our paper, we aim to re-examine the course of inflation in the Turkish economy given that inflation is ex-ante assumed to be a monetary phenomenon derived from money market equilibrium conditions. The paper tries to follow the contemporary developments in time series econometrics and specifically apply to SVEC modeling in analyzing the Turkish inflation. We model the Turkish inflation by testing both cointegration and dynamic innovation accounting aspects in a mutually consistent way through the field of the art of econometrics. All in all, based on a contemporaneous time series empirical modeling approach and as a preliminary draft to a more detailed analysis of inflation in the Turkish economy, the paper tends the readers to appreciate whether different stabilization tools in fighting inflation can be successful for the Turkish economy and following the inferences obtained from the analysis the authors finally try to attain some policy inferences.

Keywords: Money Demand; SVEC Analysis; Inflation; Turkish Economy;

Introduction

Studies on monetary policy require to stick on some theoretical relationships so that insights for stabilization attempts applied by authorities would be capable of serving to achieving *ex-ante* purposes. In this sense, estimates of money demand models reveal the determinants of the motives of why economic agents tend to hold these money balances and can provide the researchers with the inferences in constructing policy rules against major economic problems such as domestic inflationary framework and the choice of alternative costs against holding money. Thus, money demand equations yield crucial knowledge about the expectations dominated in monetary markets.

To a greater extent than the other sub-branches of the science of economics, on empirical grounds, the theoretical frameworks supported by steady-state hypothesizes of long-run relationships and the dynamic adjustment processes come out of these policy exercises are able to provide researchers with the necessary knowledge of modeling the stylized facts of the monetary economics. The seminal papers of Sims (1972, 1980) introduce the roots of the contemporaneous estimation techniques based on vector autoregression (VAR) methodology widely used in testing various approaches of making policy as well as the policy rules to which the related stabilization attempts can be applied. In this sense, empirical studies of Sims (1992), Bernanke and Blinder (1992), Kamas (1995), and Leeper (1997) examine the monetary policy shocks on reserve aggregates or short term interest rates in affecting inflationary pressures and/or domestic output. Following the conventional structural VAR (SVAR) approach, the recent developments in time series analyses are also of this type, and lead the researchers to assess both the systematic and the unsystematic components of monetary policy by considering dynamic innovation accounting methods subject to some cointegrating restrictions. This methodology enables the researchers to yield the so-called policy shocks using some key macroeconomic variables such as monetary aggregates, real output, interest rates and prices, given that the initial cointegration procedures have been used to identify a policy rule serving to carry out the latter analysis. While the papers by Gordon and Leeper (1994), Christiano et al. (1996), Leeper et al. (1996), Cushman and Zha (1997), Bagliano and Favero (1998) and Bernanke and Mihov (1998) can be dealt with for the policy innovations leading to the unsystematic part of the monetary policy, the studies of Vlaar and Schubert (1999), Jacobson et al. (2001), Juselius (2001), Brüggemann (2003) and Assenmacher-Wesche (2008) can be considered reference to an application of some recent variants of this methodology, named structural vector error correction (SVEC) modeling allowing also to analyze the systematic reactions in monetary policy by means of identification of a monetary policy rule. McCallum (1999) is a good paper emphasizing this point of view and states that monetary policy transmission mechanisms used by economists in general

tend to consider the systematic portion of policy behaviors which require structural modeling rather than the unsystematic elements represented by random shocks that account for a small fraction of policy-instrument variability and are not related to the state of the economy.

In our paper, we aim to re-examine the course of inflation in the Turkish economy given that inflation is *ex-ante* assumed to be a monetary phenomenon. Of course, the researcher can take into account inflation from different perspectives and some good examples in this sense are the empirical papers of Metin (1995a, 1995b) upon the Turkish economy and Sekine (2001) for Japan. The base of constructing this paper is also to follow the contemporary developments in time series econometrics as briefly specified above and specifically to apply to SVEC modeling in analyzing the Turkish inflation. To the best of our knowledge, however being many empirical studies analyzing the Turkish inflation from various theoretical and empirical perspectives, the Turkish economics literature lack of enough care to construct such a more complementary study revealing the responsiveness of domestic inflation to various shocks of excess demand or monetary as well as of the cost-push form represented by so-called exchange rate pass-through effects given that the long-run economic functional forms which are counterpart of the stationary econometric relationships are to be estimated. Such a mission requires modeling inflation in light of SVEC estimation techniques, testing both cointegration and dynamic innovation accounting aspects of inflation in a mutually consistent way through the field of the art of econometrics, and our paper aims to contribute to this strand of studies by using post-2000 Turkish data up to the recent mid-2013 period. Thus, the authors tend to restrict the analysis within a monetary perspective.

Methodological Issues

This paper utilizes a two-step estimation procedure derived from vector autoregressive framework. Let us briefly recall the vector error correction (VEC) model with p lags in Eq. 1:

$$\Delta Y_t = \mu + \Pi Y_{t-1} + \sum_{i=1}^{p-1} \Gamma_j \Delta Y_{t-j} + \varepsilon_t$$

(1)

$Y_t = \begin{bmatrix} y_t x_t \end{bmatrix}'$ is defined as the variable vector in which y_t is an n - vector of non-stationary I(1) variables and x_t is a d - vector of deterministic variables. μ is a vector of constant terms and $\Delta \equiv (1 - \text{L})$ indicates the difference operator. The vector of error terms is assumed to distribute normally with mean zero and covariance matrix Ω, $\varepsilon_t = [\varepsilon_y \ \varepsilon_x]' \sim \text{N}(0, \Omega)$, and Ω is positive definite. Π is the $n \times n$ long run multiplier matrix and Γ is the short run reaction matrix, where $\Pi = -\left(I - \sum_{i=1}^{p} \phi_i \right)$ and $\Gamma_i = -\sum_{k=i+1}^{p} \phi_k$. I represents $n \times n$ identity matrix and ϕ_k is the vector autoregression (VAR) coefficient matrix. If the coefficient matrix Π has a reduced rank r such that $0 < r < n$, then there exist $n \times r$ matrix of loading coefficients (α) and $n \times r$ matrix of long run coefficients (β) each with rank r such that $\Pi = \alpha \beta'$ and $\beta' y_t \sim I(0)$. As is warned by Assenmacher-Wesche (2008), what is here to be discussed is the loading coefficients instead of error correction coefficients because these pertain to the reduced form and cannot be given an economic interpretation. The model can be estimated by maximum likelihood methods scrutinized in Johansen (1988, 1991) and Johansen and Juselius (1990). In the case of $r > 1$, Johansen and Juselius (1992, 1994) reveal that by taking linear combinations of the unrestricted β vectors, it is always possible to impose $r - 1$ just identifying restrictions and one normalization on each vector without changing the likelihood function. Imposing more restrictions to each vector would be suitable to over-identification tested by likelihood ratio (LR) statistics. Johansen (1995) indicates that only if the restrictions identify the whole cointegrating vectors can asymptotic standard errors for the estimated cointegrating parameters be calculated.

Having established the reduced form model in Eq. 1, the second step involves to design a structural model which recovers dynamic interactions between the variables resulted from innovation accounting methods. This task requires identification of the economic relationships and is carried out by restricting the estimated covariance matrix in the vector autoregressive process. Thus, some restrictions need to be imposed on the $C(1)$ matrix of long run effects of shocks and the non-singular B matrix of contemporaneous effects of shocks. The reduced form disturbances ε_t and structural innovations u_t are associated with each other such that:

$$u_t = B\varepsilon_t \tag{2}$$

The matrix of long run effects of the u_t residuals is given by:

$$C(1) = \beta_\perp \left(\alpha_\perp' \Psi \beta_\perp \right)^{-1} \alpha_\perp' = \beta_\perp \left(\alpha_\perp' \left(I_m - \sum_{i=1}^{p-1} \Gamma_i \right) \beta_\perp \right)^{-1} \alpha_\perp' \tag{3}$$

As specified in Brüggemann (2003), $\alpha_\perp$ and $\beta_\perp$ are orthogonal complements of α and β, respectively: $\alpha_\perp' \alpha = \beta_\perp' \beta = 0$ and Ψ is the mean lag matrix of the VAR representation. Easy to notice that if cointegration rank $r = 0$, this model specification is reduced to $C(1) = \Psi^{-1}$, whereas if Π matrix is of full rank when $r = n$, all elements in y_t endogenous variable vector would be stationary in their levels and thus $C(1)$ is a null matrix.

Of a special importance to achieve identification of the structural model is to discern the effects of shocks from each other. Further proceeding with the analysis, thus, requires that structural innovations must be estimated as to the $n - r$ dimensional common trend space and r dimensional cointegrating vector(s). The relationship between the variances of reduced form residuals and the structural innovations yields that $BB' = \Omega$, which imposes $n(n+1)/2$ independent restrictions on B. The orthogonality assumption for the structural shocks requires $n(n-1)/2$ additional zero restrictions to the off-diagonal elements for exact identification. Similar to the identification of cointegrating vectors, these restrictions come from economic theory and it is also possible to test more than $n(n-1)/2$ over-identifying restrictions. Following the notation in Vlaar and Schuberth (1999), let us assume that the additional restrictions are all linear zero restrictions which can be shown in the general implicit form below:

$$Rvec(B) = 0 \tag{4}$$

where R denotes ($g \times n^2$) matrix imposing g independent contemporaneous restrictions on B for n^2 unknowns, and $vec()$ is column stacking operator. However, the long run restrictions are related to the total impact matrix $C(1)$.

Given that rank $C(1) = n - r$, the matrix $C(1)B$ can have at most r columns of zeros. Thus, there can be at most r shocks with transitory effects which die out in the cointegration space in the long run, and at least $n - r$ shocks which have a permanent effect on at least one variable in the system. Reduced rank matrix leads to that each column of zeros stands for only $n - r$ independent restrictions, and for exact identification of the permanent shocks, $(n-r)(n-r-1)/2$ additional restrictions are needed. Also, identifying the transitory shocks uses $r(r-1)/2$ additional contemporaneous linear zero restrictions.

Data Use

As briefly mentioned above, one of the main purposes of the study is to conduct a policy experiment using so-called dynamic innovations or shocks analyses based on money market theoretical relationships. Such a task would at first requires to establish a monetary equilibrium model prior to deriving these shocks potentially leading to an inflationary framework. Following this methodological choice is to construct an information set conditioned upon some main macroeconomic aggregates serving monetary equilibrium to be determined by the researchers. By way of employing the methodology discussed in the former section and using actual data from the Turkish economy, this methodological choice, we hope that, will enable us to keep on the study by following a learning from the data approach through the statistical and time series properties of the relationships between the chosen variables. Let us now consider the data to test the validity of structural cointegrated VAR model examined and assume an endogenous variable vector:

$$y = \left(m/p, y_{real}, trea, inf, exc, own \right)' \tag{5}$$

integrated of order d where $d \le 1$. Since the study is mainly upon monetary policy, *sine qua non*, the model is first to be inclusive of a monetary aggregate that is related to the developments within money markets. This variable is represented by M2 monetary aggregate which is consisted of currency in circulation plus demand and time deposits denominated in the domestic currency in the Turkish banking system till 2005Q4. But, we must be careful at this point in the sense that there exists a structural change in the definition of money supply within the investigation period and as of 2005Q4 residents' foreign exchange deposits previously followed under M2Y money supply are classified according to maturity and included in M1 and M2. Such a variable choice can also be ascribed to a potential relationship related to a money demand model lying in the variable vector space, if so will enable us to identify monetary policy. Under the assumption of no money illusion which is a general tendency of the studies in this tradition of research, the demand for money is a demand for real money balances obtained by deflating M2 balances with gross domestic product deflator using the base 1998: 100. However, for a violation of this assumption, the readers can apply to Juselius (2001) that empirically rejects long run price homogeneity within the monetary transmission mechanism applied to the Italian economy. Following the acceptance that the variable space is mainly of a money demand form, the scale income variable (y_{real}) representing the extent of the maximum amount of money balances to be held in hand is the real gross domestic product (GDP) at constant 1998 prices. Having specified the role of monetary aggregate and income variable within the information set, the other variables can also be associated with a money demand relationship. As alternative costs to demand for money, the variable $trea$ represents the average-simple interest rates by securities in Treasury auctions, inf is the domestic inflation in any period t such that $\pi \equiv \Delta p_t = (1-L)p_t$ where p is used for GDP deflator and lag operator L shifts p_t one period into the past, exc is the Turkish lira per US dollar exchange rate as a proxy for the currency substitution phenomenon settled in the economy, and own is the own rate of return for broadly defined money balances which is the weighted averages of 12-month deposits in the Turkish banking system. The data for all the variables come from the electronic data delivery system of CBT except the Treasury interest rates which are compiled from the Republic of Turkey Ministry of Development.

The sample covers the investigation period of 1998Q1-2013Q2 with quarterly frequency data. All the data take the form of seasonally unadjusted values. The time series m/p, y_{real}, and exc are converted to their natural logarithms, while no such a data transformation has been applied to the variables $trea$, inf, and own. For such variables as nominal interest rate and inflation that have already been used as a ratio in a long-run money demand analysis, whether or not logarithmic transformation is needed has been of a controversial issue of interest in the economics literature. For different approaches briefly stated, Friedman and Kuttner (1992) and Hoffman and Rasche (1996: 105-110) can be examined. As the deterministic variables, a set of centered seasonal dummies (d_q2, d_q3, d_q4) which shift the mean without contributing to the trend and two impact crisis dummies have been included into the system. Note that including any other dummy or dummy type variable will be able to affect the underlying distribution of test statistics so that the critical values for these tests are different depending on the number of dummies included (Harris and Sollis, 2003: 116). The deterministic variable system can be summarized as follows:

$$x_t = [\mu, d\_q2, d\_q3, d\_q4, dummy01, dummy0809]'$$

$$dummy01_t = \begin{cases} 1, t \in [2001:1, 2001:4] \\ 0, otherwise \end{cases}$$

$$dummy0809_t = \begin{cases} 1, t \in [2008:3, 2009:2] \\ 0, otherwise \end{cases}$$

Similar to the modeling in Juselius (2001), this exercise follows the principle of 'specific to general' in the choice of variables, albeit 'general to specific' in the choice of statistical model due to the efficiency of VAR approach in small systems. Further, the results drived from VAR-based cointegration analysis can easily be used for extended analysis. Any cointegrating relationship inclusive of the data would be estimated when the information set is extended. However, this is not the case when the feedback relations and the dynamics of the system are to be analyzed.

Tests for Multivariate Cointegration

Before the estimation of long run relationships, some conventional augmented Dickey-Fuller (ADF) tests not reported here to save space have been conducted to detect unit roots. The results strongly suggested that the variables considered have a drifting-in-time process that leads them to deviate from a mean reverting process. These results are available from the author upon request. But note that the exchange rate variable raises some doubts and may be in margin subject to an I(0) process only with constant restricted in the unit root regression. For this variable, we also apply to Perron (1997) unit root test with an endogenous break point and estimate value with only constant term -3.50 (0.05 cv -5.23) and constant & trend term -5.28 (0.05 cv -5.59) under the null hypothesis that the variable has a unit root with a structural break in constant and constant & trend terms models. Thus, we will carry out the analysis by assuming that all the variables are first–difference stationary. Further indicated below is that the unit root characteristics of the level form variables cannot be rejected by the data based on the information set nested in the multivariate cointegration analysis:

Then, the dynamic structure of the unrestricted VAR model is determined through the Schwarz lag selection information criteria which minimizes at lag length of 1 and the maximum likelihood estimation procedure of Johansen (1988) and Johansen and Juselius (1990) is used to see the details of the cointegration analysis. For the cointegrating relationships, the rank test results consider the critical values (cv) using MacKinnon et al. (1999) probability values. Based on the so-called Pantula principle, the tests include a constant and restricted linear deterministic trend, but no deterministic trend is assumed for dynamic VEC models. The results are summarized in Table 1 below. We see that the trace statistics report 2 significant vectors while the maximum eigenvalue statistics cannot reject the existence of only 1 cointegrating vector lying in the long run variable space. Unrestricted cointegrating and adjustment coefficients for these vectors are also reported in the table. Notice that the first vector looks like just a money demand relationship. The unrestricted adjustment coefficient of this vector upon real money balances takes a value highly different from zero. For the potential second vector, also, the loading coefficients lead us to make sense of a relationship between both interest rates and/or inflation.

Let us now examine the cointegrating vectors in Table 1 in a further detail, and normalize the coefficients to give them an economic interpretation. The first relation using unrestricted cointegrating coefficients expresses that equilibrium in the money market requires the equality of money demand and money supply in any period t, then determinants of money demand are examined as a behavioral equation. It is seen that the economics theory is really successful on empirical grounds to model money demand relationship of economic agents so much so that when the normalization is carried out upon real money balances we find a positive significant relationship running from scale real income variable and own rate of return for money to real money balances held in hand, and a negative significant relationship between alternative cost variables chosen and real money balances. At this point, since we have many variables in cointegration analysis, we apply further homogeneity and symmetry restrictions and test their significance by use of relevant LR statistics to ease making economic inferences. The one cointegrating equation under the coefficient matrices reveal that the real income homogeneity cannot be rejected as a restriction and that the income elasticity of money demand is indeed not much different from a unity value that links real money balances with real income through a quantity theoretical framework, a finding supporting a stationary income velocity of money in the long run. For all the alternative cost variables, we obtain a negative significant sign, while the own rate of return is estimated in a positive relationship with real money balances as expected. Having applied to various other restrictions at the bottom portion of Table 1, what we estimate as a final relationship for an analysis of the Turkish inflation can be seen in Eq. 6:

$$\left(\frac{m}{p}\right) = \beta_1^{H_1}\left(y_{real}\right) - \beta_2^{H1}\left(trea\right) - \beta_3^{H1}\left(inf\right) - 3.78\left(exc\right) + 1.19\left(own\right) + 0.06 trend + 148.1 \tag{6}$$

$$(-3.58) \qquad (41.97) \qquad (1.44)$$

where $\beta_1^{H_1} = 1, \beta_2^{H_1} = -1 \,\& \, \beta_3^{H_1} = -1$ and using $\chi^2(3) = 2.56 (prob. \, 0.46)$

Tabe 1. Multivariate cointegration analysis

Null hypot.	r=0	r≤1	r≤2	r≤3	r≤4	r≤5
Eigenvalue	0.793	0.466	0.332	0.223	0.190	0.070
λ-trace 185.12*	92.31*	55.34	31.56	16.70	4.29	
5% cv	117.71	88.80	63.88	42.92	25.87	12.52
λ-max eigen	92.82*	36.97	23.78	14.86	12.41	4.29
5% cv	44.50	38.33	32.12	25.82	19.39	12.52

Unrestricted cointegrating coefficients

$\left(m/p\right)$	(y_{real})	$(trea)$	(inf)	(exc)	(own)	$trend$
0.6939	-0.3051	0.2289	0.3323	1.1913	-0.2769	0.0054
0.0568	0.1558	0.1586	-0.4262	0.1651	-0.1753	-0.0618
-2.2710	0.4523	0.1502	-0.0938	-3.2170	-0.1797	0.0510
2.0084	-1.1228	0.0887	-0.2985	0.3986	-0.0211	0.0584
-1.9065	2.7068	0.0449	-0.0344	2.9680	0.0218	-0.1956
4.6700	0.5158	-0.0004	0.0803	0.9682	0.0280	-0.1806

Unrestricted adjustment coefficients

$D\left(m/p\right)$	-0.0299	-0.0047	0.0111	-0.0128	0.0028	-0.0169
$D(y_{real})$	0.0286	0.0139	-0.0710	0.0003	-0.0999	-0.0349
$D(trea)$	-5.1186	-0.7908	-0.1515	-2.4698	-0.0593	0.4875
$D(inf)$	-1.4199	0.7874	0.4038	0.7401	-0.0194	0.2696
$D(exc)$	-0.0072	-0.0191	0.0265	0.0088	-0.0138	0.0031
$D(own)$	-1.3939	1.9849	1.0542	-2.7396	-0.2482	0.4877

1 Cointegrating eq. with unit income restriction (*t*-stats in parentheses) $\chi^2(1)$=0.62 Prob. 0.43

$\left(m/p\right)$	(y_{real})	$(trea)$	(inf)	(exc)	(own)	$trend$	C
1.000	-1.000	0.692	0.993	2.992	-0.842	0.07	147.4
(9.17)	(6.93)	(3.69)	(-9.91)	(2.33)			

Adjustment coefficients (*t*-stats in parentheses)

$D\left(m/p\right)$	$D(y_{real})$	$D(trea)$	$D(inf)$	$D(exc)$	$D(own)$
-0.010	0.010	-1.703	-0.476	-0.002	-0.457
(-2.62)	(0.68)	(-5.54)	(-4.01)	(-0.67)	(-1.32)

Multivariate LR statistics for testing stationarity (under the assumption that r=1)

$\left(m/p\right)$	(y_{real})	$(trea)$	(inf)	(exc)	(own)
$\chi^2(5)$ 82.24	76.45	71.12	49.89	66.04	69.74

Prob   (0.00)   (0.00)   (0.00)   (0.00)   (0.00)   (0.00)

Homogeneity and symmetry restrictios (probs in parentheses)

b(1,1)=1, b(1,2)=-1, b(1,3)=b(1,4) $\chi^2(2)$=2.49 (0.29)

b(1,1)=1, b(1,2)=-1, b(1,3)=b(1,4), b(1,6)=-b(1,3)$\chi^2(1)$=1.08 (0.30)

b(1,1)=1, b(1,2)=-b(1,3), b(1,4)=-b(1,5)$\chi^2(3)$=26.58 (0.00)

b(1,1)=1, b(1,2)=-1, b(1,3)=1, b(1,4)=1 $\chi^2(3)$=2.56 (0.46)

b(1,1)=1, b(1,2)=-1, b(1,3)=1, b(1,4)=1, b(1,6)=-1 $\chi^2(4)$=26.93 (0.00)

But, we also find above that there might be a second vector that represents a stationary relationship lying in the long run variable space. So a two-vector identification and normalization procedure has also been implemented. The results with overidentification restrictions are given in Eq. (7).

$$\left(\frac{m}{p}\right) = \beta_1^{H_2}\left(y_{real}\right) - \beta_2^{H_2}\left(trea\right) - \beta_3^{H2}\left(inf\right) - 2.46\left(exc\right) + 1.22\left(own\right) - 0.05trend - 149.6$$

$$(-3.50)\qquad(42.91)\qquad(-1.26)$$

$$\left(own\right) = 0.83\left(trea\right) - 0.06trend + 5.05 \tag{7}$$

$$(31.60)\qquad(-1.42)$$

Error Correction Coefficients $(t-stats\ in\ parentheses)$	Cointegrated Equation 1	Cointegrated Equation 2
$D\left(\frac{m}{p}\right)$	$-0.01(-2.52)$	
$D\left(own\right)$		$-0.95(-2.85)$

where $\beta_1^{H_1} = 1, \beta_2^{H_1} = -1, \beta_3^{H_1} = -1, \beta_1^{H_2} = 0, \beta_2^{H_2} = 0, \beta_4^{H2} = 0, \beta_5^{H2} = 0$ and

$$\chi^2(5) = 3.31\,(prob.\ 0.65)$$

Notice that the second vector now is devoted to the determination of market interest rate, and for this purpose, a stationary term spread between two interest rates considered are examined. As can be expected, the last relation cannot be rejected by LR statistics and a positive and strong but not unity relationship does exist between interest rates. This is a well-established empirical money market equilibrium model which fits well with theoretical premises, and based on the assumption of a unique vector found by both LR statistics we now jump to the SVEC analysis.

Results for SVEC Modeling

Based on the results estimated above, now, a structural analysis outlined in the former sections is tried to be implemented upon vector error correction model derived from the cointegration analysis. The reader can consider the estimation results obtained so far as the theoretical background of the paper supported by the estimation of steady state economic relationships using stationary counterparts in contemporaneous econometrics. But in order to derive some policy inferences subject to our data set, we need to implement dynamic innovation accounting methods identifying the shocks traced in structural impolse responses and variance decompositions analyses. Given the methodological bases taken into account in this paper, let us identify the SVEC system and use common trends driving the system so that permanent and transitory shocks can be distinguished. For the permanent shocks, identification procedure applies to the long run impact matrix $C(1)$, while the transitory shocks use reduced form residuals in Eq. (2) as functions of the structural shocks, that is, the restrictions imposed on B matrix. the vector of structural shocks is as follows:

$$\varepsilon_t = \left(\varepsilon_t^{m/p}, \varepsilon_t^{y_{real}}, \varepsilon_t^{trea}, \varepsilon_t^{inf}, \varepsilon_t^{exc}, \varepsilon_t^{own}\right)' \tag{9}$$

Since $n = 6$ and $r = 1$ for the empirical model application using time series econometrics, one of the shocks commonly determined by both LR statistics is assumed having only transitory effects and the other five shocks would have to represent independent common trends for which long run restrictions are used to identify permanent shocks. In this sense, we know that a recent paper by Korap (2013)

estimating a similar econometric model but with late money supply definitions and covering the sample investigation period lying to 2011Q3 applies to a three-vector identification procedure. In line with the methodological discussions, for the restrictions on long run impact matrix, we tend to be benefited from the cointegration properties of the system variables, and applied to r columns of zeros for the variables carrying the knowledge of cointegration that leads to transitory shocks dying out in a long run period. In our case for this paper, zeros are applied to the column vector of the variable $\left(\frac{m}{p}\right)$.

On the other side, for identification of contemporaneous restriction matrix B, we applied to some dichotomy-like assumptions that no effect of the variables $\left(\frac{m}{p}\right)$, $(trea)$, (exc) and own has been expected on real income, but we let the price and real income variables affect each other to be able to see the trade-off between these variables. Further, the variable $\left(\frac{m}{p}\right)$ is allowed to be responsive only to the shocks upon itself and inflation. We let the nominal variables which can be used as an indicator or anchor as a policy tool for discretionary purposes be free from restriction, thus, they can be used as impulses to affect the other variable aggregates, but the exception here comes from the own rate of return for money in the sense that it is assumed the most exogenous variable in the system not responsive to the courses of other variables. It is obvious that the last restriction is somewhat arbitrary as to the other restrictions considered and that it is used for system identification purposes. All in all, suffice it to say that 5 long run independent and 13 additional contemporaneous restrictions lead to an over-identified system of the variables using LR statistic $\chi^2(3) = 4.8217$ with a statistical $prob = 0.1853$ value. The structural model is estimated by maximum likelihood method using Amisano and Giannini scoring algorithm (Amisano and Giannini, 1997). Restrictions are shown below:

Table 2. B restrictions of contemporaneous impact matrix

	$\varepsilon_t^{m/p}$	$\varepsilon_t^{y_{real}}$	ε_t^{trea}	ε_t^{inf}	ε_t^{exc}	ε_t^{own}
$\left(\frac{m}{p}\right)$	NA	NA	NA	NA	NA	0.0000
(y_{real})	0.0000	NA	NA	NA	N	0.0000
$(trea)$	0.0000	0.0000	NA	NA	NA	0.0000
(inf)	NA	NA	NA	NA	NA	0.0000
(exc)	0.0000	0.0000	NA	NA	NA	0.0000
(own)	0.0000	0.0000	0.0000	0.0000	0.0000	NA

$\varepsilon_t^{m/p}$	$\varepsilon_t^{y_{real}}$	ε_t^{trea}	ε_t^{inf}	ε_t^{exc}	ε_t^{own}
0.0035	-0.0450	**8.1959**	**2.7679**	**2.7861**	**5.3716**
(0.1450)	(-0.1904)	**(3.3402)**	**(5.7508)**	**(2.0271)**	**(2.9092)**

Notes: Statistically significant coefficients (of an absolute t-value about or above 2.0) are given in bold

effects in the economy resulting from necessity for imports is found significant with a coefficient of 2.7861. Finally, shocks on both interest rates tend to contribute to the course of inflation. Following these findings, we jump to the impulse response and variance decomposition analyses derived from the structural vector error correction model.

We can observe in Figure 1 that inflation reacts positively and strongly to the structural innovation on itself and exchange rate. At this point, it is highly explicit that the significance of innovation upon itself brings out the self-generating inflation process or differently to say inertia phenomenon based on past expectations. This is not surpring for us because such results come out of many papers for the Turkish economy cited in the former sections. Similar to this finding is the reaction of inflation to the dynamic course of exchange rate. A positive one point shock on both inflation and exchange rate leads to immediate 2.8% increase in inflation, and as can be expected these impacts weaken and stabilize four period later than the initial shock. The impact of real income which can be thought of aggregate real

expenditure pressures in the economy is highly trivial for inflation. This is also true for the broad monetary aggregate that we used. These latter findings do not support a demand-side or expenditure-pull explanation of the Turkish inflation. In the table, we see that there exists a highly strong positive relationship between interest rates and inflation. Having look at the impulse response functions, we finally present SVEC variance decomposition analyses in Table 4 that reveal proportions of forecast error in inflation accounted for by shocks. The results give strong support to the earlier findings and even after a 20 quarter period, the Turkish inflation has been seen dominated by very strong exchange rate pass-through effects. These high pass-through effects observed from exchange rate tend to weaken the efficiency of policy making to fight inflation since the exchange rates have been fluctuating as of 2002, and thus the factors affecting the determination mechanism of exchange rates will also have an indirect impact on inflation. But, this is out of interest for the main theme of this paper, but of course warrants further complementary research papers.
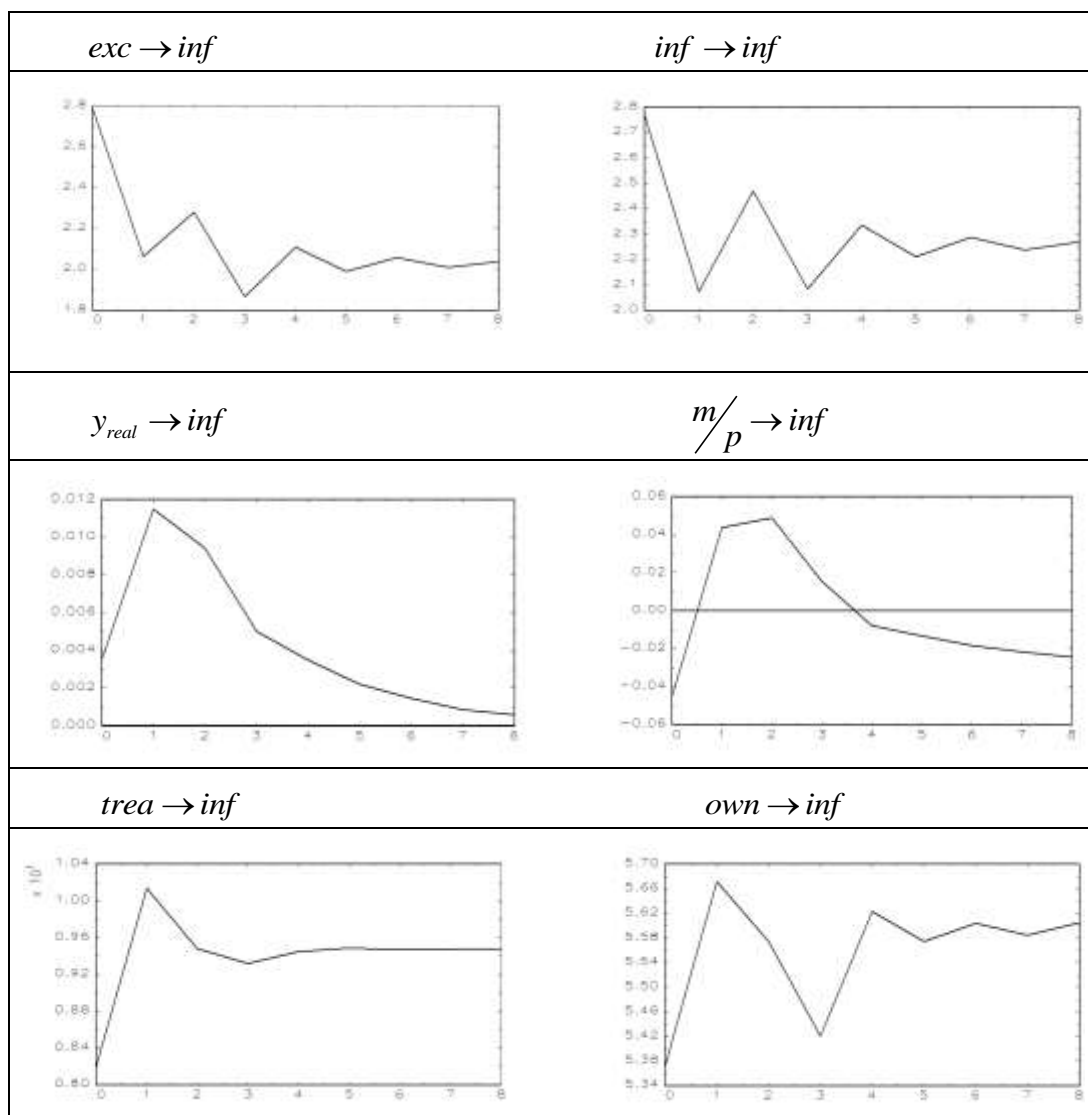
Fig 1. Selected SVEC Impulse $\rightarrow$ Response Functions

Table 4. SVEC Forecast Error Variance Decomposition in Inflation (%)

quarter	$\left(\dfrac{m}{p}\right)$	(y_{real})	$(trea)$	(inf)	(exc)	(own)
1	0.05	0.01	0.01	0.06	0.87	0.00
3	0.02	0.04	0.15	0.06	0.70	0.04
6	0.01	0.09	0.16	0.04	0.69	0.02
12	0.01	0.12	0.16	0.02	0.68	0.01
20	0.00	0.13	0.16	0.02	0.68	0.01

Conclusions and Policy Discussion

The authors aim that this paper is a preliminary draft to a more detailed analysis of inflation in the Turkish economy.

The Turkish economy has been trying to implemet an inflationary targeting policy following the 2001 macroeconomic crisis period as her one of the main economic policy goals. However, the factors that affect the success of these policies must be considered by the policy makers and future recommendations must be constructed using accurate expectations of these factors. In this sense, in our paper, we aim to re-examine the course of inflation in the Turkish economy given that inflation is ex-ante assumed to be a monetary phenomenon derived from money market equilibrium conditions. The base of constructing this paper is also to follow the contemporary developments in time series econometrics and specifically to apply to SVEC modeling in analyzing the Turkish inflation.

The paper employs an approach revealing the responsiveness of domestic inflation to various shocks of excess demand or monetary as well as of the cost-push form represented by so-called exchange rate pass-through effects given that the long-run economic functional forms which are counterpart of the stationary econometric relationships are to be estimated. Such a mission requires modeling inflation in light of structural vector error correction (SVEC) estimation techniques, testing both cointegration and dynamic innovation accounting aspects of inflation in a mutually consistent way through the field of the art of econometrics. Based on a successful money demand modeling exercise, the paper tries to implement such a task on empirical grounds using the post-2000 Turkish data. The main results from the paper bring out that the Turkish inflation till the mid-2013 has still been highly dominated by exchange rate pass-through effects, and we can infer at this point that the larger the extent of this pass-through effect the lower will be the effectiveness of economic policies that aim to control inflationary pressures since the exchange rate has been subject to free-floating since 2001, thus, cannot be under direct control of policy makers as a discretionary policy tool. Further, that one of the predominant factors affecting inflation is found as the past realizations of inflation means that the forward looking behaviour of economic agents that has been expected to be satisfied by free market floating exchange rate mechanism has not just been placed in the economy so much so that price stickiness phenomenon as mainly a function of adaptive expectations of past inflation realizations has a predominant characteristic in determining aggregate domestic prices as a behavioral foundation.

A natural outcome of these results is also that due to no significant response of monetary and real income shocks upon inflation, it is easy to conclude that monetary policy, at least to some extent, must be adaptive to the inflationary framework under the investigation period considered in this study, otherwise, active restrictive monetary policies aiming to limit monetary growth rates or dampening real income level in the economy would not be capable of fighting inflation while leading the economy in recessonist periods in terms of aggregate expenditures.

All these results suggest that both economic agents and policy makers should take account of the developments in the cost-based factors in the economy when they construct their decisions as to the future course of price changes. Otherwise, an incomplete and possibly mistaken economic decision process related to the future expectations could be resulted in undesirable outcomes for both individuals and policy authorities. Of course, additional research and future papers considering more detailed investigation of the relationships extracted in this study would be complementary to our paper so as to see the validity of the estimation results. This is especially true to test for the stability of the time-varying relationships that may lead to structural breaks in the estimated functional forms for the Turkish economy under the sample period considered.. Furthermore, papers considering a large emphasis upon the Turkish economics literature and also relating the macro-level pricing behavior to the main characteristics of the business cycles should be constructed to examine the consistency of the results obtained in this paper with the cyclical properies of the Turkish economy.

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The Impact of Sustainability Rhetoric in Disclosures: How Perceptions of Sustainability Affect Accountants' Assessments of Risk and Economic Viability

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Abstract

In recent years, sustainability reporting has accelerated in business environments as companies see various benefits from disclosing practices related to sustainability initatives. Studies show that companies who profess to be more sustainable, i.e., engaging in activities that reduce their environmental footprint and improve social impact, are rewarded by higher market returns and higher consumer demand. Seeking competitive advantage gleaned from disclosure of sustainable practices, most businesses are choosing to issue stand-alone reports on sustainability intitiatives. There is a growing trend, however, to include some voluntarily disclosure in required Annual Reports through the unaudited components like the MD&A (Management's Disucssion & Analysis). Because prior literature supports the notion that certain types of rhetoric can influence perceptions and judgments in decision making, it is plausible that sustainability rhetoric may also influence certain accounting judgments. Given the substantiated connection between sustainability and ethical behavior, where companies perceived as better corporate citizens are also thought to be more ethical and trustworthy, we question whether perceptions generated by unsubstantiated sustainability rhetoric could influence objectivity in assessments about business risk and financial potential . As the amount of voluntary rhetoric used to demonstrate a commitment to sustainability continues to increase in annual reports, the examination of this question appears warranted. This study examines sustainability rhetoric in two ways. First, in a controlled experiment using both accounting professionals and students, we examine whether perceptions about a client's commitment to sustainability activities have an impact on accounting judgements related to assessments of business risk and economic potential. Using two treatment groups, participants were provided information about a company which either included or did not include sustainability rhetoric, i.e, information about activities related to sustainability initiatives. The data suggests that such rhetoric may indeed have an impact on these types of assessments, particularly among entry-level accountants, which in turn may influence decisions based on those assessments. However, among more experienced accountants, the data suggests that the emphasis on objectivity, neutrality, and skepticism may mitigate the influence of rhetoric that discusses unaudited information. Second, we examine whether the influence of sustainability rhetoric differs among those with or without accounting backgrounds. Because accounting training emphasizes the use of objectivity in making certain accounting judgments like risk assessment, accountants may be less influenced by certain unsubstantiated rhetoric in decision-making. On the other hand, prior research suggests that sustainability perceptions can influence the decisions of other information users like investors and consumers. Consequently, it is likely that these types of information users, who may lack the more objective and skeptical focus gained from accounting training, may be more influenced by voluntary sustainability rhetoric. Thus, we propose a followup experiment using "non-accounting" participants, to examine whether accounting training with its emphasis on objective skepticism of unsubstantiated rhetoric has an effect on the level of influence of voluntary sustainability disclosure. This will provide a more rich comparison of the influence of this particular type of rhetoric on these types of financial assessments. This study contributes to research by broadening the literature in two areas, the effect of rhetoric on decision-making, and the influence of perceptions about sustainability on assessments about business risk and financial potential, among those with and without accounting training.

Keywords: Sustainability, Rhetoric, Risk Assessment

Irrationality of Macroeconomic Forecasts and Behavioral Characteristics of Forecasters

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Abstract

The main focus of the paper is to summarize characteristics of professional macroeconomic forecasts, which are recognized not only as crucial for macroeconomic modelling, but also from policy and business perspectives. Authors find reasons behind traditionally understood irrationality of professional expectations in cognitive heuristics introduced by Kahneman and Tversky [1974] such as cognitive dissonance, avoidance of regret, anchoring in previously formed scenarios and overconfidence. They extend test proposed by Campbell and Sharpe [2009] for a different type of anchor – previously formulated predictive scenarios. Although the high correlation between forecasts and realizations hinders analysis, both theoretical considerations and empirical findings corroborate the new anchoring hypothesis. Importantly these findings change interpretation behind behavioral reasons of forecasters irrationality, i.e. forecasters are proved to be overconfident. Authors find that anchoring effect accounts for up to 50% of the final forecast value and is highly significant for more than half of the most relevant macroeconomic variables for financial markets' participants.

Keywords: Evaluating forecasts; Forecasting profession; Judgmental forecasting; Macroeconomic forecasting; Behavioral economics

Introduction

Professional forecasting data are one of the few available datasets regarded as the closest to "true" expectations. They are influential for all economic agents decisions (e.g. Carroll [2003] shows that households' expectations derive from news reports of the views of professional forecasters), for financial market movements (there is vast literature on macroeconomic announcement impact on asset prices – see e.g. Andersson at.al. [2009]) and for many other processes in the economy (e.g. examples of central bank forecasts and portfolio allocation decisions in Elliot and Timmerman [2008]). The focus of this article is to point to behavioral similarities between professional forecasters and financial markets participants, which give grounds to equivalent explanations of deviations from forecasts rationality and financial markets efficiency. The latter is done by evaluation of macroeconomic forecasts prepared by professional forecasters available in Bloomberg system and description of factors influencing the forecasting procedure. The reason of choosing this dataset among all professional surveys is their high impact on financial markets[36] and therefore possibility to use recognized characteristics of forecasts' errors for policy and business purposes i.e. identification of turning points in the economy and business activity as well as their proper interpretation and incorporation by traders.

The article proceed as follows: section 2 provides theoretical background to forecasting procedures and behavioral heuristics, section 3 presents methodology for testing influence of behavioral characteristics on forecasts errors, which precede the main results and conclusions.

Theory

Elliot and Timmerman [2008] point to four factors constituting forecasting procedure: variables of interest and the information set containing available data; loss function; the family of forecasting models and finally type of the outcome. This very formal attitude should be complemented with some practical issues: in practice loss function depends on the forecast purpose (e.g. most popular mean squared error (MSE) loss might be inaccurate for trading purposes), similarly the type of the forecast (e.g. forecasts prepared for institutional planning purposes are mainly point forecasts, while some SPFs require range

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[36] Most studies involve data from various Surveys of Professional Forecasters (SPF) – in United States the longest series are available in Philadelphia Fed database and in Eurozone the main provider is European Central Bank, but directly linked to financial markets are forecasts collected by Bloomberg and Thomson Reuters, which are competing in delivering news and data to traders in financial institutions (see e.g. Adams [2011]). For United States one should also include another data source - Money Market Services Inc. (see e.g. Schirm [2003], Campbell and Sharpe [2009]).

or distribution forecasts); family of possible models, although obviously depend on the forecaster's knowledge, in general might be assumed to include mainly simplified models[37]. What this procedure also does not take into account is judgmental forecasting, which according to many studies is the key factor that determines the final performance of professional forecasts. The most evident proof comes from Batchelor [1990] survey among Blue Chip survey participants, who confessed to 42-54% contribution of judgment in their forecasts. It might be the factor responsible for surveys' better performance compared to econometric procedures and institutional forecasts like those prepared by OECD or IMF staff (see e.g. Batchelor [2000], Fildes and Stekler [2002]). Judgment also provides the link between direct and indirect expectations modelling, which proves that "true" expectations cannot be obtained from the single equation.

Adjustment may arise from estimation problems (e.g. structural breaks, measurement errors – see Fildes and Stekler [2002]); wider information set available to forecaster (so called domain knowledge[38] e.g. from more insight into entrepreneur activities or closer links to monetary authorities), different prior beliefs (see e.g. Patton and Timmermann [2010]), specific unmeasurable factors in the loss function and also from personal decisions. In general adjustment may be seen as decision making under uncertainty. Kahneman and Tversky [1974] prove that in such situation "people rely on a limited number of heuristic principles which reduce the complex tasks of assessing probabilities and predicting values to simpler judgmental operations" (p. 1124). Here authors claim that judgmental forecasting is highly influenced by few heuristics such as cognitive dissonance, regret avoidance, anchoring and overconfidence (for broader references of behavioral theory in macroeconomics and finance see Shiller [1999]).

In the standard round of forecasting, macroeconomic analyst uses econometric model based on most recent data and then adjusts model-generated result. The set of the available information includes all information from the previous forecasting round plus new time series information, new domain knowledge and previous market forecasts (so called consensus). Judgmental adjustment may result from all of these information depending on the forecasting strategy. There is wide literature defining various types of strategies (note that these might be treated as the unmeasurable factors in the loss function), but they all have a common point which are reputational concerns. Ottaviani and Srensen [2006] provide evidence when strategy is determined by forecasting contest with pre-specified rules; Croushore [1997] defines two strategies – avoiding unfavorable publicity by moving toward the consensus (herding behavior) and inversely – making unusually bold forecasts to stand out from others[39]; similarly Laster et.al. [1999] reports that those whose wages depend most on publicity produce forecasts that differ most from the consensus. Wide discussion on the conservative and extreme forecasts strategies (both in academic journals and press) is provided by Lamont [2002], but empirical evidence on this matter is mixed. The reputation concern might be seen also from another perspective, especially for forecasters like those reporting to Bloomberg, whose predictions potentially influence also longer term trading strategies and institutions budgeting plans. In such cases forecasters are responsible for the whole economic scenario and not only single economic variables. This scenario should be consistent and should not be changed too often – on the one hand from mentioned reputational matters (for both forecaster and institution), on the other due to technical problems i.e. strategy implementation, financial plans disturbances. Deschamps and Ioannidis [2013], who assign reluctance to forecasts revisions to simply avoiding giving signal that previous predictions were wrong, call it "rational stubbornness".

Effectively forecasters avoid the evidence (newly published data or other information) that contradicts their beliefs or assumptions (*cognitive dissonance* resulting in *confirmation bias*) and do not change their scenarios and predictions not to feel *regret* (similarly to investors holding for too long lost positions). Inversely, when hardly interpretable information (in terms of previously stated scenarios) is revealed, forecasters have tendency to see patterns in random data or dependence in irrelevant factors – depending on their ability to confirm previous forecasts (*representativeness*). Sticking to the previously formed scenarios (*anchoring*) can be therefore seen as the sign of *overconfidence* - excessive belief in ones abilities and correctness. These examples are consistent with the literature evidence[40] that overconfidence implies over- or under-reactions to news. Forecaster over-interprets data in line with his scenario and

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[37] Fuster et.al. [2011] points to pragmatic (i.e. ease and speed of implementation), psychological and statistical (i.e. reduced risk of overfitting) reasons behind common use of simplified models not only by laypeople, but also professionals, economists or statisticians.

[38] For references and wide review of the literature including experiments see Lawrence et al. [2006].

[39] Herding behavior is much more common on financial markets (e.g. technical analysis). In macroeconomic forecasting an obvious obstacle is simply not knowing the consensus - most of the surveys are published after all the data has been collected.

[40] Mostly from financial markets studies, but behavior patterns in many cases seem to be similar for economic forecasting– for overview see e.g. Shiller [1999].

under-interprets the relevant, but not supporting information. The above reasoning proves that described unmeasurable factors, which in fact influence forecasters loss function, make them follow simple cognitive *heuristics* and *systematic biases* introduced by Kahneman and Tversky [1974][41]. What should be stressed is that presented scenario is not only valid due to institutional requirements, but also supported by psychological profile of individuals working on high level positions in financial institutions, similarly to financial markets participants (what is more - these two sets of individuals have significant intersection).

Most of the research on the cross-section of economic forecasting and cognitive heuristics has been done experimentally, so it is only weakly linked with professional forecasters. Results of the research on macroeconomic forecasts meeting rational expectations has produced mixing results (for references see e.g. Croushore [1997], Keane and Runkle [1990], Fildes and Stekler [2002]) with some empirical evidence of the heuristic-driven adjustments for macro-finance forecasts in e.g. Deschamps and Ioannidis [2013], Campbell and Sharpe [2009], Batchelor and Dua [1990], Fujiwara at.al. [2013].

Following Stekler [2007] to understand how forecasters incorporate their judgment it is useful to reverse the question from creating a forecast to evaluating it, because the main source of information on forecaster behavior are error patterns. There is strong evidence in the literature on macro forecasting about systematic character of errors resulting from inability to predict turning points (after Fildes and Stekler [2002]: "errors occurred when the economy was subject to major perturbations, just the times when accurate forecasts were most needed" (p.442)). Therefore authors test the hypothesis of dependence between error patterns and business cycle, corroboration of which opens the door to broader policy and business applications.

Methodology

There are many methods of forecasts evaluation[42] based on ex post criterion functions connected with loss specification and rationality testing (in the literature there is no clear division between rationality, efficiency and optimality – all of these terms apply to best forecast constructed under chosen loss function based on all available information, for discussion see e.g. Nordhaus [1987])[43].

Before formal methods are introduced, it is worth reminding that authors assume MSE loss function and all factors which might influence it's different form[44] are included in the judgmental adjustment term. They believe that similarly to choosing simplified models professional forecasters tend to measure their errors under MSE loss function, which enables easy computation (via least squares techniques) and evaluation, while formal econometric testing of more sophisticated loss functions is rather academic exercise than work done in financial institutions. In this framework the optimality assessment should be done carefully as standard tests depend on the actual loss function (for discussion see e.g. Patton and Timmermann [2003]) and unmeasurable incentives might blur the picture of the definition.

The optimality testing under MSE loss function is the starting point of this analysis. Standard testing procedure incorporates unbiasedness and orthogonality tests from so called Minzer and Zarnowitz [1969] regression:

$$x_{it} = a_i + b_i f_{it} + \varepsilon_{it} \tag{1}$$

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[41] Some remarks on the pointed heuristics: although according to the first definition from Kahneman and Tversky [1974] anchoring means being influenced by suggestions (in their primary study – by initially presented values), here the past forecasts are treated as self-imposed suggestions, enhanced by cognitive dissonance and overconfidence; overconfidence is mostly tested in experiments, but many authors point to obvious overconfidence among investors, whose risky work relies on clients trust and confidence – the case of professional forecasters is very similar; representativeness in general is a tendency to categorize events as typical or representative of the well-known class.

[42] For overview of theoretical results see e.g. Elliott and Timmermann [2008] and empirical: Fildes and Stekler [2002] or Heilemann and Stekler [2010].

[43] It should be noted that chosen dataset does not allow for any methods of testing, which involve forecasts revisions.

[44] The reasons behind more sophisticated loss function may stem from e.g. financial reasons, different utilization of forecasts (e.g. asymmetric or directional loss function for trading purposes), psychological features or strategic behavior (especially in not anonymous surveys presented publicly e.g. in Bloomberg). For references see e.g. Elliott et. al. [2008]. Note that most of these factors are unmeasurable and their inclusion to loss function might have been inaccurate.

where x_i denotes release of i-th variable and f_{it} its one-period forecast (prepared at time (t-1) for the announcement at time t), t=1,...,T denotes sample size. The test of $H_0 : a_i = 0, b_i = 1$ combined with analysis of errors autocorrelation is the most popular rationality test[45]. Additionally one may check forecasts efficiency - characteristic equivalent to effective utilization of the available information, e.g. with following regression:

$$s_{it} = x_{it} - f_{it} = \alpha_i + \beta_i x_{it-1} + \delta_i DBC_t + \theta_i z_{t-1} + \varepsilon_{it} \qquad (2)$$

where s denotes surprise (forecast error), DBC is dummy equal to one in recession period as determined by NBER and z is OECD composite leading indicator (chosen on purpose from the source different than Bloomberg to avoid overlapping variables).

Rationality relies on very strict assumptions that cannot be met in reality (e.g. knowledge of the true model of the economy, access to all available information and ability to process it). This together with adjustment effect constitute reasons behind forecast systematic errors. For professional forecasters, who are the closest group to meet rational expectations assumptions due to experience and substantive preparation, the judgmental factor seems to be of highest importance. Factors that determine how experts adjusts prediction from the econometric model, may be divided into two categories: wider unmeasurable information set available to forecaster, which would lead to his systematically better performance[46] or specific factors influencing his loss function, which beside other reasons result in behavioral heuristics as described in the previous section. Most of the literature on heuristics introduced by Kahneman and Tversky [1974] focuses on experimental testing procedures (for review see e.g. Lawrence et.al [2006]), while only few tests were introduced for macroeconomic forecasting data.

One, which does not incorporate forecast revisions, is anchoring test proposed by Campbell and Sharpe [2009] (CS hereafter). They decompose forecast into forecaster's unbiased prediction and anchor (which in their original paper is the average value of the forecasted series over previous months) allowing weights to indicate strength of anchoring effect:

$$f_{it} = \lambda_i E(x_{it} \mid I_{t-1}) + (1 - \lambda_i) \cdot anchor_{it} \qquad (3)$$

This leads to testing regression of the form (for details see the CS paper):

$$s_{it} = \gamma_{0i} + \gamma_i (f_{it} - anchor_{it}) + \varepsilon_{it} \qquad (4)$$

where $H_0 : \gamma_i > 0$ is equivalent to significantly positive anchoring effect with relative weight: $1 - \lambda_i = \dfrac{\gamma_i}{1 + \gamma_i} \in (0,1)$. To check strength of anchoring effect in business cycle, interaction with recession dummy variable is added:

$$s_{it} = \gamma_{0i} + \gamma_{1i}(f_{it} - anchor_{it}) + \gamma_{2i}(f_{it} - anchor_{it}) \times DBC_t + \varepsilon_{it}. \qquad (5)$$

CS test was criticized by Hess and Orbe [2013], who argue that it incorporates only univariate time series information and therefore is biased to the superior information processing abilities. The basic idea of this critique is based on comparisons of forecasts generated with ARIMA models with survey errors and proof that they incorporate information correlated with additional macroeconomic series. It seems obvious (which is also argued in this paper) that forecaster incorporates much wider information set than univariate series of the forecasted variable, which under rationality assumption should only create independent forecast errors. This however is not the case as errors from survey forecasts reveal cyclicality. Here authors argue that the reason behind such pattern is anchoring in previous scenarios, which causes forecasts underestimation in growing periods and overestimation in decline periods – similar behavior to macroeconomic variables, which Hess and Orbe [2013] use as a contrarian proof for validity of the CS test. It should be also noted that CS test does not include any assumptions about the data generating process and information set – the only problem with reasoning (as pointed also by Hess and Orbe [2013]) is the anchor variable, for which CS choose average value of the forecasted series over few previous periods (they argue that forecasters do not rely on their personal information set and therefore they are anchored in the recently published data). Here authors claim the opposite - that

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[45] Examples of empirical papers include Baghestani and Kianian [1993], Zarnowitz [1985]. In some settings also condition of uncorrelated forecasts revisions might be added, but here data contain only one-period forecasts.

[46] It may be easily tested by standard comparative measures of forecasts performance such as RMSE – see e.g. Zarnowitz [1984] study, which suggests consensus outperformance over individual forecasts.

forecasters are overconfident, stick to previously formed scenarios and do not adjust their views to recently published data in a sufficient way to form rational forecasts. Therefore they use averages of past forecasts as anchoring variable (which also bypasses critique of CS procedure[47]).

Table 1. Results of the rationality and efficiency tests (equation (1) and (2))

#	relevance	variable	a	std.err.(a)	b	std.err.(b)	R2(adj)	DW	H0:a=0	H0:b=1	H0:a=0,b=1	R2adj	F-test p-value
1	98,1	**Change in Nonfarm Payrolls**	-18,32	7,17	0,97	0,04	81,5%	**0,09**	**0,01**	0,45	**0,01**	2,5%	0,25
2	99,1	Initial Jobless Claims	2,78	3,90	0,99	0,01	94,5%	**0,00**	0,42	0,56	0,43	1,5%	**0,01**
3	96,3	GDP QoQ (Annualized)	0,03	0,06	1,00	0,02	96,4%	0,95	0,57	0,80	0,82	0,7%	0,77
4	95,4	Consumer Confidence	-0,40	1,10	1,00	0,01	97,8%	0,44	0,75	0,77	0,95	0,8%	0,73
5	94,4	ISM Manufacturing	1,01	1,44	0,98	0,03	89,0%	0,62	0,49	0,53	0,65	0,5%	0,84
6	93,5	**Consumer Price Index (MoM)**	-0,05	0,01	1,21	0,05	86,6%	0,85	**0,00**	**0,00**	**0,00**	5,5%	**0,03**
7	92,6	U. of Michigan Confidence	1,26	0,90	0,98	0,01	96,2%	0,79	0,21	0,15	0,24	1,2%	0,29
8	90,7	**Durable Goods Orders**	-0,13	0,17	1,42	0,11	46,6%	0,38	0,52	**0,00**	**0,00**	4,6%	**0,06**
9	89,8	New Home Sales	-8,89	7,52	1,02	0,01	96,8%	0,30	0,52	0,26	0,28	0,4%	0,87
10	88,9	**Advance Retail Sales**	-0,03	0,04	1,23	0,13	68,1%	**0,01**	0,59	**0,00**	**0,01**	9,6%	**0,01**
11	88,3	**Unemployment Rate**	0,04	0,04	0,99	0,01	100,0%	0,33	0,35	**0,11**	**0,05**	6,0%	**0,02**
12	88,0	Housing Starts	-4,55	9,66	1,01	0,01	98,4%	**0,01**	0,80	0,43	0,32	1,7%	0,44
13	87,0	Existing Home Sales	-0,09	0,11	1,02	0,02	95,0%	0,13	0,56	0,54	0,81	0,8%	0,90
14	86,1	**Industrial Production**	-0,08	0,03	1,23	0,08	69,1%	0,34	**0,01**	**0,00**	**0,00**	3,5%	0,13
15	85,2	**Producer Price Index (MoM)**	-0,08	0,05	1,52	0,15	74,8%	0,24	**0,03**	**0,00**	**0,00**	2,2%	0,32
16	84,3	**Leading Indicators**	-0,01	0,01	1,17	0,04	85,6%	0,83	0,66	**0,00**	**0,00**	8,7%	**0,00**
17	83,3	**Personal Spending**	-0,05	0,03	1,15	0,06	88,5%	0,66	**0,00**	**0,00**	**0,00**	5,2%	**0,04**
18	83,3	Personal Income	0,04	0,02	0,99	0,03	68,5%	0,88	**0,10**	0,92	0,12	2,4%	0,27
19	82,4	**Factory Orders**	0,03	0,05	1,06	0,03	91,6%	0,18	0,54	**0,02**	**0,05**	1,1%	0,63
20	81,5	Trade Balance	-0,79	0,56	0,98	0,01	96,2%	**0,06**	0,28	0,27	0,54	5,9%	**0,02**
21	80,6	Empire Manufacturing	1,19	1,11	0,93	0,05	65,0%	0,57	0,33	0,30	0,53	1,5%	0,66
22	79,6	**Wholesale Inventories**	0,03	0,04	1,14	0,09	52,9%	**0,00**	0,55	0,12	**0,07**	9,2%	**0,00**
23	79,1	**Chicago Purchasing Manager**	0,16	1,97	1,01	0,04	75,0%	**0,01**	0,95	0,82	**0,10**	2,6%	0,25

Last four columns in ratonality part present p-values from Durbin-Watson test and tests of presented hypothesis H0.

Bold selection of variables mean rejection of rationality hypothesis.

Authors use ordinary least squares (OLS) with Newey-West standard errors with three lags to adjust for serial correlation of the error term resulting from the situations when forecaster might not know the forecast error from the previous period (due to probable different timing of forecast submission).

Data

Proposed dataset includes 23 macroeconomic variables for United States regarded as most relevant for Bloomberg users (i.e. relevance index measures popularity of each variable, representative of the number of alerts set for its announcement relative to all alerts set for all events in the country). The chosen dataset consist mostly of monthly data (the only exceptions are quarterly GDP data and weekly initial jobless claims). By one-period ahead forecast authors mean prediction of the nearest announcement in respective frequency[48]. Following Zarnowitz [1984] data are transformed to avoid trending and cyclicality.

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[47] It might be shown formally that decomposition of γ coefficient introduced by Hess and Orbe [2013] is not valid when anchoring process is based on forecasting data (for brevity calculations are not included).

[48] Although the Bloomberg system enables forecasters to update their forecasts in real time, we can assume that they are prepared with different purposes and are rarely updated in the system after the survey was sent.

Table 2. Results of the anchoring test (equation (4))

#	1-month anchor					3-months anchor					6-months anchor					12-months anchor				
	γ		1-λ	R2(adj)	BIC	γ		1-λ	R2(adj)	BIC	γ		1-λ	R2(adj)	BIC	γ		1-λ	R2(adj)	BIC
1	-0,16			36,2%	960,8	-0,26			62,6%	856,7	-0,29			72,6%	812,2	-0,31			72,6%	755,6
2	-0,13			1,0%	-2278,2	-0,17			1,5%	-2251,1	-0,15			0,7%	-2213,5	-0,13			0,7%	-2173,1
3	0,02			0,3%	249,3	0,04			1,6%	239,1	0,03	*	0,03	0,4%	232,9	0,01			0,4%	220,1
4	0,36	***	0,26	5,1%	-360,3	0,71	***	0,42	15,7%	-373,0	0,82	***	0,45	21,4%	-369,7	0,92	***	0,48	21,4%	-354,9
5	-0,11			0,5%	-589,8	0,08			0,3%	-580,8	0,13			1,0%	-568,3	0,16			1,0%	-550,1
6	0,07	**	0,06	1,8%	-186,6	0,16	***	0,14	11,5%	-199,7	0,15	***	0,13	13,7%	-191,4	0,18	***	0,15	13,7%	-190,7
7	0,19	*	0,16	0,7%	-1138,1	0,47	**	0,32	3,2%	-1128,6	0,69	***	0,41	6,5%	-1113,2	0,69	**	0,41	6,5%	-1057,9
8	0,21	***	0,18	3,8%	787,9	0,38	***	0,28	7,1%	759,7	0,47	***	0,32	7,8%	713,3	0,42	***	0,30	7,8%	659,0
9	0,14			0,8%	-360,7	0,28	*	0,22	2,0%	-350,6	0,38	**	0,28	3,9%	-336,7	0,43	**	0,30	3,9%	-321,3
10	0,18	**	0,15	8,7%	266,4	0,20	*	0,17	6,7%	267,0	0,06			1,9%	209,5	0,10	**	0,09	1,9%	196,3
11	-0,19			1,1%	-723,9	-0,19			0,9%	-714,7	-0,07			0,1%	-702,1	0,05			0,1%	-676,4
12	0,15	*	0,13	1,3%	-436,9	0,34	***	0,26	4,3%	-436,1	0,34	***	0,25	4,8%	-424,9	0,39	***	0,28	4,8%	-408,7
13	-0,12			1,5%	-287,6	0,16	*	0,14	2,4%	-280,4	0,27	**	0,22	6,3%	-270,0	0,30	**	0,23	6,3%	-245,0
14	0,23	**	0,19	5,6%	137,4	0,36	***	0,26	10,6%	127,4	0,30	***	0,23	11,1%	122,6	0,30	***	0,23	11,1%	115,2
15	0,44	***	0,31	20,1%	199,4	0,45	***	0,31	20,9%	196,5	0,39	***	0,28	20,7%	200,1	0,43	***	0,30	20,7%	191,6
16	0,14	***	0,12	9,2%	-106,6	0,22	***	0,18	17,2%	-111,3	0,21	***	0,17	13,8%	-95,1	0,20	***	0,17	13,8%	-77,4
17	0,10	***	0,09	10,7%	-127,7	0,14	***	0,12	12,4%	-129,8	0,16	***	0,14	12,0%	-126,1	0,15	***	0,13	12,0%	-116,4
18	0,00			0,0%	41,3	0,01			0,0%	42,5	0,01			0,0%	44,8	0,00			0,0%	48,8
19	0,03	**	0,03	1,9%	339,5	0,04	**	0,04	2,1%	337,0	0,06	**	0,05	2,9%	332,0	0,06	**	0,05	2,9%	319,5
20	0,03			0,1%	-359,7	0,08			0,4%	-355,6	0,04			0,7%	-354,2	0,12			0,7%	-348,6
21	0,77	**	0,43	20,4%	484,9	1,00	**	0,50	23,7%	473,5	1,09	**	0,52	32,1%	444,7	1,22	**	0,55	32,1%	420,2
22	-0,49			3,7%	222,2	-0,21			0,8%	225,9	0,00			0,9%	225,4	0,12			0,9%	219,7
23	0,15	*	0,13	1,1%	-357,1	0,25	**	0,20	2,1%	-358,2	0,25	**	0,20	2,5%	-350,9	0,26	**	0,21	2,5%	-337,0

*** denotes 1% significance level, ** 5% and * 10% - for one sided tests: H1: γ>0.

For bolded variables anchoring in past forecasting scenario (6-month) is significant factor in explaining forecast errors.

As mentioned before professional forecast surveys introduce one measurement error – revision problem. Analysis of root mean square error statistic (RMSE) and Diebold and Mariano [2002] statistic to compare predictive accuracy of forecasts revealed no significant difference between median and mean (Bloomberg system favors median aggregation – this is the benchmark prediction for people who observe publications e.g. traders) and slightly better performance of forecasts compared to initial announcement (contrary to finally revised data). Therefore error is defined as difference between median consensus (or individual forecast) and initial announcement[49] (due to only one-period horizon and taking as benchmark value of initial announcement authors avoid any overlapping data problems).

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[49] For robustness authors check all configurations of errors available in this dataset – estimation results are fairly indifferent. In general only for six variables revisions were proved to be significant. For brevity these statistics are not presented.

Table 3. Results of anchoring test with recession dummy (equation (5))

variable	γ0		std.err.(γ0)	γ1		std.err.(γ1)	γ2		std.err.(γ2)	R2(adj)	F-test p-value
Change in Nonfarm Payrolls	0,16		0,19	0,01		0,05	-0,27	***	0,21	0,7%	0,58
Initial Jobless Claims	0,00	***	0,00	-0,16		0,06	0,03	**	0,18	1,0%	0,03
GDP QoQ (Annualized)	-0,02	***	0,04	**0,05**	***	0,02	**-0,07**	***	0,06	3,8%	0,05
Consumer Confidence	0,00	***	0,00	0,63		0,15	0,65		0,41	21,2%	0,00
ISM Manufacturing	0,00	***	0,00	-0,03	***	0,14	0,50		0,20	2,9%	0,10
Consumer Price Index (MoM)	0,00	***	0,01	**0,20**	***	0,04	**-0,08**	***	0,07	10,9%	0,00
U. of Michigan Confidence	0,00	***	0,00	**0,92**	***	0,24	**-0,63**	***	0,65	7,9%	0,00
Durable Goods Orders	-0,11	***	0,16	0,43	**	0,11	0,18		0,30	9,5%	0,00
New Home Sales	0,00	***	0,01	0,38		0,22	0,14		0,41	3,5%	0,07
Advance Retail Sales	0,00	***	0,04	0,05		0,07	0,03	**	0,14	0,9%	0,57
Unemployment Rate	0,00	***	0,00	-0,17	***	0,15	0,30		0,35	0,7%	0,60
Housing Starts	0,01	***	0,00	**0,34**	**	0,11	**0,02**	**	0,31	3,5%	0,06
Existing Home Sales	0,00	***	0,00	**0,29**	**	0,14	**-0,25**	***	0,40	5,9%	0,11
Industrial Production	-0,03	***	0,02	0,15	***	0,08	0,68		0,36	15,9%	0,00
Producer Price Index (MoM)	0,03	**	0,04	**0,65**	***	0,13	**-0,47**	***	0,17	24,5%	0,00
Leading Indicators	0,01	***	0,01	**0,20**	***	0,05	**0,03**	**	0,07	14,5%	0,00
Personal Spending	0,00	***	0,01	0,12		0,05	0,06	*	0,09	13,7%	0,00
Personal Income	0,05	*	0,02	-0,03		0,03	0,52		0,24	4,0%	0,04
Factory Orders	0,05	*	0,05	0,04		0,03	0,08	*	0,06	4,3%	0,03
Trade Balance	0,00	***	0,01	-0,12	**	0,17	0,23		0,23	0,7%	0,60
Empire Manufacturing	-0,15	***	0,20	1,06		0,60	2,48		1,18	31,2%	0,00
Wholesale Inventories	0,10		0,04	-0,35	**	0,18	0,92		0,26	6,1%	0,01
Chicago Purchasing Manager	0,01	**	0,01	**0,31**	***	0,16	**-0,17**	***	0,27	2,5%	0,15

*** denotes 1% significance level, ** 5% and * 10%. For H1: γ0≠0, H1:γ1>0, H1:γ2≠0.
F test is joint significance test in regression (5).
Bolded variables reveal significant anchoring effect dependend in magnitude on the business cycle.

Results

For more than half of the variables authors reject rationality and efficiency (Table (1)) and past information can explain up to 10% of forecast errors variation. This results prove that for many variables forecasters do not incorporate all available information or change it depending on their interpretation of facts. On average they are over-optimistic about economic conditions.

For anchoring tests it should be noted that the difference in results for the two chosen anchors are very small as both series of forecasts and realizations have similar patterns (information criteria slightly favor forecasting anchor[50]). However, there are two reasons to support anchoring in past forecasting scenarios rather than in past realizations (which is of less importance in econometric tests, but of highest in understanding judgmental forecasting process and its motives). Firstly, from the theoretical perspective, as argued above it seems reasonable to assume that professional forecasters in financial institutions are overconfident similarly to financial market participants (who they often in fact are). Secondly and more importantly – results of empirical analysis (Table 2) prove that the longer the anchor (i.e. longer historical average), the stronger its impact on errors, which can be only justified in case of sticking to previously formed forecasting scenarios[51]. Results in Table 2 show that not only information criteria choose longer anchor, but also significance of the anchoring effect and its magnitude in most cases increases with length of anchor. It's weight (i.e. 1-λ) can account for up to 55% of forecasted value. Adding recession dummy gives an interesting result of significantly smaller anchoring effect during recession time (in Table 3 for variables with significant anchor almost all γ2 coefficients are negative).

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[50] Quantitative results are not included for brevity.
[51] Underconfidence would be supported by anchoring only in the latest available information.

Table 4. Tests for individual data

| variable | #forecasters | (1) | (2) | anchoring in: | | | | | | | |
| | | | | past forecasts | | | | | past realizations | | |
				(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Change in Nonfarm Payrolls	177	66,7%	4,4%	16,5%	0,07	0,58	12	46,4%	14,1%	0,08	0,55
Initial Jobless Claims	772	94,7%	34,0%	1,6%	0,20	0,36	1	18,1%	2,4%	0,07	0,15
GDP QoQ (Annualized)	179	33,8%	13,8%	11,5%	0,03	0,14	12	87,7%	11,5%	0,04	0,10
Consumer Confidence	176	76,7%	11,7%	30,7%	0,11	0,52	1	50,0%	25,7%	0,07	0,29
ISM Manufacturing	180	67,2%	14,9%	2,1%	0,25	0,55	1	11,9%	8,2%	0,07	0,44
Consumer Price Index (MoM)	180	60,6%	59,1%	9,6%	0,06	0,30	1	31,8%	4,5%	0,10	0,20
U. of Michigan Confidence	301	56,8%	25,9%	5,1%	0,17	0,46	1	9,9%	2,2%	0,06	0,32
Durable Goods Orders	168	23,8%	52,4%	22,0%	0,16	0,45	12	44,4%	26,8%	0,16	0,47
New Home Sales	169	22,0%	5,1%	6,5%	0,19	0,38	1	1,7%	7,9%	0,07	0,32
Advance Retail Sales	125	20,3%	65,6%	10,2%	0,20	0,31	12	54,7%	14,8%	0,10	0,37
Unemployment Rate	177	61,2%	83,6%	3,8%	0,26	0,49	1	4,5%	5,0%	0,10	0,24
Housing Starts	163	29,5%	16,4%	14,2%	0,11	0,55	1	8,2%	38,5%	0,05	0,29
Existing Home Sales	80	18,2%	2,3%	1,8%	0,30	0,33	1	6,8%	5,4%	0,08	0,30
Industrial Production	180	50,0%	37,5%	18,1%	0,12	0,33	12	60,9%	18,1%	0,11	0,42
Producer Price Index (MoM)	167	81,5%	26,2%	54,3%	0,12	0,60	12	93,8%	53,1%	0,10	0,58
Leading Indicators	176	36,2%	57,4%	24,3%	0,04	0,40	1	68,1%	22,6%	0,04	0,21
Personal Spending	177	43,8%	39,1%	28,5%	0,06	0,38	1	71,9%	31,9%	0,05	0,33
Personal Income	181	66,1%	59,7%	2,7%	0,12	0,28	12	45,2%	4,1%	0,12	0,23
Factory Orders	182	35,1%	19,3%	14,3%	0,05	0,25	12	1,8%	19,0%	0,05	0,25
Trade Balance	179	32,3%	38,7%	4,8%	0,05	0,20	1	16,1%	8,3%	0,06	0,20
Empire Manufacturing	106	71,4%	5,7%	27,8%	0,41	0,81	12	80,0%	22,2%	0,34	0,74
Wholesale Inventories	181	41,9%	64,5%	9,1%	0,17	0,26	12	22,6%	12,1%	0,19	0,32
Chicago Purchasing Manager	178	66,0%	44,0%	16,8%	0,12	0,38	1	10,0%	48,6%	0,07	0,30

Percentage values should be interpreted as a fraction of individual forecasters who meet column criteria:

(1) rejection of H0:a=0,b=1; (2) rejection of efficiency hypothesis;

(3) rejection in favor of H1:γ>0 in anchoring test with forecasting anchor;

(7) significance of anchoring models with recession dummy;

(8) rejection in favor of H1:γ>0 in anchoring test with past data anchor.

Other columns: (6) anchor length chosen with BIC criterion (in months);

(4) and (9) are min(1-λ) ; (5) and (10) are max(1-λ) - from anchor of past forecasts and past realizations respectively.

Finally, aggregated results (for consensus forecasts) are compared with the individual forecasts (see Table (4)). First, notice that not all individuals who constitute aggregated consensus forecasts are included in results in Table (4) because of availability of the lagged data. Therefore, individual results should be interpreted as representing the forecasters with experience of more than two years. In general tests for individual data gives weaker support for irrationality and anchoring, which proves that more experienced forecasters provide better predictions.

Rationality and efficiency tests give similar results to aggregated data. Interestingly results of significant anchoring effect (γ>0) for both anchors in past forecasts and past realizations are similar, but magnitude of anchor's influence on the forecasts (1-λ) is on average much higher for forecasting anchor. Similarly to aggregated results, for variables with significant anchoring effect information criterion chooses significantly longer average – compare the 6th column of Table (4). This corroborates presented hypothesis of overconfidence also on disaggregated series.

Conclusions

Authors find reasons behind traditionally understood irrationality of professional expectations in cognitive heuristics introduced by Kahneman and Tversky [1974] such as cognitive dissonance, avoidance of regret, anchoring in previously formed scenarios and overconfidence. They extend test proposed by Campbell and Sharpe [2009] for a different type of anchor – previously formed scenarios. Although correlation between past data and past forecasts is high, there are both theoretical and empirical

factors to support presented explanation. Importantly this findings change reasoning behind behavioral reasons of forecasters irrationality – inversely to underconfidence assumption made by CS, forecasters are proved to be overconfident. Authors find that anchoring effect accounts for up to 50% of the forecasted value and is highly significant for more than half of the most relevant variables for financial markets' participants. Results are confirmed in individual forecasts analysis. Finally, impact of anchoring effect decreases during recessions, which confirms that in financial institutions costs of macroeconomic forecast errors increase during difficult times.

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Acknowledgements

Developments in the Russian Economy in the Post-Soviet Era

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Abstract

The economic problems in the last ten years of the Union of Soviet Socialist Republics have deepened after its dissolution, which left the newly founded Russian state in various challenges and successive crises. In the transition period of 1993-2005, Russia had successfully transformed its economy and was able to start its modernization period after 2005. Rapid increases in oil and natural gas prices after 2005 allowed Russia to earn significant revenue with processing and sale of these natural resources. Although, this newly made revenue swiftly improved the macroeconomic indicators of the county, the economic progress and modernization cannot be explained with this revenue alone. Effective policies during the crises, determination in fighting with inflation and reduction in unemployment led the way for increases in gross domestic production. Well-founded institutions and high levels of human capital played critical roles in the modernization of a derailed economy. The economic accomplishments of the Russian state are significant and they are drawing attention in the global world. In this paper, we studied the most important economic indicators of Russia, comparing it with the Turkic states that gained their independence in the post-USSR period. We also show the role of political stability in the economic achievements of the Russian state.

Keywords: Russia, economic crises, transition period, economic growth, national income, Turkic world.

Introduction

The disintegration of the Soviet Union has given us an unprecedented series of events where whole nations had to unlearn what was taught to them as the best way of living and learn a totally different way of living. Certainly, this was not a painless task. People with no experience with free markets had to survive in a seemingly wild world. There were huge lines for a hamburger, something they have never experienced before; or a packet of gum was so original that a soldier would exchange his rifle for that. This transition period, as expected, was not easy. Many crises ensued from the dissolution.

Every crisis, national or global, has its own characteristics of how it started and how it should be ended. Russia has survived its economic turmoil in 1993-1994 and 1998-2000 with extensive economic measures which allowed it to keep a growth trend until the crisis of 2008. Russia confronted the 2008 crisis with a different economic structure than the 1998 crisis.

We tried to depict this long transition period of the Russian Federation and its consequences for the world. In the first section, we analyzed the Russian crises of the post-Soviet period. We elaborated on the 1998 crisis which left deep marks on the country. We reviewed Russian economic policies that founded the dynamics of its transformation in the next section. Finally, we compared Russian Federation to the Turkic states which gained their independences from the Soviet Union.

Russian Federation's Economic Development Phases

Russia lost a substantial portion of its economic and political strength after the dissolution of the Soviet Union. It lost one sixth of its land and experienced fifty percent drop in its gross domestic product (GDP). The stagnation in the economy that started during the Soviet Union accelerated after its dissolution. The economic crises in this period were due to structural problems that arose from a regime change, from a centrally planned economy to a market based economy. Unlike gradual shifts, there was a total collapse in many sectors of the economy due to high inflation, very low demand to domestic goods, management inadequacy, inexperience and coordination problems in between institutions.

1990-1998 Period

After the dissolution of the Soviet Union, the newly independent countries prepared economic programs with the help of the IMF and the World Bank. The major proponents of these programs were to reduce high inflation and achieve macroeconomic stability. As a result of these programs the inflation rate, which was around 1500% in 1992, came to down to single digit values in the 2000's (Efegil & Azerbaidzjan, 2002)[52].

From 1990 forward, the public and the state officials became aware of the need of reforms in the economy. It is no coincidence that in these years Grigory Yavlinsky, who became the leader of the liberal Yabloko party later on, prepared the famous 500 days programme for the transition of the Soviet Union into a free-market economy. The goal of this ambitious plan was to rapidly improve the economic conditions of the Union. But the efforts turned futile as the plan was not extensive enough to cover many unforeseen political and social factors. The union was disintegrated in 1993.

The most fundamental issue after the disintegration was the problem of private ownership. How would the state dispense the state property to its citizens? Neither they were experienced with such a job, nor was anyone else in the world on this scale. The state officials of the time looked at what the United Kingdom did in the early 80's with its privatization program. Sizable funds were allocated to the study of privatization where many people specialized in this topic. In its first round from 1992 to 1994, twenty thousand institutions were privatized (Boyko, 1999). Although there were big hopes from privatization, expectations did not materialize and economy kept moving on its path downwards.

Table 1. Macroeconomic Indicators for the Period

	1993	1994	1995	1996	1997	1998
GDP (% change)	-8.7	-12.7	-4.1	-3.5	0.9	-4.9
Unemployment rate (% change)	6.0	7.8	9.0	9.9	11.2	13.3
Inflation Rate	875.0	311.4	197.7	47.8	14.7	27.6
Current Account/GDP	NA	2.9	2.3	3.0	0.5	0.4

Looking at Table 1 above, we see the inverse relationship in between inflation rate and the unemployment, validating the Phillips for the Russian case. We observe an almost continuous decrease in GDP values, except 1997. This implies that Russia struggled with its real economy during this time. Even though there was almost a constant decline in the real economy, the current account did not suffer from these drops due to oil exports.

1998-2008 Period

The inheritance of enormous structural problems from the Soviet Union is the ultimate cause of the Russian crisis of 1998. These structural problems were so deep, economically, sociologically, and even psychologically, that a rapid recovery to a sensible economic level was almost impossible, not only for the Russian state, but for the other states separated from the Union as well.

There was a widespread belief that the crises were due to the new system, especially within the elderly people. People were comparing their lifestyles with that during communism and making nostalgic remarks like they had been living a spectacular life during those times. In reality, the economic problems were due to the inefficient policies of the Soviet Union going back all the way to early 80's. It takes a longer time to correct structural problems compared to other basic economic problems.

As it is well known, the Soviet Union had a closed economy, unlike other developed world economies of its time. Therefore, the extent of its economy was limited with its domestic markets. The structure of the economy prevented Soviet Union from using the most suitable technologies in production, which caused great inefficiencies. This reduced the competitiveness of Russian products not only in its own newly opened markets, but also in the countries where it was able to export before the dissolution, the eastern European countries. The public simply preferred fancy western products to old, low-tech Russian goods.

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[52] From the article "Orta Asya üzerine güç mücadelesi" by Ercan Sancak, pages 119-171.

Table 2. Macroeconomic Indicators of the Period

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
GDP (% change)	-5.3	6.4	10.0	5.1	4.7	7.3	7.2	6.4	7.7	8.1	5.6
Unemployment rate (% change)	12.3	12.6	9.8	9.0	7.9	8.2	7.8	7.2	7.2	6.1	6.4
Inflation Rate	28.0	86.0	21	22.0	16.0	13.7	10.9	12.7	9.7	9.0	14.1
Current Account/GDP	0.1	12.6	18	11.1	8.4	8.3	10.0	11.0	9.6	5.9	6.1

Note: Data taken from OECD statistics.

Russian GDP started to improve in 1999 and kept this trend all the way into the 2008 crisis. There were improvements in the unemployment rate with increases in GDP. Again current account balance was positive throughout this period due to oil revenue.

Beyond 2008

Russia was not prepared for the 2008 crisis. The downfall of the GDP by 7.8% in 2009 shows the effects of the world markets on Russia. During the crisis, the exports and imports dropped sharply and higher levels of inflation caused a pressure on the cost of manufacturing.

Table 3. Macroeconomic Indicators of the Period

	2009	2010	2011	2012
GDP (% change)	-7.8	4.5	4.3	3.4
Unemployment rate (% change)	8.4	7.5	6.5	5.5
Inflation Rate	11.7	6.9	8.4	5.1
Current Account/GDP	3.8	4.7	5.2	5.5

Note: Data taken from OECD

The reason of positive current account balances during and after the crisis is not the healthy economy but rather the revenue made by sale of petroleum products.

Dynamics of the Russian Change

Human Capital

The Soviet Union had a well-established and working education system targeting 100% literacy rate. The workforce of the Soviet Union was already trained in certain areas with relatively higher levels of human capital before the dissolution. Higher education institutions were training students in theoretical and practical sciences in world standards. In 1993, Russia was fourth in the world in number of scientists and engineers to total labor force ratio[53]. Concrete evidence to high levels of human capital is that during the Union, Soviets were able to compete with the United States in mechanical engineering, medical sciences, space and defense industries. In the post-Soviet era, Russia experienced a rapid transition to capitalism and foreign companies, world giants, started investing and operating in the Russian state. Some people easily adapted to the new working conditions in these Western companies with moderate professional development trainings. But we should also mention the fact that a common complaint of these Western companies was lack of efficiency and low levels of professionalism.

During the 1998 crisis, people realized a fact about the Russian workforce. The existing level of human capital was not enough to compete with developed countries. The state officials admitted the need of reforms in training the workforce[54]. The aim of these reforms was to train the workforce to produce high-tech goods and promote innovation in the country. Although there were improvements in human capital, results were barely noticeable.

Natural Resources

The most important natural resources for the Russian economy are oil and natural gas. Export of these natural resources makes 25% of foreign trade and allows current account surpluses possible (Sancak, 1999b). Even though Russia is trying to diversify its economy, it is still very dependent on oil exports.

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[53] Subbotina, T. (2006), "Rossia Na Raspute: Dva Puti K Mejdunarodnoy Konkurentospasobnosti" Voprosi Ekonomiki (No:2, p. 56)
[54] Subbotina, p. 55

Having rich reserves of natural resources may help to boost the economy and people's wellbeing or on the other hand, it may tie the wellbeing of people to the natural resource revenue. Russia is in a relatively better situation compared to other natural resource-rich countries.

Political Stability

Boris Yeltsin was the first elected president of the Russian Republic by popular vote in June 1991. He enhanced his credentials during an attempted coup by the conservatives in August 1991 by standing against the military forces with his famous speech on top of a tank. Russia was recognized as an independent country in December 1991. Yeltsin took on the challenge of reforming an embattled country. The success of his modernization efforts and reforms was very questionable. He gradually lost his health and reputation until he designated Vladimir Putin as his successor.

The political administration of Russia is a type of autocracy, named as "power vertical" by Putin himself. The public, at least some of it, embrace this ideology as the best way of running the Russian state. The popular media and the educational institutions promote this understanding. Political opposition is very weak since the power is hold by the running government. The political stability is established with giving up personal freedoms (Stuermer, 2008). There is a strong correlation between political and macroeconomic stability. We believe that there is a bidirectional causal relationship between them.

People who defend the power vertical claim that Russia is new to democracy and therefore, fully and rapidly adapting democracy and freedoms will cause dissolution of the Russian federation.

Policies that Improved Russian Economy

According to Sorokin (2007), the most important reasons of the disintegration of the Soviet Union were not being able to reform the state on time, not being able to prepare the state for a transition and losing public's trust in state. Being aware of its earlier shortcomings, the new Russian state initiated a wave of new reforms and modernization efforts in many different areas, most importantly, in the economy. They used different policies to do this;

Incentivizing Domestic Production

Russia provided significant incentives to domestic producers to increase local production in the country. Providing low interest credit to the firms is one of the methods used. Since domestic producers did not have their own resources to finance their expansions or R&D expenditures, they were dependent on external funding. Providing the much needed capital to producers made a big difference on domestic production. The proportion of high-tech goods in domestic production was 10% in 2000 and the government is aiming to increase this ratio[55].

Use of Natural Resource Revenue

An important reason of why Russia suffered substantially in the 1998 crisis was the low price of oil, down to $11 a barrel. But, from 1999 to 2009, price of oil steadily increased together with Russian oil extraction. Annual production was 310 million tons in 1999 where it became 490 million tons in 2009. Petroleum products' export increased by 1.8 times together with extraction levels.

As it is known, Russia is rich in natural resources of oil and natural gas but marketing these resources was not trivial. European states' diversification of gas sources forced Russia to look for new markets. The petroleum and natural gas reserves in the Siberia region were diverted to new emerging markets like China through newly built gas pipe lines. This allowed Russia to diversify its markets.

Even though the Russian government is trying to lessen its economic dependence on oil export revenue, still, big changes in oil prices cause substantial changes in national income. For example, a $10 rise in prices in 2002 to 2003 caused a 7.3% increase in Russian GDP[56].

Export/Import Policies

Although, appreciation of Russian currency, ruble, from 2000 to 2008 hurt manufactured goods' export, the government did not observe a drop in its oil revenue because of the connections made in this period. Ruble lost value in the 2009 crisis where it fell from 23.5 ruble per dollar to 35 ruble per dollar.

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[55] European Bank for Reconstruction and Development, Transition Report 2005
[56] European Bank for Reconstruction and Development, Transition Report 2010

Since Russia is not a member of the World Trade Organization (WTO), it determines its own rules of trade with its trading partners. Russia did not hesitate to apply any arbitrary tariffs whenever tides turn against its own interest in its trade balance. This unpredictability caused harm to its trading partners. Some traders decided to move its production into Russia to overcome such subjective trade policies which eventually helped Russian GDP.

Defense Industry and Industrial Products

Defense industry was vital for Soviet manufacturing. It was a measure of technological independence and industrial achievement. There was a huge emphasis on mechanical production both in theory and practice; and there were substantial achievements in this area. Universities allocated great resources for theoretical and practical applications of mechanical engineering and this educational system is still in use in current day Russia.

According to Çepenko (2011), lack of technological investment and inefficiencies in production had been deepened with the dissolution of the Soviet Union and caused many industrial production facilities to shut its doors. From 1992 to 2002, Russia lost half of its industrial production facilities. The proportion of industrial production was 30-35% during the Soviet times where it dropped to 20.5% in 1990 and to 18.6% later on. The share of industrial products in exports was no more than 5% at that time. All these developments were a threat to the Russian defense industry but Russian government's special attention to this industry prevented a catastrophic fall and although not as strong as before, Russian defense products are still competitive in the international arena.

According to one criterion, a country is considered as an industrialized country if its industrial production is 25% of its GDP[57]. In 2008, this was 20% for Russia where it was 46% for the United States, 54% for Germany and 40% for China. Russian production is not as good as many of the Western countries but still competitive in certain areas.

Comparison of Russian Economy to the Turkic States that Gained their Independence after the Dissolution

There were many challenges for the newly independent Turkic states after the dissolution of the Soviet Union. Many authorities were questioning the political and economic permanency of these states at the time of dissolution. At the same time, many Russian news agencies were emphasizing the superior living conditions of Russia, comparing it to these states. As expected and similar to Russia, right after their independence these states experienced various crises and poverty rates increased dramatically. The following table gives the poverty rates comparing 1989 with 2009.

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[57] European Bank for Reconstruction and Development, Transition Report 2010

Table 4, GDP and Poverty Rate Comparisons

Countries	Population (in millions)	Per Capita GDP	Poverty Rate (Percentage of the total population)	Population (in millions)	Per Capita GDP	Poverty Rate (Percentage of the total population)
	1989			2009		
Russia	148.3	6 577	5.0	142	9,340	<2 (2008)
Azerbaijan	7.3	4458	33.6	9	6,920	7.8 (2008)
Kazakhstan	16.8	7593	15.5	16	4,840	<2 (2007)
Kirgizstan	4.4	3702	32.9	5	870	29,4 (2007)
Uzbekistan	20.5	5118	43.6	28	1,100	76,7 (2003)
Turkmenistan	3.7	4795	35.0	5	3,420	49,7 (1998)

Note 1: Per capita GDP data for 1989 is computed by Maddison (2007) and for 2009 it is taken from http://www.worldbank.com

Note 2: Poverty rates for 1989 are computed by Atkinson and Mickwright (1992) using Goskomstat data.

Total lack of any experience; and not being aware of free market economic dynamics, Turkic states suffered unrecoverable losses from privatization. For example, Kirgizstan sold many of its state-owned industrial production facilities, for the sake privatization, to new entrepreneurs who had connections with the state officials but no experience in a market economy. Free market economy dynamics, like price and quantity, are determined in the free markets. These entrepreneurs learned the dynamics the hard way and they were not able to survive in this new environment with almost no experience. They had to sell these factories left from the Soviet Union for scrap prices and close them.

The war between Azerbaijan and Armenia in 1993 caused further declines in already low GDP levels of Azerbaijan. According to the European Bank for Reconstruction and Development data, per capita GDP was down to $173 due to this war. Another reason of big drops in production rates was Soviet Union's political organization of factories throughout the Union (Sancak, 1999a). The factories producing parts of various products were operating in many different states. This way, one state was not able to be independent of other states in producing goods. For example; the tire, the engine and the transmission of an automobile were all produced in different states. The anti-inflationary and other economic reforms started in 1994 bare its fruits in the 2000's and Azerbaijan finally observed increases in its GDP.

Kazakhstan experienced its first, after independence, increase in GDP in 1996 with a modest 1.1% growth. GDP per capita continuously decreased from 1992 to 1996 (J., 2008). The 2012 GDP per capita for Kazakhstan is $12,116[58], up from $5,411 in 1992.

Turkmenistan experience was not much different than other Turkic states. A sudden drop in GDP and living standards caused confusion among people. Reforms started in 1992 to target the high inflation rate. There were price controls on every good before 1992 but it was limited to certain goods, like energy, cereals, dairy products etc. after that date[59]. Turkmenistan's economy was largely dependent on raw products' export like crude oil. In the late 90's, state policies aimed at building the infrastructure for economy to diversify its production. (Abalkin & Whalley, 1999)

Although there are many challenges for these young Turkic states, rich natural resources, investments made to improve human capital and geopolitical developments are likely to provide more opportunities.

Conclusion

The Russian Federation has experienced two major crises after the dissolution of the Soviet Union. The first crisis is right after the dissolution from 1992 to 1994. In this period, the major problem of the federation was the transition from a command economy to a free market economy. The second major

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[58] From the World Bank database
[59] European Bank for Reconstruction and Development, Transition Report 2012

crisis was in the 1998. The reason of this crisis was the incoherence in between the financial and the real economy. The distrust that was buildup in the financial markets triggered the crisis. After the 1998 crisis, a comprehensive package of economic reforms is administered in the country. Increase in petroleum product prices helped the effectiveness of these reforms. Political stability is another major factor in economic development. Besides, agreements made with former Soviet Union countries about the sales of Russian natural resources improved its political stance end helped its economy even further.

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The Implications of the EMU Debt Crisis on the Process of Gulf Cooperation Countries' Monetary Integration'

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Abstract

The paper provides a critical evaluation of the Optimum Currency Area (OCA) theory and its applications in the context of European Monetary Union (EMU) and the Gulf Cooperation Council (GCC) countries. Thus, the features of the EMU debt crisis, the GCC countries' macroeconomic integration and the implications of adopting a single currency for their economies are addressed. In doing so, lessons are drawn from the history, experience and performance of EMU concerning the appropriate exchange rate policies to be pursued by the GCC countries. This is taking place in conjunction with considering different aspects of the GCC's economies, such as macroeconomic coordination. Policy recommendations with regards to exchange rate management are also made. The main conclusion is that the current exchange rate arrangements in the GCC countries are not necessarily conducive to the process of monetary integration of its member countries and more flexible exchange rate policies with the rest of the world should be adopted, once the single currency is established. This is particularly interesting in the light of the current fixed exchange rate arrangements between the USA dollar and all the GCC countries' currencies as the adoption of quantitative easing in the USA has led to increases in inflation in the former. The problem could potentially become more acute in the case of the adoption of a single currency, as all GCC countries could experience increased inflation. Associated with this, in the context of a single GCC currency, are the institutional arrangements that would precede the creation of the single currency. The problems faced the Euro-zone reflect the impasse monetary unification(s) can ultimately reach at the absence of fiscal or political union.

Keywords: Exchange Rate Regimes, Optimum Currency Area, European Monetary Union, Gulf Country Council, Monetary Integration, Exchange Rate Policies.

Liquidity Management of Small Firms

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Abstract

This paper aims to investigate the relationship between the firm's working capital management practices and its liquidity. This relation examined using GMM System Estimation applied to dynamic panel data (87030 firm-year observations) for non-financial firms listed in the major US stock exchanges for the period 1990-2004. The analysis is applied at the levels of the full sample and divisions of the sample by size. The results show negative and significant relationship between net trade cycle and liquidity of small firms.

Keywords: Net Trade Cycle, Receivable Collection Period, Inventory Conversion Period, Payable, Deferral Period, Liquidity

Does the Turkish Stock Market Overreact? An Application in the Industrial Index

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Abstract

This paper investigates whether overreaction / underreaction effects exist in Turkish Stock Market via controversial hypothesis. In Overreaction effects via controversial hypothesis, investigators can gain more return than market return as using some information like on other anomalies. Generally, this information used to investigate the overreaction hypothesis are returns of loser/winner portfolios in formation terms. Also if these effects exist in stock market, it means that market is not efficient in weak form. In our analyses, we used Industrial Index from Istanbul Stock Exchange. We used the methodology of De Bondt and Thaler (1985 and 1987) in this study. In their method, formation and testing terms are made as long and short term for finding evidences of overreaction/under reaction effects. Several studies on this topic show that loser portfolios have overreaction effects, hence in this study we expect to find similar results.

Keywords: The Overreaction Hypothesis; Contrarian Strategy; Istanbul Stock Exchange

Introduction

The Efficient Market Hypothesis has been one of the most discussed and most researched topics in finance literature since 1970. Fama, E.F. (1970) suggests that stock prices always fully reflect the available information in market and also defines this type of markets as efficient markets. Fama categorizes markets into three groups in terms of efficiency: Weak Form, Semi Strong Form and Strong Form. Weak form market hypothesis represents markets in which prices fully reflect historical information only. In these markets, investor can't earn more than market return by using historical information. Semi-strong form market hypothesis means that prices fully reflect only publicly available information about companies. Strong form market hypothesis exists in the markets where prices fully reflect both historical information and publicly available information, and also private information that belongs to monopolistic groups. According to Fama's efficient market hypothesis, investor can't earn more than market return (Abnormal Return) by using these information. Because, prices already reflect all of the information. But contrary to Efficient Market Hypothesis, there have been several studies suggesting that investors can earn abnormal return by using some available information. Basu, S. (1977) indicates that investment performance of low P/E stocks outperform high P/E stocks and this is not consistent with the Efficient Market Hypothesis. Banz, R.W. (1981) suggests that the size effect exist on stock markets. Size effect exists where small firms have relatively more risk-adjusted return than large firms. Additionally Wachtel, S.B. (1942) finds January Anomaly that is investors can earn higher abnormal returns in January than other months.

The Overreaction Hypothesis is one type of anomaly proposed instead of the efficient market hypothesis De Bondt, W. and Thaler, R. (1985 and 1987). According to this hypothesis, investors show a tendency to overreact when they encounter unexpected situation and receive bad news about stocks. As an explanation for this, most studies show that investors attach more importance to problems happening again and to most recent information about companies than basic data. After overreaction, mostly stocks are valued under or above the real value. If we assume that stocks are valued below (above) their true values because of over pessimism (optimism), in the following period we would expect that they will increase (decrease) to their true values. De Bondt and Thaler use low investment performance in their study as bed news and suggest that portfolios loosing dramatically in the former term, have higher performance than winning portfolios in the next term. They formed portfolios using NYSE firms. Each portfolio comprises of fifty most loosing stocks and fifty most winning stocks. They observe that looser portfolios outperform winner portfolios by % 31.9.

The rest of the paper is organized as follows. Next section presents the literature review and information on ISE (Istanbul Stock Exchange). The following section presents data and methodology used in this study. Next We provide the results the empirical analysis. And lastly, We conclude and provide suggested future research.

Literature Review

There are several studies on the overreaction hypothesis in finance literature. We provide some of them in this section. Research analyzed overreaction hypothesis in both developed countries and developing countries. In this study, We categorize the literature review into two parts: developed countries and developing countries.

Lobe, S. and Rieks, J. (2011) examine the overreaction hypothesis in German context. While they couldn't find any evidence for efficient market hypothesis in Frankfurt Stock Exchange in the short-run, they found significant evidence of overreaction that is not solely concentrated in companies having small capitalization. Additionally, Klobnor, S. Becker, M. and Friedman, R. (2012) show that investors overreact to bad news compared to good news for thirty major German companies trading on the Frankfurt Stock Exchange that form XETRA DAX.

Gunaratne, P. and Yonesawa,Y. (1997) and Chiao, C. and Hueng, J.C. (2005) investigate overreaction hypothesis in Tokyo Exchange. Both of them observed significant evidence of overreaction in Tokyo Exchange. Moreover Gunaratne and Yonesawa observed that looser portfolios outperformed to winner portfolios in % 54 of all period.

Clare, A. and Thomas, S. (1995) investigate mean reversion in stocks quoted in the London Stock Exchange by using overreaction hypothesis in the long-run. In their analyses, they use the methodology from De Bondt and Thaler (1985 and 1987). Their results indicate looser portfolios significantly outperform winning portfolios, especially over the two-year period. They conclude that overreaction they observe is indeed a manifestation of the small firm effect. Mazouz, K. and Li, X, (2007) is another study on London Stock Exchange. Unlike Clare and Thomas, Mazouz and Li find significant evidence for overreaction hypothesis after controlling for the size effect.

Mun, J. Vasconcellos, G. and Kish, R. (2000) examine contrarian strategy as well as overreaction hypothesis in both US and Canada contexts. They add non-parametric methodology with a multi-factor asset pricing model to methodology utilized by De Bondt and Thaler (1985 and 1987). They show that by implementing contrarian strategy, it is possible to earn more than market in U.S. in short and mid-term. Additionally, in Canadian Stock Markets best term to earn above market returns is mid-term. Lauterbach, B. and Vu, J. (1992) analyzed a sample consists of 101 firms that received best manager award from Financial World Magazine. They provide significant evidence for overreaction hypothesis. Also Klobnor, Becker and Friedman (2012) examine overreaction hypothesis in Dow Jones Index and show that investors overreact to bad news compared to good news.

Antoniou, A. Galariotis, E. and Spyrou, S. (2005) examine contrarian strategy and overreaction hypothesis in the Athens Stock Exchange over long term. In their study, they use three factor models and they find some evidence that show investors earn more returns using contrarian strategy. Fung, A. (1999) investigates overreaction hypothesis in the Hang Seng Index which comprises of firms that has market capitalization of more than % 70 of total Hong Kong Stock Exchange. Fung use a similar methodology to De Bondt and Thaler (1985) and provides very strong evidence for overreaction hypothesis. Also Fung's results show that looser portfolios outperform winning portfolios by % 9.9 over one-year term.

One of the studies on developing countries is Erzurumlu, Y. (2011) which is in Turkey context. He investigates overreaction hypothesis in ISE 100 and ISE 30 Indices by using unexpected information hypothesis. He forms portfolios based on cumulative abnormal return for thirty days after trigger points that represent negative or positive events. He provides evidence for overreaction hypothesis in both indices. Baussaidi, R. (2013) investigates whether overreaction Hypothesis holds in the Tunisian Stock Market. He analyzes the relationship between trading volume and return volatility by using the Granger Causality Test. He finds some evidence on overreaction hypothesis in his study. To examine overreaction hypothesis in the Brazilian Stock Market, Da Costa, N. (1994) using both the standard Sharpe-Lintner CAPM adjusted returns and market adjusted returns. He finds that size of overreaction in Brazilian Stock Market is larger than U.S. evidence. Also he states that CAPM-betas are insufficient to determine the differences between looser portfolio and winning portfolio. Maher, D. and Parikh, A. (2011) test the overreaction hypothesis in the Bombay Stock Exchange (BSE). They use three indexes: BSE Sensex-30, BSE Mid Cap and BSA Small Cap. They find significant evidence for underreaction for negative events

in BSE Mid Cap and BSA Small Cap. And also they observe investors mostly overreact to bed news in BSE.

The Istanbul Stock Exchange and the Industrial Index

The Istanbul Stock Exchange (ISE) which has one of the highest trading volume stock markets in emerging markets during the last decade was founded in early 1986. ISE which comprises of 371 companies has roughly \$221 billion market capitalization.

The Industrial Index has been traded in ISE since December 1990. Among the sector indices, Industrial Index covers the highest number of stocks listed on the ISE. It represents more than 48% of all companies listed on the ISE. Moreover, it is second most trading sector index and has the highest market capitalization.

Data

In this study, data covering form January 2000 to December 2012 is gathered from ISE's website. Sample comprises of 115 stocks traded in Industrial Index. We require that the monthly is available for our time period

Method

Before we start our analysis, we calculated monthly time series of stock returns from monthly time series of stock prices for our sample firms. We calculate the monthly return series for each stock as:

$$R_{i,t} = \frac{(P_{i,t} - P_{i,t-1})}{P_{i,t-1}} \tag{1}$$

$R_{i,t}$ represents the return on stock i at period t. $P_{i,t}$ is the price on stock i at period t and $P_{i,t-1}$ is the price on stock i at period t-1. And the market return ($R_{m,t}$) is calculated as the equal-weighted return of all of firms included in the industrial index at period t.

In this study to test overreaction hypothesis for the Industrial Index, we follow the methodology of DeBondt and Thaler (1985). Firstly we calculate Abnormal Return ($AR_{i,t}$) on stock i at period t as:

$$AR_{i,t} = R_{i,t} - R_{m,t} \tag{2}$$

Then for each stock, Cumulative Abnormal Return (CAR_i) is calculated in the portfolio formation period as:

$$CAR_i = \sum_t^Z AR_{i,t} \tag{3}$$

Z represents months of year. CAR_i earned during formation period is ordered from highest to lowest. We then assigned the top 10 stocks to the winner portfolio and the bottom 10 stocks to the loser portfolio. We test both portfolios' performance during testing period in the following year. And for both portfolios, we calculate separately Cumulative Abnormal Return in testing period.

$$CAR_{W,t} = (1/N)\sum AR_{W,t} \quad ; \quad CAR_{L,t} = (1/N)\sum AR_{L,t} \tag{4}$$

In which W represents winner portfolio and L represents losing portfolio at period t. N is number of stocks in portfolio.

Lastly, Average Cumulative Abnormal Return (ACAR) is determined both winner portfolio and losing portfolio. Specifically we use these formulas at below.

$$ACAR_{W,z,t} = \frac{\sum CAR_{W,t}}{Z} \quad ; \quad ACAR_{L,z,t} = \frac{\sum CAR_{L,t}}{Z} \tag{5}$$

We keep continue this method until year of 2012. So each year is to be both formation period and testing period but except of years of 2000 and 2012. Because year of 2000 is to be only formation period and year of 2012 is to be only testing period. Totally we make 12 different portfolios to analyze overreacting. End of all of analysis, these hypotheses are examined in this study.

H_0: *ACAR$_W$ = 0 and ACAR$_L$ = 0 or (ACAR$_L$ - ACAR$_W$) = 0*
H_1: *ACAR$_W$ < 0 and ACAR$_L$ > 0 or (ACAR$_L$ - ACAR$_W$) > 0*

If there is overreaction in the Industrial Index, we should find support for H_1. Also we use *t- test: Two-Sample Assuming Unequal Variances* to calculate whether portfolios have differences between Cumulative Abnormal Returns (CAR) in Formation and Testing Period for each term.

Empirical Results

In this study, portfolios which lose or win at formation period are examined whether overreact at testing period. As saw in results, while looser portfolios mostly have higher performance at following period, winner portfolios mostly have lower performance at following period. Table 1 provides the results for loser portfolios for both formations and testing periods.

Table 1: For Looser Portfolios results of $CAR_{L,t}$ and $ACAR_{L,z,t}$ at Formation Period and Testing Period

Looser Portfolios (L)					
Formation Period			**Testing Period**		
Terms	**CAR**	**ACAR**	**CAR**	**ACAR**	**t-Test**
1	-83.94	-7.00	23.42	1.95	2.12*
2	-99.76	-8.31	23.73	1.98	2.23*
3	-89.70	-7.47	-3.06	-0.25	2.11*
4	-103.92	-8.66	4.06	0.34	2.13*
5	-79.66	-6.64	-1.80	-0.15	2.20*
6	-74.62	-6.22	19.02	1.59	2.13*
7	-67.82	-5.65	25.13	2.09	2.23*
8	-65.06	-5.42	2.89	0.24	2.13*
9	-66.56	-5.55	58.94	4.91	2.23*
10	-110.40	-9.20	-0.55	-0.05	2.14*
11	-70.97	-5.91	-5.45	-0.45	2.13*
12	-70.83	-5.90	-2.08	-0.17	2.10*
Average	**-81.94**	**-6.83**	**12.02**	**1.00**	**-**

* Significant at %1 level

During formation period, average CAR is -81.94% ranging from -110.40% in term of 10th to -65.06% in term of 8th and average ACAR is -6.83% ranging from -9.20% in term of 10th to -5.42% in term of 8th. Consistent with our expectations, testing period returns are higher than formation period returns for all years. During testing period, average CAR is 12.02% ranging from -5.45% in term of 11th to 58.94% in term of 9th and average ACAR is 1.00% ranging from -0.45% in term of 11th to 4.91% in term of 9th. We can see in table 1, $ACAR_L = 1.00$ or $ACAR_L > 0$. These results indicate investors consider loser stocks to have lower value than their real value and react by buying into loser firms. These results also show that investigator may gain 1% more Average Cumulative Abnormal Return using the Contrarian Strategy. In figure 1, we can see more clearly results of looser portfolio's ACAR showing differences between at formation period and at testing period.

Fig 1: Performance of Looser Portfolios ACAR at Formation and Testing Period
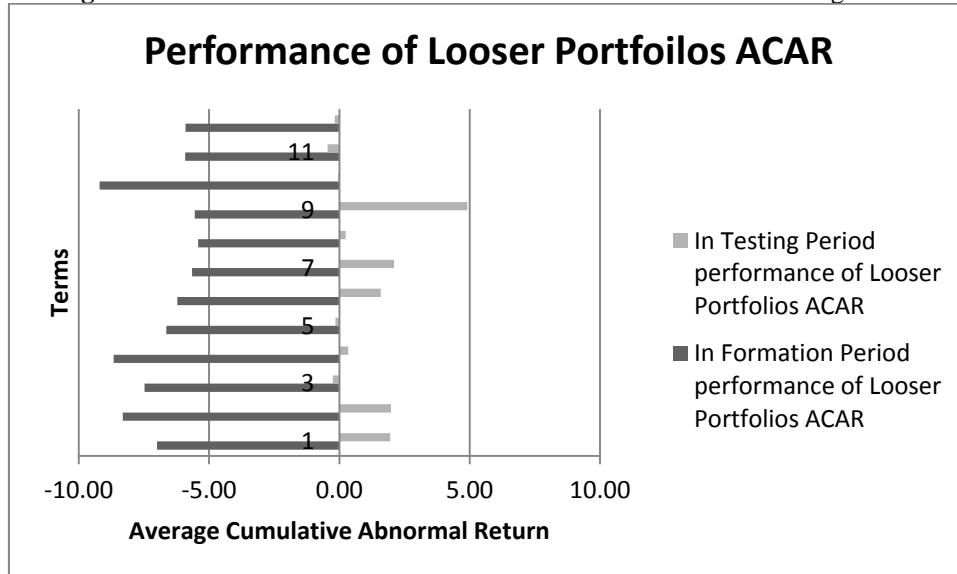
Table 2 provides the results for winner portfolios for both formations and testing periods. During formation period, average CAR is 110.51% ranging from 73.22% in term of 7th to 149.78% in term of 3th and average ACAR is 9.21% ranging from 6.10% in term of 7th to 12.48% in term of 3th. Consistent with our expectations, testing period returns are lower than formation period returns for all years. During testing period, average CAR is -13.91% ranging from -66.24% in term of 9th to 8.56% in term of 6th and average ACAR is -1.16% ranging from -5.52% in term of 9th to 0.72% in term of 6th.

Table 2: For Winner Portfolios results of $CAR_{W,t}$ and $ACAR_{W,z,t}$ at Formation Period and Testing Period

Winner Portfolios (W)					
Formation Period			**Testing Period**		
Terms	**CAR**	**ACAR**	**CAR**	**ACAR**	**t-Test**
1	117.35	9.78	-8.08	-0.67	2.12*
2	114.56	9.55	-35.01	-2.92	2.10*
3	149.78	12.48	8.55	0.71	2.16*
4	96.24	8.02	-19.65	-1.64	2.18*
5	99.90	8.32	-16.97	-1.41	2.18*
6	101.15	8.43	8.56	0.72	2.12*
7	73.22	6.10	-17.32	-1.44	2.23*
8	110.89	9.24	-2.50	-0.21	2.14*
9	130.60	10.88	-66.24	-5.52	2.18*
10	135.94	11.33	-3.90	-0.33	2.10*
11	100.38	8.37	-21.55	-1.80	2.16*
12	96.14	8.01	7.22	0.60	2.13*
Average	**110.51**	**9.21**	**-13.91**	**-1.16**	**-**

* Significant at %1 level

These results indicate investors consider winner stocks to have higher value than their real value and react by selling out of winner firms. Also we can see in table 2, *ACAR_W = -1.16 or ACAR_W < 0.*

We can see more clearly results of winner portfolio's ACAR showing differences between at first period and at following period in figure 2.

Figure 2: Performance of Winner Portfolios ACAR at Formation and Testing Period
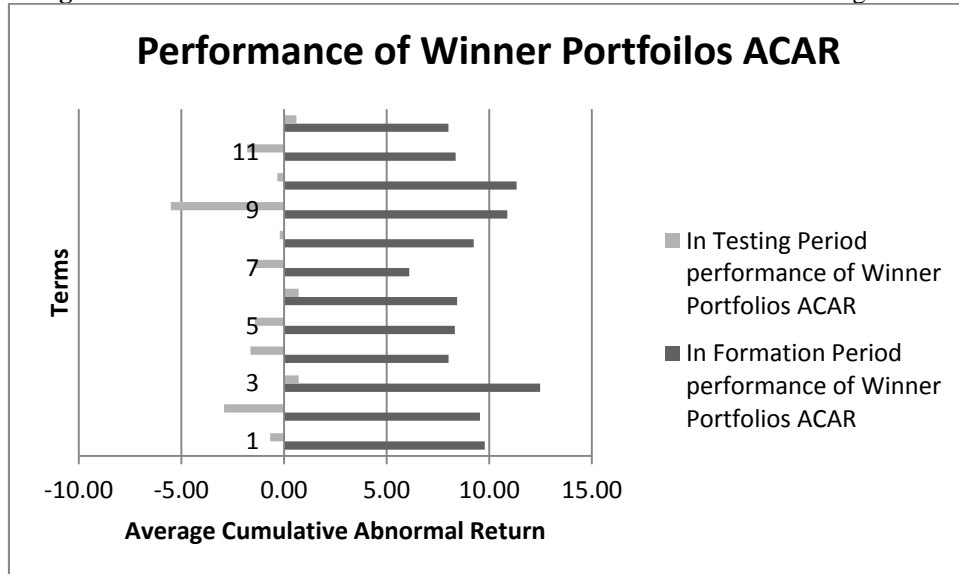
As stated in our hypothesis, we need to reject H_0 to confirm that overreaction hypothesis for Industrial Index. As we observe from both table, $ACAR_L = 1.00$ or $ACAR_L > 0$ and $ACAR_W = -1.16$ or $ACAR_W < 0$. On the other hand $ACAR_L - ACAR_W = 2.16$ means $ACAR_L - ACAR_W > 0$. Also when we look to table 3, we can say that significant at level %1, $ACAR_L$ and $ACAR_W$ are not equal. So according to these results, we can reject to H_0 Hypothesis significant at level %1. Altogether, these results suggest that Overreaction Hypothesis exist in Industrial Index.

H_0: $ACAR_W = 0$ and $ACAR_L = 0$ or $(ACAR_L - ACAR_W) = 0$
H_1: $ACAR_W < 0$ and $ACAR_L > 0$ or $(ACAR_L - ACAR_W) > 0$

Table 3: The Results of t-Statistic Between $ACAR_L$ and $ACAR_W$ in Testing Period

	$ACAR_L$	$ACAR_W$
Mean	1.00	-1.15
Variance	2.47	3.17
t Stat	2.07*	

* Significant at %1 level

Conclusions

The Overreaction Hypothesis was one of the suggestions that were found out to reject The Weak Form Efficient Market Hypothesis. According to The Overreaction Hypothesis, if investors overreact to recent information about companies, because of this, stocks may asses more or less than real value. In following term, investors turn into an opportunity to this situation via the Contrarian Strategy. When we look to other studies about Overreaction Hypothesis, we can encounter to lot of results indicating that looser portfolios significantly perform to winning portfolios. In this study, we examine to Overreaction Hypothesis in Industrial Index of ISE at between years of 2000 and 2012 by using monthly data of 129 companies. We use same method are used by DeBondt and Thaler like most of other study about overreaction and also we observe that ACAR of looser portfolios dramatically outperform to ACAR of winning portfolios in testing period. While $ACAR_L$ equals to -6.83 in formation period, $ACAR_L$ is 1.00 in testing period. As opposite of this situation, While $ACAR_W$ equals to 9.21 in formation period, $ACAR_W$ is -1.16 in testing period. Also we demonstrate our hypothesis ($ACAR_L - ACAR_W > 0$). These results shows that in ISE one of developing exchanges, even if there are no so high effects about Overreaction Hypothesis as much as developed exchanges but we can indicate that investigators can gain abnormal return in Industrial Index of ISE by using Contrarian Strategy.

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Ex-post Return Efficiency of the Investment Trust Funds Using Data Envelopment Analysis with Higher-Order Moments Framework

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Abstract

An efficient performance assessment of the actual yield in investment trust funds should go beyond the composition of the return on funds' assets and the volatility in dispersion of these returns. If an unsymmetrical fashion of plotted returns around the mean or an incongruity in return expectations are notable, the evaluation methodology becomes critical not only for a realistic interpretation of the funds' return distributions but also for a strong judgment about the utility functions of the investors. Therefore, the underlying themes of this paper are the subjects of rationalizing the anomalous return patterns in equity real estate investment trust funds (REITs) bounded up with a critical behaviour of higher-order moments structure and relating the funds' performance to the utility preference of the investors. This article argues the efficiency in sporadic ex-post returns of the equity REITs and structures a dynamic network model to probe into the anomalous distribution patterns in investment fund returns' yield in conjunction with the higher-order moments framework. Forty five equity REITs from hospitality investment trust firms (worldwide) are examined in this paper. The data is gathered from Center for Security Research Database based on the security classification (SIC) codes of 6798 and 6799. The time period analysed in this paper is divided into three parts; beginning year is 2007 (this is the set year), first period is 2008, middle period is 2009 to 2012, and the end period is 2013. The reason we have to have three different time period is that we have three different time periods in dynamic DEA model (t-1, t, and t+1).The content of our dynamic network DEA analysis includes essential properties. First off, according to our sample, a decision in one specific return period influences the following periods, which we applied our model to several different periods. Hence, as we intended, we can observe the robust return patterns allowing for each return period to be scaled individually. Second, we utilized primary extrinsic (exogenous) inputs (change in earnings, systematic risk, and the kurtosis of returns) and intermediate (endogenous) inputs (firm size) to produce final outputs (ex-post returns and the skewness of returns). By the help of this, we can analyse the annual efficiency in ex-post returns along with intervening inputs. This paper, when completed, aims to shed a light for contemporary performance analysis and investors' preferences based on the performance indexes in equity investment trust funds (REITs) in the hospitality industry.

Keywords: Dynamic Network Model, Equity REITs, Performance Evaluation, Investors' Utility

The Effects of Monetary Shocks in OECD Countries on Other Macroeconomic Variables

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Abstract

Over the past few decades, many financial and technological innovations have facilitated the flow of information between countries, but at the same their rapid development complicated the environment in which central bank implements its policies. Now, while the primary aim of central banks is to maintain price stability, their secondary aim is to maintain and sustain financial stability. Therefore central banks have begun to use untraditional monetary policy instruments, as well as traditional ones, in the new policy approach. The aim of this study is to analyze the effects of monetary shocks in OECD countries on other macroeconomic variables. In this sense; by using Panel VAR (Panel Vector Autoregressive Model) in this study which covers 1995:1-2013:IV period, the effect of monetary shocks on nominal and real sector was analyzed.

Keywords: Monetary Shocks, Panel VAR, Macroeconomic Stability

Introduction

 In the aftermath of 2008 Global Crisis it is concluded that price stability isn't enough to ensure macroeconomic stability. Most of the countries began to implement macroeconomic policies covering both price stability and financial stability. Until the global crisis, USA and most of European countries used interest rates as a policy tool. However, reaching the limits of interest rate cuts during the crisis has again brought up the concept of "liquidity trap" emphasized by Keynes (1936). Liquidity trap considerably reduced the effectiveness of the monetary transmission mechanism. As a consequence this made central banks reorganize their monetary policies. Because of increasing of financial fragility they have actively begun to use unconventional monetary policy in addition to the traditional monetary policy. In order to provide a direct support to financial system, measures such as deposit guarantees, facilitating the possibility of domestic liquidity, recapitalization of banks, providing government guarantees for bank debt, expropriation, transfer of funds and swap channel have been taken. These policies aren't competitor for standard interest rate policies. In contrast, they are complementary policies increasing the effectiveness of monetary transmission mechanism (Corthimann & Winkler, 2013). Within this context, it can be said that central banks execute extended flexible inflation targeting policy which covers both price stability and financial stability.

In a flexible inflation targeting policy fluctuations in the output level as well as price stability are taken into account. However, according to Miskhin (2007) a monetary policy emphasizing the output target undermines the credibility of the central bank by reducing the central bank's communication strategy. Therefore, a monetary policy basically focusing on inflation control will increase the credibility of the monetary policy by facilitating that monetary policy authorities focus on long term.

In addition to monetary transmission mechanism examining the effects of monetary shocks on the volume of economic activity, numerous models which emphasize that output fluctuations are important for the choice of monetary policy instruments have been developed. Taylor (1993) built a model indicating that interest rates should be determined by output and inflation level. According to this model, short term nominal interest rates should be increased when actual inflation deviates from the targeted inflation and output gap occurs. This model which is known in the literacy as Taylor rule was tested empirically by Bullard and Mitra (2000), Woodford (2001) and Orphanides (2004,2007). Svesson (1997) developed a new model based on the traditional aggregate supply model, which relates the level of current inflation with the level of previous inflation and output, and in this model the level of current inflation is determined by the level of previous output and real interest rate. Clarida, Gali and Gertler (2000) extended classic Taylor model and as a result a new model has been developed by including all the expectations. In this model targeted interest rate relates to the expected output gap and desired nominal interest rate and the difference between expected inflation rate and targeted inflation rate. When the difference between expected inflation and targeted inflation is positive and there is an output gap,

targeted interest rate should be increased. In this context, monetary shocks and real shocks are interacting with each other. In the periods of increases in the financial instability, systematic relations between variables disrupt and also the effectiveness of monetary transmission mechanism considerably decreases. In this study, interaction between monetary shocks and real shocks is analyzed by using Panel VAR.

Methodology

In this study covering the period of 1995:I-2013:IV, we can divide this period into two sub-periods namely the period of 1995:1- 2005:IV and 2006:I-2013:IV and the model of Panel VAR has been used to analyze whether there is an important difference between the effect of pre-crisis and post-crisis monetary shocks on real and nominal variables.

Panel VAR

A panel VAR with k lags can be written as follows;

$$y_{it} = \mu_0 + A_i \sum_{t=1}^{k-1} y_{it-1} + a_i + \lambda_t + \varepsilon_{it} \quad i = 1,.....N ; t = 1...T \tag{1}$$

Where $y_{it} = (GDP_{it}, Ms_{it}, r_{it}, \pi_{it}, \varepsilon_{it})$ is a five-variable random vector. Variables including in the model respectively represents Gross Domestic Product, money supply, interest rate, consumption price index, and exchange rate. A_i are 5x5 are matrices of estimable coefficients; a_i denotes unobserved country-effects; λ_t denotes time-effects; and ε_{it} is a 5 x1 vector of well behaved disturbances.

Empirical Analysis

Stationary must be provided in VAR (Vector Autoregressive) models. Moreover, Panel data sets often include heteroscedasticity, autocorrelation and cross sectional dependence (Wooldridge, 2007). Therefore, in the study Panel VAR model based on flexible generalized least squares regression considering heteroscedasticity, cross sectional dependence and autocorrelation problems has been used. CADF unit root test formulated by Pesaran (2007) was used to test stationary of series. CADF unit root test provides testing of stationary tests both in terms of country and panel data. However, because the results obtained in Panel VAR models collectively are assessed, the findings obtained have been evaluated only according to CIPS statistics.

Table.1 CADF Panel Unit Root Test

	1995-2005					2006-2013				
	**GDP	Ms	r	π	ε	GDP	Ms	r	π	ε
Düzey	-2.41	-2.11	-1.90	-1.60	-1.90	-3.08	-2.75	-2.28	-2.22	-2.64
Δ	-5.71	-3.09	-3.80	-3.11	-4.57	-4.30	-3.17	-2.70	-3.82	-2.77

Kritik değerler ; %1 için -2.78, %5 için -2.65,%10 için -2.58
** GDP : Gross Domestic Product Ms: Money Supply(m3) r: nominal interest rate, π : inflation rate, ε: Exchange rate

If difference series is non-cointegration, VAR model should be established, or not, Vector Correction Model should be established. Therefore, principally it is tested whether series are cointegration or not by Westerlund(2007) Panel Cointegration test. Table 2 shows panel cointegration estimate results.

Table.2 Westerlund Cointegration Test

	1995-2005				2006-2013			
	Gt	Ga	Pt	Pa	Gt	Ga	Pt	Pa
GDP&Ms	-1.685 (0.678)	-5.395 (0.867)	-4.665 (0.638)	-5.228 (0.218)	-0.364 (0.979)	-0.152 (0.997)	0.457 (0.972)	0.079 (0.907)
GDP&r	1.800 (1.000)	0.408 (0.999)	7.171 (1.000)	0.446 (0.961)	-1.075 (0.371)	-0.891 (0.987)	-2.289 (0.328)	-0.819 (0.598)
GDP& π	-0.584 (0.904)	-1.397 (0.967)	-1.298 (0.656)	-0.696 (0.654)	-0.869 (0.639)	-1.864 (0.930)	-1.826 (0.480)	-0.307 (0.805)
GDP& ε	0.232 (1.000)	-0.280 (0.996)	(-1.203) (0.686)	-0.701 (0.651)	-1.490 (0.044)	-3.398 (0.621)	-1.935 (0.443)	-0.696 (0.654)

According to Table 2, GDP and other macroeconomic variables are non-cointegration. The use of VAR model is suggested to be used when dynamic effects of shocks are examined between non-cointegration series. Moreover, the fact that there are causality relations between variables using VAR model shows that shocks are statistically significant. Table 3 indicates Panel Granger Causality estimation results.

Table. 3 Panel Granger Causality

	1995-2005					2006-2013			
	χ^2	df	Prob	Karar		χ^2	df	Prob	Karar
Ms→GDP	66.13	2	0.0000	H0 reject	Ms→GDP	0.39	2	0.8206	H0 accept
r→GDP	94.59	2	0.0000	H0 reject	r→GDP	0.44	2	0.8002	H0 accept
π→GDP	301.80	2	0.0000	H0 reject	π→GDP	0.01	2	0.9942	H0 accept
ε→GDP	19.34	2	0.0001	H0 reject	ε→GDP	0.10	2	0.9506	H0 accept
GDP→Ms	7.98	2	0.0184	H0 reject	GDP→Ms	1.38	2	0.5000	H0 accept
r→Ms	50.65	2	0.0000	H0 reject	r→Ms	2.06	2	0.3555	H0 accept
π→Ms	185.35	2	0.0000	H0 reject	π→Ms	0.20	2	0.9025	H0 accept
ε→Ms	9.75	2	0.0076	H0 reject	ε→Ms	0.28	2	0.8677	H0 accept
GDP→r	34.68	2	0.0000	H0 reject	GDP→r	1.44	2	0.4845	H0 accept
Ms→r	86.45	2	0.0000	H0 reject	Ms→r	2.86	2	0.0239	H0 reject
π→ r	43.12	2	0.0000	H0 reject	π→ r	0.25	2	0.8059	H0 accept
ε→ r	39.29	2	0.0000	H0 reject	ε→ r	0.43	2	0.0475	H0 reject
GDP→π	8.69	2	0.0130	H0 reject	GDP→π	6.09	2	0.0302	H0 reject
Ms→ π	41.73	2	0.0000	H0 reject	Ms→ π	7.00	2	0.0065	H0 reject
r→ π	71.43	2	0.0000	H0 reject	r→ π	10.08	2	0.4836	H0 accept
ε→ π	16.49	2	0.0003	H0 reject	ε→ π	1.45	2	0.8487	H0 accept
GDP→ε	11.39	2	0.0033	H0 reject	GDP→ε	0.32	2	0.8487	H0 accept
Ms→ε	0.50	2	0.7760	H0 accept	Ms→ε	0.04	2	0.9785	H0 accept
r→ ε	14.37	2	0.0008	H0 accept	r→ ε	0.12	2	0.9404	H0 accept
π→ε	0.88	2	0.6436	H0 accept	π→ε	0.48	2	0.7863	H0 accept

According to Table 3, during the periods of 1996-2005 money supply and inflation don't Granger cause exchange rate. However, there are two way causalities. This condition shows that shocks are statistically significant. But, causal relations disrupted in 2006-2013. In this period money supply and exchange rate do granger cause interest rate while income and money supply cause inflation. Figure 1 shows impulse response functions in 1995-2005.

Fig.1 Impulse Response Functions (1995-2005)
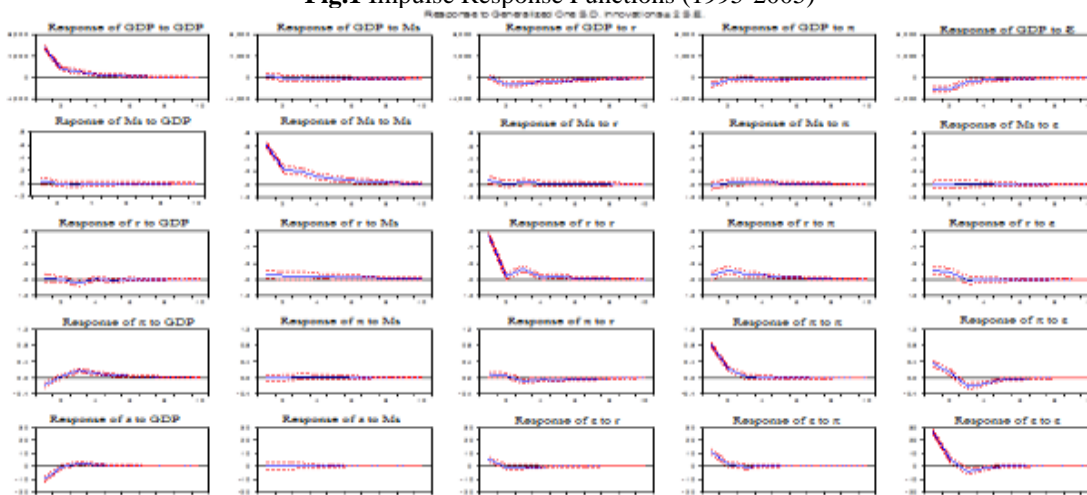
Analyzing Figure 1,it is easily observed that money supply shocks don't have an important effect on GDP. At first, while a negative interest rate has a negative effect on GDP. This effect up to the second quarter but, after second quarter GDP gradually increases and shock loses its effect at sixth quarter. Until the second quarter negative inflation and exchange rate shocks have a negative effect on GDP.

144

However, after the second quarter this effect loses. GDP, interest rate and exchange rate shocks don't have an important effect on money supply. A positive interest rate shock has a positive effect on money supply and inflation but this influence loses in short time.

A negative GDP shock has a positive effect on inflation. This effect until fourth quarter, after fourth quarter inflation decreases and at sixth quarter loses its effect. Money supply shocks don't have an effect on inflation. A positive inflation shock increases interest rate, after second quarter interest rate starts to decrease and the effect of this declines at fifth quarter. A positive exchange rate shock has negative influence on interest rate and loses its effect at fourth quarter. Moreover, a positive exchange rate has also a negative effect on inflation. This effect up to at fourth quarter and loses its effect at fifth quarter.

Fig. 2 Impulse Response Functions (2006-2013)
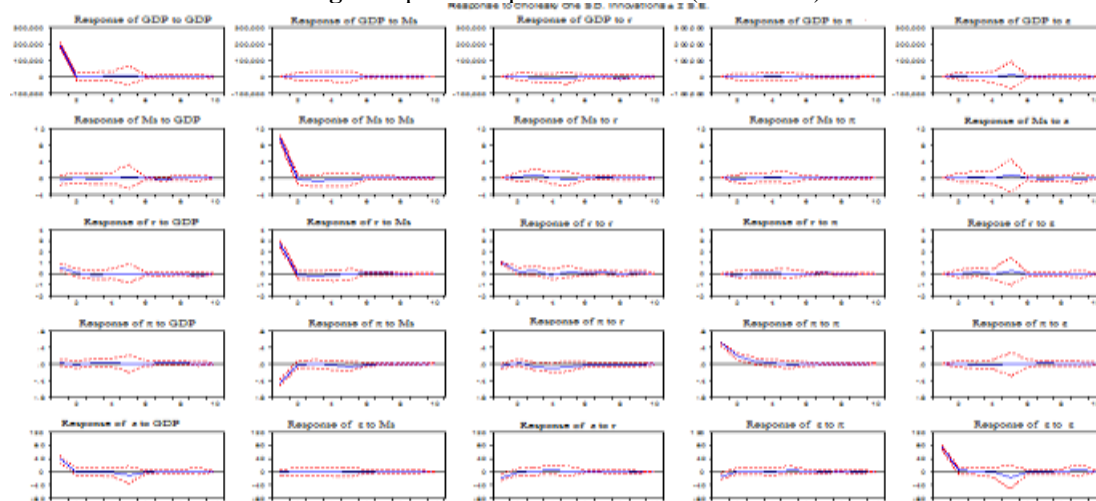
Figure 2 shows impulse response function during 2006-2013. Upon examining the table it is seem that statistically significant relations disrupts. In this period while a positive money supply shock has a negative effect on interest rate, a negative interest rate shock has a positive effect on exchange rate. But, this effect goes away in a short time. However a positive GDP shock has a negative effect on exchange rate.

Variance Decomposition

According to Table 4 the variable having the largest proportion in the prediction error variance of GDP is the interest rate with about % 9. Interest rate is followed by exchange rate. The variable having the lowest proportion is the inflation rate. It is seem that proportion of other economic variables within the prediction error variance of money supply is very low. As a result, it can be said that money supply is considerably exogenous. The variable having the largest proportion in the prediction error variance of interest rate is the inflation rate with about % 5. Exchange rate rate is followed by money supply. the variable having the largest proportion in the prediction error variance of exchange rate is the GDP with about % 15. Interest rate is followed by Inflation. Inflation and interest rate respectively follow it.

Table.4 Variance Decomposition (1995-2005)

Variance Decomposition of GDP					
Period	S.E.	GDP	Ms	r	π	ε
2	6211.906	91.00161	0.104942	4.169648	0.003720	4.720080
3	6412.423	88.38459	0.144559	6.900467	0.082331	4.488056
4	6492.596	87.04366	0.223335	8.230701	0.119659	4.382641
5	6547.429	86.10142	0.294990	9.110325	0.176785	4.316482
6	6572.303	85.62629	0.369952	9.468721	0.244148	4.290891
7	6586.268	85.33862	0.429010	9.655139	0.284508	4.292722
8	6593.108	85.18670	0.473264	9.729734	0.313127	4.297179
9	6596.810	85.10191	0.503431	9.764173	0.328749	4.301735
10	6598.662	85.05781	0.522985	9.777135	0.337764	4.304311
Variance Decomposition of Ms					
Period	S.E.	GDP	Ms	r	π	ε
1	0.611891	0.435954	99.56405	0.000000	0.000000	0.000000

2	0.654623	0.385847	99.33012	0.067439	0.171527	0.045067
3	0.686686	0.411360	98.92054	0.091134	0.445613	0.131352
4	0.698123	0.408956	98.73290	0.094357	0.622322	0.141467
5	0.704075	0.406992	98.58796	0.107559	0.704304	0.193185
6	0.706775	0.404119	98.50818	0.111537	0.756495	0.219667
7	0.708092	0.402938	98.46347	0.115479	0.781872	0.236244
8	0.708716	0.402234	98.44159	0.116650	0.795775	0.243753
9	0.709016	0.401897	98.43030	0.117370	0.802265	0.248167
10	0.709159	0.401741	98.42487	0.117579	0.805572	0.250236

Variance Decomposition of r

Period	S.E.	GDP	Ms	r	π	ε
1	0.549756	0.054231	1.185635	98.76013	0.000000	0.000000
2	0.567760	0.051448	1.719179	93.01307	4.554608	0.661698
3	0.594055	0.784738	2.242782	89.50123	4.642202	2.829045
4	0.598698	0.794571	2.658828	88.25003	5.396004	2.900569
5	0.602552	0.845970	2.933884	87.57997	5.444232	3.195944
6	0.603698	0.845048	3.116151	87.26886	5.552335	3.217609
7	0.604409	0.847763	3.216791	87.11152	5.565766	3.258156
8	0.604691	0.847289	3.274376	87.03313	5.582147	3.263063
9	0.604843	0.847133	3.304148	86.99446	5.585111	3.269148
10	0.604911	0.847007	3.319856	86.97526	5.587692	3.270182

Variance Decomposition of π

Period	S.E.	GDP	Ms	r	π	ε
1	0.815902	5.347212	0.008609	0.781704	93.86247	0.000000
2	0.849280	5.067898	0.032976	1.089841	93.36313	0.446160
3	0.897952	8.709096	0.095573	2.212675	84.19355	4.789109
4	0.914145	9.643559	0.100398	2.439890	81.32040	6.495750
5	0.918317	9.976762	0.108318	2.833052	80.61632	6.465546
6	0.919755	10.06480	0.108986	3.014058	80.36528	6.446873
7	0.920773	10.11842	0.108881	3.148975	80.19102	6.432703
8	0.921191	10.13435	0.110372	3.203817	80.12441	6.427048
9	0.921429	10.14055	0.112694	3.234346	80.08686	6.425549
10	0.921538	10.14190	0.115160	3.246751	80.07094	6.425251

Variance Decomposition of ε

Period	S.E.	GDP	Ms	r	π	ε
1	26.31731	15.08804	0.086028	4.380632	10.52988	69.91541
2	26.87557	14.54382	0.084962	4.322127	10.33896	70.71013
3	27.25952	14.71548	0.082588	4.239346	10.05077	70.91182
4	27.32176	14.81080	0.083523	4.248248	10.02432	70.83311
5	27.32443	14.81579	0.083539	4.256222	10.02498	70.81946
6	27.32797	14.82055	0.083517	4.271523	10.02241	70.80201
7	27.32955	14.82294	0.083612	4.277549	10.02174	70.79416
8	27.33048	14.82405	0.083809	4.281475	10.02131	70.78936
9	27.33086	14.82419	0.084030	4.282986	10.02132	70.78747
10	27.33108	14.82422	0.084224	4.283831	10.02132	70.78641

Table 5 shows impulse response functions during 2006-2013. Upon examining the table, it can be said that exogenous factors considerably determined money supply and GDP. The variable having the largest proportion within the prediction error variance for interest rate (% 84) is money supply. It is seem that variable having the largest proportion within the prediction error variance for inflation (% 40) is money supply. Interest rate follows it. In addition, it is observed that GDP having the largest proportion within the prediction error variance of exchange rate with % 9 comes at the first place and interest rate and inflation follow it.

Table.5 Variance Decomposition (2006-2013)

Variance Decomposition of GDP

Period	S.E.	GDP	Ms	r	π	ε
1	197008.7	100.0000	0.000000	0.000000	0.000000	0.000000
2	197064.3	99.94653	2.35E-05	0.004119	0.005508	0.043817
3	197200.2	99.80948	0.014154	0.123478	0.008972	0.043920

4	197631.2	99.40517	0.026882	0.408800	0.082827	0.076320
5	198333.9	98.86761	0.027352	0.614144	0.082950	0.407947
6	198343.6	98.86108	0.027855	0.614117	0.088259	0.408686
7	198385.3	98.82827	0.028709	0.642105	0.092109	0.408808
8	198444.0	98.78223	0.032228	0.678438	0.092719	0.414381
9	198482.3	98.74512	0.035222	0.697453	0.094428	0.427777
10	198484.3	98.74331	0.035250	0.699205	0.094455	0.427775

Variance Decomposition of Ms:

Period	S.E.	GDP	Ms	r	π	ε
1	9.782133	0.231901	99.76810	0.000000	0.000000	0.000000
2	9.799293	0.233039	99.57991	0.117498	0.058014	0.011536
3	9.869035	0.335071	98.79467	0.731520	0.063801	0.074934
4	9.881128	0.334628	98.72985	0.729950	0.130684	0.074885
5	9.921379	0.463484	98.11047	0.761818	0.134004	0.530224
6	9.923220	0.476468	98.07999	0.766427	0.133966	0.543151
7	9.929222	0.503657	97.97128	0.821860	0.133804	0.569396
8	9.929630	0.503689	97.96323	0.824725	0.135413	0.572944
9	9.931524	0.514699	97.92623	0.825543	0.136699	0.596833
10	9.931569	0.514733	97.92543	0.825539	0.137172	0.597123

Variance Decomposition of r

Period	S.E.	GDP	Ms	r	π	ε
1	3.047362	3.878391	84.72724	11.39437	0.000000	0.000000
2	3.057169	3.877021	84.26468	11.77296	0.085136	0.000196
3	3.080107	3.960532	83.41593	12.35880	0.100442	0.164296
4	3.087341	3.946063	83.33224	12.38872	0.112072	0.220900
5	3.104806	3.902200	82.45354	12.72196	0.110837	0.811467
6	3.105955	3.901898	82.40250	12.74451	0.116385	0.834714
7	3.109755	3.940012	82.21390	12.88385	0.121876	0.840364
8	3.110078	3.940267	82.19824	12.88325	0.132745	0.845500
9	3.113331	4.001524	82.02701	12.96388	0.133723	0.873857
10	3.113410	4.001713	82.02285	12.96429	0.137189	0.873957

Variance Decomposition of π

Period	S.E.	GDP	Ms	r	π	ε
1	0.690607	0.118997	44.66015	0.608589	54.61226	0.000000
2	0.713168	0.149472	41.94789	0.712994	57.17723	0.012415
3	0.720176	0.244522	41.15267	1.587931	56.80669	0.208186
4	0.729398	0.331506	40.40710	3.555568	55.41490	0.290927
5	0.735450	0.326232	40.55083	4.251024	54.56372	0.308189
6	0.736164	0.333503	40.52113	4.348858	54.47829	0.318224
7	0.737533	0.438130	40.37405	4.556621	54.27655	0.354650
8	0.738537	0.494356	40.26941	4.732544	54.13016	0.373530
9	0.738854	0.500948	40.23735	4.804122	54.08403	0.373547
10	0.738911	0.501251	40.23120	4.816294	54.07657	0.374688

Variance Decomposition of ε

Period	S.E.	GDP	Ms	r	π	ε
1	87.90641	19.08980	0.099145	3.684784	2.707497	74.41878
2	88.00636	19.05842	0.098920	3.681330	2.762348	74.39898
3	88.03427	19.05095	0.099375	3.707513	2.777476	74.36468
4	88.24374	19.00472	0.105478	4.026841	2.773175	74.08978
5	90.70337	19.25165	0.112830	3.892776	2.884312	73.85843
6	90.72031	19.24954	0.116777	3.894468	2.883878	73.85534
7	90.72586	19.24801	0.117459	3.894265	2.886118	73.85415
8	90.73300	19.24583	0.118439	3.893665	2.885665	73.85640
9	90.86286	19.26832	0.118240	3.892517	2.894379	73.82654
10	90.86488	19.26755	0.118435	3.892447	2.894295	73.82727

Conclusion

In the aftermath of 2008 Global Crisis it is concluded that price stability isn't enough to ensure macroeconomic stability. Most of the countries began to implement macroeconomic policies covering

both price stability and financial stability. In this study covering the period of 1995:I-2013:IV, we can divide this period into two sub-periods namely the period of 1995:1- 2005:IV and 2006:I-2013:IV and the model of Panel VAR has been used to analyze whether there is an important difference between the effect of pre-crisis and post-crisis monetary shocks on real and nominal variables. According to obtained results money supply is exogenous and it doesn't have an important effect on other macroeconomic variables during 1995-2005. However, in this period, while a negative interest rate shock effects GDP negatively at first, this effect turns into positive after the second quarter. While a positive interest rate shock effects on inflation and money supply positively, it effects exchange rate negatively. However this effect goes away in a short time. On the one hand negative GDP shocks have a positive effect on inflation, on the other hand a positive GDP shock effects on interest rate negatively. But this effect is temporary. While inflation has a positive effect on interest rate, exchange rate shocks effect interest rates negatively.

During the periods 2006-2013, it is concluded that causal relations disrupted and although money supply shocks negatively affected interest rate in this period changes in interest rates couldn't increase GDP. From all this results concluded that it can be interpreted that unconventional monetary policies tools which are used to increase effectiveness of monetary transmission mechanism aren't able to achieve their purpose.

Because of the increased risk resulting from financial instability, bottlenecks in domestic credit volume and the increase in fiscal dominance are the main causes of decrease in the efficiency of monetary transmission mechanism.

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The Relationship between Perception and Utilization of Export Incentive Schemes among Indian Exporters

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Abstract

The current study evaluated the utilization of Export incentives of Indian Government. A model conceptualizing the relationships between incentive's awareness, utilization, perception of utilization on export increase and overall performance was tested. Results indicated that awareness impacted availing of incentives which led to the perception of enhanced export sales. Enhanced export sales led to the perception of an enhanced overall performance of the firm. The smaller firms believed more as compared to larger firms on the effect of export incentives on export sales growth. Recommendations have been provided to remove lacunae in various incentive schemes and improve utilizations.

Keywords: Export Promotion Programs (EPP); Export Incentive Schemes (EIS) or Authorizations; Trade Performance; Structural Equation Modeling; India

Introduction

The Balance of Trade situation is a concern for Indian policymakers (Fig 1). The imports have risen sharply as compared to exports during the 2005-08 periods leading to an increase in trade deficit. The worrying trend however is the declining trend of authorizations from 2006-07 periods onwards which is cause for concern and focus of this study.

Fig. 1.
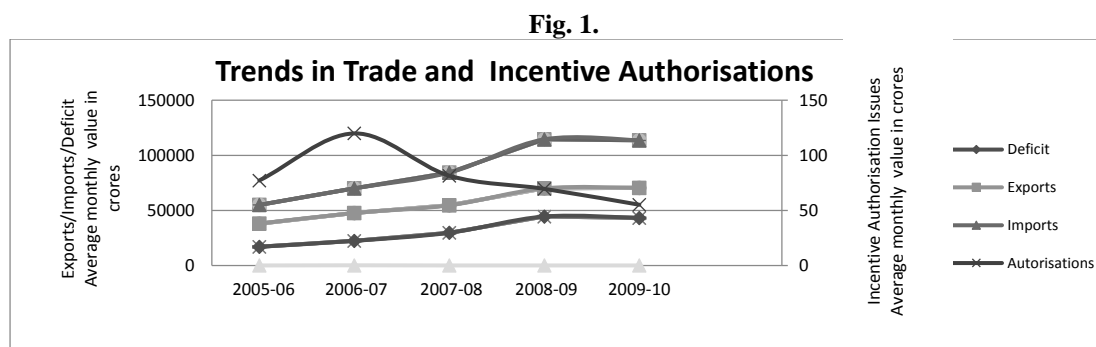
Further probe in the authorizations of various export promotion schemes of Indian Government confirmed the lack of incentive utilization by exporters depicted by declining trend or stagnation in majority of the schemes.

Fig. 2.

Number of Authorisations Under Various Scemes
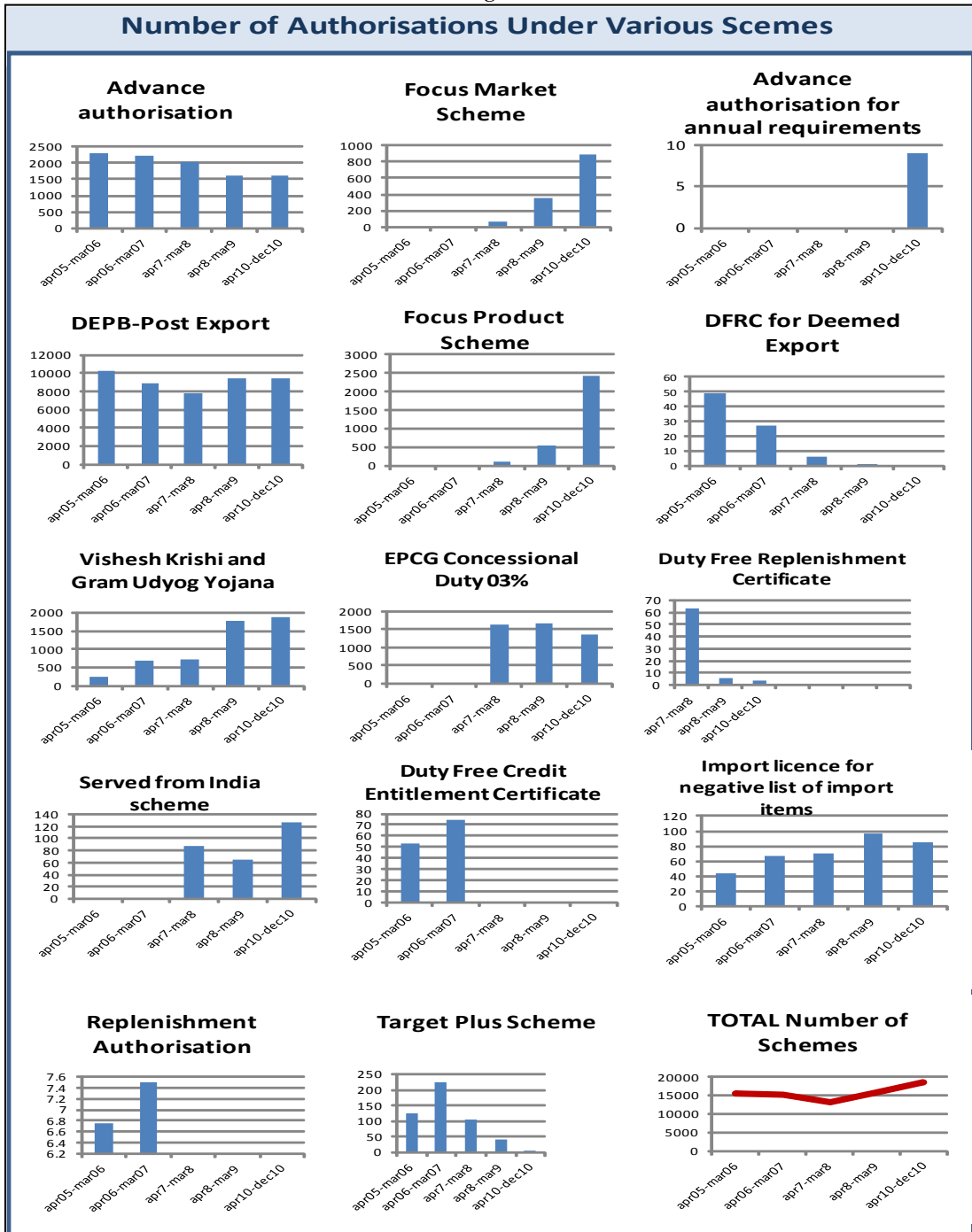
Utilization varied across various schemes during the period. The schemes which directly enhanced margins were utilized more as compared to others. Business houses have been found to prefer short term benefits over long term incentives (Rolfe et al, 2004). This poses serious questions on policy support, design of schemes and implementation process. This lead to the investigation of all EPP's of Indian Government and the exploration for understanding reasons of ineffective policy initiatives. The investigation had dual objective of collectively stating the failure and the reasons thereof plus commenting on individual EPP's also, wherever possible.

Literature Review:

Successful exporting depends on the favourable macro-level and micro-level environment in the international trade. The policies of a government are to some extent responsible for the general economic health of a nation. Encouraging exports is a primary concern of most governments. The governments

play a key role in stimulating the international business activity of domestic firms through Export Promotion Programs (EPP's) (Weaver et al, 1998; Palmer et al, 1991). The export incentives are classified as input, output and externality related. Most governments followed a wide range of measures, mainly in the form of indirect production subsidies to exports and on intermediate inputs and factors used by exporters (Falvey and Gemmell, 1990).

The benefits provided by the exporting activity encourage public policymakers to implement EPPs with an objective of helping firms improve their competitive advantage and ultimately enhancing their performance in the international arena (Lages and Montgomery, 2003). This approach to the stimulation of export promotion through incentives, both direct and indirect, is a common practice. For this the states across the globe plan various Exports Promotion Programs as a corrective measure to enhance their export performances. Apart from enhancing export performance, the export and investment incentives given to private houses positively affect the employment scenario thereby serving both the economic as well as the social agenda of Governments (Yavuz, 2010). Other benefits accruing to the Governments in encouraging export include developing energy efficient solutions because of the need for exporting better energy efficient products (Urpelainen, 2011). In the specific context of developing countries, the export promotion definitely raises employment and productivity, but these measures may not stimulate the supply to the domestic market and improve domestic welfare (Yin and Yin, 2005). The developed countries do export promotion guided by the motives of improvement in the balance of payments, the strengthening of the competitive position of selected industries, creation of new industries and securing of national employment. The developing nations are guided by the motive of improving the economic situation (Gronhaug and Lorentzen, 1983). From a firm's perspective, EPPs can reinforce the motivations of a firm to export. These motives include exploitation of technological advantage, the ability to offer unique products, the maximization of comparative marketing advantages, and the need for market diversification (Seringhaus and Rosson, 1998).

The usage of government export promotion programs is an important export success factor among others because foreign market environment, which include various macro-level uncontrollable factors, act as export barriers for the exporting firms (Gencturk and Kotabe, 2001; Marandu, 1995). Globerman and Shapiro's (2002) study confirmed the availability of world class governance infrastructure as the most important variable in the exporting process. EPP's are very important for the success of exporting firms but there are high chances of failure of initial exporting efforts if the firms are under prepared in their marketing efforts. The product quality along with the Governments foreign trade policy is critical determinants of success. The governments need to provide export incentives to firms and encourage them for exports only when they are ready for it. The Government policy makers should initially handhold the exporters in the first export orders for a better success rate (Aaby and Slater 1989; Lawrence and Finn, 1980). The use of EPPs provide better payoffs in terms of a firm's competitive position (overall strength of the firm) and efficiency (profitability), and is reflected in the export performance of existing exporters and encourages more firms to export (Gencturk and Kotabe, 2001). Apart from Government incentives, internal success factors such as firm's own resources, managerial attitude towards export, etc. are crucial for the export success of a firm. Utilizing Lumpkin and Dess (1996) Entrepreneurial Orientation (EO), it was observed that the firms with a moderate to high entrepreneurial rating tended to be high export performers (Alexopoulus, Coulthard, and Terziovski, 2004). Exporters' perceptions of factors such as the importance of the level of export development, product type and, to a lesser extent, company size also contribute in influencing export success (Katsikeas, Deng and Wortzel, 1997).

In the managerial dimension, extensive empirical research confirmed that younger, better-educated managers with a good command of foreign languages were more successful in exporting (Watson, 2006) and are less likely to get influenced by export barriers. Smaller firms have higher mortality and their success is a key focus area for developing countries. Access to information, access to capital and the level of education increase the probability of a small enterprise to be an exporter, apart from business linkages such as networks, joint ventures and subsidiaries play an important role in increasing the probability to export of small enterprises (Gumede, 2004).

Ample evidence exists of the positive effect of EPP's on increasing export performance. In U.S., the Domestic International Sales Corporation (DISC) was helpful in attracting small firms into export marketing while the large multinationals used it as tax shelter (Samuel, 1980). The magnitude of the foreign tax credit (FTC) incentive was positively related to the proportion of exports versus foreign sales MNC's use to serve their foreign markets. A positive relation between tax rate and exports also exists at the country level and this relationship was significantly stronger after the tax reform act (TRA) 1986 triggered a production related tax incentive for MNC's than before TRA (Kemsley, 1996). Taxes also induced U.S. multinationals to prefer exports rather than foreign production to serve unaffiliated

customers in foreign markets (Kemsley, 1998). Liou (2011) discovered that the series of measures including export credit subsidies helped to initiate the early private investment and allow domestic wind capacity to see stable growth. There is, however, some evidence also indicating weak or no relationship between export performance and export incentives. Export Growth of Latin American countries of Argentina and Brazil was not excessively dependent on export incentives. It was a natural consequence of maturing industrial growth process, aided by the substantial expansion in international trade (Teitel and Thoumi, 1986). This study casts doubts on imitation of Latin American countries of the South East Asian countries strategy of export orientation largely based on unskilled labor intensive industries. In Iran, the export stimulating policies had hardly any impact other than the oil exports sector. The inconsistency in monetary policy, which is often independent of the export policy, was the reason for this (Molana and Mozayani, 2006). Similarly, the anti-export bias in South Africa's trade policy during the 1990's was discovered lesser than as claimed in the empirical literature. The sectoral output growth didn't strongly correlate with the prevailing trade incentives of the 1990's (Rangasamy, 2005). In another similar result from Pakistan, the manufactured exports in the aggregate expanded in response to the export incentive schemes at a rate higher than the growth in world trade in manufactures but not in any proportion to the differential export incentives (Islam, 1969). Ahmet et. Al. (2010) elaborated the structure and incentives provided by the Turkey Government to boost exports. It illustrated the importance of export related incentives for SME's and the recommendations to increase their efficiencies.

The mixed response to EPP's indicate that although there is a general agreement that the EPP's are helpful in growing exports yet they alone are often not sufficient and the relationship is sometimes non-linear. Mustafa (2011) posited that export incentives alone would not lead to desired growth unless accompanied by improving educational attainment and providing incentives to attract new businesses. In Nepal, the policy reforms to boost exports had little impact on actually increasing export. It was opined that without adequate infrastructural and institutional changes, mere policy incentives may not result in the export increase. The findings may be cautiously generalized for similar other underdeveloped countries (Sharma et al, 2001). Similarly, the reasons for export include attractive export incentives in Malaysia. However, there were many other variables like export minded management, reduction in tariff in target countries etc. (Ahmed et al, 2006).

The usage of EPP's are not uniformly distributed. A study on the acceptance of Foreign Sales Corporation incentives in US by the small versus large exporters revealed that the proportion of exporters availing incentives was significantly higher in large exporters as compared to small exporters. The reasons for small exporters not availing benefits included complexity of the regulations governing the formation and operation of the new vehicles (Timothy, 1986). In another study, it was established that the major export incentive schemes were found to provide the highest subsidies to those exports with the highest total import components. The development policy in this case failed to adequately encourage those producers with relatively higher levels of domestic value-added to export their products (Hecox, 1972). The effect of removing export incentives is also felt unequally among large and small firms. In a study in Pakistan, it was observed that the removal of subsidized export credit resulted in a significant decline in the exports of privately owned firms whereas the large publicly listed and group network firms were unaffected (Zia, 2008).

A lot of research has taken place in examining the reasons of failure of EPP's. There was high utilization of ASEAN Free Trade Agreements (AFTA) by Philippines industries. However, a lack of information was identified as the biggest barrier to FTA use. Other impediments include the availability of export-processing zone incentive schemes, low most-favored-nation rates, delays in origin administration, rent seeking behaviour and nontariff measures in other partner country markets (Wignaraja et al, 2009). In the developing countries context, (Kedia and Chhokar, 1986) results indicate that export promotion programs have not been very effective due to the lack of familiarity on the part of existing or potential exporters of the existence or the availability of these programs. However, there is deficiency of scientific enquiry into linkages between awareness of government sponsored incentives for traders, its consumption and trade performance in developing countries context. In another study, the adequacy of government export incentive programs as well as managers' awareness of these incentives were found to be the two important determinants of success of export development strategies. Level of export interest, export exploration and company size determine the awareness levels (Erdogan et al, 1995). The import barriers act as the most important external factor of failure of EPP's. The destructive effect of trade barriers is still a hot topic in the free trade discussion and the GATT-rounds (Cateora, 1973). Finger (1976) concluded through their research that tariffs matter and when the tariffs were reduced by developed countries the developing country exports responded significantly by increasing their exports. Protectionism is adapted by developed and developing countries both to protect indigenous

manufacturers. However, initially the protection may help but there should be a gradual removal of export substitution and other mechanisms to make the industry stand on its own in a globally competitive market. As a case in point, the export substitution policy of Indonesian Government initially worked well for the plywood industry but later resulted in the industry becoming noncompetitive (Thee, 2009). The Governments also have to tread a cautious path. On one hand they have to increase exports. On the other hand, if the import restrictions are lowered for components etc. to realize export growth, it is strongly resisted by the local manufacturers (Wemelsfelder, 1956). Herander (1986) posited that export drawback on one hand encourages domestic exporters by reducing the component costs but have the potential of affecting the business of domestic component manufacturers negatively. However, research also indicates that removal of import substitution restrictions could also become the second best alternative to protection. The reasoning for it being that in the absence of import liberalization, protection offsets are becoming vital to the competitiveness of exports. As exports rely increasingly on the imports of intermediate goods, a better strategy for Government could be import liberalization meant for exports (Herdershee, 1993). Harris and Schmitt (2000) examined discretionary and strategic FDI incentives in the export sector relative to a non-interventionist policy. They observed that there is a shift in trade policy regime toward strategic promotion of exports on intermediate inputs.

The current trend, in the sphere of EPP's is therefore multifaceted with most Governments trying to give export incentives in whatever possible manner yet on the other hand trying to protect local industries. The business houses generally prefer short term benefits, such as upfront tax holidays with high rates imposed at the end of the period as compared to the long term incentives such as relatively low rates without tax holidays (Rolfe et al, 2004). Nouira et al (2011), using a sample of 52 developing countries, showed that during the period 1991-2005 a number of countries has used undervaluation to foster the price competitiveness of manufactured exports. The smaller countries like Dominican Republic, El Salvador etc. have requested the WTO to allow them to continue with their tax incentives and subsidies given to the local businesses although under WTO they were required to eliminate these tax incentives and subsidies by 2007 (Chavarría, 2007). One counterview posits that import protection itself negatively affects the export promotion. For some countries the bias imparted by tariffs on exports was substantial (Tokarick, 2007). Another similar study observed the same phenomenon in Indonesia and Thailand. It was observed that the low protection was a key facilitator of rapid export growth in multinational enterprises (MNE) in the electrical, office and computing machinery industry. At the same time, high protection reduced incentives to export among MNE's in the transportation machinery industry (James and Ramstetter, 2008).

Governments are still aggressively pursuing EPP's. For example, the Brazilian Government is giving tax incentives for increasing software exports (Munhoz et al, 2005). Togo is promoting export processing zones (EPZs). Results indicate efficiency being lower for firms operating outside the EPZ, when compared to firms operating within it. At the same time, firms within EPZ offered little job security as compared to the ones outside (Agbodji, 2010). The US is still predominantly giving tax incentives as a means to boost exports. However, providing export subsidies by embedding them in the tax system introduces several distortions. The use of simple ad valorem alternative is advocated (Desai and Hines, 2001). Kleiman and Pincus (1982) posit that instead of a flat rate export subsidy a regression subsidy schedule is a better alternative. A flat rate scheme would involve larger payments to firms with larger exports which will lead to the criticism of the scheme favouring already successful. Wang (2009) concluded in his study that under an oligopolistic market structure, simultaneous elimination of export subsidies is not optimal for the subsidizing countries or for their exporting firms. They argue that reoccurrence of export subsidies is indeed possible even though all the exporting countries will be forced to withdraw subsidies together under WTO.

Research Methodology

Fair representation of all sectors of the Indian Economy was desired. For this, the ten major exporting sectors were chosen which include Agriculture and Allied Products; Iron Ores, Minerals and Metals; Leather and Leather Products; Gems and Jewelry; Engineering Goods; Machinery and Instruments; Textiles including RMG and Accessories; Drugs, Pharmaceuticals and Allied products; Chemical, Petro-chemicals and Related Products and Information Technology and Information Technology enabled Services.

Fig. 3.

Sample Category Representation
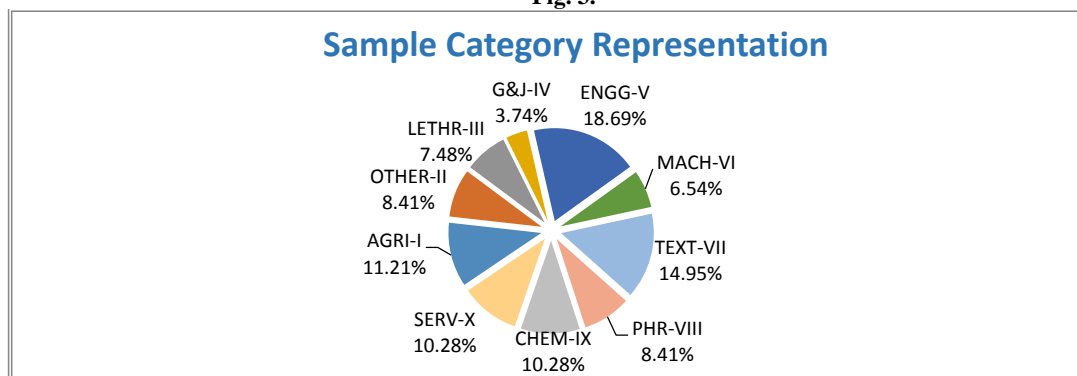
The responses from senior most executives of the exporting organizations were considered as the closest proxy of the firm level responses to the schemes floated by the policy makers. The export incentives were classified as General Export Incentives and Special Export Incentives. The general incentives were applicable to all exporters whereas the special incentives were exclusive for certain class of exporters only like a exporters in a specific sector.

Exploratory study indicated a lot of resistance of export companies in revealing any financial figures (even tentative) of the various export schemes availed and relevant export figures to establish any kind of relationship. Even overall increase in the last years export figures was also not provided. Only an approximation of absolute export sales was provided by respondents with a lot of reluctance. With this limitation, it was decided to keep the questionnaire simple by asking only dichotomous (yes/no) least resistible questions. It was further decided to ask the respondents' opinion of the impact of incentive schemes on export sales growth rather than asking the actual values of the incentives availed and corresponding actual value of export.

There is deficiency of scientific enquiry into linkages between awareness of government sponsored incentives for traders, its consumption and trade performance in developing countries context (Kedia and Chokkar, 1986). The study was aimed to fill this research gap. Thus, the objective of research was to know the awareness, usage and resulting perception of the effect of usage of EPP's. After the initial information, the goal was to find the relationships and the strength of relationships between these variables. The first objective was achieved by using Descriptive analysis. The second objective was achieved by making an intuitive model of the variables (Fig 4) and modifying it using SEM to get the best fit model.

For the first objective, there were four hypotheses:

H11a: There is not enough awareness of EPP's among exporters.

H21a: Not enough exporters are availing EPP's even after awareness

H31a: EPP's are perceived by exporters as ineffective policy tools for increasing export sales.

H41a: EPP's are perceived by exporters as ineffective policy tools for increasing overall firm performance

For the second objective, the intuitive model proposed is given as under with six hypotheses for the six regression paths. The hypotheses can be expressed as:

H1a: Awareness doesn't lead to availing of EPP's

H2a: Availing of EPP's doesn't significantly increase export sales

H3a: Availing EPP's doesn't significantly increase overall performance of the   firms

H4a: Increase in export sales doesn't significantly increase overall performance of the firms

H5a: There is no relationship between the perception of increase in export sales and   actual export turnover of a firm.

H6a: There is no relationship between the perception of increase in overall performance of the firm and actual export turnover of a firm.

Fig. 4.

Intuitive Model with Hypotheses
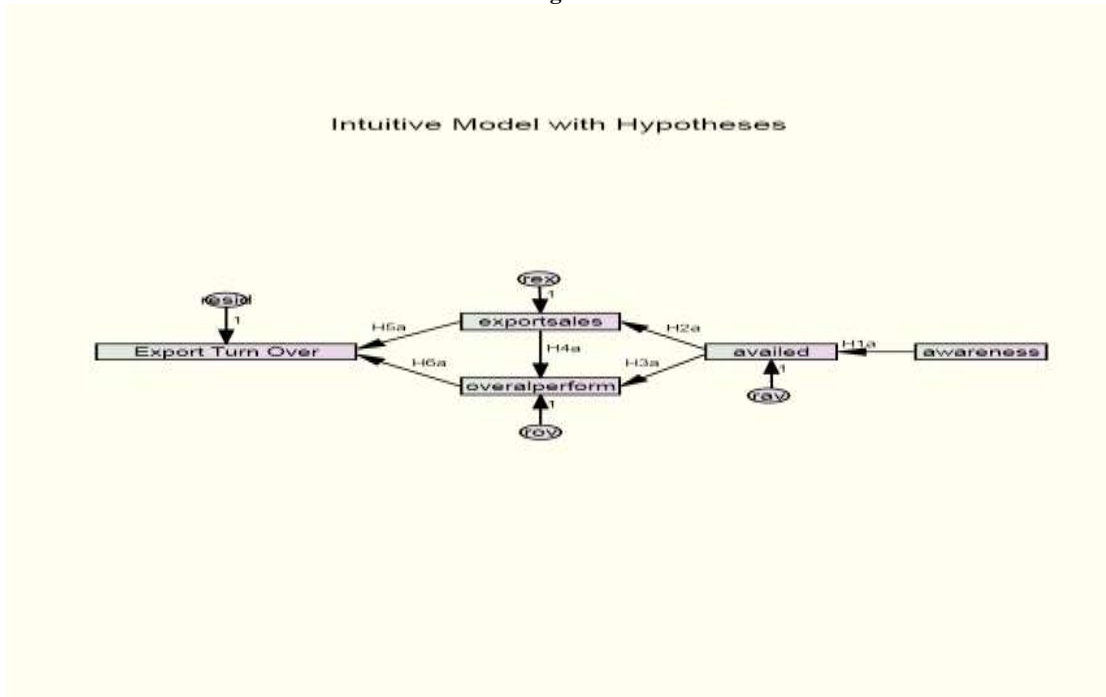
Participants, procedure and data collection: The data was collected using quota sampling. It was the endeavour to collect almost equal number of respondents of the 10 sectors chosen for study. The average percentage was close to the desired 10% for the 10 sectors. The minimum and maximum, however, was approximately 4% (Gems and Jewelry) and 19% (Engineering) respectively. The study is a cross sectional study and the sample size consists of 107 exporters. Personal interview technique was adapted to administer the structured questionnaire. Apart from the structured questionnaire, the exporters were further asked for an in-depth interview regarding their assessment of various schemes. Forty nine exporters responded to the request. The categories by the turnover follows more or less the actual distribution in the population with around 70% tiny and small scale industries and 20% medium with around 10% large industries.

Fig. 5.
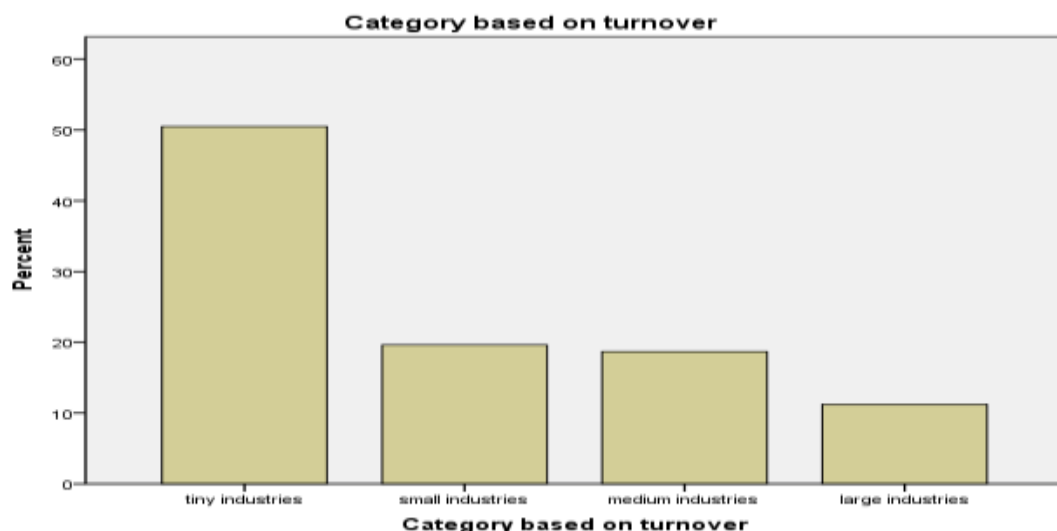
Analysis and Findings:

Descriptive analysis including chi-square for single sample was conducted to test the hypothesis pertaining to the first objective. The percentage expected of awareness, availing etc. was decided at 75% in line with the expectations of experts. Although, in the information age there should be almost 100%

awareness about the various EPP's and schemes, yet the Government officials and experts opined that a 75% achievement can be considered good enough in the Indian context.

Only 52% of the schemes selected for study had significant high awareness. 36% of the schemes had significant low awareness and the remaining 12% had almost equal percentage of aware and not aware respondents. The hypothesis (H11a) could not be rejected that the schemes are having low awareness.

The results indicate that the exporters have significantly availed only one scheme that is Duty Entitlement Passbook (DEPB). A large percentage (64%) schemes are such where significantly large percentage of exporters have not availed the schemes. Another 32% schemes have equal percentage of exporters who availed and who didn't avail of the scheme. The hypothesis (H12a) was accepted that EPP's are not being availed by exporters.

The only scheme which the exporters significantly perceive to have contributed to export sales growth is DEPB. Eighty percent of the schemes are perceived by a significantly large proportion of exporters as not contributing to export sales growth. A few schemes like EPCG, Pre Shipment Finance, Post Shipment Finance and DBK (total 16%) have the perception equally divided with half believing they have contributed and the rest half believing they haven't contributed to export sales growth. The hypothesis (H13a) was accepted that the exporters perceive that EPP's are not increasing exports significantly.

Not a single scheme is perceived to be contributing significantly to the overall performance of the company. As earlier, 80% of the schemes are perceived by a significantly large portion of the population as not contributing significantly to the overall performance of the company. The rest 20% schemes have mixed perceptions with half of the exporters believing they contribute and the rest half believing that they have not contributed to the overall performance of the company. The hypothesis (H14a) was accepted that the exporters perceive that EPP's are not increasing overall performance of the firms significantly.

Structural Equation Modeling (SEM) was used to conduct the hypotheses testing related to the proposed intuitive model. SEM was used as there were observed variables acting both as dependent and independent variables. It was intuitive to argue that the awareness will lead to the usage of EPP's, which in turn should lead to export sales growth, in turn enhancing the overall performance of the organization. It was believed that the usage of EPP's may also result in overall performance of the organization. A relationship was also expected between the export sales increase and actual export turnover. Similarly, the relationship was also postulated between overall performance and actual export turnover.

Table 1.

Chisquare = 0.669, Degrees of Freedom = 4, P Value = 0.955

H#	Relationship	Estimate	P Value	Hypothesis Support
H1a	Awareness -> Availed	0.604	***	Yes
H2a	Availed -> Export Sales	0.74	***	Yes
H3a	Availed -> Overall Performance	-0.051	0.1	No
H4a	Export Sales -> Overall Performance	1.036	***	Yes
H5a	Export Sales -> Export Turnover	306.78	0.364	No
H6a	Overall Performance -> Export Turnover	-191.663	0.569	No

The model was a good fit but three hypotheses out of the six were found to be insignificant. Three hypotheses were rejected at .05 levels. As postulated, the awareness of EPP's led to the usage of EPP's significantly. The usage of EPP's significantly increased the managers' perception of the EPP's increasing the export sales. There is only 90% confidence that availing of EPP's improved the overall performance of the firm. However, as expected, there is a significant relationship between the increased export sales leading to improved overall performance. A relationship was expected between perception of increased export sales and actual export sales but this relationship was not found to be significant. A better measure could have been the relationship between increased export sales and the perception of EPP's increasing export sales. This could not be achieved as only the total export sales data could be extracted from the companies with much difficulty. The relationship between the export sales and the perception of increased overall performance was also not found to be significant.

Fig. 6.

Fig VI: Final Model with Standardized Regression Coefficients and Squared Multiple Correlations
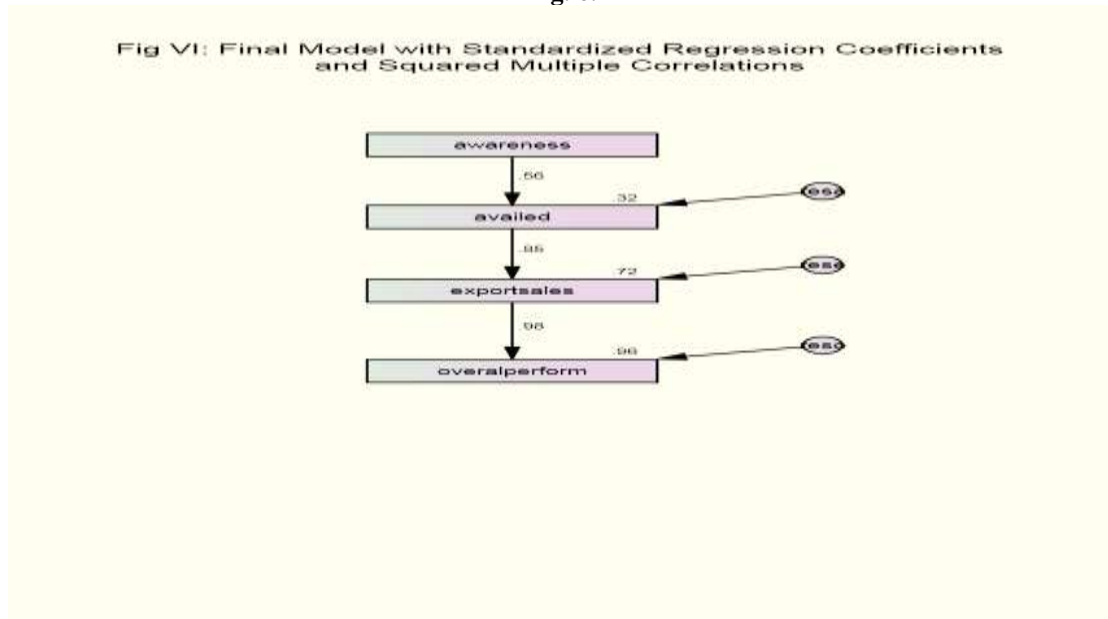
Modifications were done in the model and all three non-significant relationships were dropped. The new model was also found to fit the data well with p value for CMIN 0.955. The GFI and AGFI measures were 0.997 and 0.991 again indicating a good fit. Similarly, the NFI and RFI both were above 0.95 indicating a decent fit. Parsimony adjusted measures PNFI and PCFI were recorded close to 0.4 indicating a moderate fit. Overall the model can be considered to have fitted the data well providing credibility to the path diagram tested. Out of the three relationships, the best explained relationship is **export sales** -> **overall performance** with 96% of the variance in overall performance accounted by the export sales. In the second relationship **availed -> export sales,** 72% of the perception of export sales increase can be accounted for the incentives availed. However, the third relationship, **awareness -> availed**, the percentage of variance explained in availed is only 32% by awareness. This indicates the presence of other variables deciding the availing of export incentives other than just awareness.

This model was further used to compare the differences between the small and large companies. The data was median split based on the export turnover resulting in two groups. The small firms were having annual export turnover of $ 7.5 million or less. A hypothesis that the relationship is similar for both small and large firms came very close to rejection at 95% level with the p value being .053. On further inspection, it was observed that there was a big difference between the large and small firm managers regarding the relationship between availed EPP's and their effect on increasing export sales. The small firms considered a greater effect of availed EPP's on export sales growth as compared to large firms. The other two relationships were similar in both small and large firms.

Qualitative research conducted using in depth personal interviews with exporters, concerned government officials and others engaged in trade facilitation like banking officials, export promotion agencies, boards, insurance agencies and port authorities etc., revealed their respective positions that mostly corroborate the quantitative findings using SEM approach.

Table 2.

Incentive Scheme	Exporters Suggestions (n= 49)		Government Officials Suggestions (n= 7)		Other Stakeholders Suggestions (n= 13)	
	Proportion of respondents suggest continuation	Suggestions	Proportion of respondents suggest continuation	Suggestions	Proportion of respondents suggest continuation	Suggestions
EPCG (Export Promotion Capital Goods)	61%	Lost attraction, Should be at Zero duty rate	100%	Serving the purpose	54%	lost its attraction, zero duty
DEPB (Duty Entitlement Passbook)	90%	The uncertainty of the date till continue Criticized, less scope of future planning	29%	WTO non-complaint	54%	Should be Discontinued
AA (Advance Authorisation)	100%	Good but Procedural, Practical Problems	71%	Clubbing of AA with AA for annual requirement can't be permitted	38%	Good, No comments
DFIA (Duty Free Import Authorisation)	97%	Procedure, some suggested merger with AA	43%	Successful	23%	Good, Positively accepted by members
PRE-SF (Pre- Shipment Finance Scheme)	71%	Less popular, hazardous to use, Banks of denied support	100%	No reports of difficulties in administering the scheme were known	54%	Divided opinion on availability in FC
POST-SF (Post Shipment Finance Scheme)	71%	Same as Pre-Shipment	100%	Same as Pre-SF.	50%	Same as Pre-SF
ST (Service Tax Exemption)	100%	Good. Received No comments.	100%	Serving its purpose	100%	Good, No Comments
VAT (Value Added Tax Exemption / Refund)	85%	Most Refunds not happening, should either be converted into exemption or made available by DGFT not by State govt.	0%	Revision in implementation is being considered by increasing the involvement of state governments.	0%	should be governed by Central govt.
DBK (Duty Drawback Scheme)	78%	Procedural difficulties	100%	Serving its purpose	100%	exporter friendly scheme, uncertainty in date of extension criticized.
MDA (Market Development Assistance)	44%	Less known, limit of 15 crores should be increased to 30 , or 50 crores for eligibility.	100%	Needs more attention and active participation by EPCs	100%	More funds required for notice-able results, raise funds allocation.
MAI (Market Access Initiative)	0%	Almost not known	100%	Serving its purpose	100%	Allocate more funds.
SFIS (Served from India Scheme)	84%	Known among service providers, duty scrip should be transferable, otherwise useless	100%	Serving its purpose	100%	Include more services
VKGUY (Vishesh Krishi and Gram Udyog Yojana)	95%	Good, add more products	100%	Serving its purpose	100%	Good. No comments
FPS (Focus Product Scheme)	60%	Good, add more products	100%	Serving its purpose	100%	Add more products
FMS (Focus Market Scheme)	70%	Good, add more markets, proof of landing on buyers territory is hazard, increase scrip	100%	Serving its purpose	100%	Add more markets
HIGHTECH	0%	no feedback	-	More products shall be considered in future	-	Only 1 respondent knew the scheme. Add more industries and products.
G&J (Schemes for Gems and Jewellery)	100%	Individual exporters should be allowed import of metals, gold etc. directly.	100%	Serving its purpose	67%	Allow individual import of Raw material.
EOU (Export Oriented Unit)	50%	Lost attraction, 8 visited exporters either surrendered or had plans to surrender EOU status, other schemes more attractive.	86%	Policy is being Revised	46%	lost its relevance
SEZ (Special Economic Zone)	54%	Administrative and procedural problems, lease-hold and no ownership of acquired land was biggest deterrent. Captive SEZs spoiling show, less interested State govt.	57%	Serving its purpose	31%	Do not offer enough incentives for motivating existing units lot, moving away from its original objective when introduced because of captive SEZs
BTP (Bio Technology Park)	-	5 respondents had heard about the scheme but knew no details.	100%	Serving its purpose	100%	Add more products.
STP (Software Technology Park)	100%	Membership rules are stringent, higher membership Fees to get RCMC de-motivated, new IT supplier less aware about the services STPs provide.	100%	Serving its purpose	44%	Add more parks.
EHTP (Electronic Hardware Technology Park)	100%	Little known scheme, generate awareness	100%	Serving its purpose	29%	Add more facilities and Popularize
SHS (Status Holder Scheme)	57%	Almost no benefit they realized.	100%	Serving its purpose	38%	Benefits are negligible, no much distinction between SHS and non-SHS, Has no impact in foreign markets.
GCS (Gold Card Scheme)	52%	withdraw, no uniform rules across different banks defeat the objective of the scheme, Pre-SF not available even to GC holders	100%	Serving its purpose	50%	Mandatory guideline by RBI should be ther for easy access from across banks.
TEE (Towns of Export Excellence)	-	Almost not known outside TEE exporters, Increase awareness. Add more servies.	100%	Serving its purpose	31%	Make it popular among others.

Interviews revealed that various internal factors of firms primarily contribute to the performance in exports, for example entrepreneurial characteristics of the exporter, managerial attitude towards exports, exporting experience etc. apart from firm's resources. Since the schemes supplement the efforts of

exporters, any deficit in competitive strengthen is less likely to be remedied completely by the incentives because these have a short term scope and most of these schemes are normally reviewed by policy makers on certain periodicity. Smaller firms can also outperform bigger firms as far as sales growth (percentage increase) influenced by incentive schemes is concerned but may be reverse if absolute figures are considered because smaller firms have lesser turnover to assess annual performance improvements. Except few schemes, exporters seem to be dissatisfied with the many incentive schemes rolled out by the state whereas the policy makers seem to believe in the effectiveness and necessity of the incentive schemes. Interviews with individual smaller exporters revealed the fact that there is limited inclusion of majority exporter's voice in policy design and initiatives. In some schemes particularly which are sector specific, there could be a lack of awareness and possibly weak policy implementation, procedural complexities or misjudgment of the state officials about the utility of incentives or authorizations.

Discussion and Implications

The poor awareness is a major concern for policy makers in developing economies (Kedia and Chhokar, 1986; Erdogan et al, 1995). This is one of the biggest reasons of failures of EPP's in growing economies. The reasons for exporters not availing benefits included complexity of the regulations (Timothy, 1986) and non-availability of good governance (Globerman and Shapiro, 2002). Based on the analysis and taking clue from hierarchy of effects model, the following strategy is recommended for specific schemes.

Table 3.

Diagnosis	Low Awareness	Low Availing	Low export/overall performance increase perception
Schemes	MAI, SFIS, VKGUY, HTPS, G&J, BPT, STP, EHTP, TEE, FPS, FMS, GCS	DFIA, MDA, EOU, SEZ	DEPB
Remedy	Advertising, Seminars, Symposiums, etc. to increase awareness	Simplifying the schemes, reducing red tape and corruption	Conducting causal research to prove the EPP's effect on export/overall performance and disseminating the successful exporters' stories

The SEM results were in line with expectations but SEM results along with the descriptive analysis reveal some important conclusions. The effect of availed EPP's on export sales growth perception was found to be significant in SEM but direct questioning with respondents indicated otherwise. Similarly, the relationship between export sales growth perception and overall performance perception was found to be significant. However, the direct questioning of respondents indicated no effects of EPP's on overall performance. This might be due to the fact that short term benefits like profits or tax savings are the primary focus of firms over long term effects on sales increase or overall performance (Rolfe et al, 2004). We have more reasons to believe in line with the existing literature (Samuel, 1980; Kemsley, 1996 & 1998; Liou, 2011) that the EPP's have benefitted the firms but the poor perception needs to be addressed by proper research and dissemination of information. Smaller firms perceived the effect of EPP's on performance more than larger firms. The policy maker should concentrate on smaller firms more as literature indicates larger firms taking more benefits of EPP's as compared to smaller firms (Timothy, 1986; Zia, 2008). Smaller firms success is a key focus area for developing countries including India. The Government should increase access to information and level of education. This will increase the probability of a small enterprise to be successful in export (Gumede, 2004). Effective incentive policy should be grounded in concerns about competitiveness of exporters for long term sustainability particularly young and smaller firms. This should be done through inclusion of majority voice in policy making and timely review as there is a risk of incentive scheme losing shine soon due to extreme competition and new challenges in international trade.

The firms also need to have an Entrepreneurial orientation. The managerial attitude towards export incentives which was found lackluster is crucial for export success of the firms (Alexopoulus et al, 2004). The exporters should also check their negative perceptions with objective data to have a more balanced view of EPP's as exporters' perceptions of factors such as the importance of the level of export assistance also contribute in influencing export success (Katsikeas, Deng and Wortzel, 1997). Firms should also see that the top executive is young, better educated and has command over foreign languages etc. which are crucial for export success (Watson, 2006).

Limitations

Inability to extract firm level financial data of the value of various schemes availed, exports sales increase, overall performance indicators is a limitation of the study.

Future Directions

Causal research design may be applied to clearly establish the effect of EPP's on export sales as well as overall performance of the firms.

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Appendix

Abbreviation (Incentive Scheme)	
EPCG (Export Promotion Capital Goods)	VKGUY (Vishesh Krishi and Gram Udyog Yojana)
DEPB (Duty Entitlement Passbook)	FPS (Focus Product Scheme)
AA (Advance Authorisation)	FMS (Focus Market Scheme)
DFIA (Duty Free Import Authorisation)	HIGHTECH
PRE-SF (Pre- Shipment Finance Scheme)	G&J (Schemes for Gems and Jewellery)
POST-SF (Post Shipment Finance Scheme)	EOU (Export Oriented Unit)
ST (Service Tax Exemption)	SEZ (Special Economic Zone)
VAT (Value Added Tax Exemption / Refund Scheme)	BTP (Bio Technology Park)
DBK (Duty Drawback Scheme)	STP (Software Technology Park)
MDA (Market Development Assistance)	EHTP (Electronic Hardware Technology Park)
MAI (Market Access Initiative)	SHS (Status Holder Scheme)
SFIS (Served from India Scheme)	GCS (Gold Card Scheme)
	TEE (Towns of Export Excellence)

Changing Risk Perception and Interactions among the Global Markets: Asymmetric Causilty Approach

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Abstract

Blue Chip Indexes are composed of stocks belonging to big companies. These stocks are defined riskless and follow a stable course. In this context Blue Chip Indexes are suitable instruments especially investors avoiding risk. On the other hand destructions like 2008 Global Crisis and Eurozone Crisis changed the investors' risk perception. In consequence of changing risk perception investment desicions differentiated and it caused a big change in the indexes. The aim of this paper is to assess the degree of integration or segmentation among the regional Blue Chip Indexes after the changing risk perception by conducting asymmetric causality test. In the study two periods were determined including 2006-2014 according to 2008 Global Crisis. For these periods causilty relations among the four big regional Blue Chip Indexes (STOXX North America 50, STOXX Asia 100, EURO STOXX 50, The STOXX Latin America 50 Index) were analysed with assymetric causilty test and important results were revealed. Differently from the Granger and Toda Yamamoto Causilty test, asymmetric causality test separates the potential causal impact of positive shocks from the negative ones. This is an important issue to take into account because economic agents usually respond more to negative news than to good ones in absolute terms. In this context it is thought that to use asymmetric causality approach is more suitable in crises periods while analysing interactions.

Keywords: Asymmetric causality, Global markets, Blue chip indexes, Crises, Risk perception,

Luxury Consumption Behaviour in Mainland China: the Roles of Brand Commitment and Brand Trust

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Abstract

The Chinese luxury brands market is one of the world's largest, although it is relatively young and marketers have some work to do in fully understanding consumer motivations and associated commitment to specific brands. This study investigates future luxury consumption behaviour through an evaluation of brand commitment and trust. Survey data has been gathered using self-completed questionnaires encompassing 494 Chinese consumers within four luxury Beijing shopping malls. Confirmatory factor analysis and structural equations modelling are used to analyse the data. The findings reveal that brand affect positively influences brand trust and commitment. Trust impacts on commitment for luxury brands. Trust and commitment positively impact on purchase intention and willingness to pay price premiums for these items, with willingness to pay also positively impacting on purchase intention. This study establishes a research model endorsing the tandem roles of brand trust and commitment in enhancing potential future luxury brand consumption. The research was restricted to Beijing, where patterns of consumer behaviour are transferable to other major Chinese "*Tier 1*" cities. The findings provide a basis for extended research into "*Tier 2/3*" settings, where disposable income and consumer relationships with luxury brands are less mature but nonetheless are expected to grow

Keywords: Luxury brands, Brand commitment, Brand trust, purchase intentions, China.

Introduction

While the markets for luxury brands have exhibited decline in the leading global economies of the USA, Japan and Western Europe, the developing markets located in Asia, particularly China are moving in the opposite direction (Li, Li & Kambele, 2012). The same authors recognise a lack of cultural commonality between the leading Western nations and China, which has the potential to influence the behaviour of the latter in their luxury brand relationships. Particular aspects to consider here include a desire to achieve value for money complemented by only modest levels of loyalty to particular brands (Suessmuth-Dyckerhoff, Hexter & St-Maurice, 2008). China, has perhaps not yet reached fully maturity in its luxury brand relationships, where it would take the existence, acceptance and utilisation of such brands as a matter of course and certainty (Chadha & Husband, 2006). As such, the retention of degrees of novelty may still have a part to play in the country's luxury brand consumption, especially as its markets grow and expand beyond the initial confines of its most high profile cities.

Two central aspects that are crucial in building a sustainable market for brands are consumer-held brand trust and brand commitment, with both constructs being the engine room for various desirable brand outcomes (Chaudhuri & Holbrook, 2001). There is criticism, however, that the former is accepted as "a given" especially when the brands in question have a high profile with a clear record of market success (Hur, Kim & Kim, 2014). The objective of the research presented here is to assess how pleasure generated by brands for their consumers (assessed by brand affect) can foster feelings of consumer-held trust and commitment towards these brands, and by doing so, enhance future behaviours around repeat purchase and a willingness to pay higher prices. The setting of this assessment is the increasingly important Chinese "*Tier 1*" marketplace, which for a period of time has been central to China's move towards leading the world in consumption of luxury brands and related accessories, as highlighted above and adds to a growing body of research in this interesting and fast moving setting.

Literature Review

Luxury - Concept and Definition

The assessment of luxury is longstanding and the concept is highly complex with a number of research contributions focussing on both definition fluidity and subject composition exclusively (Miller & Mills, 2012b). Indeed, these authors reported on the development of the numerous dimensions of the luxury

definition, although they conclude that represents only a limited steer away from the longstanding concept of "*old luxe*". Across the numerous studies on luxury brands, some commonality within the presented definitions exists. Phau and Prendergast (2000) encompass a number of commonly recognized attributes around being exclusive, identifiable, having awareness and transmitting a perception of quality, thereby generating loyalty in their customer base and a particular level of sales.

There are examples where the concept of luxury and its definition extended beyond this. Berthon, Pitt, Parent and Berthon (2009) suggest luxury is a concept, with Kapferer and Bastien (2009) purporting that luxury goods have moved away significantly from function and having a closer proximity to art. Miller and Mills (2012a) give evidence of the importance of both innovation and leadership as determinants of luxury brand acceptance. However, concept, art and innovation stand independent of deeply held consumer expectations in this arena, given the lack of compromise on quality in luxury brands in the pursuit by suppliers for contemporary and alternative agendas such as ethics or sustainability (Achabou & Dekhili, 2013).

In the relatively newer markets, China and other parts of South-East Asia included, consumption of high-value brands which have an image based on some or most of these attributes afford consumers with an opportunity to exhibit relatively newly acquired wealth and status, and by doing so, make a positive impression on peers and achieving a desired social acceptance or role (Chadha & Husband, 2006; Hung *et al.*, 2011). This may be achieved without recognition of the brand or its status (Zhan & He, 2012), let alone a full understanding of the complexity and esteem placed on the brands.

Brand Affect and its Relationships with Trust and Commitment

Vigneron and Johnson (1999) point to two essential personal outcomes or internal, consumer-specific emotions that are potentially realised through luxury consumption, namely hedonism and perfectionism. Consumers exhibiting the former value a luxury brand that can stimulate personal feelings and positive emotions, the latter in contrast put greater emphasis on product quality underpinning their experience. The impact of emotional feelings on future purchasing behaviour represents the focus of this particular study. While value for money, status or product quality are important determinants of consumer trust and longer-term commitment, the "softer" aspects of personal feeling have an important contribution here. As a measure of this, brand affect represents an established assessment of how luxury brands can, through ownership and utilisation, engender positive emotions within their consumers (Chaudhuri & Holbrook, 2001; 2002). In their assessment of affect, Chaudhuri and Holbrook (2001) developed a three-item measurement encompassing consumers experience of being "*happy*", "*feeling good*" and realising "*pleasure*", which was subsequently applied in their further research (Chaudhuri & Holbrook, 2002). Their subsequent empirical evidence pointed to positive values enhancing affect, which in turn uplifted levels of consumer trust, from which one of a number of beneficial outcomes was an increase in purchase loyalty (Chaudhuri & Holbrook (2001). The potential strength of such an association may seem surprising, given the differences in tangibility between the two constructs, with Chaudhuri and Holbrook (2001:82) indicating brand trust encompasses "*a process that is well thought out and carefully considered, whereas the development of brand affect is more spontaneous, more immediate, and less deliberately reasoned in nature*". In more recent times, this positive link between enhanced good experiences that are brand-specific and trust, via satisfaction en-route to enhanced loyalty (Hur *et al.*, 2014) and commitment (Atwal & Williams, 2009) have been established. Much the same has been reported from a South Korean perspective, where brand affect has a significant influence on brand trust, which subsequently has a significant positive impact on brand loyalty, the latter representing an assessment of commitment. Interestingly from the same study, the direct affect to loyalty path was non-significant; perhaps emphasising that affect alone will not enhance loyalty, with trust having to play a significant mediating role (Song, Hur and Kim, 2012). This relative order of strength and importance concurs with the earlier work referenced above, collectively pointing to the crucial part played in developing consumer trust (Chaudhuri & Holbrook, 2001; 2002). In much the same way, brand trust and affect can make a significant tandem contribution in enhancing brand commitment in markets where the customer base is relatively risk averse (Matzler, Grabner-Kraüter & Bidmon, 2008). In terms of assessing affect, two hypotheses follow:

    H₁: Brand affect positively influences brand trust positively.

    H₂: Brand affect positively influences brand commitment positively.

Brand Trust and Brand Commitment, Purchase Intentions, Willingness to Pay a Price Premium

Chaudhuri and Holbrook (2001, p. 82) define brand trust as "*the willingness of the average consumer to rely on the ability of the brand to perform its stated function*". There is longstanding consideration of trust in consumer behaviour research that places it at the heart of a number of crucial branding relationships (Moorman, Deshpande, & Zaltman, 1993; Morgan & Hunt, 1994). High levels of trust underpin relationships that are much valued by the consumer (Morgan & Hunt, 1994). An important outcome of higher-level trust is increased consumer loyalty (Chaudhuri & Holbrook, 2001) or commitment (Delgado-Ballester & Munuera-Aleman, 2001; Chaudhuri & Holbrook, 2002; Albert, Merunka & Valette-Florence, 2013). The direct relationship between brand trust and brand commitment is, according to Albert and Merunka (2013), mediated by "*brand love*", which given the definitions presented appears to be a more passionate and intimate variant of affect. The significance of this relationship in no way contradicts the brand affect to trust path highlighted earlier, since it would suggest a feeling of consumer happiness and brand liking leads to trust, which in turn, enhances the closeness and intimacy of the consumer to the brand. In assessing the impact of trust on the differing dimensions of commitment, Louis and Lombart (2010) identified that trust represented a significant antecedent for both affective and continuance commitment, suggesting that enhanced trust measured in terms of being credible, benevolent and acting with integrity would impact positively on the former dimension, with significant associations also being determined for the latter, credibility apart. To some extent, this contradicts Bansal, Irving and Taylor (2004), who report that trust only impacts on the affective strand of commitment.

Trust also contributes significantly to various outcomes that specifically gauge future brand consumption. In particular, brand trust has a direct and significant influence on both purchase intention and willingness to commit to price premiums as well as an indirect impact, mediated by enhanced consumer identification with the brand. Even stronger are the direct influence of commitment exhibited by the consumer on both of these outcomes (Keh & Xie, 2009). The indirect impact of trust, via loyalty, to desirable consumer outcomes pertaining to market share and relative price are reported by Chaudhuri and Holbrook (2001), whilst an enhanced trust-commitment relationship has a positive impact on the "*price tolerance*" of the consumer (Delgado-Ballester & Munuera-Aleman, 2001), with a significant relationship between brand loyalty and equity being reported by the same authors (Delgado-Ballester & Munuera-Aleman, 2005). From the evidence presented here, the following hypotheses are posited:

  H_3: *Brand trust positively influences brand commitment positively.*

  H_4: *Brand trust positively influences consumers' purchase intentions positively.*

  H_5: *Brand trust positively influences consumers' willingness to pay a price premium positively.*

Brand Commitment and Purchase Intentions, Willingness to Pay a Price Premium

A robust consumer-brand relationship has at its core a high level of brand commitment (Morgan & Hunt, 1994; Fullerton, 2005), with key components of this relationship being a commitment on the part of the consumer to maintain, prolong and value this link (Moorman, Zaltman & Deshpande, 1992). Commitment has been defined and measured as multi-component construct, typically in two components, its affective and continuance dimensions (Fullerton, 2005). The subsequent impact of enhanced brand commitment is extensively recognised in the literature, in particular the impact this has on key indicators of brand performance such as future purchasing intentions and consumer propensity to pay premiums for these brands. Commitment relates in a positive sense to desirable consumers including an intention to repurchase and a demonstration of greater robustness to price changes (Musa, Pallister & Robson, 2005), the commitment to price tolerance path according with the empirical evidence provided by Delgado-Ballester & Munuera-Aleman (2001). Direct impact from customer commitment to both purchase intention and price premiums are presented by Keh and Xie (2009), whilst both Albert *et al.* (2013) and Albert and Merunka (2013) demonstrate a positive path between commitment and consumer willingness to pay price premiums. Fullerton (2005) has evidenced a significant relationship between brand commitment and intention to repurchase, this being subsequently endorsed from an online consumer perspective by Kim, Choi, Quall and Han (2008). Consequently, this underpins the following hypotheses:

  H_6: *Brand commitment influences consumers' purchase intentions positively.*

  H_7: *Brand commitment influences consumers' willingness to pay a price premium positively.*

Fig. 1. The Conceptual Model
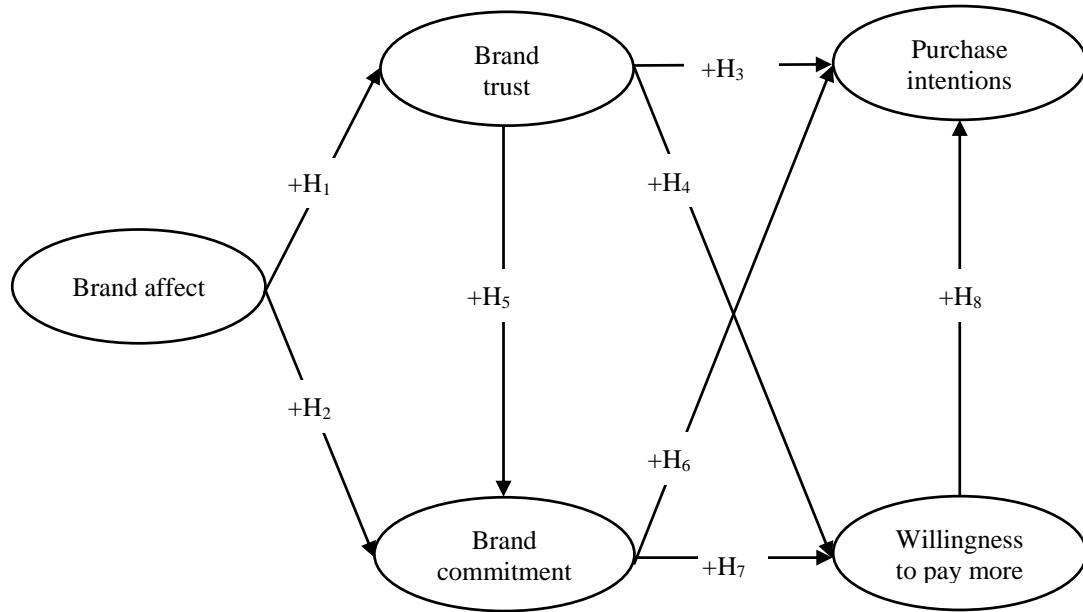
Willingness to Pay a Price Premium and Purchase Intentions

Willingness to pay price premiums and purchase intentions represents accepted indicators of actual future consumption behaviour. The former assesses customers' acceptance of higher prices relative to alternatives and beyond the utilitarian value of the brand (Netemeyer *et al*., 2004). Customer attitudes towards their brands and perceptions of brand value drive this willingness to provide premium payments (O'Cass & Choy, 2008; Li *et al.*, 2012) although in the context of non-Western consumers seeking symbolic value, the delivery of paying extra for brands can only be realised if individual perception of self-status is enhanced (O'Cass, Lee, & Siahtiri, 2013). A positive path between willingness to pay more and purchase intentions has been presented by Netemeyer *et al.* (2004). Therefore, the following hypothesis is proposed:

H8: Consumer willingness to pay a price premium influences their future purchase intentions positively.

These hypotheses combine to given the research model presented in Figure 1. Whilst the model has been proposed in the context of this study, it represents a combination of various paths previously assessed and validated in previous research. The trust-commitment-willingness to pay link has been evaluated by Albert *et al.* (2013), trust-commitment by Morgan and Hunt (1994), as well as by Chaudhuri and Holbrook (2001; 2002). Chaudhuri and Holbrook (2002) also evaluated the affect-commitment path.

Research Methods and Procedures

Research Design and Sample

Primary data were obtained through a self-completed, but research team supported questionnaire. This was developed from an amalgamation of established, validated and reviewed scale sets in English, translated for this particular study into Chinese, before back-translation. The two English variants of the survey instrument were evaluated to ensure translation accuracy with any deviations being identified and modified accordingly, a process consistent with that deployed in similar and recent studies (Bian & Forsythe, 2012; Zhan & He, 2012), notwithstanding earlier criticisms of the approach and its limitations with the promotion of alternative techniques (Douglas & Craig, 2007).

The work to be presented here represents the second of a two-stage primary study. The first stage was a pilot whose aim was to assess the survey instrument (and component parts) including the accuracy and quality of translation and to gauge the ease to which consumer-intercept within the confines of a shopping mall would realise a sufficient number of survey participants. The assessment of the data was used to ensure validity in the constructs adopted. The substantive or stage-two study involved data capture from four shopping malls located in the CBD vicinity of Beijing, which is home to a significant number of its

key outlets that specialise in luxury western brands. These comprise numerous expected names such as Burberry, Cartier, Chanel and Louis Vuitton, dealing in items such as jewellery, leather goods, perfumes and clothing, consistent with a range of comparable research (Hung *et al.*, 2011; Zhan & He, 2012). Again, face-to-face implementation of the survey instrument took place, thereby maximising potential participation, and by ensuring any ambiguities were addressed, realising as full a completion of the questionnaires as possible. The key ethical issues involved in the work were addressed through access permission to collect the data in the described locations, granted during the pilot process and ensuring all participants were both willing to contribute and were aged 18 years or more. In conclusion, 700 consumers participated, with 545 respondents completing the questionnaire. These were screened for missing data (given the requirements of the software for CFA/SEM analysis), which provided a complete sample of 494 questionnaires, representing a 78% response rate. Analysis of this final consumer group by demographics indicate 63% were female; 78.5% aged under 35 years old; 85% are employed; 40.5% educated to Masters' level or higher and 50.8% earning upwards of 150,000 RMB per year. This profile of the luxury brand consumer has some accordance with those participants profiled in various analogous Chinese research that has been recently published (Deng, Lu, Wei & Zhang, 2010; Zhan & He, 2012; Li *et al.*, 2012).

Construct Measurements

The model developed comprised a range of scale sets that have been developed, validated and presented in various literatures pertaining to consumer marketing. The assessment of both brand affect and brand trust adopted the scales from Chaudhuri and Holbrook (2001, 2002). For trust, the item "*this brand is safe*" seemed unsuitable to the study context and was replaced by "*I feel that I can trust this luxury brand completely*", from Han and Sung (2008), whose further assessment of trust resonates strongly with that of Chaudhuri and Holbrook (2001). Brand commitment, comprising sub-dimensions of affective and continuance was provided by Fullerton (2005). Regarding outcomes of consumer experience and consumption, purchase intention has been assessed through a scale developed by Dodds *et al.* (1991) and adopted for Chinese-based work by Bian and Forsythe (2012). Willingness to pay price premiums has been evaluated through the employment of the scale presented by Netemeyer *et al.* (2004). The suite of scales and corresponding items are listed in Table 1 and each were measured in this study using seven-point Likert scale, comprising strongly disagree to strongly agree, the latter being consistent with many marketing studies.

Data Analysis

The assessment of the survey data involved the dual approach of confirmatory factor analysis (CFA) and structural equations modelling (SEM). This was undertaken through the parallel application of SPSS 21.0 and Amos 21.0. CFA is employed in this dual analysis to provide model validation through assessment of reliability, validity and goodness/badness-of fit of its five constituent constructs. For a model deemed suitable, SEM is then employed to evaluate the hypotheses H_1-H_8 presented as a summary of the literature review and represented by the paths in the conceptual model displayed above as Figure 1 (Hair *et al.*, 2010). Within this analysis, Maximum Likelihood Estimation (MLE) is adopted, and regarding the model's parameters (i.e. number of constructs and items), guidelines for the various fit indices proposed by Hair *et al.* (2010, p. 672) are presented in brackets [] below.

Analysis and Findings

For the reliability of the model proposed and presented in Figure 1, a very high degree of internal consistency has been achieved within each of the five presented constructs, the respective reliability coefficient values ranging from 0.841 to 0.910 [Hair *et al.* (2010) propose values exceeding 0.7]. Nomological validity is supported for this model, given the positive and statistically significant correlations that have been determined between each of the five defined constructs, consistent with their definitions and that of the constituent items. Further assessment of the correlation output supports discriminant validity for the model, since the AVE values in each case are larger than the related squared inter-construct correlations, thus implying that each construct has greater internal association than that exhibited across to the other defined constructs. Face validity is assumed in this application, given the adoption of validated scales from previous academic research. To assess the construct validity of the model, the factor loadings pertaining to the 20 items measured range from 0.606 to 0.931 [0.7 or higher]; with 18 out of 20 achieving this suggested minimum value, thus pointing to the acceptance of convergent validity. Convergent validity is supported further through the assessment of Average Variance Extracted (AVE) values presented in Table 2. These range from 0.573 to 0.746 [all should be 0.5 or higher]. The

model has a normed chi-square statistic value (χ^2/df) of 2.343 [between 2 and 5]. The respective fit indices accord with the guidelines presented by Hair *et al.* (2010). The goodness-of-fit indices are GFI=0.929, AGFI=0.906 and CFI=0.966 [all greater than 0.9]. The complementary badness-of-fit index RMSEA=0.052 [under 0.08]. Combined, the fit statistics indicate a robust model.

The verification of model reliability, validity and fit permits the assessment of the model paths by means of SEM. There has been confirmation of a positive and statistically significant path between "*brand affect*" and "*brand trust*" (0.1% level) and between "*brand affect*" and "*brand commitment*" (1% level), the latter upholding the findings of Chaudhuri and Holbrook (2002). The standardised regression weights for the two paths are 0.433 and 0.239 respectively, with Table 3 presenting the details. The analysis presented supports H_1 and H_2. The paths between "*brand trust*" and each of "*brand commitment*" (supporting Morgan & Hunt, 1994; Chaudhuri & Holbrook, 2001; 2002), "*purchase intentions*" and "*willingness to pay more*" are significant at 0.1%, with respective regression coefficients of 0.598, 0.482 and 0.466, suggesting each path relationship is strong. This allows the support of H_3, H_4 and H_5. The significance of the whole path from trust to commitment to willingness to pay endorses the earlier work of Albert *at al.* (2013). For the relationships between "*brand commitment*" and both "*purchase intentions*" and "*willingness to pay more*", these are both positive and statistically significant (0.1% level), the respective regression coefficients being 0.132 and 0.553, indicating the greater relative strength of the latter. Considering both paths, H_6 and H_7 are supported. There is also support for H_8, given the positive and significant (0.1% level) path between "*willingness to pay more*" and "*purchase intentions*", with its regression weight of 0.110. The final assessed structural equations model is presented in Figure 2 displaying the path coefficients and indicating their level of significance. The squared multiple correlations relating to "*purchase intentions*" and "*willingness to pay more*" are 0.501 and 0.426, respectively, suggesting a decent level of explanation from the SEM

Table 1. Scale Items, Factor Loadings and Reliability Measures by Constructs

Constructs	Scale items	Factor loading	Construct reliability
Brand affect	This luxury brand makes me happy.	0.829	0.859
	I feel good when I use this luxury brand.	0.878	
	This luxury brand gives me pleasure.	0.744	
Brand trust	I trust this luxury brand.	0.745	0.841
	I rely on this luxury brand.	0.606	
	This luxury brand is an honest brand.	0.854	
	I feel that I can trust this luxury brand completely.	0.797	
Brand commitment	I feel emotionally attached to this luxury brand.	0.763	0.910
	This luxury brand has a great deal of personal meaning for me.	0.885	
	I feel a strong sense of identification with this luxury brand.	0.787	
	It would be very hard for me to switch away from this luxury brand right now even if I wanted to.	0.796	
	My life would be disrupted if I switched away from this luxury brand.	0.794	
	It would be too costly for me to switch from this luxury brand to other luxury brands.	0.728	
Purchase intention	If I was going to purchase a luxury product within the next 12 months, I would consider buying this luxury brand.	0.673	0.848
	If I was shopping for a luxury brand within the next 12 months, the likelihood I would purchase this luxury brand is high.	0.743	
	My willingness within the next 12 months to buy this luxury brand is high.	0.828	
	The probability that I would buy this luxury brand within the next 12 months is high.	0.801	
Willingness to pay a premium price	The price of this luxury brand would have to increase significantly before I would switch to competitors' brands. [a]	0.796	0.898
	I am willing to pay a higher price for this luxury brand compared with substitute brands.	0.861	
	I am willing to pay a lot more for this luxury brand than competitor brands.	0.931	

[***] Significant at p<0.001, [a] Reverse-scored item

Table 2. Construct Reliability and Validity

	CR	AVE	MSV	ASV	Inter-construct Correlations				
					BA	BT	PI	BC	WTP
Brand affect (**BA**)	0.859	0.671	0.269	0.163	0.819				
Brand trust (**BT**)	0.841	0.573	0.378	0.252	0.519	0.757			
Purchase intentions (**PI**)	0.848	0.583	0.378	0.283	0.439	0.615	0.764		
Brand commitment (**BC**)	0.910	0.630	0.379	0.230	0.322	0.403	0.525	0.793	
Willingness to pay (**WTP**)	0.898	0.746	0.379	0.238	0.293	0.445	0.536	0.616	0.864

CR=Construct Reliability, AVE=Average Variance Extracted, MSV=Maximum Shared Squared Variance, ASV=Average Shared Squared Variance.

Table 3. Analysis of the Paths in the SEM Model

Hypothesis	Path	Beta coefficient	Direction	Sig-level	Decision
H_1	Brand affect → Brand trust	0.433	Positive	< 0.001	H_1 supported
H_2	Brand affect → Brand commitment	0.239	Positive	< 0.01	H_2 supported
H_3	Brand trust → Purchase intention	0.482	Positive	< 0.001	H_3 supported
H_4	Brand trust → Willingness to pay more	0.466	Positive	< 0.001	H_4 supported
H_5	Brand trust → Brand commitment	0.598	Positive	< 0.001	H_5 supported
H_6	Brand commitment → Purchase intention	0.132	Positive	< 0.001	H_6 supported
H_7	Brand commitment → Willingness to pay more	0.553	Positive	< 0.001	H_7 supported
H_8	Willingness to pay more →Purchase intention	0.110	Positive	< 0.001	H_8 supported

Fig. 2. The Final Structural Equations Model
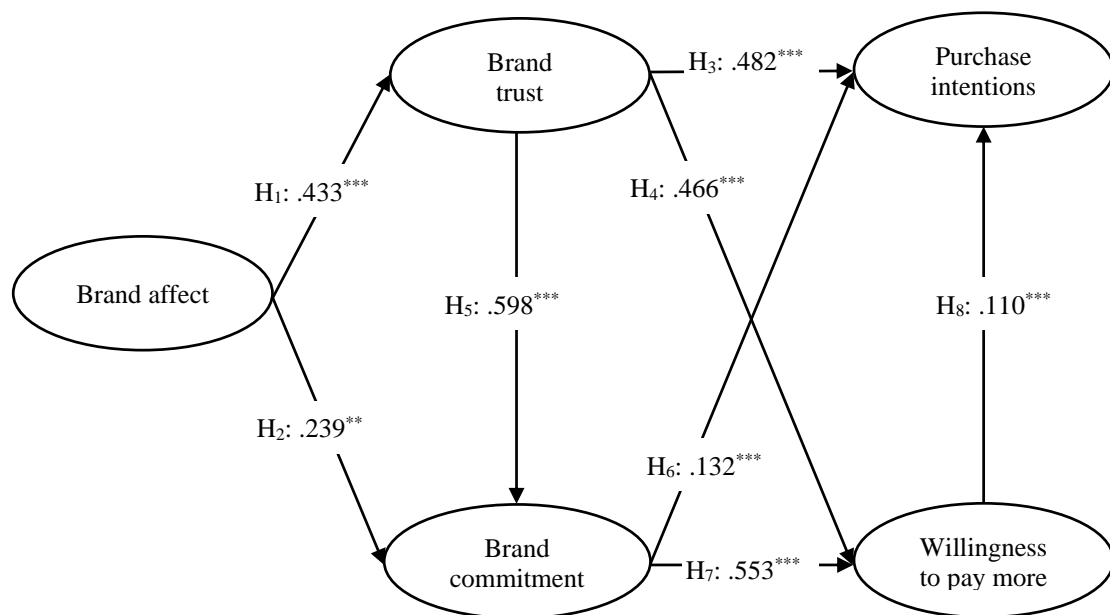
→ Significant relationship, *** Significant at p<0.001, ** Significant at p<0.01.

Conclusions and Further Study Opportunities

The study presented is based on a sample of consumers sufficiently large, providing a complete data set that has permitted the application of CFA/SEM to a model of some complexity (Hair *et al.*, 2010), comprising five constructs and twenty items which was reliable, valid and affording a high level of fit. The survey participants had a demographic profile whose dominant characteristics exhibited some similarity with previous luxury brand studies from this part of the world (Gao, Norton, Zhang & To, 2009; Zhan & He, 2012), thereby allowing some careful inference to be made from its findings with respect to other leading "*Tier 1*" marketplaces.

The findings highlight the importance of the tandem role of brand trust and brand commitment on the potential behaviour of consumers with an experience and predisposition towards luxury brands. This future behaviour has been assessed by means of willingness in the future to pay top prices for these brands and purchase intention. In short, the greater the trust engendered, the greater the commitment of the consumer. With higher levels of trust and commitment, a greater propensity towards these future actions is advocated. The need to develop trust and commitment through effective marketing strategies

is therefore clear and a significant way of doing this is to make sure the consumer is happy, feels good in the deployment of the brands and realise pleasure through these interactions. This is supported in the context of this particular research, given the relative strength of the trust-based relationships exhibited in both Table 3 and Figure 2. The study does however recognise its limitations given the narrow consideration of antecedents to trust and commitment relative to their understood complexity and that these constructs are arguably consumer outcomes in themselves. The importance in particular for the different dimensions of value, namely functional, social and symbolic on these consumer outcomes, be it direct or indirect should also not be underestimated in the context of this market and research arena (Li, Robson and Coates, 2013). The relative strength of the relationships, as depicted by the path coefficients presented in Table 3 and Figure 2 reinforce the particular importance played here by the development of consumer trust in these brand relationships (Chaudhuri and Holbrook, 2001; 2002; Song *et al.*, 2012), although this counters the findings of Keh and Xie (2009) who found the paths involving customer commitment to be stronger.

The Chinese marketplace is large and heterogeneous, given its geographical spread that encompasses various cultures, languages and levels of spending power. As such, inference from one of the leading or "*Tier 1*" settings beyond this and the other prominent locations is probably ill advised. However, there is anticipated movement of the luxury brand suppliers into the next set of leading locations, the "*Tier 2/3*" settings in the reasonably near future. As such, the nature, strength and transferability of the identified relationships between the constructs of brand affect, trust, commitment and future consumer behaviour could be re-assessed in one or more of these developing luxury brand markets, where potential consumers may have initial excitement at their new spending opportunities but coupled with a natural conservatism in their consumer behaviour (Suessmuth-Dyckerhoff *et al.*, 2008), although currently there has to be understandable reservations about transferring the findings directly to these newly developing locations for luxury brand outlets and markets given the recognisably lower levels of disposable income and living standards (Zhan & He, 2012).

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Human Behaviour Experiments for the Time Series of Stock Price with Fundamental Information

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Abstract

We conducted the subjects experiments based on the cognitive psychology as follows. We prepared an artificial stock price time series and artificial fundamental information on the computer. The subjects were students of Economics, and had elementary knowledge about the stock market. First we had a experiment on technical analysis. We showed to subjects the graph of time series of a stock price, and required the subjects predict the price on future. (This is one trial, and 23 trials repeated for each subject. The time series are changed on each trial). The time series of stock price serially plotted on the computer display controlled Visual Basic program. And subjects predict the stock price on future by pointing on the touch panel display. We also had another experiment on same time series but with fundamental information about the stock. And we observe how subjects change their prediction. The result suggests that most of human ignore past fundamental information and have concern only recent fundamental information. (And they concern technical information of past). The purpose of this research is not to predict a stock price, but to investigate how human predict a stock price given certain information.

Keywords: Technical Analysis, Fundamental Analysis, Human Behaviour, Psychology, Experiment

Introduction

There are many pragmatic and theoretical researches on stock price time series. Pragmatic researches of predicting the stock price of the future are roughly divided into two types. One is a technical analysis and another is fundamental analysis. In the technical analysis, they use only past time series of price statistically. There are so many technical analysis methods. In the fundamental analysis, the actual information about the economic activity of a company or a national economic activity is taken into consideration.

But according to the Efficient Market Hypothesis (EMH), it is theoretically impossible to predict the stock price. Because the present price includes all information of past time series, economic activities and expect for future price. If EMH is true, stock price must be random walk and its distribution is Gaussian (Normal distribution). However the actual distribution of stock price shows "High-peak and Fat-tail".

Issues

The purpose of this research is **not to predict** a stock price, but **to investigate how human predict** a stock price given certain information.

We consider that the cause of this distribution is in human's forecasting system. Since human cannot process rationally the information of time series nor fundamental one. In this research, we investigate the human information processing and prediction.

Early Studies

In Hashimoto (2002) , Hashimoto(2003), Hashimoto(2008), we already conducted 5 experiments. All experiments had same methods as follows.

Method and Procedure

 The time series graph (Fig. 1) showed to subjects, and they are required predict future price. On Fig. 1, X-axis is time (unit is "Day") and Y-axis is price (Unit is "Yen"), each dot means the stock price of the day. The graph contains past 30days data. Each dot plotted serially (plotting interval is 500msec. So subjects should wait 15 sec until all dots plotted). And subjects required the answer (by keyboard key press) the price at 31, 35, 45, 55 days (this 4 trial called "1 trial"). The order of predict days are

randomized and counterbalanced. The time series are artificial random walk. Each subject repeated 30 trials.
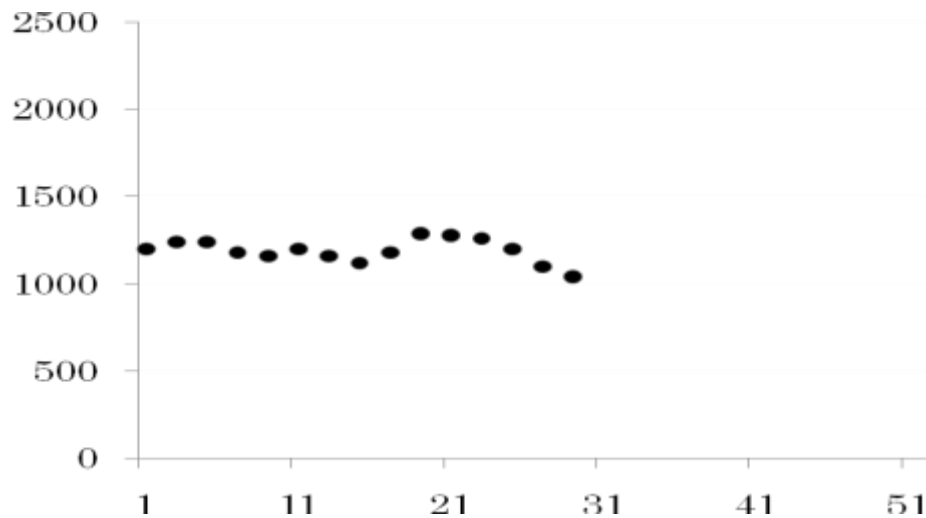
Fig. 1. Displayed time series of stock price

Each experiment varied in **density** of dots (displayed 30 dots or 15 dots – every other one), **period** of displayed (30days or last 15days), existence of **reward**, **pattern** of the time series and existence of **restriction of time** for decision making. The numbers of subjects are 15-41. (It changed with experiments).

Result

We obtained the results from these experiments. About the near future, subjects predict by extrapolation of random walk (it means subjects answers are unfixed). And about the distant future, subjects predict by linear regression of all data or simple extension of last few data. (Subject's patterns are two types).

Experiment 1

On this experiment, we use touch panel display for subject's prediction. And we use actual time series of stock price data instead of artificial random walk data.

Method and Procedure

Subjects: 8 university students. They already had elementary class of stock market.

Each subject repeated 23 trials.

Apparatus: Stock price display program controlled by Visual Basic Program (Programmed by Hashimoto).

HP Personal Computer with 17" touch panel.

Method: Almost the same as early studies. But stock price time series are actual series. And restriction of time for decision-making is 1.8sec, reward is 0 yen.

Result

Irrespective of inclination of a regression line, subjects predict the price around final displayed dot, especially the distant future prediction as 55days. This result observed any patterns of time series.

There are large difference at the prediction price on the 31st and the prediction price on the 35th. But on the other hand, there is small difference at the 35th prediction price and 55th price.

This results suggest that subjects use serial extrapolation for the very near future, and use other (linear regression or dependence on a last few data) processing for the distant future. This is the same as early studies. In comparison with the linear regression and the dependence of a last few data, the result of this experiment tells latter is larger than former.
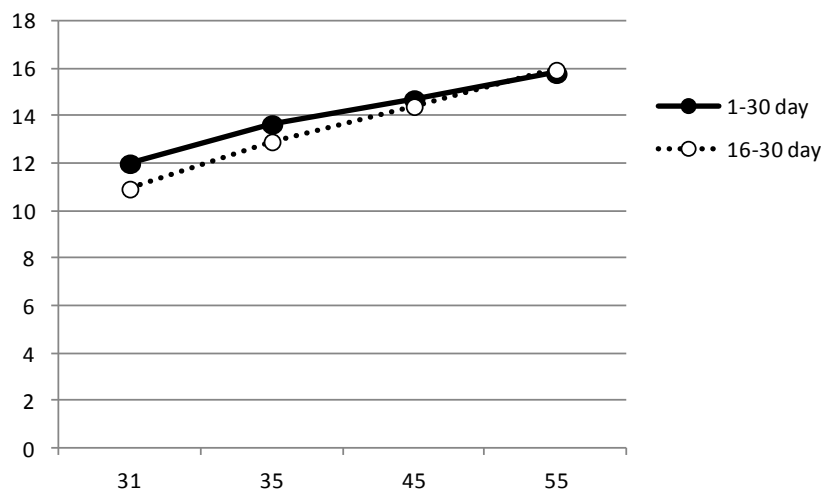
Fig. 2. Response Time
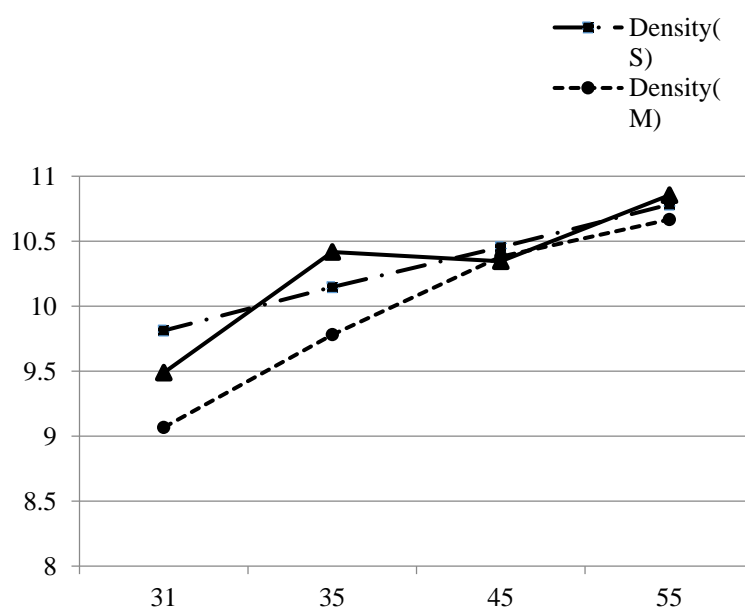
Fig. 3. Response Time (Displayed Density)

Experiment 2

On this experiment, we investigate how subjects change their prediction according to fundamental information.

Method and Procedure

Subjects: 22 university students. They already had elementary class of stock market.

Each subject repeated 23trials.

Apparatus: Stock price display program controlled by Visual Basic Program (Programmed by Hashimoto).

HP Personal Computer with 17" touch panel.

Method: Almost the same as experiment 1. We add the fundamental information at 1-25day (Period A) and 26-30day (Period B) on the display. The fundamental information patterns are 4. "Good", "So-so " , "Bad", No Display.

Figure 4 is the image of display fundamental information displayed on Japanese characters.
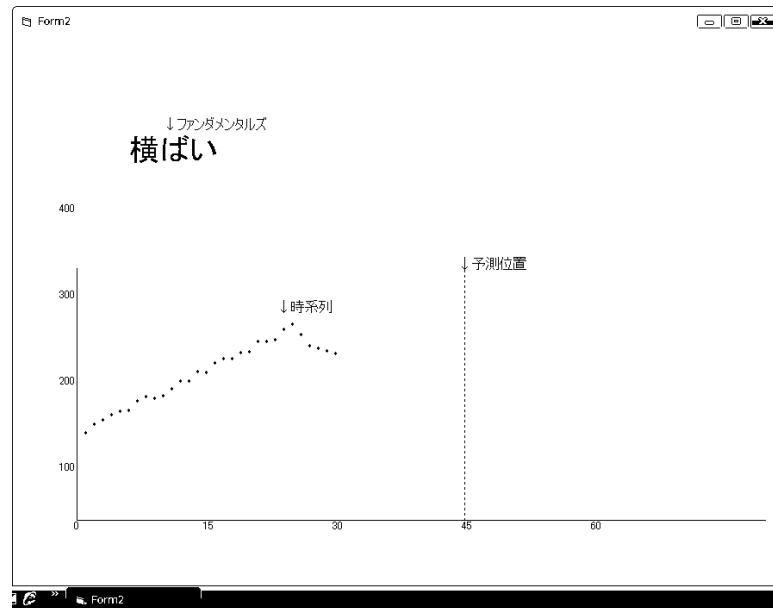
Fig. 4. Display Image

Pattern of time series: 9 patterns

Period A (Ascend, Horizontal, Descend) x Period B (Ascend, Horizontal, Descend)
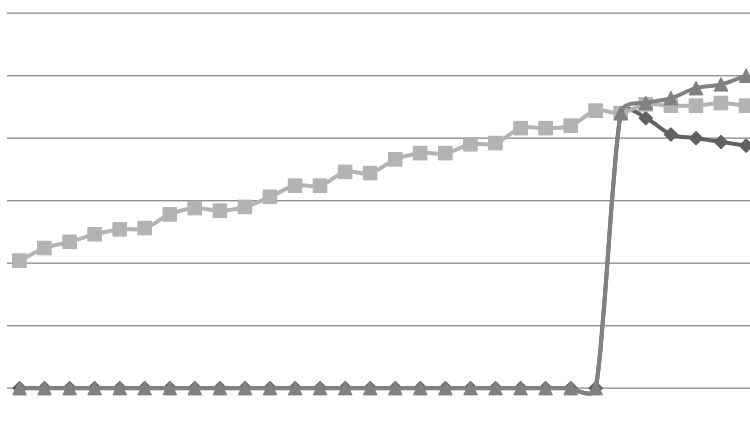
Fig. 5. Example of Time series (Period A = Ascend & Period B = 3 patterns)

Table 1. Combination of time series and fundamental informations

Perid A		Period B		
Time Series = Ascend	funamental= Good / So-so	Time Series = Ascend	fundamental =	Ascend
				So-so
				Descend
		Time Series = Horizontal	fundamental =	Ascend
				So-so
				Descend
		Time Series = Descend	fundamental =	Ascend
				So-so
				Descend
Time Series = Horizontal	funamental= Good / So-so / Bad	Time Series = Ascend	fundamental =	Ascend
				So-so
				Descend
		Time Series = Horizontal	fundamental =	Ascend
				So-so
				Descend
		Time Series = Descend	fundamental =	Ascend
				So-so
				Descend
Time Series = Descend	funamental= So-so / Bad	Time Series = Ascend	fundamental =	Ascend
				So-so
				Descend
		Time Series = Horizontal	fundamental =	Ascend
				So-so
				Descend
		Time Series = Descend	fundamental =	Ascend
				So-so
				Descend

Result

Subjects predict high price than average of any time series when fundamental information of Period B is "Good", regardless of day of prediction. And contrary to it, They predict low price than average of any time series when fundamental information of Period B is "Bad".

When fundamental information of Period B is same, there is no significant difference on price between fundamental information of Period A.

We show the average of subject's prediction for every time series pattern on Fig. 6-fig. 14.

In Fig. 6 – Fi. 14 , "u" = fundamental information at Period B is "Good", "d" ="Bad", "-" = "So-so", n =no information.
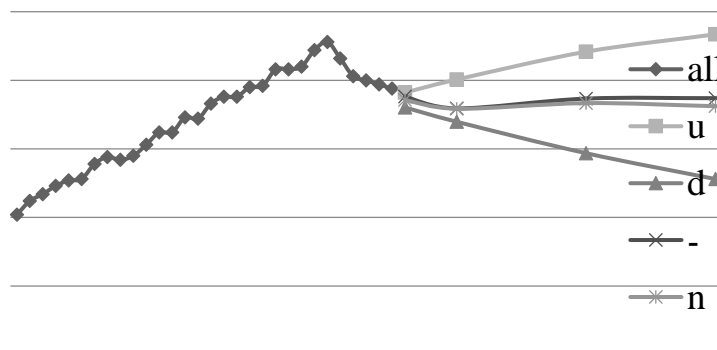
Fig. 6. Period A = Ascend, Period B = Descend

178
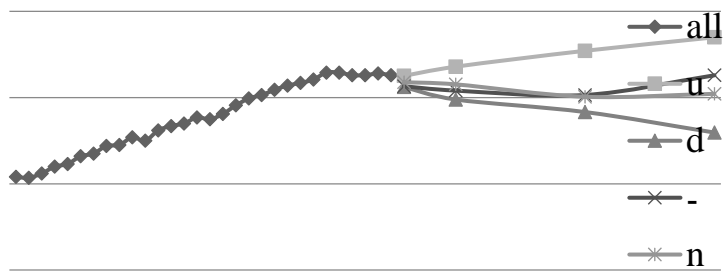
Fig. 7. Period A = Ascend, Period B = Horizontal
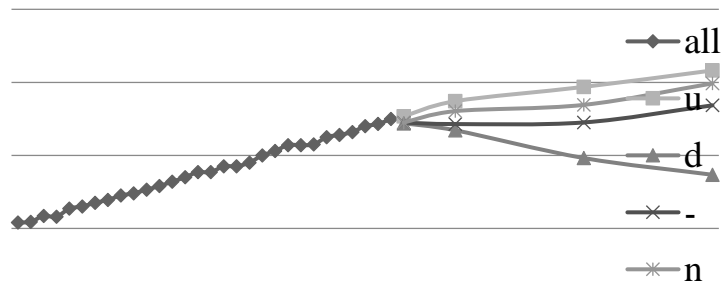
Fig. 8. Period A = Ascend, Period B= Ascend
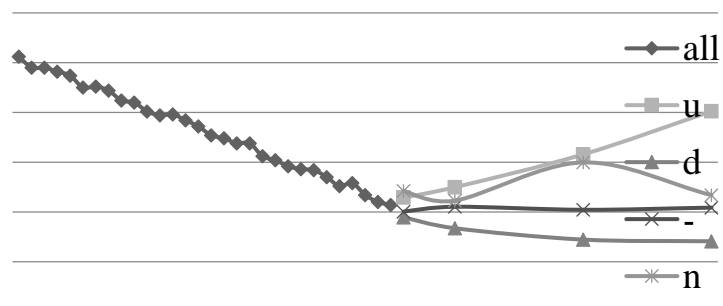
Fig. 9. Period A = Descend, Period B = Descend
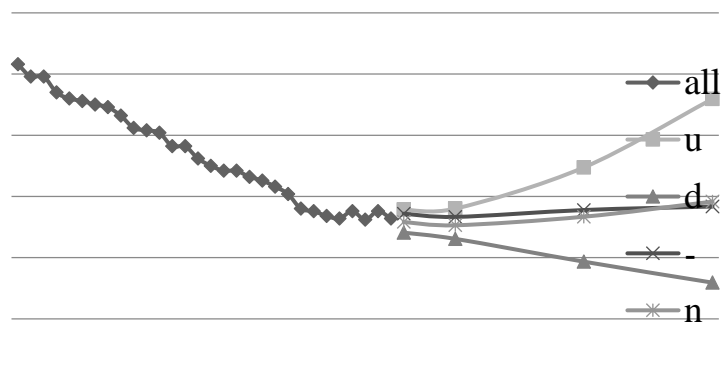
Fig. 10. Period A = Descend, Period B = Horizontal
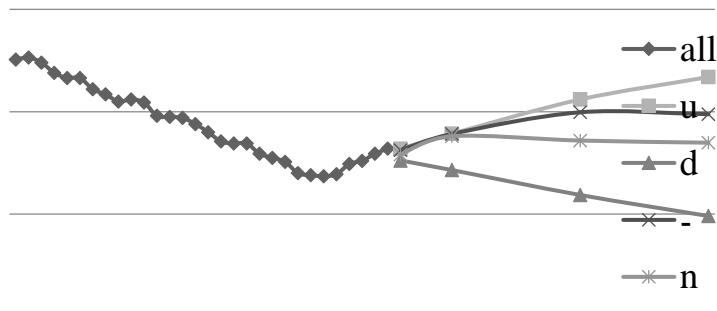
Fig. 11. Period A = Descend, Period B = Ascend
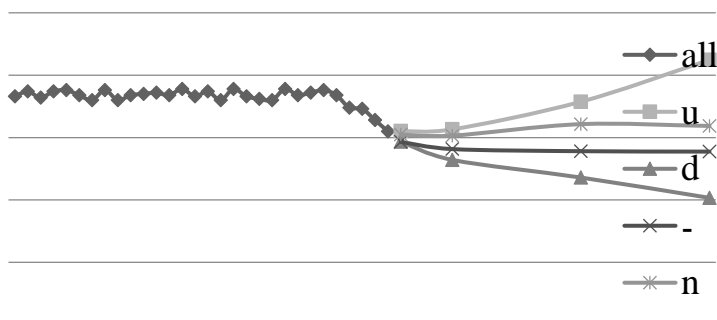
Fig. 12 Period A = Horizontal, Period B = Descend
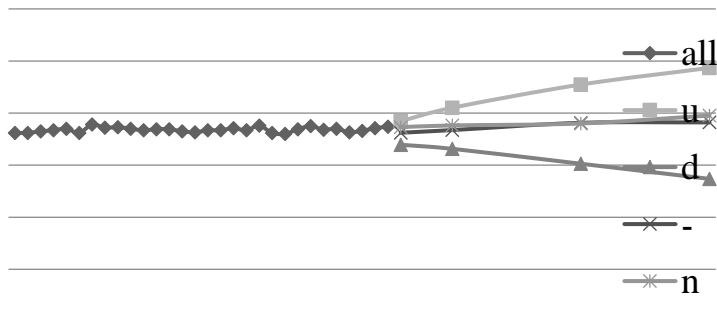
Fig. 13. Period A = Horizontal, Period B = Horizontal
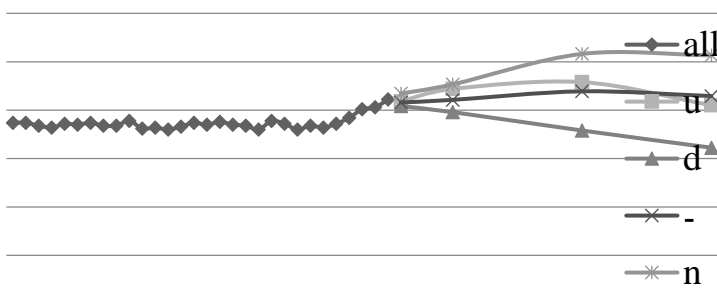
Fig. 14. Period A = Horizontal, Period B = Ascend

Discussion

Experiment 1 and experiment 2 suggest as follows.

If subjects are possible to use fundamental information, they ignore past information but concern only newest information. And on this condition, they use past time series data average into account as a norm.

And if they cannot use fundamental information, their prediction depends on only a last few data.

Off course we know, there are so many people using technical analysis who have great concern at past price data in long terms. Is the fact conflict with our result that they depend on only a last few data? I have to say "yes" and "no". Our subjects are university students (faculty of economics), all of they know technical analysis but their responses are as above. As we gave them very short time to make decision, it may cause them using only a few data. We have to take next experiment in a real time trading.

Conclusions

When there is a clear fundamental information, human predict according to it. And ignore past information. But if there is not fundamental information, human predict future price depending on a last few prices.

It means that if there is no clear fundamental information, human use last day's price data. It makes today's data same price (-> High Peak), and when fundamental information come, they use it with over evaluation (ignoring past fundamental information), it makes large response (-> Fat Tail).

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Acknowledgements

Does Sequence Patterns of Recent Gains and Losses Effect Individuals Risk Taking Behavior: An Experimental Study

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Abstract

This proposed dissertation will make an important contribution to current literature by examining the impacts of the sequence patterns of recent gains and losses on individuals' risk taking behavior. Although present research has examined the effects of gains and losses on individuals' risk taking behavior and has theoretically shown the differentiated risk taking willingness depending on the state of wealth the impacts of sequence pattern of recent gains and losses on individuals' risk taking behavior has not been empirically tested. I assert that individuals change their willingness to take risk depending on their recent gain and loss patterns by internalizing their beliefs immediately. The current literature suggests that recent losses decrease individuals' risk aversion so individuals act more recklessly in order to compensate for their losses. I expect to obtain supporting evidence from my empirical study. However, I also assert that repeated recent losses decrease individuals risk aversion by leading individuals to believe that there will be future gains. The current literature does not suggest a common view on whether recent gains decrease the individuals risk aversion. Some of the scholars conclude that it has an effect on individuals' risk aversion; however, empirical studies have not found proof to support this hypothesis. I will create a game setting to test the impact of the recent gain and loss patterns on individuals risk taking behavior and examine individuals' risk taking willingness in different states. I will also examine the individual versus joint decision making and whether the gender (and/or other demographic specifications) affect adapting risk aversion by introducing different treatments.

Keywords: Behavioural Economics, Game Theory, Laboratory Experiment, Utility Theory

Introduction

Imagine that you are playing a simple coin toss game and you clearly have a fifty percent chance to win or lose every time you toss the coin. The fifty percent winning probability doesn't change no matter how many times you toss the coin. However, does your belief that you will win differ depending on the previous outcomes of the game? Imagine that you bet any amount of money you want each time you play and receive double if you win or lose the amount you bet. Does the amount of money you bet differ after losing five times in a row? Will your gambling behavior be altered by your recent gain or loss pattern?

Imagine a professional poker player with high cards in his hand. Does the amount of money he bids differ if he had had low cards, rather than high cards during the previous game? Having high cards increases the probability of winning, but , does the risk taking behavior of the player differ depending on the sequence of recent game outcomes?

Neoclassical theory assumes that rational decision makers maximize their utility subject to a budget constraint. Moreover, the classical expected utility theory states that willingness to take risk increases with wealth and that agents are loss averse. In spite of this, many empirical studies find evidence against classical expected utility theory.

Neoclassical theory introduced total lifetime wealth into the risk preference function. The marginal utility of an extra dollar is determined by the amount of wealth the decision maker has in neoclassical utility function. From one prospective, a dollar buys the same amount of goods and services regardless of how it is obtained. From the other side, it would be irrational to expect the same marginal utility gain of a dollar for different individuals with the same amount of wealth. Many empirical studies prove that risk preferences are often not just a function of total lifetime wealth, but also a function of recent changes in wealth.

Literature Review

Previous studies try to explain the relationship between risk taking behavior and individuals' recent wealth gain or loss. Kahneman and Tversky (1979) came up with the idea of a "reference point" of wealth, which was formalized by Konzegi and Rabin (2007). The reference point of wealth is the state of wealth an individual would like to maintain. An individual's risk taking behavior depends on his distance from his reference point of wealth.

Konzegi and Rabin (2007) insert the "reference point" theorem into the utility function by separating the utility function to two parts, "consumption utility" and "gain-loss utility", and created equation shown below.

$$U(w|r) \equiv m(w) + \mu\big(m(w) - m(r)\big) \qquad (1)$$

where w is riskless wealth outcome and r is riskless reference level of wealth.

The first part of the equation $\{m(w)\}$ is "consumption utility" and the second part $\{ \mu\big(m(w) - m(r)\big)\}$ is reference dependent "gain-loss utility".

Thaler and Johnson (1991) also develop Kahneman and Tversky's (1979) prospect theory and investigate the role of prior outcomes on risky choice. They suggest in their study that there are two different risk taking behaviors that are caused by the state of the agent "the house money effect" and "the break-even effect". "House money effect" is the decrease in risk aversion following gains while "break-even effect" is the decrease in risk aversion following losses.

Current literature examines "house money and break-even effects" in different concepts. Hsu and Chow (2013) examine the impacts of "the house money effect" on investment risk. They conclude that there is not any evidence to support to "the house money effect" in the real world financial markets and not just in artificial laboratory experiments.

Clark (2002) examines the free rider problem and over consumption of public goods by creating an experimental set up and has not found any supporting evidence against " the house money effects" on public goods. Harrison (2007) comment on Clark's study and conclude with an proper statistical methodology that there is a clear "house money effect" on public goods.

Eil (2011) and Lien (2010) also contribute to the "reference point" theorem by testing "the house and break-even effects" using World Series of Poker (WSOP) online tournaments data.

Therefore, individuals who are further from their reference point of wealth become less risk averse. The above studies indicate the first order concavity of wealth at the reference point

Motivation of the Research

Eil's and Lien's dissertation thesis enlightened me on how to estimate the risk taking behavior of an individual. Moreover, while reading Eil's dissertation thesis, I clearly saw that using a pre-collected data set brings its own challenges. They found evidence in support of the "break-even effect" in the data set from an online poker website "Full Tilt". Eil and Lien were able to obtain sixty percent of the total hands played during a time period of nine months from the mentioned website. They conduct their analysis on the 100 players who played the largest number of the hands in nine month period which was only a random sample of the hands played by those 100 players.

Eil assumed that the players internalize recent gains and losses every time they leave the game and start the new game with a new reference point. He estimated the break-even effect by using the Cox proportional hazard model with a probit regression and concluded that players who had been losing tended to play longer and behave more recklessly in a losing position.

The structure of the poker game itself provides neutral experiment results in the area of behavioral economics and eliminates the "Minimax in Laboratory Experiments" challenge. The measurability of risk in the poker game is also an advantage. However,while I was reading Eil's study, I realized that there are more data related challenges than he mentions. First of all, using 100 of the most frequent players' outcomes creates a bias problem since poker players do not just strategize their game plans according to their hands but also according to other players' previous game strategies. There is a clear

pattern of updating beliefs of the other poker players' behaviors. This issue brings out the bluff behavior in the poker game. However, an unbiased estimation requires elimination of other players' behaviors.

Borm and van der Genugten (2001) examined the level of skill relative to chance at various games by calculating the learning and random effects. They conclude that Texas Hold'Em Poker is a pure chance game since it requires only strategic skills. However, Cabot and Hannum (2005), Dedonno and Detterman (2008) and Levitt and Miles (2011) examine skilled versus unskilled poker players' outcomes empirically and find evidence against Borm and van der Genugten's study. Their empirical studies show that skilled players outperform the unskilled players and observational skills such as receiving instructions and previous experience creates difference among players' outcomes.

Von Neuman and Morgenstern (1944) define "the betting behavior of player by the low hands for bluffing" *as pure strat*egy. Norman (2012) develops van Neuman and Morgenstern's study and concludes that betting by the low hands as pure strategy is not a sequential equilibrium; however betting by the low hands provides the sequential equilibrium where bluffing strategy is considered as a mixed strategy.

There are some more empirical studies conducted on the data obtained from poker game settings and quite few of them investigate risk taking behaviors of individuals.

Meng (2010) examined poker players dynamic optimization behavior using The World Poker Tour (WPT) data. He stated that when facing uncertainty and dynamic risk, high stake poker players make significantly more conservative choices rather than is either statically or dynamically optimal.

Contribution of the Research

My contribution to the literature will be examining the effects of the recent wealth change pattern on risk preferences with respect to individuals' risk taking willingness.

The current literature has not investigated how soon the individuals internalize the gains or losses. I assert that players internalize the recent gains sooner than recent losses and that this might be the reason why empirical studies were not able to find an evidence against "the house money effect".

The current literature examines the impacts in the "the house money and break-even effects" by using distance from the reference point of wealth by as a measure. Thaler and Johnson (1991) build "the house money and break-even effects" on the prospect theory and conclude that getting further from the reference point of wealth changes the risk taking willingness of an individual.

In my study, I will not just investigate the changes of risk taking willingness of an individual from the "house money and break-even" perspective. I also would like to investigate the changes in risk taking behavior depending on the previous states of the world not just the outcome.

By setting up a laboratory experiment, I will create different patterns of gain and losses to examine how the number of the recent outcome affect individuals' risk taking behavior and try to answer the following questions.

Does the risk taking behavior of an individual changes differently after losing or gaining five times in a row than two times in a row?

Does the risk taking behavior of an individual changes differently if he loses four of last six games than if he loses two of last three games?

Does individuals risk taking behavior changes differently after losing five times in a row than gaining five time in a row?

Does losing a 500 dollars at once changes the individuals' risk taking behavior differently than losing 100 dollars five times in a row?

By this study I would like to contribute to the prospect theory literature by examining the internalization process of recent gains and losses.

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Analysis of Consumer Demands and Needs Related to Regions in Turkey And a Research

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Abstract

In this study, the interregional differences in Turkey on effects of consumer demands, needs and purchasing behaviors have been scrutinized. The interregional geographical, cultural and economic differences in Turkey naturally affects the demands and needs of the people living in different regions and as a result causes differences in the purchasing behaviors of human who is a consumer. Factor analysis has been conducted in the survey study and it is identified that the factors concentrated under the need levels of Maslow's Theory of Hierarchy of Needs. The interregional differences and the effects of these differences on the demands, needs and behaviors of the humans have been examined related to the need levels of Maslow's Theory of Hierarchy of Needs. As a result, it is identified that the geographical regions of Turkey cause significant changes on the demands and needs of the consumers. In the conclusion part of the study, recommendations to local and regional administrations have also been made to enhance the living conditions of humans in the region.

Keywords: Consumer Demands, Consumer Needs, Purchasing Behavior, Differences inter Regions, Maslow's Theory of Hierarchy of Needs.

Introduction

Human beings down the ages have tried to satisfy various demands and desires, and most of their efforts through lifetime are for increasing their living standards. For instance, discovering the fire for heating need, the invention of writing for communication need, and the invention of tire for freightage and transportation need appeared in response to the efforts of the humans. There are too many samples to be counted. It is obvious that all of us are in an effort to survive in better living conditions. Thus, human demands and needs are among the most important factors affecting our course of life. Demands and needs that are too important a factor for human life, obviously affect directly human behaviors as well. Every human being as a consumer shows a purchasing behavior as per his demands and needs. But consumer demands and needs vary from a human to another for many reasons. This difference reflects directly on the purchasing behavior of the consumers. When we compare the credit card statements of the people from different social classes, while the luxury expenditures of a person with a good income would be too high (entertainment, fuel expenses, etc.), the same kind expenditures of a person with lower income would be lower or none. So the purchasing behaviors of the consumers vary in many reasons like social, psychological, economic factors.

One of the factors affecting human demands, needs and the behaviors related to them is the interregional differences. The interregional differences which are the topic of this study that effect on human needs are very important that need to be considered while shaping the strategies of the firms. Geographical, economic and cultural differences currently existing among the geographical regions in Turkey, cause differences as well in the purchasing behaviors of the consumers living in different regions. The most important reason to this is the people living in different conditions have different needs. For instance, AC is a very important need for a middle class family living in the Mediterranean Region; on the other hand it is not the case for a family living in the Eastern Anatolia Region. Interregional climate differences also make differences in the consumer needs. Thus any kind of differences existing among regions constitutes differences directly or indirectly in the consumer needs.

In this study, the effects of the interregional differences on the human needs have been researched. Consumer demands, needs and the factors affecting the behaviors of the consumers have been reviewed and first and foremost Maslow's Theory of Hierarchy of Needs has been taken as a basis in the practice.

Literature Research

Consumer Demands, Needs and Behaviors

Day by day improvements in the science of marketing increased the importance of consumer concept more. Nowadays consumer focused concept improved with the improvement of modern marketing understanding, this caused the need to pay more importance on the consumer and the consumer behaviors as well. The consumer is expressed as the key factor of the consumer behavior. Consumers, notice their needs, search the goods for their needs, use the products to satisfy their needs and dispose those products after meeting their needs (Wells and Prensky, 1996:4).

It is not enough to be a consumer for an individual to buy a product or service. For this reason, the terms of consumer and customer should be separated. The consumer is the person that has the capacity to buy or buys the marketing components for his personal wish, demand and needs. The customer is the consumer who receives frequent service through a firm or buys frequently the same brand (İslamoğlu, 2003:5). The consumers with regard to a wider assessment can be described as the persons who buy goods and services to meet their economic, social and cultural needs. For this reason, using the goods and services after purchasing is called consumption, the ones realizing these processes are called consumers (Erdem, 2006:69). In other words, the consumer can be described as the person, institution or organization that have needs to be met, have money to spend and have the will to spend. As can be easily understood here, every customer is a consumer but every consumer is not a customer.

The term of "consumer" has a wide scope as a sense. For this reason, it is possible to categorize consumers in two groups with regard to the purposes of purchasing goods or services in the market (Mucuk, 2006:66):

- End Consumers: buyers for personal or family needs,

- Industrial or Organizational Consumers: buyers for supporting or adding to their production, continuing their economic activities like reselling.

The firms while forming their marketing strategies must consider as meeting the demands and the needs of the consumers. While consumer demands and needs can be detected and measured by various means, consumers display different behaviors as per some criteria in accordance with the purchasing wills and needs. Thus the firms should analyze the purchasing behaviors of the consumers correctly in order to increase the satisfaction levels of the consumers and incline towards the consumers in this direction.

It will be appropriate to express the meanings of the words before examining these concepts. Demand, as a term, can be described as tendency, will, and enthusiasm to something. Need is described as necessity, strong will (TDK Dictionary 2000). In the light of these definitions, consumer demands can be expressed as the circumstance and the conditions that the individuals with the tendency of purchasing desire in the purchasing process, the consumer needs can be expressed as the necessity of the individuals with the tendency of purchasing. Although consumer demands are understood as the their will to the product or specifications of the product, in fact other aspect of this will is the expectation of the consumer to the service given by the firm. Thus, marketing, one of the functions of the firms, deals directly with the demands and the needs of the consumers and produce strategies to meet these expectations. The purpose of marketing is to meet the needs of the customers selected as target and to satisfy them. In this regard, consumer behaviors within the marketing management concept, in order to satisfy the needs and the demands of the individuals, groups and the organizations are to analyze on how they select the ideas and use them (Kotler ,1997:172).

Besides that by analyzing the consumer behaviors, important advantages can be obtained in capturing the marketing opportunities. Especially the target is to satisfy the real necessities of the consumers forming the target market, the focus of "general marketing strategy" formed in two important actions like market selection and improvement of the marketing mix suitable for the selected target market (Tek, Özgül 2005:165).

Firms while forming appropriate marketing strategies should detect measure and analyze the characteristics of the consumer behaviors, factors affecting these behaviors, differences and the reasons to these differences.

Consumer behavior is stated as a practical discipline analyzing the behavior of the consumer in the market, and researching the reasons to that behavior (Odabaşı, 2002:16). Purchasing behavior of the consumer as a discipline is stated as focusing to the goods or services to satisfy the needs of the consumer and to the values to be obtained for them (Wells&Prensky, 1996:5). In previous terms while the scientists

interested in consumption were researching only the purchasing time, nowadays consumer behavior analyzes the things not only during the purchasing, but also circumstances before and after purchasing, experiences related to these phases and various factors (Koç, 2007:21). Purchasing behaviors vary from consumer to consumer with regard to the effects of some personal and environmental factors.

Consumer behaviors include the activities of the consumer in obtaining, consuming and disposing a good or service. As can be understood from this expression, consumer behaviors comprise of three fundamental processes (Blackwell et.al. 2001:6); Obtaining, Consuming and Disposing.

a. Obtaining; comprises of purchasing activities of the good. This activity comprises of the processes of researching the knowledge related to the selection of the good, and evaluating alternative goods or brands. Researchers during examining the consumer behaviors also analyze the questions as how consumers purchase how they pay during purchasing and why they purchase.

b. Consuming; comprises of the activities related on how, where, when and in which way the consumers use the goods.

c. Disposing; comprises the activities related on how the consumer disposes the good or its package. In this process, consumer researchers examine on how the consumers dispose the package of the good and the wastes. For instance, is this a biologically degradable or recyclable product?

While the factors affecting the purchasing process of the consumers are summed by some authors as obtaining, producing and disposing (Blackwell et.al. 2001:6), discussed widely by some other authors and stated as selecting the goods to satisfy the needs of the individual, purchasing, using, evaluating and disposing (Wells&Prensky, 1996:9).

Nowadays increasing importance of the consumer behavior is subject to a set of factors. The first one of these factors is growing of the firms gradually and increases of layers within the hierarchical body. As a result, the direct communication between the managers in decision making position and the customers / consumers became difficult. So the need to conduct researches toward understanding the consumer behavior and set up units and systems toward it come up. In addition, both the increase in the amount of the consumers and their more awareness made it crucial to put marketing studies on more scientific fundamentals (Koç, 2007:21). Besides the increase in the amount of the consumers and in the variety of products to satisfy their needs, with the awareness of the consumers, caused increase in their uncertainty at the same time during purchasing. In this kind of circumstances, organizations tend to go to commercials and suchlike investments in order to meet the expectations and the needs of the consumers and to minimize their state of uncertainties (Anisimova, 2007:395).

Regional Differences in the World

Today there are regional differences in almost every country less or more. With this aspect regional differences can be seen as any kind of differences in the same area (Bayraktutan, 1994:184). With different density from country to country, emerging differences in regional development is an inevitable fact that every country with the economic development through industrial revolution would face. Development pattern in world economy described with concepts like developed and underdeveloped countries appears also in various regions and cities of the country economies. Dispersion of economic factors, having a dynamic body, shapes the development process with different densities in the country, causes to appear developmental differences between regions and cities (Küçüker, 1998:425).

Interregional differences are not a unique character for underdeveloped countries. Regional development differences are a problem felt in different burden in every phase of development. Hence, according to Rostow, during maturement, all regions of a country or all sectors of an economy cannot maintain progress at the same level while practicing modern technology thoroughly. It is normal that there are developmental differences between regions and sectors. (Rostow, 1966:63).

Regional inequalities not only in backward areas of a country, but also in developed big cities appear as lack of education and health services, need for land and house, lack of water, energy, infrastructure and general municipal services, traffic jam, overcrowding, noise and environmental pollution. (Gündüz, 1994:4). Besides, development movement in a country generally starts in certain regions of that country and it takes some time to reflect to other regions in geographical and human reasons. This delay in time may cause regional differences and inequalities. In other regions below the developmental momentum causes proportional regression and socio-economic deficiencies. It is also possible to degrade regional inequality in a narrow sense to economic and social inequality of opportunity. Economic inequality of opportunity means people living in different regions do not have the opportunity to find jobs as well as equal salary for equal jobs; social inequality of opportunity means people living in different regions do

not obtain equal health, education and art services, do not have even equal chances in spouse selection (Dinler, 1994:123).

A Research of Consumer Demands and Needs on Regional Differences in Turkey

In Turkey, there are significant and serious economic, cultural and social differences between geographic regions and even in the same region. In this sense, separate researches in the regions have been conducted with questionnaire. Factor analysis has been applied in order to find whether the questions are in line with the Maslow's factors or not. In the analysis applied to data, varimax factor spinning option has been used. At first, KMO and Bartlett Tests have been applied in order to understand if the data is appropriate or not.

KMO and Bartlett's Test

Table-1 KMO and Barlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0,805
Bartlett's Test of Sphericity	Approx. Chi-Square	7690,536
	df	2556
	Sig.	0

The KMO value is required to be greater than 0.5 at KMO sample sufficiency test. Because this value is 0.805 in our sample, we may say that our sample is suitable for factor analysis. Bartlett test measures whether the correlations between variables are greater than the expected value with chance or not. P-Value should be less than (Sig) 0. 05. Because this value is p<0.05, we can say that there is relation between variables that factor analysis can be performed. It is seen that the variables are collected under 5 factors as the factor analysis performed.

Factor Analysis Results

Table-2 Rotated Components Matrix

Rotated Components Matrix					
Rotated Questions	1	2	3	4	5
S1	0,872				
S6	0,854				
S11	0,841				
S16	0,831				
S21	0,819				
S26	0,795				
S31	0,763				
S36	0,746				
S41	0,737				
S46	0,726				
S51	0,716				
S56	0,711				
S64	0,708				
S69	0,705				
S2		0,805			
S7		0,802			
S12		0,798			
S17		0,746			
S22		0,716			
S27		0,703			
S32		0,694			
S37		0,688			
S42		0,681			
S47		0,653			
S52		0,65			
S57		0,643			

S61	0,64			
S3		0,756		
S8		0,743		
S13		0,735		
S18		0,731		
S23		0,728		
S28		0,681		
S33		0,647		
S38		0,627		
S43		0,619		
S48		0,615		
S53		0,613		
S58		0,608		
S62		0,604		
S65		0,601		
S67		0,594		
S70		0,59		
S71		0,588		
S72		0,581		
S4			0,684	
S9			0,682	
S14			0,679	
S19			0,676	
S24			0,672	
S29			0,67	
S34			0,668	
S39			0,664	
S44			0,653	
S49			0,651	
S54			0,648	
S59			0,643	
S5				0,653
S10				0,612
S15				0,594
S20				0,584
S25				0,564
S30				0,537
S35				0,528
S40				0,521
S45				0,518
S50				0,515
S55				0,511
S60				0,508
S63				0,506
S68				0,501

As it is seen at the table, the values of all questions are greater than 0.5. It is realized that all of 72 questions with Likert scale will not create any problem regarding the analysis study.

1. Factor: The first factor including question 1,6,11,16,21,26,31,36,41,46,51,56,64,69 expresses the physiological needs.

2. Factor: The second factor including question 2,7,12,17,22,27,32,37,42,47,52,57,61 expresses the security needs.

3. Factor: The third factor including question 3,8,13,18,23,28,33,38,43,48,53,58,62,65,67,70,71,72 expresses the belonging and love needs.

4. Factor: The fourth factor including question 4,9,14,19,24,29,34,39,44,49,54,59 expresses the value sense.

5. Factor: The fifth factor including question 5,10,15,20,25,30,35,40,45,50,55,60,63,66,68 expresses the sense of satisfaction.

Total Explained Variances

Table-3 Total Explained Variances

Factors	Variance (%)	Accumulated (%)
1. Factor	15,365	15,365
2. Factor	22,578	37,943
3. Factor	28,457	66,4
4. Factor	10,398	76,798
5. Factor	13,658	90,456

As it is seen at the table, the 72 variables are formed through explaining the total variance under 5 factors and with the rate of 90.456%. It is seen that the factor structures are as expected.

Reliability Analysis

The reliability analysis was applied at the data on the basis of inferential statistics. The reliability analysis measures the internal consistency between articles taking place in a scale and presents information about the relations between these articles. The reliability analysis of 5 factors formed by variables taking place in the survey is shown at following table with their Cronbach Alfa values. This value's being a number, which is 0.7 and above shows that a reliable measurement was made. As it can be seen at the table, Cronbach Alfa values vary between 0,789 and 0,978. This means that in case the survey will be repeated with the same participants, the result will be the same to a large extent. Consequently, it is possible to say that the variables are measured reliably.

Table-4 The Reliability Analysis Results According to the Factors

Factor Name	Cronbach Alfa
Physiological Needs	0,789
Security Needs	0,897
Belonging and Love Needs	0,978
Value	0,914
Satisfaction	0,897

Hypothesis Tests

Hypotheses take place following the reliability analysis. Whether the answers given to question vary according to the individuals living in different regions or not were presented and One-way ANOVA test results were explained.

Hypothesis:
H_0 = There is no difference between the needs of individuals taking place at the Maslow's hierarchy of needs, who are living in 7 different geographical regions of Turkey.
H_1 = There is difference between the needs of individuals taking place at the Maslow's hierarchy of needs, who are living in 7 different geographical regions of Turkey.

Maslow's 5 Criteria Show Differences for 7 Different Regions in General.

The opinions of participants taking place in the research stated in the survey gave meaningful differences statistically at the ANOVA test results according to 7 different region ($P<0,05$) and H_1 Hypothesis is supported for all factors.

Table-5 ANOVA Test Results between Factors and Regions

ANOVA					
FACTORS	Sum of Squares	df	Mean Square	F	Sig.
Physiological Needs Between Regions	15,112	6	2,519	2,648	0,017
Security Needs Between Regions	28,54	6	4,757	5,412	0
Belonging and Love Needs Between Regions	19,038	6	3,173	3,412	0,003
Value Between Regions	13,062	6	2,177	2,263	0,039
Satisfaction Between Regions	13,836	6	2,306	2,407	0,029

*P<0,05

As it can be seen at the table, there are meaningful differences at ANOVA test results of all factors and meaningful differences exist between Maslow's factors and regions. As it can be realized from the table, sig. (importance) values of all 5 factors were found less than 0,05. The environment, traffic conditions, security conditions, education opportunities, employment opportunities, e.g. of individuals living in 7 different region may be shown as the reason of this.

Relations of Regions with Each Other Regarding Their Physiological Needs

Table-11 Relations of Regions with Each Other Regarding Their Physiological Needs

	Marmara region	Aegean region	Mediterranean Sea region	Blacksea region	Central Anatolia region	Eastern Anatolia region	Southeastern Anatolia region
Marmara region	0	0,063	0,058	0,014	0,013	0,002	0,003
Aegean region	0,063	0	0,118	0,031	0,038	0,009	0,016
Mediterranean Sea region	0,058	0,188	0	0,046	0,049	0,021	0,029
Black sea region	0,014	0,031	0,046	0	0,031	0,042	0,047
Central Anatolia region	0,013	0,038	0,049	0,031	0	0,046	0,048
Eastern Anatolia region	0,002	0,009	0,021	0,042	0,046	0	0,021
Southeastern Anatolia region	0,003	0,016	0,029	0,047	0,048	0,221	0

Physiological Needs between the Regions:

When we range them according the table above, the physiological needs:

Marmara Region: However the physiological needs of individuals living in this region show similarities with the physiological needs of individuals living in Aegean region and Mediterranean Sea region; they show meaningful differences with the physiological needs of individuals living in Eastern Anatolia region, Southeastern Anatolia region, Central Anatolia region and Black sea region.

Aegean Region: However the physiological needs of individuals living in this region show similarities with the physiological needs of individuals living in Marmara region and Mediterranean Sea region; they show meaningful differences with the physiological needs of individuals living in Eastern Anatolia region, Southeastern Anatolia region, Central Anatolia region and Black sea region.

Mediterranean Sea Region: However the physiological needs of individuals living in this region show similarities with the physiological needs of individuals living in Aegean region and Marmara region; they show meaningful differences with the physiological needs of individuals living in Eastern Anatolia region, Southeastern Anatolia region, Central Anatolia region and Black sea region.

Blacksea Region: However the physiological needs of individuals living in this region show similarities with the physiological needs of individuals living in Central Anatolia region; they show meaningful differences with the physiological needs of individuals living in Eastern Anatolia region, Southeastern Anatolia region, Central Anatolia region, Marmara Region, Mediterranean Sea region and Aegean region.

Central Anatolia Region: However the physiological needs of individuals living in this region show similarities with the physiological needs of individuals living in Black sea region; they show meaningful differences with the physiological needs of individuals living in Eastern Anatolia region, Southeastern Anatolia region, Central Anatolia region, Marmara Region, Mediterranean Sea region and Aegean region.

Eastern Anatolia Region: However the physiological needs of individuals living in this region show similarities with the physiological needs of individuals living in Southeastern region; they show meaningful differences with the physiological needs of individuals living in Central Anatolia region, Marmara Region, Mediterranean Sea region and Aegean region.

Southeastern Anatolia Region: However the physiological needs of individuals living in this region show similarities with the physiological needs of individuals living in Eastern region; they show meaningful differences with the physiological needs of individuals living in Central Anatolia region, Marmara Region, Mediterranean Sea region and Aegean region.

INTERPRETATION: The results in the table show us that a meaningful similarity is seen between the physiological needs of individuals living in Marmara region, Aegean region and Mediterranean Sea region. Similarly, there is also a meaningful similarity between the physiological needs of individuals

living in Central Anatolia region - Black sea region and Eastern Anatolia region- Southeastern Anatolia region. It is possible to say that because industry and population are dense in Marmara region, Aegean region and Mediterranean Sea region this similarity is seen between these regions. In the same manner, Central Anatolia region and Black sea region are the same within this scope. Eastern Anatolia region and Southeastern Anatolia region are the locations where industry, population and life-sustaining events are seen less frequently, there are similarities between them, but they are different from other regions.

Relations of Regions with Each Other Regarding Their Security Needs

Table-6 Relations of Regions with Each Other Regarding Their Security Needs

	Marmara region	Aegean region	Mediterranean Sea region	Blacksea region	Central Anatolia region	Eastern Anatolia region	Southeastern Anatolia region
Marmara region		0,162	0,13	0,277	0,781	0	0
Aegean region	0,162		0,863	0,785	0,201	0,002	0,01
Mediterranean Sea region	0,13	0,863		0,666	0,161	0,004	0,017
Black sea region	0,277	0,785	0,666		0,347	0,001	0,005
Central Anatolia region	0,781	0,201	0,161	0,347		0	0
Eastern Anatolia region	0	0,002	0,004	0,001	0		0,45
Southeastern Anatolia region	0	0,01	0,017	0,005	0	0,45	

Security Needs between the Regions:

When we range them according the table above, the security needs:

Marmara Region: However the security needs of individuals living in this region show similarities with the security needs of individuals living in Aegean region, Mediterranean Sea region, Black sea region and Central Anatolia region; they show meaningful differences with the security needs of individuals living in Eastern Anatolia region, Southeastern Anatolia region.

Aegean Region: However the security needs of individuals living in this region show similarities with the physiological needs of individuals living in Marmara region, Mediterranean Sea region, Black sea region and Central Anatolia region; they show meaningful differences with the physiological needs of individuals living in Eastern Anatolia region, Southeastern Anatolia region.

Mediterranean Sea Region: However the security needs of individuals living in this region show similarities with the security needs of individuals living in Marmara region, Aegean region, Black sea region and Central Anatolia region; they show meaningful differences with the security needs of individuals living in Eastern Anatolia region, Southeastern Anatolia region.

Blacksea Region: However the security needs of individuals living in this region show similarities with the security needs of individuals living in Marmara region, Aegean region, Mediterranean Sea region and Central Anatolia region; they show meaningful differences with the security needs of individuals living in Eastern Anatolia region, Southeastern Anatolia region.

Central Anatolia Region: However the security needs of individuals living in this region show similarities with the security needs of individuals living in Marmara region, Aegean region, Mediterranean Sea region and Black sea region; they show meaningful differences with the security needs of individuals living in Eastern Anatolia region, Southeastern Anatolia region.

Eastern Anatolia Region: The security needs of individuals living in this region show similarities only with the security needs of individuals living in Southeastern Anatolia region. There is meaningful difference with other regions.

Southeastern Anatolia Region: The security needs of individuals living in this region show similarities only with the security needs of individuals living in Eastern Anatolia region. There is meaningful difference with other regions.

INTERPRETATION: According to the table, Eastern Anatolia region - Southeastern Anatolia region and Marmara region - Aegean region - Mediterranean Sea region - Central Anatolia region - Black sea region show similarities among them. The illegal organization actions and separatist activities in the eastern regions of country may be shown as the reason for this.

Relations of Regions with Each Other Regarding Their Belonging and Love Needs

Table-6 Relations of Regions with Each Other Regarding Their Belonging and Love Needs

Belonging and Love Needs between the Regions:

When we range them according the table above, the belonging and love needs:

Marmara Region: The belonging and love needs of individuals living in this region show similarities only with the belonging and love needs of individuals living in Aegean region. There is meaningful difference with other regions.

Aegean Region: The belonging and love needs of individuals living in this region show similarities only with the belonging and love needs of individuals living in Marmara region. There is meaningful difference with other regions.

Mediterranean Sea Region: While the belonging and love needs of individuals living in this region show similarities only with the belonging and love needs of individuals living in Black sea region and Central Anatolia region; they show meaningful differences with the belonging and love needs of individuals living in Marmara region, Aegean region, Eastern Anatolia region and Southeastern Anatolia region.

Blacksea Region: While the belonging and love needs of individuals living in this region show similarities only with the belonging and love needs of individuals living in Mediterranean Sea region and Central Anatolia region; they show meaningful differences with the belonging and love needs of individuals living in Marmara region, Aegean region, Eastern Anatolia region and Southeastern Anatolia region.

Central Anatolia Region: While the belonging and love needs of individuals living in this region show similarities only with the belonging and love needs of individuals living in Mediterranean Sea region and Black sea region; they show meaningful differences with the belonging and love needs of individuals living in Marmara region, Aegean region, Eastern Anatolia region and Southeastern Anatolia region.

Eastern Anatolia Region: The belonging and love needs of individuals living in this region show similarities only with the belonging and love needs of individuals living in Southeastern Anatolia region. There is meaningful difference with other regions.

Southeastern Anatolia Region: The belonging and love needs of individuals living in this region show similarities only with the belonging and love needs of individuals living in Eastern Anatolia region. There is meaningful difference with other regions.

INTERPRETATION: According to the table, Eastern Anatolia region - Southeastern Anatolia region and Marmara region - Aegean region and Mediterranean Sea region - Central Anatolia region - Black sea region show similarities among them.

Relations of Regions with Each Other Regarding Their Value Sense Needs

Table-7 Relations of Regions with Each Other Regarding Their Value Sense Needs

	Marmara region	Aegean region	Mediterranean Sea region	Blacksea region	Central Anatolia region	Eastern Anatolia region	Southeastern Anatolia region
Marmara region		0,085	0,466	0,038	0,273	0,026	0,014
Aegean region	0,085		0,29	0,041	0,057	0,045	0,032
Mediterranean Sea region	0,466	0,29		0,046	0,9	0,041	0,038
Blacksea region	0,038	0,041	0,046		0,032	0,119	0,342
Central Anatolia region	0,273	0,057	0,9	0,032		0,02	0,029
Eastern Anatolia region	0,026	0,045	0,041	0,119	0,02		0,365
Southeastern Anatolia region	0,014	0,032	0,038	0,342	0,029	0,365	

Value Sense Needs between the Regions:

When we range them according the table above, the value sense needs:

Marmara Region: While the value sense needs of individuals living in this region show similarities with the value sense needs of individuals living in Aegean region, Mediterranean Sea region and Central Anatolia region; they show meaningful differences with the value sense needs of individuals living in Black sea region, Eastern Anatolia region and Southeastern Anatolia region.

Aegean Region: While the value sense needs of individuals living in this region show similarities with the value sense needs of individuals living in Marmara region, Mediterranean Sea region and Central Anatolia region; they show meaningful differences with the value sense needs of individuals living in Black sea region, Eastern Anatolia region and Southeastern Anatolia region.

Mediterranean Sea Region: While the value sense needs of individuals living in this region show similarities with the value sense needs of individuals living in Marmara region, Aegean region and Central Anatolia region; they show meaningful differences with the value sense needs of individuals living in Black sea region, Eastern Anatolia region and Southeastern Anatolia region.

Blacksea Region: While the value sense needs of individuals living in this region show similarities with the value sense needs of individuals living in Eastern Anatolia region and Southeastern Anatolia region; they show meaningful differences with the value sense needs of individuals living in other regions.

Central Anatolia Region: While the value sense needs of individuals living in this region show similarities with the value sense needs of individuals living in Marmara region, Aegean region and Mediterranean Sea region; they show meaningful differences with the value sense needs of individuals living in Black sea region, Eastern Anatolia region and Southeastern Anatolia region.

Eastern Anatolia Region: While the value sense needs of individuals living in this region show similarities with the value sense needs of individuals living in Black sea region and Southeastern Anatolia region; they show meaningful differences with the value sense needs of individuals living in other regions.

(7) Southeastern Anatolia Region: While the value sense needs of individuals living in this region show similarities with the value sense needs of individuals living in Black sea region and Eastern Anatolia region; they show meaningful differences with the value sense needs of individuals living in other regions.

INTERPRETATION: According to the table, Black sea region - Eastern Anatolia region - Southeastern Anatolia region and Marmara region - Aegean region -Mediterranean Sea region - Central Anatolia region show similarities among them. The individuals living in Marmara region - Aegean region - Mediterranean Sea region - Central Anatolia region drive themselves forward one more step due to their living conditions and wishes to be accepted into a specific environment or employment and to be respected by others. The general of population living in Black sea region - Eastern Anatolia region - Southeastern Anatolia region are farmers and they deal with agriculture and animal breeding. The social living area in these regions is limited when it is compared with other regions.

Relations of Regions with Each Other Regarding Their Satisfaction Sense Needs

Tablo-15 Relations of Regions with Each Other Regarding Their Satisfaction Sense Needs

	Marmara region	Aegean region	Mediterranean region Sea	Blacksea region	Central Anatolia region	Eastern Anatolia region	Southeastern Anatolia region
Marmara region		0,224	0,118	0,015	0,009	0,022	0,013
Aegean region	0,224		0,154	0,024	0,031	0,018	0,022
Mediterranean Sea region	0,118	0,154		0,036	0,026	0,024	0,006
Blacksea region	0,015	0,024	0,036		0,713	0,506	0,871
Central Anatolia region	0,009	0,031	0,026	0,713		0,342	0,924
Eastern Anatolia region	0,022	0,018	0,024	0,506	0,342		0,473
Southeastern Anatolia region	0,013	0,022	0,006	0,871	0,924	0,473	

Satisfaction Sense Needs between the Regions:

When we range them according the table above, the Satisfaction sense needs:

Marmara Region: While the satisfaction sense needs of individuals living in this region show similarities with the satisfaction sense needs of individuals living in Aegean region and Mediterranean Sea region; they show meaningful differences with the satisfaction sense needs of individuals living in other regions.

Aegean Region: While the satisfaction sense needs of individuals living in this region show similarities with the satisfaction sense needs of individuals living in Marmara region and Mediterranean Sea region; they show meaningful differences with the satisfaction sense needs of individuals living in other regions.

Mediterranean Sea Region: While the satisfaction sense needs of individuals living in this region show similarities with the satisfaction sense needs of individuals living in Marmara region and Aegean region; they show meaningful differences with the satisfaction sense needs of individuals living in other regions.

Black sea Region: While the satisfaction sense needs of individuals living in this region show similarities with the satisfaction sense needs of individuals living in Central Anatolia region, Eastern Anatolia region and Southeastern Anatolia region; they show meaningful differences with the satisfaction sense needs of individuals living in other regions.

Central Anatolia Region: While the satisfaction sense needs of individuals living in this region show similarities with the satisfaction sense needs of individuals living in Black sea region, Eastern Anatolia region and Southeastern Anatolia region; they show meaningful differences with the satisfaction sense needs of individuals living in other regions.

Eastern Anatolia Region: While the satisfaction sense needs of individuals living in this region show similarities with the satisfaction sense needs of individuals living in Black sea region, Central Anatolia region and Southeastern Anatolia region; they show meaningful differences with the satisfaction sense needs of individuals living in other regions.

Southeastern Anatolia Region: While the satisfaction sense needs of individuals living in this region show similarities with the satisfaction sense needs of individuals living in Black sea region, Central Anatolia region and Eastern Anatolia region; they show meaningful differences with the satisfaction sense needs of individuals living in other regions.

INTERPRETATION: According to the table, while a similarity is seen between Marmara region - Aegean region -Mediterranean Sea region, another similarity is seen between Black sea region - Eastern Anatolia region - Southeastern Anatolia region - Central Anatolia region among themselves. The reason for this is these regions' - Marmara region - Aegean region -Mediterranean Sea region – being locations of Turkey where welfare level is high and the individuals living these regions wish to be satisfied with their positions at companies, institutions, e.g. where they work and at their professional fields, hobbies and other activities they perform and realize their selves.

Conclusion And Assessment

This study was performed for the purpose of detecting whether the demands and needs of consumers in Turkey differ according to the geographical regions. There are different regions in Turkey and each region has different economic, cultural and social characteristics. These characteristics create the different living types, consumption patterns and behaviors. Each region's consumers have different demands and behaviors. And this is limited with the opportunities of the region.

The passed governments until now have tried to find solutions for the problems of the region, but the found solutions have always become political due to national and global reasons and couldn't cause to permanent reliefs. In this academic study, proposals and recommendations were presented to local and regional governments for the purpose of detecting the problems and their solutions. Making such a research and finalizing it as a supporting element for these was decided. The result found at the factor analysis of survey questions within this scope, formed a meaningful parallelism with the need levels presented by Maslow at theory of hierarchy of needs. The analysis of survey was assessed at these five need levels. When the result were assessed, it was found that Marmara region - Aegean region - Mediterranean Sea region show similarities with each other and Black sea region - Central Anatolia region show similarities with each other and Eastern Anatolia region - Southeastern Anatolia region show similarities with each other regarding physiological needs level. In addition to these, it was found that Black sea region shows similarity to Eastern Anatolia region - Southeastern Anatolia region; Central Anatolia region shows similarities to Marmara region - Aegean region -Mediterranean Sea region regarding value sense need level; and Black sea region - Central Anatolia region show similarities to Marmara region - Aegean region -Mediterranean Sea region regarding security needs level. It is thought that the primary reasons of these differences and similarities are related with higher industrialization level of Marmara region - Aegean region -Mediterranean Sea region regarding other regions, an economy based on agriculture and animal feeding is effective in Black sea region - Central Anatolia region and the effects of heavy economic and geographical conditions in Eastern Anatolia region - Southeastern Anatolia region over these regions besides the geographical positions of regions. In addition to these, it is obvious that the differences between regions cause directly or indirectly to these differences and similarities.

It was found as the result of the study that there are meaningful differences between the needs of individuals living in Turkey regarding the regions. These differences between regions should be considered regarding all policies from government services to the marketing strategies of companies to be applies in the regions and they should be measured and suitable policies should be produced.

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Determinants of Mobile Penetration to Forecast New Broadband Adoption: OECD Case

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Abstract

This paper aims to analyze relationship between Mobile penetration and various indicators of communication infrastructure throughout OECD countries. Panel data is utilized for the purpose of this study. In order to control network effects as well as the endogeneity of variables, the Arellano–Bond dynamic panel estimation is adopted. In particular, this paper attempts to identify what are the factors to promote the 3G mobile phone by using dynamic panel data analysis. In constructing an estimation model, Cellular mobile penetration is taken as a dependent variable, while various technical and economic variables are selected as independent variables. The obtained results can be used to forecast adoption of New Broadband Penetration technology.

Keywords: Mobile Penetration, New Broadband Adoption, Panel Data, Communication, Forecast

Introduction

The world has witnessed a dramatic improvement in telecommunications technologies during the past couple of decades. A wide range of telecommunication services have emerged in parallel with an increasing competition among the service providers. It has not been long since the introduction of third generation (3G) technologies even in OECD countries, yet some countries have already started to use 4G technology and some other are in the process of doing the required investment. 2G technology which is still widely used globally was based on voice technology to meet the basic demand of consumers. But the improving telecommunication technologies have enabled the video services as well, thus leading to 3G technologies. Now, Worldwide Interoperability for Microwave Access (WiMAX) 802.16 m and Long-Term Evolution (LTE)-Advanced were recognized as the foundation of fourth generation (4G) technology at the end of 2009 (Tseng, 2014). In this context, this study aims to explore the relationship between the level of such technologies and various factors that are argued to be related to them. Specifically, we attempt to identify the factors promoting the 3G mobile phone by using panel data analysis. In constructing an estimation model, Cellular mobile penetration is taken as a dependent variable, while various technical and economic variables are selected as independent variables. The obtained results are intended to be used to forecast adoption of 4G technology in the following studies.

Such a forecast is especially vital for telecommunications businesses. It is important to understand the development tendency of the 3G market and the growth of the 3G phones penetration rate to allocate their investments in base station settings and launched services. Therefore, an accurate forecast of 3G phones demand is important to help telecommunications companies with making operational, tactical marketing strategic decisions, such as business scheduling, staff training-on-job, the preparation of 3G added-value services, base stations investments, and so on. The benefits of accurate forecasting are undisputed (Chen, 2014).

Abu (2010) attempts to present a view of the effect of technological innovations for the diffusion of 3G mobile phone in Japan using panel data analysis. Suki (2011) examines the relationship between perceived usefulness, perceived ease of use, perceived enjoyment, attitude and subscribers' intention towards using 3G mobile services.

The purpose of this paper is to analyze factors promoting the 3G mobile phone from these two viewpoints. Regarding the research method, this paper applies a dynamic panel data model which performs an analysis with telecommunication data for OECD countries.

One of the major advantages of using the dynamic model is the opportunity to introduce network externalities or network effects into the analysis. In particular, subscribers can receive greater benefits in accordance with the growth of the network. Thus, a mobile carrier's network size or number of

subscribers plays an important role when users choose the particular carrier they want to subscribe to. Mobile carriers, for example, offer discount rates for calls among their own subscribers, and accordingly subscribers to larger networks receive greater benefits. Network effects are significant when competition among mobile carriers is fierce. Another benefit of applying a dynamic panel data model has something to do with the endogeneity problem of the data. Endogeneity problem occurs quite often in empirical analyses, thus appropriate ways of dealing with this problem need to be utilized. A parameter or variable is said to be endogenous where there is a correlation between the parameter or variable and the error term. When correlations between explanatory variables and error terms exist, estimated coefficients of variables are not true values, and an endogenous bias occurs. One way of dealing with the problem of endogeneity bias is to use instrumental variables. The reason of using such variables is that they are not correlated with alternative factors, instead they are only correlated with the independent variable of interest. Thus, such variables will be correlated with the dependent variable only indirectly. They work through the independent variable to affect the dependent variable. This paper provides a solution to such an endogeneity problem by applying the Arellano–Bond estimator which enables the calculation of an unbiased estimator by using an exogenous or predetermined endogenous variable. In addition to this, the system generalized method of moments (GMM) is used (Akematsu, 2012).

Methodology and Models

Methodology

A study consisting 34 OECD countries during the years of 2001-2011 (11 years) is conducted. Total number of observations is 330. Panel data analysis is used because both cross-section and time-section dimensions exist. Mobile penetration (the number of subscription per 100 inhabitants) which is used as the independent variable is dependent on the number of subscribers in the previous years, thus a dynamic panel data is used rather than static panel data. The Arellano–Bond linear dynamic panel data estimation model (Arellano& Bond, 1991) is used in order to solve the endogenuity, heteroskedasticity, and autocorrelation problems that exist among the variables. Arellano-Bond (1991) and Arellano-Bover (1995)/Blundell-Bond (1998) are models developed for this purpose. Both of them are especially designed for situations with small T, large N panels. Their usage on datasets of such characteristics is safe (Roodman, 2006). In our study, since T = 11 and N = 34, these conditions are satisfied.

Conducting the unitroot tests of the variables, it is detected that unitroot problem does not exist since the H_0 hypothesizes which states that it exists are rejected for each variable.

On the other hand, the Arellano–Bond linear dynamic panel data estimation model is executed by using xtabond2 command which was developed in 2003 in Stata12 to solve all these problems detected. This command also provides that endogenous and autocorrelation tests as well. H_0 hypothesis stating that instruments used in Sargan test are valid. Sargan is applied to test the instrumental variables used for the solution of endogeneuity problem (endogenous). If the number of observations is enough, as many lag values of endogenous variables as wanted can be used as instrumental variable (Roodman, 2006). The fact that number of observations is enough in our study makes it possible to use the 6th lag values of endogenous variables and pass the Sargan test successfully.

On the other hand, Arellano–Bond tests AR(1) and AR(2) are executed to test the auto correlation problems. In the AR (1) test, the lagged value of the dependent variable used in the model causes the rejection of H_0 hypothesis which states that there is no auto correlation. (The presence of the lagged dependent variable MP_{it-1} gives rise to autocorrelation). Thus, AR(2) test needs to be viewed (Roodman, 2006). Our model is resulted as expected, as the H_0 hypothesis stating that there is no autocorrelation in AR(2) test is accepted. Moreover, Wald test has resulted statistically meaningful. All these test results are provided in the tables below. Thus, our model has passed all the tests with success.

Models

Gombertz and logistic models have been the best models in explaining the S graphics (S-curve of innovation diffusion) of the most innovative trends (Lee & Lee, 2010). Using the Gombertz model is more appropriate as stated by Lin and Wu (2013) and Gruber and Verboven (2001) in their studies. Because in the Logistic model, the number of all the potential users (adopters) in a specific time and country needs to be forecasted and this is very difficult if it is an early stage for diffusion or there is heterogeneity among the countries (Lin and Wu, 2013); (Gruber and Verboven, 2001). This number (the number of potential adopters) is determined in Gombertz model as a function of supply and demand side variables. The formulas below are developed by this approach. The Gomberts model has a wide range

of applications in forecasting the transition processes into the new communication and service technologies (Stoneman, 1983; Estache, Manacorda, and Valletti, 2002; Lee and Lee, 2010; Kiiski and Pohjola, 2002; Singh, 2008; Trappey and Wu, 2008; Andres et al., 2010; Lin and Wu, 2013).

In our study, the empirical model below is used for mobile penetration similar to the way Lin and Wu (2013) used for fixed broadband penetration.

$$\ln MP_{it} - \ln MP_{it\_1} = \alpha_i (\ln MP^*_i - \ln MP_{it\_1}) \tag{1}$$

whereas MP stands for mobile penetration, MP_{it_1} mobile penetration of the previous year, and MP* total potential subscribers which is defined as a function of supply and demand side variables. Adding the changes of these variables by time, the model takes the form below:

$$\ln MP^*_i = \beta_{i0} + \beta_i 1 \ln gdp_{it} + \beta_{i2} \ln arpu_{it} + ¥_i Z_{it} \tag{2}$$

Z_{it} is used to explain the other explanatory variables possible. If we place this second formula into the first, it takes the below form:

$$\ln MP_{it} = \alpha_i \beta_{i0} + \alpha_i \beta_{i1} - \ln gdp_{it} + \alpha_i \beta_{i2} \ln arpu_{it} + \alpha_i ¥_i Z_{it} + (1- \alpha_i) \ln MP_{it\_1} \tag{3}$$

Writing this formula for the panel data analysis with our other variables:

Model 1:

$$\ln MP_{it} = \alpha_0 + \beta_1 \ln gdp_{it} + \beta_2 \ln arpu_{it} + \beta_3 \ln traf_{it} + \beta_4 \ln telinv_{it} + \beta_5 \ln internet_{it} + \beta_6 \ln edu_{it} + \beta_7 \ln HH_{it}$$
$$+ \beta_8 \ln mobrevenue_{it} + ¥_3 Z_{it} + \beta_9 \ln MP_{it\_1} + \mu_{it} \tag{4}$$

Model 2:

$$\ln MP_{it} = \alpha_0 + \beta_1 \ln MP_{it\_1} + \beta_2 \ln arpu_{it} + \beta_3 \ln traf_{it} + \beta_4 \ln gdp_{it} + \beta_5 \ln internet_{it} + \beta_6 \ln edu_{it}$$
$$+ \beta_7 \ln HH_{it} + \beta_8 \ln mobrevenue_{it} + ¥_3 Z_{it} + \mu_{it} \tag{5}$$

Model 3:

$$\ln MP_{it} = \alpha_0 + \beta_1 \ln MP_{it\_1} + \beta_2 \ln arpu_{it} + \beta_3 \ln traf_{it} + \beta_4 \ln telinv_{it} + \beta_5 \ln internet_{it} + \beta_6 \ln edu_{it}$$
$$+ \beta_7 \ln HH_{it} + \beta_8 \ln mobrevenue_{it} + ¥_3 Z_{it} + \mu_{it} \tag{6}$$

$\mu_{it,}$ shows the regression bias.

Variables and Data

Four of the 34 OECD countries are excluded from the analysis due to the lack of data availability (Israel, Australia, Slovenia, and Chile). Mobile penetration which is measured as the mobile phone subscribers per 100 people (mobile subscribersper 100 inhabitants) is used as the dependent variable in the study conducted over 30 countries. Nine independent variables used in the developed model are: mobile penetration rate in previous year, GDP per capita, mobile traffic, ARPU (average monthly revenue per user), public telecommunication investment per capita, internet host per domain, education, HHI (Herfindahl-Hirschman Index for mobile and other platforms), and mobile telecommunication revenue. In order to obtain the values of these variables, OECD Communications Outlook 2013 is used (OECD, 2013).

Moreover, import and export variables are used as the instrumental variables in the study. The logarithms of all the variables are used in the model as a way of minimizing the skewness problem that might have otherwise occurred.

The revenue is used to explain the broadband diffusion. Akematsu and Shinohara et al. (2012), Garcia-Murillo (2005) and Bouckaert et al. (2010) in their studies state that the revenue has a significant positive effect in broadband diffusions. Lin and Wu(2013), using the technique developed by Rogers (2003), have applied the approach of dividing the broadband usage periods into the innovator and early adopter stage, the early majority stage and the late majority and laggard stage. With this approach they have not been able to detect a meaningful relationship between the broadband diffusion and GDP per capita which they have used to represent the revenue in total time. On the other hand, they have found a positive meaningful relationship in the periods of the innovator and early adopter stage and the late majority and laggard stage. GDP per capita is used for this purpose in our study.

Although a meaningful positive relationship between the education and broadband diffusion is expected theoretically, this could not be detected in many studies (Garcia-Murillo, 2005; Cava-Ferreruela and Alabau-Muˇnoz, 2006; Lee and Lee,2010; Lin and Wu, 2013). Lin and Wu (2013) have faced with a

similar situation but they have been able to show this positive relationship for some periods of the life cycle.

We have used the Students as a percentage of the population of 15-19 year-olds as education variable.

The number of subscribers is expected to increase as the competition increases resulting in improved services and convenient prices. HHI (Herfindahl-Hirschman Index for mobile and other platforms) is used in this study to measure the factor of competition. It is calculate as the sum of the squared .market share of mobile and other platforms. This positive relationship is detected in some studies using HHI. (Bouckaert et al., 2010; Distaso et al., 2006; Lin and Wu, 2013; Lee and Lee, 2010).

Telecommunication investments (public telecommunication investment per capita) and increase in services provided through internet are expected to increase the mobile penetration. Various variables are used for this purpose. Internet host as a proxy (Garcia-Murillo, 2005), internet host per 100 inhabitants (Lee and Brown, 2008) and internet hosts per 1 million people (Lin and Wu, 2013) have detected the existence of this relationship. Internet host per domain and public telecommunication investment per capita is used for this purpose in our study.

On the other hand, the effects of the changes in mobile traffic (cellular mobile traffic per mobile subscriber per year) on mobile penetration is looked into during the study. In their study over Japan, Akematsu and Shinohara et al. (2012) have shown that the increase in need for talk has increase the use of new techniques developed (iphone, onesec, and felica), thus having a positive effect on the usage of 3G.

Penetration rate in previous periods can be expressed as the factor causing the model to be a dynamic panel. In other words, the number of mobile subscribers in previous periods effects the current number of subscribers. There are various studies in the literature showing that the high penetration in previous periods increases current penetration (Akematsu and Shinohara et al., 2012; Bouckaert et al., 2010; Lee and Lee, 2010; Lin and Wu, 2013; Church and Gandal, 2005; Andres et al., 2010). In these studies it is stated that the network developed by the subscribers in previous periods plays an important role in adding new subscribers, thus showing the network effect with a positive relationship on current penetration.

Although a meaningful negative relationship between the price and broadband diffusion is theoretically expected, in many studies conducted this could not be detected (Cava-Ferreruela and Alabau-Muˇnoz, 2006; Lee and Lee, 2010; Garcia-Murillo, 2005; Akematsu and Shinohara et al., 2012). Lin and Wu (2013) have shown the existence of this relationship only in certain stages of the life cycle. ARPU and mobile telecommunication revenue are used for this purpose in our study.

Results of Estimation and Discussion

Analyzing the correlation between the variables, a high correlation of 72.89% between GDP per capita and public telecommunication investment per capita is detected in the table 1. For this reason, used together, one of these variables always loses meaning statistically. Public telecommunication investment per capita is meaningful, while GDP per capita is not when they are used together. But both of them are meaningful when they are used separately. In the table 2, the three cases where (i) they are used together, (ii) GDP per capita used only, and (iii) public telecommunication investment per capita used only are shown by mopen1, mopen2, and mopen3 models respectively. Based on the statistics provided in the table 2, all three models have valid values. As of the other variables, the situation does not change.

In this case, the three models can be evaluated together. A positive meaningful relationship between mopen and GDP per capita is detected when considering the revenue variable. This situation shows similarity with the relationship between the revenue and broadband diffusion found in the studies of Lin and Wu (2013), Garcia-Murillo (2005), and Bouckaert et al. (2010). Since the increase in the revenues of individuals will increase their purchasing power, the positive relationship between GDP per capita and mobile penetration is an expected situation.

The negative relationship between the price and broadband diffusion observed in previous researches, is similarly observed between ARPU and mobile penetration. It is seen that the increase in the prices of provided services due to the increase in average revenue per capita results in decrease in the mobile penetration. A meaningful relationship between mobile penetration and other variable of mobile telecom revenue has not been detected.

Table 1: Correlations

	mopen	traf	arpu	pubtel~p	gdpcap	inthos~m	educ	hhi
traf	0.1637	1						
arpu	0.1277	0.5477	1					
pubtelinvcap	0.3043	0.392	0.6341	1				
gdpcap	0.5297	0.4713	0.6776	0.7289	1			
inthostdom	0.6523	0.2934	0.3472	0.4187	0.5943	1		
educ	0.4814	0.2704	0.3691	0.4521	0.449	0.4585	1	
hhi	-0.4008	-0.2133	-0.2029	-0.1235	-0.2117	-0.2983	-0.4672	1
motelrev	-0.0941	0.3128	0.3433	0.1212	0.0656	-0.1514	-0.0709	0.0824

Between cellular mobile traffic per mobile subscriber per year and mobile penetration, a meaningful negative relationship is observed. If the increase in mobile traffic reflects the fact that the market is about to reach its peak, this negative relationship is an expected situation because it might have resulted from the narrowing potential market share.

Table 2: Arrellano Bond Dynamic Panel Data Estimation Models of Mobile Penetration

	Model 1	Model 2	Model 3
	b	b	B
L.mopen	1.129859***	1.267539***	1.141039***
L2.mopen	-.335095***	-.439966***	-.3542452***
traf	-.0272314***	-.0243563***	-.0236675***
arpu	-.0904169***	-.057524***	-.0771358***
pubtelinvcap	.0556482**		.0529736**
gdpcap	0.0310059	.0639558***	
inthostdom	.0080408*	.0077373*	.0135067**
educ	.0571577**	.0794254***	.0734505**
hhi	-0.0561548	-0.0251569	-0.0566201
motelrev	0.0034965	0.0024224	0.0036879
_cons	1.294525**	0.4963797	1.474469***
Wald test	6729.65***	6021.977***	5592.234***
ar2	-1.317913	-1.30131	-1.236199
sargan	37.45361	27.05501	34.39133
N	270	270	270

*, **, ***indicate significance at the10%, 5%, 1% level, respectively.

As found in earlier studies, increase of internet use and services provided through internet with telecommunication investments, have resulted in positive effect on mobile penetration. Currently, many services can be provided through the internet. Using techniques such as voip, tango, skype, viber, and face time which enables cheaper communication through smart phones and e-trade opportunities increase this positive relationship.

The network effect shown by Akematsu and Shinohara et al., (2012); Bouckaert et al., 2010; Lee and Lee, 2010; Lin and Wu, 2013; Church and Gandal, 2005; and Andres et al., 2010 in their studies has been detected in our study as well. The number of subscribers in previous years had a positive effect on the current number of subscribers.

An expected positive relationship between education and broadband diffusion could not be proved statistically in most of the studies in the literature. However, existence of a statistically meaningful positive relationship between education and mobile penetration is detected in our study. Mobile penetration has increased in relation with the growth in the level of education, reflecting that technological services are used more in the societies with high education levels.

Although mobile penetration is expected to increase in relation with increasing competition, a statistically meaningful relationship between them could not be detected in this study. However, analyzing the periods of the life cycle as discussed in Lin and Wu (2013), the existence of such a relationship is expected to be observed because the effects of the competition for each stage of product life cycle can be different.

Conclusion

The relationship between 3G penetration and various indicators of communication infrastructure throughout OECD countries is analyzed throughout this paper. Panel data is utilized for this purpose. In order to control network effects and endogeneity problem, the Arellano–Bond dynamic panel estimation is adopted. This estimator enables the calculation of an unbiased estimator by using an exogenous or predetermined endogenous variable. In addition to this, the system generalized method of moments (GMM) is used. In constructing an estimation model, the number of subscribers to 3G mobile phone services is taken as a dependent variable, while various technical and economic variables are selected as independent variables.

A study consisting 34 OECD countries during the years of 2001-2011 is conducted. Total number of observations is 330. Panel data analysis is used because both cross-section and time-section dimensions exist. Mobile penetration which is used as the independent variable is dependent on the number of subscribers in the previous years, thus a dynamic panel data is used rather than static panel data.

The findings reported in the earlier section can be summarized as follow:

Analyzing the correlation between the variables, a high correlation of 72.89% between GDP per capita and public telecommunication investment per capita is detected.

A positive meaningful relationship between mobile penetration and GDP per capita is detected when considering the revenue variable.

The negative relationship between the price and broadband diffusion observed in previous researches, is similarly observed between ARPU and mobile penetration.

Increase of internet use and services provided through internet with telecommunication investments, have resulted in positive effect on mobile penetration. The detected network effect indicates that the number of subscribers in previous years has a positive effect on the current number of subscribers.

Existence of a statistically meaningful positive relationship between education and mobile penetration is also detected.

The obtained results are intended to be used to forecast adoption of 4G technology in future research.

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The Perception of Employing an Aging Workforce in the Industrial Sector

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Abstract

Better health and lower birth rates and longevity have helped create a greater number of elderly people and bring about an aging society in Thailand. The impact of this transition means that there will also be a change in the labor supply. Attracting workers from the older population segment may be one of the choices for adjustment in this context. Therefore, this study aims at the investigation of the perception of the stakeholders that are involved in hiring older people, especially in the automotive industry. Qualitative research methodology was employed by using in-depth interviewing. Key informants were selected from 4 groups of stakeholders, namely: elderly workers, employers or human resource managers, government officers, and academic scholars. The findings from interviewing the 32 key informants revealed that employing older people is a new phenomenon in this industry. The perception of the aging workforce was seen in both negative and positive aspects. The strengths of older people were perceived in terms of their skills and knowledge gained from their experience, while physical ability was the main weakness. However, most of the key informants agreed with the idea of employing an aging workforce because of the context of the aging society, labor shortages, and for economic reasons. Therefore, appropriate job assignments should concern the individuals' skills and knowledge utilization, such as consulting, supervising, and teaching—work which requires physical ability was not recommended. It is also interesting to note that many key informants viewed that hiring older people can be considered as social support without any business benefits concerned.

Keywords: Aging workforce; Employment; Elderly people

Economic Structure and Innovative Capacity

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Abstract

Managing structural change and strengthening innovative capacity are two most important tasks for any country, particularly for developing countries. Innovative capacity is the key for driving economic growth, and therefore offers a guideline to judge optimal structural adjustment. This paper studies how innovative capacity is affected by important structural factors - production structure，level of urbanization and the structure of the urban system, and openness to trade. It expands on the study of innovative capacity by Furman, Porter and Stern (2002) in three important ways. First, by focusing on the determinants of R&D expenditure, the most important determinant of innovation output, it goes a step further than FPS in trying to understand the driving forces of innovative capacity. Secondly, it brings urbanization process and urban structure, two important structural factors for developing countries, into consideration. It also takes a more nuance approach to the effect of trade on innovation capacity. Thirdly, it imposes a unified framework in analysing data from both developed countries and developing countries. The main findings are the following: (1) despite the fact that most R&D investment is made in the manufacturing sector, expansion of manufacturing sector at the expense of the service sector may lead to lower R&D intensity; (2) while improperly managed urbanization may weaken innovative investment，it is always possible to design the expansion path so that urbanization leads to higher R&D intensity; (3) shifting of population from small cities to large cities in practically all cases increases R&D intensity. However, a rise in urban primacy results in lower R&D intensity, for countries of all income levels; (4) the effect of openness on R&D depends on the level of development as well as the size of the country. By showing that urbanization can be managed to promote R&D intensity and therefore indirectly increase the rate of economic growth, the paper contributes to regional economics literature in offering a clarifying formulation to the conjecture of Henderson (2005) that urbanization per se does not promote growth.

Keywords: Innovative Capacity, Production Structure, Urbanization, Openness

Introduction

Managing structural change and strengthening innovative capacity are two of the most important issues faced by any country, particularly developing countries. Innovative capacity is the key for sustaining long run growth. The success of managing structural change thus must be judged in light of its impact on national innovative capacity. This paper looks at the relationship between national innovative capacity and three important dimensions of economic structure: production structure, urbanization, and the openness of an economy.

It's close to a consensus that innovative capacity and the associated rate of technological progress of a country ultimately determine the rate of its long term growth. There are good reasons to believe that the economic structure of an economy has important implications for its innovative capacity. On the one hand, the economic structure determines the proportion of the economy that is directly involved in innovative activities. On the other hand, the economic structure is an important part of the market environment that determines the incentive of investing in innovation. According to Furman, Porter and Stern (2002), R&D investment is the most important factor in deciding a country's innovative capacity.

However, the existing literature has not found impact of economic structure on innovative capacity or aggregate R&D spending to be statistically significant and consistent. A better appreciation of the different channels through which economic structure affects innovative capacity is required. Based on research done on urbanization, evolution of production structure, and open economy new growth theory, this paper analyzes the relationship between economic structure and innovative capacity with possible parameter variations, particularly due to differences in the level of economic development. It shows that economic structure has a significant impact on innovative capacity. However, both the direction and the magnitude of the impact may vary according to the level of economic development. The result provides a useful guideline for managing structural change, especially for developing countries. It also offers a way to broaden the discussion about the determinants of long run growth, avoiding many of the pitfalls

of measuring productivity and likely providing more power in testing statistical significance of the determinants by shortening the transmission links.

A Literature Review

This paper is built on four strands of literature : the study of structural change and economic growth, open economy new growth theory, the study of urbanization and development, and the research on national innovative capacity.

Production structure has long been an important subject in development research. Raul Prebisch, Simon Kuznet and Hollis Chenery are among the most prominent development economists that devoted considerable research attention to study the relationship between production structure and economic development. The three sector theory of Clark and Fourastie generated lasting impact on the way researchers and policy makers think about economies and economic development. More recently, Lall (2000) forwarded the idea that production structure in developing countries tilted towards industries with higher technology content is conducive to economic development. Hausmann etc. (2007) refine the measurement of technology content of industries and corroborate Lall's result.

Baumol's theory of cost disease (1967) makes the connection between production structure and growth in developed countries. He notices that due to the slow pace of technological progress in the service sector, increased share of the service sector may lead to the slowdown of economic growth.

Neoclassical growth theory made it clear that economic growth ultimately depend on technological progress. The new growth theory has opened the black box of technological progress, making profit seeking innovation the center piece of growth models (Romer, 1990). But the empirical new growth research bypasses innovation and focuses instead on the implications of new growth theory on cross country growth performance (Barro 1991). While this has resulted in the difficulty to test the new growth theory against neoclassical growth theory (Romer 1994), it highlights the possibilities of a variety of variables that can have an impact on economic growth under a general equilibrium framework.

Jacobs (1968) is associated with the idea that economies of scope in cities promote exchange of ideas and accumulation of knowledge. Marshall is another economist with a view that aggregation of economic activities helps the exchange of technical information, although his focus is on economies of scale within industries. From the perspective of new growth theory, both Jacobs and Marshall's ideas of agglomeration may lead to more efficient research activities, thus offer reasons to expect that urbanization promotes growth.

Both Jacobs and Marshall focused on the implication of agglomeration for the local economy. Lucas (1988) presents an endogenous growth theory that links cities with aggregate growth in a country. The key of endogenous growth theory is externality of knowledge, which diminishes with distance. The close contact of people within a city thus is conducive to knowledge sharing, knowledge accumulation and economic growth. Fujita and Thisse (2003) provide a theoretical model where the agglomeration of productive resources towards more innovation regions is conducive to economic growth. Duranton and Puga (2001) construct a model with both specialized and diversified cities. The latter offers a more supportive environment for innovation, and thus becomes the place where new products emerge and technological progress is made to propel economic growth.

There are few empirical studies of the impact of urbanization and the structure of urban system on innovative capacity or economic growth. Henderson (2003) studies the impact of urban primacy, defined as the share of urban population accounted for by the largest city, on economic growth. He shows that there is an inverted U type relationship between urban primacy and economic growth, and that the optimal urban primacy increases with the level of economic development. The coefficient of urbanization, however, is found to be negative, leading to Henderson's conclusion that urbanization per se has no impact on growth.

Brülhart and Shergami (2009) appeared to have accepted Henderson's conclusion about urbanization per se and focused their analysis on large cities and urban primacy. Their panel regression did not find the relationship between urban primacy and growth rate to be significant. But the share of large cities with population of more than 75 thousand is shown to have a positive coefficient, although the coefficient of its interaction term with the level of economic development is negative. At low levels of economic development, increase in the population share of large cities is positive for economic growth. Once per capita income reaches 10,000 USD, increase in population share of large cities has a negative effect on economic growth.

Based on data from 48 countries, Fan (2007) ran panel regression of R&D investment on urban population share, and did not find the coefficient to be statistically significant.

The last three studies collectively highlighted the most important issues in analyzing the impact of urbanization on innovative capacity and economic growth. But individually, they may all be plagued by the problem of missing variables. Henderson's focus was on the effect of urban primacy. He did not consider the effect of big cities and did not allow the relationship between urbanization and growth to be affected by the level of development. Additionally, he did not control the effect of the "advantage of backwardness", making level of urbanization a possible instrument for the level of development. Thus, the negative coefficient of urbanization may reflect the effect of "conditional convergence", rather than the effect of urbanization on growth.

Brülhart and Sbergami carefully specified control variables, but left out the level of urbanization as an explanatory variable, possibly influenced by Henderson's dismissal of urbanization as a relevant explanatory variable for growth. Fan did not consider the effect of the structure of the urban system on innovation. It is not surprising that their results are at odds with each other both in terms of the sign and statistical significance of the estimated coefficients. Besides causing biased estimation of coefficients, missing variables may lead to the coefficients being insignificant by increasing the unexplained variance.

Research on national innovation system tries to explain variations of innovative capacity across countries. The literature has long emphasized an appreciative approach, stressing the importance of individual characteristics of different countries, and being short on systematic statistical analysis. FPS contribute to resolving the problem by combining endogenous growth theory, national innovative system research and theory of national competitive advantage in an attempt for a unified empirical approach. The study demonstrates that national innovative capacity, measured by number of patents granted by the US, is closely linked to the stock of knowledge and R&D investment, offering support to endogenous growth theory. It also shows that increasing in the share of R&D performed by the business sector helps to improve national innovative capacity, offering support to national innovation system theory, according to FPS. Additionally, the study shows that the production structure has an impact on innovative capacity. Employing Ellison-Glaeser index to calculate the degree of concentration of patents granted by the US. in three industries: chemical industry, electrical and mechanical machinery and using the index to measure a country's degree of product specialization, the study shows that the degree of specialization is positively linked to a country's innovative capacity. This is regarded by FPS as supporting Porter's industry cluster theory. Hu and Mathews employ FPS framework to study innovative capacity of Eastern Asian economies. Their study offers support to the main FPS conclusions, but shows that the estimated parameter values as well as the statistical significance of some explanatory variables differ in developing countries from developed countries studies by FPS.

The aforementioned studies of national innovative capacity did not consider the impact of the spatial structure of the economies and took a simplistic approach to the effect of international trade. Base on an analysis of potential demand, Fan (2007) argues that international trade and urbanization are expected to have an impact on national innovative capacity. However, he finds no statistical evidence of either urbanization or international trade to affect R&D investment. While international trade is found to be a significant explanatory variable for patents granted by the US, both the magnitude and the sign of the coefficient are unstable.

The existing research on national innovative capacity may be improved in three directions. First, FPS only analyzed developed countries while Hu and Mathews only employed data from developing countries. For making forward looking development policies, understanding the difference between developing countries and developed countries is important. Therefore, study needs to be done with data covering both developing countries and developed countries. Second, according to FPS, 90% of the difference in innovative capacity can be explained by variation of R&D investment. But their study did not attempt to explain the source of the difference in R&D investment. Fan filled the gap by focusing on the source of variation in R&D spending, but his regression model did not reflect the core conclusions of open economy endogenous growth theory and the urbanization literature, therefore displayed weak power in finding statistically significant and stable relationships between the explanatory variables and innovation investment. Third, the existing literature on innovative capacity mostly relies on partial equilibrium analysis implicitly in the discussion and fails to appreciate the importance of the impact generated through general equilibrium channels stressed by endogenous growth theory.

Economic Structure and Innovative Capacity: A Theoretical Discussion

Thinking in term of endogenous growth theory, economic structure can affect innovative capacity mainly through three channels: spillover effect, agglomeration effect and change in relative demand. Through the lens of the three channels, the following discussion analyzes the impact on R&D investment from the three structural dimensions of interest.

Production Structure and Innovative Capacity

The manufacture sector is where the majority of the R&D investment is targeted and where the pace of technological progress has been most brisk. But for developed countries strong with R&D investment and at the leading edge of technological, the share of manufacture output normally accounts for only about 20% of GDP, far lower than that in developing countries with weaker innovative capacity. Furthermore, within developed countries, big cities with high shares of service sector in the economy are the most innovative, while small cities with large shares of their economy in the manufacture sector are far less innovative. The agglomeration of a rich set of producer services in large cities appears to be crucial for productive R&D activities in the manufacture sector. Expansion of the manufacturing sector at the expense of the service sector for the sake of achieving faster economic growth may be counter-productive, retarding the pace of innovation in the manufacture sector and overall rate of technological progress. However, with innovation mainly occurring in the manufacturing sector, it is conceivable that over expansion of the service sector can also lead to slow pace of innovation, as commonly believed. How the structure of the manufacture-service configuration affects the pace of innovation is an empirical issue to be investigated.

Urbanization and Innovative Capacity

Empirical literature provides strong evidence that cities, particularly large cities, are conducive to innovation. First, researches show strong localized spillover effect in knowledge production. Jaffe (1986) shows that a firm's research output is positively influenced by the spillover effect of other local firms. Jaffe (1989) shows that the number of patents granted to a firm are positively related to the R&D performed by the universities in the same region. Feldman (1994) uses number of new products as a substitute for patent as the indicator of firms' innovation output, and offers corroborating evidence. Similarly, Jaffe etc. (1993) find that the number of citations in patent application that comes from the same city is five to ten times higher than that from other cities. Almeida and Kogut (1997) confirm the result with a study of patents in the semiconductor industry. Therefore, cities where working population and production activities agglomerate help to enhance the spillover effect.

Second, among cities, large cities appear to be significantly more innovative than smaller cities. Researches on the US show that metro areas are where most innovations are made. Feldman and Audretch (1999) analyzed 3969 cases of product innovation in 1982 and found that 96% of it came from metropolitan areas, where the population only accounts for 30% of the national total. This is because Jacobs externality is strong associated with big cities where production structure is more diversified (Duranton and Page, 1990). Small and medium sized cities, on the other hand, tend to be more specialized (Henderson, 1997). Empirical evidence show diversified production structure promotes innovation (Glaeser etc., 1992; Groote etc., 2008). Therefore, innovations mostly happen in big cities with diversified production structure. Most new products are first produced in big cities, then move to specialized small and medium sized cities when the technology is mature (Duranton and Page 1999).

Based on the above evidence, hypotheses can be advanced that the expansion of big cities promotes aggregate national innovation; the expansion of small cities may also help to promote innovation by facilitating the exit of the mature industries from big cities, releasing resource for innovative activities. To test the hypotheses, level of urbanization, population share of big cities will be used as explanatory variables for innovation. Urban primacy is also included in light of Henderson (2003).

International Trade and National Innovative Capacity

Supported by empirical evidence (Dollar 1992, Frankel and Romer 1999), it is now widely accepted that openness to international trade is generally associated with faster economic growth. But this does not mean unconditional endorsement of open trade policy (Rodriguez and Rodrik, 2001). It is important to understand the channels through which trade affects economic growth (Edward 1993). Since technological progress determines the long term trend of economic growth, the key is to understand how international trade affects innovative capacity.

According to open economy new growth theory, there are three channels through which trade is connected with the rate of technological progress. First, a country can benefit from knowledge spillover effect when trading which other countries. (Grossman and Helpman, 1993; Coe and Helpman, 1999). Second, trade leads to specialization effect, with developed countries specializing in the production of high tech industries and engage in more innovative activities, while developing countries specializing in the production of traditional goods and shifting their resources away from research and development (Grossman and Helpman 1993). As a result, innovative capacity in developed countries is expected to strengthen with trade while that in developing countries is expected to decline. This second effect has ong been a concern of international trade theory. From "infant industry" argument, new trade theory, to open economy new growth theory, all have discussed the issue directly or indirectly.

The third channel is through "advantage of backwardness" or "catch up" effect, with which less developed countries lagging further behind technologically are expected to benefit more from international knowledge spillovers. Empirical endogenous growth literature shows that there is conditional convergence in cross country growth performance, providing supporting evidence for the theory. However direct studies of the spillover effect tend to raise questions about whether developed or developing countries benefit more from international trade in term of receiving knowledge spillovers (Coe and Helpman). The conflicting evidence may be related to the capacity of absorption in developing countries (Griffich etc. 2004). It may also be due to the offsetting specialization effect. To conclude, the effect of international trade on a country's innovative capacity may or may not be positive, depending on a combination of spillover effect, specialization effect and catchup effect. The net effect of international trade on innovative capacity is the third structural issue to be investigated.

The Statistical Model and Data

Using FPS framework as the starting point, the following analysis expands in three directions. First it extends from explaining innovative output to both innovative investment and innovative output，and with emphasis on the former in an effort to understand 90% of variation in innovative output. By focusing on R&D spending, rather than R&D output or economic growth, it shortens the transmission distance between the explanatory variables an d the explained variable, possibly reduces the noises in the data inflicted by random disturbances, and therefore is more likely to allow statistically significant relationships to emerge. The first panel regression equation is specified as

$$RS_{it} = \rho RS_{it-1} + \sum_l \alpha_l X_{lit} + \sum_j \beta_j MS_{jit} + \sum_{j'} \bar{\beta}_{j'} MSX_{j'it} + \sum_k \gamma_k U_{kit} + \sum_{k'} \bar{\gamma}_{k'} UX_{k'it} + \theta T_{it} + \sum_n \bar{\theta}_n TX_{nit} + \nu_i + \omega_t + \varepsilon_{it} \tag{1}$$

Where subscript I denote country and t denote time. RSit is R&D intensity of a country, defined as the ratio of R&D spending to GDP. R&D intensity rather than the absolute value of R&D spending is used to avoid noises associated with exchange rate fluctuations when R&D spending is converted to a common currency，normally the US dollar. This will give the regression more power in detecting statistically significant relationships. While using GDP as the denominator of the explained variable has its own drawback in making the error term correlated to explanatory variables, system GMM can effectively address the issue.

X_l denotes control variables. Subscripts i and t are omitted in the discussion. Control variable X1 is the level of economic development measured by ln (per capital GDP). Per capital GDP is converted by PPP exchange rates to US dollar. X1 measures the stock of knowledge and captures the "catch up" effect as well. Although, it is not possible in the regression to distinguish the two effects from each other, and the variable will be affected by exchange rate fluctuations. These are not issues of the main concern here to the extent that they do not pose a problem for the estimation of other coefficients.

The ratio of R&D expenditure funded by government spending to GDP is the second control variable X2. It can be regarded as reflecting the impact of national innovation system on R&D intensity. PFS uses the share of R&D expenditure funded by the business sector and shows a positive relationship with national innovative capacity. But Hu and Mathews show that for developing countries, the share of R&D funded by the government is positively associated with national innovative capacity. To avoid artificially setting government R&D expenditure against R&D funded by the business sector, the estimation here employs the ratio of government R&D expenditure to GDP as the second control variable.

The third control variable X3 describes the provision of infrastructure such as transportation and telecommunication facilities. The level of education among the working population is the fourth control variable, denoted by X4.

MSj and MSXj′ are variables related to the production structure. MS_1 is the ratio of manufacture value added to GDP; MS_2 is the ratio of service value added to GDP. The interaction terms of the two variables with the level of economic development X1 are devoted by MSX_1 and MSX_2, respectively.

Uk and UXk′ are variables related to urbanization. U1 is the level of urbanization, measured by the share of urban population. U2 is the share of national population residing in big cities with population of more than 1 million. U3 is urban primacy. UXk (k=1,2,3) is the interaction term of Uk (k=1,2,3) with the level of development X1, to capture the variation in the impact of urbanization variables with the level of economic development.

T and TXn are variables related the openness of the economy. The degree of openness is measured by the ratio of trade to GDP and denoted by T. TX1 is the interaction term of T with X1. TX2 is the interaction term of T with the size of the population. The coefficient of T is easy to interpret. The coefficient of TX1 shows whether the impact of the trade on innovation varies with the level of development due to specialization effect and catch up effect, although the two cannot be separated. The coefficient of TX2 shows whether large countries rely more on their domestic market for knowledge spillovers.

The second panel regression equation investigates the determinants of innovation output.

$$P_{it} = \lambda_1 P_{it-1} + \lambda_2 RS_{it} + \sum_l \alpha'_l X_{lit} + \sum_j \beta'_j MS_{jit} + \sum_{j'} \overline{\beta}'_{j'} MSX_{j'it} + \sum_k \gamma'_k U_{kit} + \sum_{k'} \overline{\gamma}'_{k'} UX_{k'it} + \theta' T_{it} + \sum_n \overline{\theta}'_n TX_{nit} + v'_i + \omega'_t + \varepsilon'_{it} \qquad (2)$$

Here Pit, ln (per capita patents granted in the US), is the variable measuring innovation output. Besides R&D intensity, the explanatory variables include all the control variables and variables of economic structure in equation (1). Equation (2) will help to check how economic structure affects innovative capacity—by influencing innovation expenditure, innovation efficiency or both.

Data for patent come from WIPO. All other data come from the World Bank online data base.

Quantitative Analysis

Descriptive Statistics

Table 1 provides basic statistics of the data. Due to missing data for many countries in R&D spending or patents granted in the US, the sample consists of 50 countries spanning the period of 1996 to 2009. The table shows that in terms of level of development, level of urbanization, openness to international trade, R&D intensity and patent granted in the US, the data display a good range of variation and are representative of both developing countries and developed countries.

Table 1. Basic Features of the Data

Variable	Obs	Mean	Std. Dev.	Min	Max
R&D intensity	699	1.10	1.03	0.02	4.84
Patents	481	1509	4959	2	32199
Per capita GDP	696	16535	12242	768	49952
Manuf. Share	642	18.6	6.8	1.8	35.6
Service share	654	60.0	11.4	23.8	92.8
Urbanization	700	70.2	17.3	26.1	100
Large city population share	700	29.4	20.2	4.3	100
Urban primacy	700	30.6	21.3	2.6	100
Ratio of R&D funded by government GDP	567	0.20	0.11	0.00	0.60
Trade-GDP ratio	700	90	67	15	444

Regression Results

System GMM method is used for panel regression. GMM method helps to address problems associated with correlation between the error term and explanatory variables. System GMM method improves estimation efficiency significantly compared with GMM method, under mild assumption on initial conditions (Blundell and Bond, 2000). The condition that patents granted in the US exceed 20 annually is used to make sure that the countries in the regression are engaged in earnest R&D investment and that the estimated relationship is not overly sensitive to random disturbances. Using Stata 11 for the

estimation, Fisher-type tests reject the existence of unit roots. Sargan tests rejects the existence of AR（2）process in the residual。

The Impact of R&D Infrastructure: Regression I presents the main result of the regression analysis. Lagged R&D intensity and lagged X1t can both be regarded as indicators of the stock of knowledge. Lagged X1 is used to avoid direct effect of contemporaneous GDP on R&D intensity. While lagged R&D intensity is statistically significant, confirming the dynamic structure assumed in system GMM method, development level was not found to be significant. One explanation is that if per capita GDP is more closely related to missing variables than the stock of knowledge, then after better function specification eliminates missed variables, the significance of per capita GDP is expected to fall.

Government R&D expenditure as a share of GDP has a positive effect on R&D intensity. This is consistent with Hu and Mathews' result, but with data covering both developed countries and developing countries here. Statistical test does not reject the hypothesis of the coefficient being 1, implying that government R&D expenditure does not crowd out business R&D spending, although it does not show crowd in effect either.

Among the infrastructure variables used in the regression, flight density, defined as the number of flight departures in a country divided by the population and the size of the territory, has a positive impact on R&D intensity and is reported as X3, while internet usage, network of road transportation are not found to have a significant effect (not reported). The positive effect generated by flight density is consistent with the finding of Freeman, Ganguli and Murciano-Goroff (2014) that in long distance research cooperation, face to face communication is very important.

Variables related to education attainment, such as contemporaneous or lagged high school enrolment and university enrolment are not found significant or having the right sign, and not reported in the table.

The impact of production structure: Share of manufacturing sector is not found to be a significant explanatory variable, while the coefficient of its interaction term with the level of development is negative and significant. The coefficient of the share of the service sector is positive and significant. The interaction term, if added, was not significant and comes with the wrong sign. (result not reported in the table).

Table 2. Regression results on R&D intensity

	I			II			III			IV		
	Coef	z					Coef.	z		Coef.	z	
L1. rndsh	0.7697	17.11	***	0.7490	20.72	***	0.7563	11.01	***	0.7053	9.32	***
X1	0.0452	0.82		0.0736	1.58		-0.1072	-0.62		0.0685	0.33	
X2	0.9744	13.11	***	0.8907	9.65	***	1.0932	8.29	***	1.0028	3.35	***
X3	0.0444	4.44	***	0.0584	7.85	***	0.0494	3.9	***	0.0366	3.52	***
MSX1	-0.0023	-3.56	***	-0.0027	-7.27	***	-0.0025	-3.76	***	-0.0039	-6.69	***
MS2	0.0039	3.84	***	0.0025	2.43	***	0.0002	1.37				
MSX3	0.0004	3.41	***	0.0004	6.46	***	0.0004	3.44	***	0.0007	6.63	***
U1	-0.0510	-3.06	***	0.0060	1.49		-0.0696	-3.89		-0.0673	-3.27	***
UX1	0.0056	3.36	***				0.0075	3.49		0.0068	3.05	***
U2	0.1629	7.13	***	0.0026	1.09		0.1370	4.79		0.1451	5.24	***
UX2	-0.0155	-6.65	***				-0.0126	-4.44		-0.0130	-4.58	***
UX3	-0.0172	-5.97	***	-0.0154	-4.68	***	-0.0023	-5.1	***	-0.0029	-5.99	***
TX1	0.0014	13.64	***	0.0009	12.37	***	0.0014	6.97	***	0.0015	10.11	***
TX2	-0.0008	-14.26	***	-0.0005	-12.34	***	-0.0008	-3.26	***	-0.0008	-8.97	***
T1							0.0000	0.01				
Dum-1997	0.0219	3.12	***	0.0162	3.14	***	0.0203	3.19	***	0.0169	2.26	***
Dum-1999	0.0245	6.05	***	0.0298	8.48	***	0.0272	5.53	***	0.0303	5.32	***
Dum-2002	-0.0083	-2.18	**	-0.0075	-2.02	**	-0.0084	-1.77	**	-0.0098	-1.92	**
constant	-0.7872	-1.43		-0.8269	-2.51	**	0.9177	0.75		-0.2501	-0.17	
patents >	20			20			50			100		

Note: *Statistically significant at 10%. ** Idem, 5%. *** Idem, 1%.

According to the result, one can analyze the effect of expanding manufacturing sector at the expense of the service sector, perhaps in the hope of encouraging activities in the R&D intensive sector. Taking derivatives with respect to MS1t,

$$\frac{dRS}{dMS_1} = -0.0023 \, X1t - 0.0039 + 0.0004 \, (MS2 - MS1)$$

It can be calculated that after per capita GDP reaches 1000 USD[60], if the share of the service sector is not 49 percentage points higher than that of the manufacturing sector, expansion of the manufacturing sector at the expense of the service sector will cause R&D intensity to decline. When per capita GDP reaches 5000 USD, if the share of the service sector is not 59 percentage points higher than that of the manufacturing sector, than the expansion of the manufacturing sector will result in lower R&D intensity. Therefore, in practically all realistic cases, expansion of the manufacturing sector at the expense of the service sector retards R&D activities.

Similar calculation shows that if manufacturing sector expands at the same pace as the service sector, R&D intensity increases in practically all meaningful circumstances. While this is not surprising, it is reassuring against possible spurious results from model misspecification.

The effect of urbanization: All interaction terms of urbanization turn out to be significant, suggesting that the effect of urbanization is systematically related to the level of economic development. Note that rising urbanization is caused by small cities if the population share of the large cities is held constant. Taking the linear terms and the interaction terms together, it can be calculated that after per capita GDP reaches 18900 USD, urbanization in the form of growth in small cities promotes higher R&D intensity. Holding the level of urbanization constant, changing the urban structure in favor of large cities increases R&D intensity, as long as per capita income is below 71,000 USD. But its effect diminishes as the level of income increases. It follows that when the income level is below 18900 USD, it is always possible to increase R&D intensity through enlarging the urban population by expanding the population in large cities with most but not all of the increase coming from small cities.

The linear term of urban primacy is not significant and removed from the regression. The interaction term has a negative and significant coefficient, showing that urban primacy being too high is not just a problem for developing countries. Actually, it is more a problem for developed countries, although the latter may have more means to prevent the problem from becoming a visible social issue.

As a comparison, regression II reports the case where only linear terms of urbanization variables are considered. Similar to Henderson (2002), urbanization has no significant effect on R&D intensity, while urban primacy has a negative effect and population share of large cities has a positive effect. This suggests that the conclusion of urbanization per se having implications for growth is likely a result due to particular specification of the regression function, and not a precise characterization of the relationship between urbanization and growth.

The Effect of International Trade: Going back to regression I, The interaction term of trade with X1t has a positive coefficient, consistent with the expected specialization effect. The interaction term with ln(population) is negative, showing that large countries benefit less from international trade than smaller countries. This is consistent with the stylized fact that large countries tend to trade less. Combining the two effects, expansion of international trade reduces R&D intensity for most developing countries. For example, for a nation with a population of 24 million, per capita GDP has to reach 21,000 USD, before expansion of trade increases R&D intensity.

The linear term is added to regression III. The result shows the coefficient is not significant，similar to the result in Fan. It shows again the importance of getting the exact channels right through which structural variables take their effect.

Regression Robustness: Regression IV reports results of regression after removing the insignificant terms in regression III where data were filtered by the requirement that patents received in the US exceeds 50 annually. Regression IV further imposes the requirement that patents received from the US exceeds 100 annually. The coefficients for the remaining variables are shown to be fairly consistent and stable compared with regression I both in terms of their signs and the magnitudes.

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[60] All income levels are in terms of the 1996 constant US dollar for all the discussion in the paper.

Innovative Capacity and Innovation Efficiency

The measurement of innovative capacity, or innovative output, is a difficult issue. Problems associated with using number of parents granted are well known. But the most frequently used alternative, productivity growth, needs to be calculated and are subject to problems caused by endogeneity, missing variables and artificial variations due to different methodologies used in the calculation. Everything considered, the analysis here adopts the approach used by FPS and employs number of patents granted in the US as the indicator of R&D output.

Table 3. Patents granted in the US

	F2. P	F2. RS	F2. X1	F1. X2	X3	U1	U2	U3	TX3
Coef.	0.12	0.47	1.12	3.25	0.28	-0.002	0.02	-0.01	0.0006
z	1.67	2.11	2.58	2.2	2.35	-0.11	0.94	-0.43	3.45
	*	**	***	**	**				***
	year4	year5	year7	year9	_cons				
Coef.	-0.29	0.22	-0.17	-0.14	-22.39				
z	-2.91	2.03	-1.89	-1.86	-5.32				
	***	**	*	*	***				

The results show research intensity has a positive impact on innovative capacity, consistent with expectation. Note that given R&D spending, the effect of other variables on R&D output reflects change in R&D efficiency. Flight density, besides promoting R&D investment, also boosts R&D efficiency. Face to face information exchange enhances both the scale and efficiency of R&D activities.

Similarly, government R&D spending also has a positive impact on R&D efficient besides raising R&D intensity. An increase of 0.1 percentage point in the government R&D expenditure-GDP ratio leads to a 32% increase in patents granted in the US. This is not surprising given the noted non-rival nature of knowledge generated by R&D investment. Knowledge generated by Government sponsored R&D is more likely to be made public and generate a higher social return. It suggests that immature market in developing countries stressed by Hu and Mathews may not be the main reason explaining the positive contribution of government R&D spending.

Other variables, such as share of R&D performed by universities，or that performed by the business sector, are not found to have a significant effect on patents granted (results not reported here）.

International trade and the interaction terms in equation (1) are all insignificant in the regression of equation (2). This may be due to the fall in data availability in patents granted. What turn out to be significant is the interaction term between trade and share of R&D performed by non-business sectors, with a positive coefficient. This suggests again that more research done to produce publicly available information enhances the efficiency of R&D spending. Here, it strengthens the effect of openness on R&D efficiency, likely through increasing broadly based absorptive capacity of the country.

Urbanization variables including the interaction terms are not found to have significant effects on R&D efficiency. Production structure variables including interaction terms are not found to be statistically significant. The results are not reported here.

Conclusions

This paper tests the impact of three groups of structural variables on innovative activities and discovers significant effect from all three groups of variables on R&D intensity. To summarize the main findings: (a) the effect of manufacturing share of GDP on R&D intensity declines with the level of economic development, and increases with the share of the service sector. (b) The positive effect of urbanization on innovation is mainly through the expansion of the large cities, although higher urban primacy leads to lower R&D intensity. Growth of small cities raises R&D intensity when the country has reached certain level of development. Importantly, urbanization can always be made to increase R&D intensity. (c) The impact of trade on innovation is positively related to the development level and negatively related to the population size. Trade increases R&D efficiency, particularly for countries that offer strong

support to research in universities and public laboratories. Government R&D expenditure enhances innovative capacity for countries of all income levels.

According to the above results on innovative capacity, as the economy develops, developing countries need to pay more attention to supporting the service sector, which is likely to mean producer services. Urbanization should be focused on the expansion of the large cities at early stages of economic development, but avoid the expansion of the super cities. To benefit more from international trade, developing countries may need to take a two pronged approach: first, adopting policies that reduce the specialization effect; second, providing more support to research that produces public available knowledge and technical information.

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The Impact of Internal Conflict & Judicial Outlay upon the Inflows of Foreign Direct Investment in Pakistan

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Abstract

Foreign direct investment has been a source of economic growth, transfer of technology, export orientation, competitiveness of local firm as well as a source of employment in many countries. Inflows of foreign investment in Pakistan are declining while the investment climate in neighboring countries is relatively pro-business, that is one of the reasons Pakistan has low profile in regional standings. According to different data vendors the high risk of terrorism in Pakistan and the heavy intrusion of judiciary in political matters, imply popular practices and culture of political integration, causing regime instability and political instability in country. So motivation behind this study is to assess the impact of judicial outlay and the internal conflict on the foreign direct inflows in Pakistan. Two competing models are used in order to consolidate the findings comprehensively. Feasible Generalized Least Square was used because of the serial correlation in the data; the variables used in this model are internal conflict, judicial outlay, interest rate differentials, military in politics, GDP per capita growth and investment profile. All of the variables are statistically significant except for judicial outlay reflecting the judicial ineffectiveness in attracting the FDI in the country. Weighted least square also imply that judicial outlay did not affected the judicial outlay significantly. The results of this model also revealed that all of the variables are significant except for judicial outlay. The role of judiciary in Pakistan is not so impressive in attracting the FDI in Pakistan. There has been an undue delay in the court decisions. The popular practices of the judiciary have not created the kind of precedence needed to attract more FDI, instead have led to decisions that have only complemented its own popularity. A policy guideline has also been suggested to combat the on-going civil disorder in Pakistan.

Keywords: Foreign Direct Investment, Crony Capitalism, Institutions

Introduction

Economic prosperity largely depends on the investment, domestic and well as foreign investment. Since the last decade of 20th century there has been a massive development in the globalization process as the international financial flows[61] has continuously increasing because of the active role played by the international economic environment . Investors are more willing to invest in the countries where they can enjoy safe and supporting business atmosphere. In Pakistan there has been a wave of terrorism and in turn damaging the security aspects in the country. Furthermore the judicial performance is also not so impressive in enforcing the contracts to secure the investor rights. So the first chapter will stress on historical trends of foreign direct investment[62] in Pakistan along with its regional comparison. However the judicial efficacy and the on-going internal conflict in Pakistan will also be taken under consideration. The investment climate in Pakistan will also be accessed by analyzing the country reports from different vendors.

Risk Ratings of Pakistan, Investment Climate Assessment and Prospects of Foreign Direct Investment: Perspective of EIU and PRS Groups

In Pakistan the investment climate is not much favorable to attract the foreign direct investment. According to Economic Intelligence Unit, the widespread planned load shedding in the industrial cities of Pakistan has led to increase in riots that erode the investors' confidence. There has been a shutdown of thousands of industrial units and severely damage the investment profile of the country. Corruption is also one of the main concerns for the business climate in Pakistan; there is a need for the liberal policies

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[61] International Flows can be the in the form of foreign direct investment, foreign portfolio investment, remittances and foreign aid
[62] "Direct investments in productive assets by a company incorporated in a foreign country, as opposed to investment in shares of local companies by foreign entities" (Investorwords.com).

in order to attract the foreign investment in the country. However new government of Pakistan has responded urgently in restructuring the country's electricity and gas sectors. It has paid off US$5bn of government companies related to power sectors.

Another report issued by the Political Services Group (PRS) stated that the reason behind the low inflows of foreign investment in Pakistan is high security threats. There is a high concern of political stability that hinders the investors' confidence to invest in Pakistan. There has been an undue delay in the privatization process of state owned enterprises along with that, the prolonged disputes between government and foreign investors puts a heavy toll on the inflows of FDI in Pakistan. The intellectual property rights of foreign investors are also not protected that seriously damaged the investment profile in Pakistan. Government policies are also non-transparent; they are move towards the subjective behavior rather than objective one. Bureaucratic quality is very poor in Pakistan, the provincial and federal bureaucrats are not easily adjustable to more open investment climate and are often resist to changes in policies, which really erodes the foreign investment in Pakistan.

Foreign Direct Investment in Pakistan: Trends and Cross Country Comparison

Pakistan is one of the developing countries and many sectors of Pakistan are in dire need of the foreign investment so that developments can be made and maximum economic benefits can be reaped through these investment flows. In case of Pakistan, the share of world FDI inflows rose to 20% in 1990's after the market -based economic reform policies of 1980, as the financial incentives had been introduced in form of tax concessions and credit facilities in order to attract foreign investors to Pakistan, this attempt was made in an attempt to liberalized trade Khan (1999). The era of 1990 also witnessed a liberalized policy[63] by the government and large FDI inflows were attracted towards telecommunications and energy sector. But if we compared to other developing countries the FDI inflows were low because of rapid government changes in this era[64]. From 2000 to 2007 FDI in Pakistan showed an increasing trend as the military regime during this era liberalized its policies and massive developments has been made in financial progression of the country, but after the 2008 FDI inflows declined sharply.
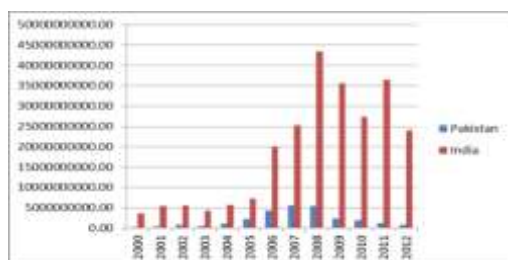
Fig1 FDI inflows current US $ in Pakistan and India, 2000 to 2012. Source: WDI

Figure 1 shows the comparison of foreign direct inflows to Pakistan and India, it has been reported y the figure that although these two countries are of same region, India also as one of the developing country is very much ahead of Pakistan in attracting the foreign investors. The table above explains that there has been an increase in the FDI inflows to Pakistan from 2000 to 2007 but after 2008 it fell drastically. India on the other hand is successful in attracting huge inflows to their economy as compared to Pakistan, showing the very clear picture of advantage India is experiencing over Pakistan from this ongoing financial globalization.

Institutional Outlay, Efficacies and the Investment Climate

The ability of country to reap maximum benefits from the economic liberalization and its ability of resistance to financial crises depends on its domestic institutions[65]. So the presence of strong institutions ensures the predictable framework for human interactions. Supporting and friendly institutional environment can reduce the uncertainty and costs associated with any transactions while as inefficient institutions can also adversely affect the cost of operating in a country. The reason behind the economic

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[63] In this decade maximum tariffs were reduced from 80 percent to 25 percent, tax concession has been introduced and credit facilities were provided in order to attract investors in the country

[64] During this era governments were sacked or replaced five times and elections were held three times, the dismissals of government were made on the basis of corruption charges against the government

[65] Institutions are the rules of the game in a particular society. This definition institutional framework shapes interactions between humans i.e. economic exchange. Institutional framework is considered as the basic social political and legal rules that work as a foundation for exchange, production and distribution (North 1990).

failure and social chaos in Pakistan is the collapse of its domestic institutions. Despite the fact that Pakistan has liberalized its policies to welcome the foreign investors, the government commitment in governing the institutions is below satisfactory level and is a major cause of declining FDI inflows in Pakistan.

Contract Enforcement, Dispute Settlement Mechanism and the Role of Judiciary

Multinationals are very much concerned that their contracts must be enforced and their intellectual property must be secured from the state and non-state actors of a country. So in the case where the contracts are breached and are not fulfill accordingly, the MNE's would approach courts to seek justice. Prompt decisions of such cases will remove the certain uncertainties and save their costs and time associated with the unnecessary delays by the courts. Judiciary in Pakistan is very much interfering in the government policies as in the recent years there is a rivalry tussle[66] going on between the government officials and judiciary. These steps by judiciary gives rise to the political instability and decrease their performance in disposing the cases that requires serious attentions. The judicial corruption is also high in Pakistan; the decisions are made on the basis of their social ties and relationships with the accused persons and elites that suppress the rights of masses that are poor people residing in a country. Corruption has been increasing over the years ; there is a lack of transparency in the regulatory policies as they are used only to support their own interests. In Pakistan there is a very trend of crony capitalism[67] and it is an area of concern for investors as it implies the unequal treatment in the country

State Legitimacy, Internal Conflict and the Prospects of FDI

For a healthy environment of FDI, it is necessary to have a sound security situation in Pakistan. Internal conflict shows the extent to which conflict in Pakistan exists in terms of various components, like civil war, terrorism and political violence against the government or the State itself. Pakistan, especially in the last 2 decades has faced waves of conflict within its sovereign boundaries. Whether it is in the form of sectarian violence, or terrorist attacks against law enforcement agencies of the State, internal conflict has been very high in the Islamic Republic of Pakistan.

In modern day States, the State is the sole actor that has monopoly[68] over exercising violence. It is necessary for the population to recognize this monopoly in order to consider the State as the legitimate entity to represent the people. Legitimacy over violence is essential because the State alone has the power to exercise violence through its law enforcement agencies in order to ensure a level of security for the citizens of the State. Therefore, sovereignty and legitimacy of any State, even Pakistan, this monopoly needs to be maintained. Terrorism in Pakistan aggravate the economic activity through increased transaction costs as there has been an increase in the public spending on defense and homeland security. This results the increase of social inequality in the country because the education and health sector has not given priority.

Study Objectives

So the focus of this paper is on the particular country risk particularly internal conflict as it is related to the business risk, as it is believed and intuitively supported by many studies that high internal conflict risk impedes the foreign direct investment inflows. Data of these risks are extracted from the International risk guides (ICRG) provided by the Political risk services (PRS). Political risk refers to the institutional environment as these are the risks may affect the returns on the investment and are caused by the poor institutional environment in a country. Uncertainties in the transactions can be caused by the low institutional quality. These risk ratings will help to evaluate the condition of FDI inflows in Pakistan.

This study will also take in to account the role of judiciary in attracting the foreign direct investment. Judiciary is very main institution of the country, as it provides a guarantee of fair and equitable treatment

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[66] In the recent years a lot of Suo moto cases has been called by the Chief justice of Pakistan against the Government executives like for example the prime minister of Pakistan has been disqualified by the Court that cause a social unrest in the country

[67] Crony capitalism is the economic structure in which the allocation of resources depends on the social ties with the political leaders and government officials

[68] Monopoly here defines that government is only the sole entity that can take extreme actions against its people nor one can challenge this right neither one can compete with the government activities.

of everyone residing the country. So this has been incorporated in a study to see that whether the investors are attracted because of judicial effectiveness or not.

Proposed Framework of Analysis, Methodological Choices, Literature Review and Model Building Preferences

This section will cover the theoretical formulations, the expected signs of variables and model specifications like the how the data is used is collected, quantified.

Framework of Analysis

Variables discussed below will be backed by the literature review; two models have been developed to justify the results and to check the consistency of signs in accordance with the thesis title. The main regressors in the models are internal conflict and judicial outlay.

Internal Conflict, Risk of Terrorism: A hindrance to Foreign Direct Investment

Internal conflict it is the also the risk ratings. It shows the civil wars and terrorist activities in a particular country. It is quantified on the scale of 0 to 12; the highest rating is given to countries who are not indulged in ongoing civil wars and terrorist activities. It will also have positive sign as the investors will be attracted towards country with low internal conflict. It is used in model 1 to analyze its effect on the inflows of FDI in Pakistan. In Model 2, Risk of terrorism is the number of incidents each year; it is replaced by the internal conflict to confirm the investors view on the terrorist activities going on in the country. The expected sign of this variable would be negative as the terrorist activities will increase the risk premium and hence will decrease the inflows of FDI.

Internal conflict shows the extent to which conflict in country exists in terms of various components, like civil war, terrorism and political violence against the government or the State itself. These conflicts forced the investors to increase their risk premium and that will in-turn reduces the overall investment by the MNE's (Busse & Hefeker 2007). Hayakawa, Kimura, & Lee (2013) also estimated that internal conflicts can deter the foreign direct investments when the developing countries are added in the sample, as it increases the risk and acts as a disincentive for them to invest in a particular country. Abadie, Gardeazabal (2008) in their study examined that terrorism depresses the net foreign investment positions; it was significant with the other factors like governance indicators, GDP per capita, country risk and FDI restrictions.

A Nexus between Judicial Outlay, Legal Protection and the Foreign Direct Investment

Judicial outlay shows the effectiveness of judiciary and is quantified by the ratio of number of disposed cases in a year and the total number of cases in that year. It will have the positive sign as the ratio increases, the judicial efficacy will increase and investors will be attracted towards the country. Judicial outlay is the effectiveness of judiciary in a country that is important for the legal protection. Judicial slowness might reduce the motivation behind the operation of new businesses in Pakistan as it indicates the deterioration of security related to legal protection, the possibilities of obtaining loans would also be reduced. The increase in the government spending in the form of judicial process increase the training provided to judges and it results in more disposals of cases and also the increase in the entries of new firms by half. (Chemim, 2009). Legal system in china is ineffective in attracting the flows of foreign direct investment as the laws implemented by the courts in china are based on subjective bases rather than on objective grounds. Judicial proceedings are very slow and subject to delays, apart from this most of the judgments from courts are interfered by the political personalities. Due to this delay and poor enforcement of courts decisions, investors often look for international forum rather than domestic courts to settle their industrial disputes (Shan, 2006).

Other Control Variables of Foreign Direct Investment

Investment profile shows the risk that investors might face in the host country; this risk is divided into three components, expropriation risk, payment delays and contract viability. It is ranked on a scale of 0 to 12; low ratings implied the high risk in a host country and higher ratings means low risk. So the expected sign of this variable would be positive as the risk reduces the inflows of foreign direct investment will flow in a country. These risk ratings are taken from the PRS group. The importance of investment profile in the determination of foreign direct inflows in a country is not surprising as it shows the ability of foreign investors to repatriate profits back to their origin country and it also shows the risk

of expropriation and contract viability, it is highly significant when uses the fixed affects but when but when uses the GMM estimators in order to have the lag effect it is appears insignificant as improvements in previous periods are not significantly related to inflows of FDI in recent period (Busse & Hefeker 2007)

An interest rate differential is the difference between the Pakistan lending rate and United States lending rate. The expected sign would be positive as the difference increases the comparative advantage to the foreign investors for investing in Pakistan would increase and will bring more inflows in the country. Akhtar(2000) observed that there is a relation between FDI and the borrowing cost. As if the borrowing cost in home country is lower than the recipient country, it will imply the advantage that foreign country can have over its competitors in the host country and this advantage will encourage the entry of foreign investors in the economy.

Military in politics is the interference of military in politics; it is ranked on a scale of 0 to 6. These PRS rating implies that the lower the value the higher will be the military participation in country politics. This expected sign would be negative as in Pakistan. There is a dichotomy in this concept as some researchers explained that FDI inflows are attracted towards democracy as there is a favorable environment in the democracies as it can protect their property rights (Nieman & Thies). While as Li & Resnick(2003) observed in their study that democratic institutions can improve the property rights protection in the country but increase in the level of democracies will have negative effect on the inflows of FDI in developing countries.

GDP per capita growth shows the increasing market size of a country and the improvement in the living standards of the citizens in a particular country. The higher the market potential the larger will be attracted as investors often considered the market approach into consideration before investing in a country. According to Tintin (2013), the recipient country GDP is positively and significantly related with the FDI from the European countries to the central and Eastern European countries. Market size usually most active and vibrant cause for locating FDI, that is the reason most countries try to gain the benefits from globalization as it swells market size which is the reason of high foreign investment in the region (Asiedu 2006). Aqeel& Nishat (2004) in their study on the foreign direct investment in Pakistan also observed that FDI and market size are positively and significantly related.

The variables discussed below are used in model 2.

Exchange rate volatility shows the instability in the exchange rate, the expected sign of this variable would be negative as it shows the macro economic instability in the economy. The higher the instability in the exchange rates the lower would be the inflows of foreign investment in a country. It is quantified by taking the natural log of official exchange rate. Exchange rate volatility represents the economic instability in the country and is one of the main factors in determination of foreign direct investment in a country. Sharifi-Renani, & Mirfatah(2012), in their study observed that exchange rate volatility is negatively and significantly related with the levels of foreign direct investment in Iran. Some studies also indicate the direct positive relationship of foreign direct investment and exchange rate volatility. Takagi & Shi (2011) in his study of panel data observed that FDI flows from japan to nine Asian countries increases with exchange rate volatilities in the host countries.

Number of telephones per 1000 people is a proxy for infrastructure in communication .The higher the numbers the high will be the accessibility of infrastructure of communication to investors and this will in turn induce more investors in the country. So the expected sign would be positive. Increase in infrastructure of communication is a main determinant of attracting the FDI inflows in a country. Moosa & Cardek when using the extreme bound analysis explained that the telephone lines per 1000 people proxy for communication infrastructure is statistically significant. Mottaleb, (2007) in his study observed that increase in infrastructure as telephone lines per 1000 is significant in attracting the FDI in developing countries.

Corruption is one of the determinants of institutional environment in a country; it is the risk ratings of PRS group in which higher value is given to those countries that have low corruption. So the expected sign would be positive according to the scale as the corruption decreases more FDI will flow in the country. There is a dichotomy exists in the theory of corruption as it might have positive or negative relationship with the FDI inflow in a country. Corruption is generally avoided by the foreign investors as because of corruption the operational costs of conducting a business will increase and will result in the operational inefficiencies therefore corruption deters FDI (Habib & Zurawicki 2002), Al-Sadig (2009). Corruption might reduce the FDI inflows from the transparent countries which are inexperienced in dealing with corruption while as it is not a problematic for MNE's those are from more corrupt countries, Wu (2006).While as on the other hand Egger& Winner (2005) in their study of developed and

less developed countries found that corruption increases FDI as it is regarded as helping hand in strict administrative restrictions.

Statement of Research Hypothesis

1st Hypothesis:

To pretest the proposition that the judicial outlay, as estimated by the ratio of disposed cases and total cases in a year, will affect the Foreign Direct Investment (Inflows) in Pakistan significantly and positively.

2nd Hypothesis:

To pretest the proposition that the Internal conflict (PRS Ratings) will affect the Foreign Direct Investment (Inflows) in Pakistan, Significantly and positively.

There will be two hypotheses in this model; their expected signs are already discussed in the above theoretical framework. Theses hypotheses are developed to observe that whether these factors are reflected in the MNE's decision to invest or not.

In the 2nd model the proxy for foreign direct investment has been replaced by the FDI inflows as a percentage of GDP. In this model five variables are included to justify the above two hypothesis as risk of terrorism will be used rather than internal conflict and judicial outlay would be the same.

Model Specifications, Estimation Techniques and Mathematical Derivations

Model 1: Generalized Least Squares

The econometric model used to estimate the results is Feasible Generalized Least Squares in order to account for serial correlation in the time series. After the Ordinary least squares regression with these variables the Durbin Watson test for serial correlation shows the value of 1.325 which lies between the values of du and dl at 5% significance level and this is implying the inconclusiveness of test, so to exclude any possibility of any serial correlation between the error terms and to yield better results GLS will be applied on the above variables.

Mathematical Derivations

$$\varepsilon t = \rho \varepsilon t\text{-}1 + \mu t$$

Also equals
$$Y t = \beta 0 + \beta 1 X 1 t + \rho \varepsilon t\text{-}1 + \mu t \qquad (1)$$

$$\rho Y t\text{-}1 - \rho \beta 0 + \rho \beta 1 X 1 t \text{-}1 + \rho \varepsilon t\text{-}1 \qquad (2)$$

This second equation was derived after multiplying the first equation by ρ. However If $\rho \varepsilon t\text{-}1$ is removed from the equation, there will be no autocorrelation.

Now subtracting the equation (2) from equation (1), the new equation which is equation (3) is free from serial correlation

$$Y t - \rho Y t\text{-}1 - \beta 0 (1\text{-} \rho) + \beta 1 (X 1 t - \rho X 1 t \text{-}1) + \mu t \qquad (3)$$

Equation 3 can be rewritten as:

$$Y 1^* = \beta 0^* + \beta 1 X 1 t^* + \mu t \qquad (4)$$

Model 2: Weighted Least Squares

The variables used in the second equation were hetroscedastic in nature as Breusch-Pagan / Cook-Weisberg test for heteroscedasticity shows the value of 0.0260. Which states that we reject the null hypothesis of homoscedastic series and hence the series is hetroscedastic so to remove this problem and to get the unbiased and reliable results we used the weighted least squares method in which robust regression has been run by assigning weights through software.

Estimation, Analysis and Conclusion

After regressing the selected models, this section will be based on the estimated results drawn from the specified models. The interpretation and analysis of these estimated results would be done and will be

backed by some studies, conducted in this relevant area of research. At the end of this chapter some policy guidelines will be suggested that can be drawn from the findings of the study and also the limitations of the study that can make the precision of the model questionable.

Estimated Results

In this section, the estimated results of both the models will be reported in the table explicitly

$$Log\ FDI_t = f(Cons + \beta_1 Interestdiff_t + \beta_2 Investmentprof_t + \beta_3 Internalcon_t + \beta_4 Mrksize_t \\ + \beta_5 Judicialoutlay_t + \beta_6 Military_t + e_t$$

$$FDI_t = f(Cons + \alpha_1\ terrorism_t + \alpha_2 Vol_t + \alpha_3 Infras_t + \alpha_4 Corr_t + Judicialoutlay_t + e_t)$$

Independent Variables	FGLS: Dependent Variable: Log Foreign Direct Investment, net inflows (current US$) (Coefficients) (Z-value)	WLS: Dependent Variable: Foreign Direct Investment as a percentage of GDP (Coefficients) (Z-value)
Interest rate differentials	(0.099)* (5.10)	
Investment Profile	(0.244)* (4.75)	
Internal Conflict	(0.086)** (2.36)	
Market size	(0.116)* (3.45)	
Military in Politics	(-0.441)* (-2.87)	
Judicial Outlay	(0.003) (0.68)	(.00576) (1.53)
Risk of terrorism		(-.0004)** (-2.42)
Exchange rate Volatility		(-1.6694)* (-4.25)
Corruption		(.32262)** (2.12)
Infrastructure		(1.2514)* (5.74)
Cons	(6.335)* (14.76)	(3.7924)* (4.06)

*Significant at 1%, **Significant at 5%

Analysis of Findings

All of the variables used have consistent signs in the above models their importance will be explained below.

Internal Conflict, Risk of Terrorism and the Inflows of FDI in Pakistan

Internal conflict is significant at 5% significance level, this factor basically showing the threat of terrorism as it is a proxy of civil war, and violence in the country. The higher the value, the lower the risk of terrorism so it also showing the direct significant relationship implying that as the threat of terrorism goes down the more foreign direct investment will flow in the country. Internal conflict arises from incidents like civil disorders and terrorist activities in a state, creates uncertainty and it is a cause of higher risk premium associated with particular projects and hence will affect the foreign direct investment significantly.

In Pakistan, there have been waves of terrorist attacks against the State to the extent that the State alone is not a legitimate entity to practice force. Terrorist organizations even have support in the population which is more dangerous for the State. This political violence has been so great that the government of Pakistan has been forced to come onto the table with these terrorist organizations and pay heed to their terms, giving a projection of a vulnerable and fragile State. In Pakistan many of the developmental projects are shut down because these terrorist organizations kidnapped many foreigners that were working on the development projects that halted the flow of technical skills in the country and decrease the inflows of foreign investment in Pakistan.

Foreign direct investment is negatively affected by the internal conflict because investors don't think that the State can protect their investment within their so called sovereign boundaries. This is why in the last six years especially, there has been a drastic fall in investments coming from abroad. An increase in the transaction costs due to terrorism affects the financial capitals and commodity trade as well.

Risk of terrorism in Weighted Least Square model is a proxy for internal conflict as it is highly significant in this model justifying the result of model 1; the reason for the decrease in the FDI in Pakistan in the last six years is due to the increased risk of terrorism in the country.

Judicial Outlay and FDI

Judiciary has the expected sign as the increase in judicial effectiveness is directly related to the foreign direct investment in Pakistan but it is not statistically different from zero as p-values are greater than the significance levels in both models.

The judiciary in Pakistan is politicized. It is because of the lack of judicial independence. This utterly upsets businesses that agonize by the crook police officers and they don't have any choice for the enforcement of their rules and laws, because of their lack of confidence in the judicial proceedings.. In Pakistan the protection of property rights is only for namesake being weakened by the ineffective judiciary. Judiciary in Pakistan is considered as one of the corrupt institutions in a country as the appointment of judges is heavily politicized. Investors are not showing their concern and confidence in the judicial proceedings in Pakistan. For investors time is money and as shown by the stats, judges are not able to resolve a dispute in a given time that discourages the investors to use the legal system for the enforcement of their contracts and to secure their property rights so they will indulge in other illegal ways like bribing the government officials to resolve their disputes in their own interests and this would give a rise to the corrupt culture in the country. Cases in Pakistan have been known to be drag; there are thousands of pending cases that requires some attention from judges. People have also suffered in penitentiary for years as their judgments are endlessly protracted. It is mainly because of incompetent hiring's in the selection process and apart from this there is a lot of political pressure that reflects in the decisions made by the judges.

One of the most important factors for FDI is how friendly the government is towards foreign investment. We've seen how even countries with the most inefficient judiciary still had a lot inflow of FDI, like Iran during the era of Shah and Chile during the regime of the dictator Pinoche. Even the most democratic countries like India has inefficient and corrupt judiciary yet the influx of foreign direct investment in India is very high .The reason was simply that they let in the investment flow in without any restriction.

Analysis of Other Control Variables

Interest rate differentials is highly significant at 1% significance level, as its p-value is 0.000 which indicating a strong positive relationship between the interest rate differentials and foreign direct investment. It shows the comparative advantage to foreign investors if they borrow money from the home country and invest in the host country. The results of this variable clearly state the cost advantage that foreign investors want over their rivals in the host country.

Investment profile is a proxy of risk for profit repatriation, expropriation risk and payment delays... The decrease in ratings will imply that risk has been increased as investors are very much concerned of the illegal possession by the state and the confiscation of their properties and most importantly foreign investors are more resistible to the risks associated with the repatriation of profits which is the process of sending back their profits to their home country. It is highly significant as p-value is very low and positive sign shows the risk averse behavior of foreign investors.

Military in politics shows that autocratic regimes attract foreign direct inflows as the lower value implying higher military involvement in politics. It is supported by the fact that autocratic governments can provide better entry agreements to multinational companies, as the military governments did not interfere much in the initial commitments of the foreign investor's business activities. There is also a fact that democratic governments condemned the presence of monopoly culture in the state which reduces the chances for foreign investors to exploit the domestic markets and this will in turn reduce their gains through comparative advantage over local businesses.. The trend in the data also supporting the fact that after 2008 the foreign direct investment inflows decreased sharply from $5.4 billion in 2008 to $0.8 billion in 2012. It is highly significant as p-value is less than 0.01.

Gross domestic product per capita growth rate is used to represent the market size in the country. It is very important variable for the investors that are looking for market approach. The result in the above

table shows that foreign investment is more likely to be attracted by the fast growing market. P-value is less than 0.01 and it also showing the direct relationship with the investment flows implying that as the Gross domestic product grows there will be a chance for investors to find the potential customers and provides an opportunity to them to expand their market.

The analyses of variables discussed below are used in the weighted least square models with the FDI as a percentage of GDP as a dependent variable.

Corruption is significant at 5% significance level; this is the ratings taken from the PRS group, stating that the corruption decreases with the increase in ratings. So the positive sign justifying the result that as the corruption decreases the foreign investment will flow in the country.

Infrastructure which is proxy by the number of telephone lines per 1000 people is significant as it is a part of infrastructure that is need to conduct the business operations in a country. The availability of infrastructure is very important for MNE's to indulge in the cross-border co-ordinations.

The result shows that foreign direct investment is negatively and significantly associated with the exchange rate volatility in Pakistan at 1% significance level. The more the exchange rate volatile the higher will be the exchange risk which increases the uncertainty in profits for future and as result the investor will lose confidence in the market.

Conclusion and Policy Recommendations

The main goal of this research is to analyze the factors that are important in determination of foreign direct investment in Pakistan, particularly the nexus between judicial outlay and FDI along with the relationship of internal conflict and the inflow of FDI in the country. Foreign direct investment is an impetus for development in a country but the investment climate in Pakistan is not very favorable as revealed by many data vendors. Internal conflict has increased dramatically in Pakistan, there is a very high risk of terrorism as civil disorder is prevailing in the country and significantly affects the foreign direct investment in Pakistan. Judicial outlay is also inefficient in securing the very interests of investors as the enforcement of contracts are poor, property rights are not secured and the judicial efficacy in disposing the cases is not very impressive in Pakistan. In order to eradicate the risk of terrorism and civil order prevailing in a country, the Government of Pakistan needs to take the steps in order to take the people of these forces in the political mainstream of the country. This very step would help to solve their grievances against the state, as once they will be involved in the political mainstream, there will be a chance for them to express their stance and the citizens of Pakistan will than make a rationalize decision on their views. Secondly, there is a popular notion that these forces are funded by some international agencies. Involving them in the political mainstream would expose the agencies that are supporting them in this evil cause. Thirdly, it would eliminate their incentive to damage the state.

Limitations of the Study

The biggest limitation in conducting this research is that very short time period has been selected because the PRS data is available from 1984, so it limits my research to limited years. Secondly the researches done by the indigenous researchers of Pakistan are far less than the studies conducted in the world especially in the Latin America. The quantification of the Judicial Outlay has been done by taking the cases regarding to the appeals in Supreme Court, this might not allow us to incorporate the effectiveness of lower courts in the study.

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Real Option Strategic Approach to Find Optimal Company's Source of Financing

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Abstract

This article is devoted to investigation and evaluation of the project expanded NPV rather than simple or passive NPV depending on its available options of financing using real option approach. This approach combines ideas of corporate finance, real options and game theory and concludes to the Risk-Neutral Probability measure and the value of a Call Option that comes from Black-Scholes-Merton model. The findings enable us to estimate the value of managerial decisions, project flexibility and help managers to select the best choice of strategic financing and its available options and their respective combination.

Keywords: Strategic Real Options, Strategic Planning, Strategy Valuation, Expanded Net Present Value (ENPV), Call Option, Exercise Value (EV).

Introduction

Any project whether it is launching or developing requires financing, that in most cases is covered by own funds partially, whereas the rest of by attracted facilities. On the one hand, financing attraction varies in different forms, e.g. loan, mezzanine, equity financing, or even concluding forward contracts. On the other hand, the proportion of each available source is important and stays under question. Therefore, the problem of better choice between available financing options and their respective combination exists.

Correct decision thus is especially important as a real option implies the value that includes any direct and indirect costs and benefits connected with using such an option, besides its direct influence on investment attractiveness ratios and ultimate valuation of a project. Moreover, since financing attraction requires a valid business valuation, the real option effect is an integral part of any calculations connected with such.

Theory

Corporate or strategic real option models synthesize the newest developments in corporate finance and real options and game theory to help bridge the gap between traditional corporate finance and strategic planning. It enables to estimate the value of a managerial decision, timing it depending on key variables and market conditions and thus is suitable to valuing strategy and its flexibility. The opportunity to invest or make any other decision that implies an ultimate cash flow effect is thus analogous to a call or put option with an inherent exercise price.

In pursuit of its decision-making goals, real-options modelling conclude into expanded Net Present Value (ENPV), rather than simple NPV, that is much more relevant base for either a feasibility study of any project, an investment and managerial decision. The key here is that ENPV criterion incorporates, along with simple NPV of expected cash flows from an immediate investment, the flexibility of the combined options embedded in the project. Such an option could be for instance the opportunity to change a source of financing due to a certain circumstance occurred in future.

In order to assess the company ENPV depending on its available financing options we use real option approach that concludes to the Risk-Neutral Probability measure (1) and the value of a Call Option that comes from adjusted Black-Scholes-Merton equation (3).

$$p = \frac{(1+r)S - S^d}{S^u - S^d} \qquad (1)$$

where S is the initial stock price that can go either up to S^u or down to S^d. If the risk-free interest rate is $r > 0$, and $S^d \leq (1+r)S \leq S^u$, then the risk-neutral probability of an upward stock movement is given by the number p.

Adjusting the equation (1) to a real option case we get

$$p = \frac{(1+r)V - V^-}{V^+ - V^-}$$

(2)

where V is the gross value of expected cash inflows that can go either up to V^+ or down to V^-.

$$C = \frac{p \times C^+ + (1-p) \times C^-}{1+r}$$

(3)

where C is the ENPV or Call Option, $C^+ = Max(V^+ - I, 0)$, $C^- = Max(V^- - I, 0)$, I is the investments or Exercise Value of Call Option.

Risk-Neutral Probability is the most important principle in derivative valuation. It states that the value of a derivative is its expected future value discounted at the risk-free interest rate. This is exactly the same result that we would obtain if we assumed that the world was risk-neutral. In such a world, investors would require no compensation for risk. This means that the expected return on all securities would be the risk-free interest rate.

Methods

We apply Discounted Cash Flow (DCF) rather than standard NPV approach because of two fundamental differences between them. The first is that DCF allows apply different discount rate through analysed periods whereas NPV just single discount rate does (left-site part of formula (4)). On the other hand, using DCF valuation we apply Terminal Value (TV, formula (4, 6)) that is the present value at a future point in time of all future cash flows when we expect stable or perpetuity growth rate forever. TV is most often used in multi-stage cash flow analysis and allows for the limitation of cash flow projections to a several-year period.

$$DCF = \sum \frac{FCFE}{(1+WACC)^n} + TV$$

(4)

where $FCFE$ or Free Cash Flow to Equity is the cash flow paid to the equity shareholders of the project after all expenses, reinvestment and debt repayment in time n.

$$WACC = \frac{E}{E+D} R_e + \frac{D}{E+D} R_d (1-T)$$

(5)

where $WACC$ or the Weighted-Average Cost of Capital, E and D is the company's equity and debt respectively, R_e is the cost of equity or required Return on Equity (ROE), T is a corporate tax rate.

$$TV = \frac{1 - \dfrac{1}{(1+WACC)^n}}{WACC - g} \times \frac{CF_n}{(1+WACC)^n}$$

(6)

where g is perpetuity growth rate of the company's cash flows.

Results

Whereas ENPV criterion incorporates the flexibility of the combined options embedded in the project we assume the company has an option to change a source of financing after the project has been launched shown in Figure 1.
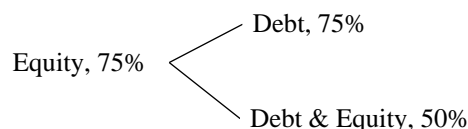
Fig. 1. Financing options decision tree

Options reproduced in Fig. 1 anticipate the company's investment (I) to launch the project is initially structured as 75% of Equity and 25% of Debt capital. The company has an option to change the capital structure after starting the project due to decrease of its riskiness. Thus it can choose between increase in Debt 1) up to 50% or 2) up to 75%. Hence, the calculations showed in Table 1 depict all consecutive NPV components for each option.

Table 1. NPV components

	Base	Equity	D&E	Debt	STD
NPV, USD mln	(7.2)	14.4	15.9	17.8	15.0%
FCFE, USD mln	(7.2)	9.0	9.1	9.1	1.4%
Gross FCFE, USD mln	1.3	9.0	9.1	9.1	1.4%
less CapEx (I), USD mln	8.5	-	-	-	-
TV, USD mln	-	5.4	6.8	8.6	32.7%
WACC, %	*17.4%*	*17.4%*	*14.9%*	*12.3%*	*24.5%*

The Base figures in Table 1 mean zero (0) or a launch period, which is a set base for all other scenarios (options) available. Hence, the NPV figure include the Base part and a particular variable inherent to each Equity, D&E and Debt financing option that is separated only in Table 1.

It is obvious that the key company valuation component TV hugely depends on the cost of capital, as we can see by the standard deviation (STD) measure in Table 1. The reason for such a deep tie of it to WACC can be explained by the equations (6) and (5). Behind that, we can see the extremes of NPV due to a key WACC component deviation, i.e. Debt interest rate (IR) showed in Table 2.

Table 2. NPV sensitivity analysis

	+ 25%	Base IR	- 25%
NPVe, USD mln	6.6	**7.2**	7.8
FCFEe, USD mln	1.5	1.8	2.1
TVe, USD mln	5.2	5.4	5.7
WACCe, %	*18.0%*	*17.4%*	*16.8%*
NPVde, USD mln	**7.3**	8.7	10.2
FCFEde, USD mln	1.2	1.9	2.6
TVde, USD mln	6.1	6.8	7.6
WACCde, %	*16.1%*	*14.9%*	*13.6%*
NPVd, USD mln	8.2	10.6	**13.5**
FCFEd, USD mln	0.9	2.0	3.1
TVd, USD mln	7.3	8.6	10.4
WACCd, %	*14.1%*	*12.3%*	*10.5%*

We assume the initial IR is 12% per annum and can deviate within 25%. Since the change in IR affects NPV non-linear, it takes negative and positive effect in case of IR ups and downs respectively. The company can grasp possible benefits from IR change once any occurred or even can suffer negative impact. Moreover, the company can secure its utmost IR risk connected with Equity scenario by switching to other available ones. Therefore, the worst NPV in such case is $7.3 million instead of $6.6 million showed in Table 2, whereas the best one $13.5 million is still available to achieve.

Following the equations (2) and (4) we calculate V, V^+ and V^- in Table 3 by adding Exercise Price to NPV, NPV^+ and NPV^- respectively.

Table 3. Gross cash inflows calculation

	Equity	D&E	Debt
Exercise price, USD mln	8.5	8.5	8.5
NPV, USD mln	7.2	8.7	10.6
NPV+, USD mln	7.8	10.2	13.5
NPV-, USD mln	6.6	7.3	8.2
V, USD mln	15.7	17.2	19.1
V+, USD mln	16.4	18.7	22.0
V-, USD mln	15.1	15.8	16.7

Summarizing the data in Table 3 we obtain the capital investment opportunity showed in Fig. 2.

$$V = 15.7 \quad < \quad \begin{matrix} V+ = 22.0 \\ V- = 15.8 \end{matrix}$$
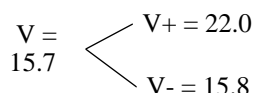
Fig. 2. Investment opportunity decision tree

Conclusions

Consider again the financing opportunity shown in Fig. 2. The company has an option to launch the project that involves making a capital expenditure (CapEx) of $I_0 = \$8.5$ million (in present value terms). The gross value of expected future cash inflows from the project, $V_0 = \$15.7$ million, may differ in line with financing options available to $V^+ = \$22.0$ million or $V^- = \$15.8$ million (with equal probability, $q = 0.5$) due to uncertainty over the Debt interest rate including. The opportunity to invest provided by the project is analogous to a Call Option on the value of the completed project (V) with an exercise price equal to the required outlay, $I_0 = \$8.5$ million.

The value of this investment opportunity obtained from the end-of-period expected values with expectations taken over risk-neutral probabilities calculated by equation (2) in Fig. 3, discounted at the risk-free rate (here $r = 0.09$): the ENPV or Call Option according to the equation (3) is $\$7.9$ million, showed in Fig. 4.

$$p = \frac{(1+r)V - V^-}{V^+ - V^-} = \frac{(1+0.09)15.7 - 15.8}{22.0 - 15.8} = 0.2$$

Fig. 3. Risk-neutral probability calculation

$$C = \frac{p \times C^+ + (1-p) \times C^-}{1+r} = \frac{0.2 \times 13.5 + (1-0.2) \times 7.3}{1+0.09} = 7.9$$

Fig. 4. Call option calculation

The value of the financing option (ENPV) exceeds passive NPV of Equity scenario commitment of 15.7 – 8.5 (i.e., 7.9 > 7.2 million). Therefore, it is reasonable to change the capital structure after starting the project and replace Equity capital by increasing Debt up to 75%.

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Turkey's Export Dynamics: A Simultaneous-Equation Model Analysis

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Abstract

Turkey is one of the countries where a major portion of exports is critically dependent on foreign manufacturing on its land which in turn is dependent on imports of intermediate goods. Intermediate goods imports make 70% of Turkey's total imports. This critical feature of the economy, which causes endogeneity in regression models, led us to use simultaneous-equations model in analyzing its exports and imports. We covered the period from 2003 to the end of 2013 which is economically more stable. While imported intermediate goods play a critical role in exports, we find that exports are more sensitive to real exchange rates than imports.

Keywords: International Trade, Exports, Imports, Simultaneous-Equation Models, Intermediate Goods

Introduction

There are many different models used to analyze export/import dynamics with each focusing on a different aspect of the problem. Understandably, these dynamics may differ across regions, countries or the conditions which justify using different models. The primary three factors are income level at the domestic and the foreign country, relative prices and movements in exchange rates. The secondary factors are trade policies, monetary and fiscal policies and producer level features (Yücel 2006).

Starting in the late seventies, the higher cost of labor in the developed countries forced producers to look for opportunities in countries with relatively cheaper cost of labor. The major beneficiaries of such a movement of capital were the Southeast Asian countries. These countries became known for their high levels of exports with current account surpluses. Foreign direct investment (FDI) played a major role in these results. In fact, according to Singh and Jun, export orientation is the strongest variable for explaining why a country attracts FDI (Singh and Jun 1995).

Another factor in determining exports is the level of intermediate goods imports. Together with FDI, imports of intermediate goods have a determining role in the level of exports in low-cost-labor countries. Therefore, they cannot be thought independently. The cost of labor in Turkey, which is the subject of this paper, is lower than many of the developed countries, even if not as low as the Southeast Asian countries. Turkey's average ratio of its intermediate goods imports to total imports is more than 71% over 11 years (Figure 1, Turkey's ratio of its intermediate goods imports to total imports). Since intermediate goods play an important role in export goods production, we cannot think them independent of exports. In this paper, we analyzed intermediate goods imports and exports of Turkey in a simultaneous equations model with the thinking that these two variables are endogenous.
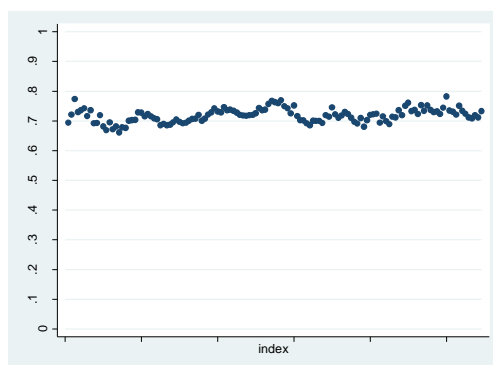
Fig. 1. Turkey's ratio of its intermediate goods imports to total imports

Literature Review

The causal relationship between exports and intermediate goods imports of Turkey is tested in a paper by Yildirim et al. (2012). They use a leveraged bootstrap-corrected MWALD test to find this relationship. They found no causal relationship between real exchange rates and imports/exports though.

Giles et al. (2000) surveys more than a hundred and fifty papers looking for causal relationships between export and import levels. Although they suggest extreme care in interpreting much of the applied research, they conclude that there is a relationship between exports and growth (export-led growth). But the direction of the causality, export-led growth or growth-led export is ambiguous in the existing literature (up to the date of their publication). The results also vary according to the method, time period and country. For Turkey, Temiz et al. (2010) show that the direction of the causality is from economic growth, measured as real GDP, to real export.

Gerni et al. (2008) first determine imports as a determinant of exports in their paper. Then they build an econometric model to analyze the relationships. In their model, imports is taken as an independent variable where there is a bidirectional causal relationship. This requires a more careful analysis where one should either use a simultaneous equation model, like we did in this paper, or instrumental variables.

In a study using Turkish data, Tuncer (2013) uses Granger causality tests to confirm the causal relationship from imports to exports. Aktaş (2009), covering the period 1996-2006, tests the time series data for cointegration and uses an error correction model to show bidirectional causality in between exports and imports. Aktaş (2010) uses vector autoregression (VAR) technique to study the relationship between real exchange rates RER and exports/imports. He finds no relationship between RER and exports/imports which is the same result found by many other papers in the literature.

Using Toda-Yamamoto causality test, Soyyiğit (2010) shows that industrial product exports depend on intermediate goods imports and capital goods imports in Turkey. This is an expected result for not only Turkey, but many other countries that depend on production stemming from foreign direct investment. Öztürk (2012) suggests investing in research and development instead of using the exchange rates to improve the current account deficit for Turkey. Current account deficit is a chronic problem of the Turkish economy after the liberalization of its economy in early eighties. It only got worse recently. Use of real exchange rates is considered as a policy instrument but as shown by many papers, its effectiveness as an instrument to manipulate trade balance is ambiguous. Finally, Demez and Ustaoğlu (2012) show that Turkish exports are not sensitive to structural breaks and currency rate changes, another paper in the same line of research.

The Model

As discussed in the literature review above, exports and imports are dependent on each other. This is especially true for countries like Turkey where cheaper labor, both at blue collar and white collar levels, is giving it a comparative advantage in production of certain goods. Therefore, we used a simultaneous equations model, where the need is verified by Hausman specification test, to analyze the exports and imports of the Turkish economy using data from 2003 to 2013. Turkey experienced a major crisis in 2008, together with the rest of the world. We added a dummy variable for the significance of that period. Our model follows:

$$EX = \beta_0 + \beta_1 IIM + \beta_2 CIM + \beta_3 RER + \beta_4 OIP + \beta_5 DUM + u_{1t} \tag{1}$$

$$IIM = \alpha_0 + \alpha_1 EX + \alpha_2 RER + \alpha_3 IP + \alpha_3 DUM + u_{2t} \tag{2}$$

Data

EX is for total exports, IIM: imports of intermediate goods, CIM: imports of capital goods, RER: real exchange rate, IP: domestic industrial production and OIP: OECD countries industrial production index. Since Turkish economy trades mostly with OECD countries, OIP is taken as a proxy for the real economy of Turkish trade partners.

OECD industrial production index, OIP, and Turkish industrial production, IP, data are taken from OECD's website. It was already seasonally adjusted. EX, IIM, RER values are downloaded from the Central Bank of Turkish Republic website, (EVDS). We seasonally adjusted data series using the X-12 ARIMA method. We used the natural logarithm of all variables in all tests and regressions. The data is monthly data from 01.2003 to 11.2013, one month less than 11 years.

Use of Dummy a Variable

The world experienced a crisis in 2008. Looking at the data for Turkey, we see that there are big shifts during this period and we used a dummy variable to account for the shifts of the period.

Stationarity Tests

Since we use time series data there is a stationarity problem in the data, as expected, except for the real exchange rate, RER. We used augmented Dickey-Fuller test to verify the stationarity (Dickey and Fuller 1979). The results are given in Table 1, Augmented Dickey-Fuller Test Results. Looking at the results, we see that all but the real exchange rate are nonstationary in first degree. The null hypothesis is that there is a unit root in augmented Dickey-Fuller test. Since the test value is greater than the critical values, we do not reject the null and except the existence of a unit root.

Table 1. Augmented Dickey-Fuller Test Results

Variables	Test Statistics	1% Critical Value	5% Critical Value	10% Critical Value	MacKinnon approximate p-value
EX	-1.682	-3.5	-2.888	-2.578	0.4402
IIM	-1.49	-3.5	-2.888	-2.578	0.5386
CIM	-2.114	-3.5	-2.888	-2.578	0.2390
RER	-3.629	-3.5	-2.888	-2.578	0.0052
OIP	-1.195	-3.5	-2.888	-2.578	0.6756
IP	-2.592	-3.5	-2.888	-2.578	0.0947

Taking the first difference removes the nonstationarity of all variables. In Table 2 we show results for the first differences.

Table 2. Augmented Dickey-Fuller Test Results for first differences

Variables	Test Statistics	1% Critical Value	5% Critical Value	10% Critical Value	MacKinnon approximate p-value
ΔEX	-19.205	-3.5	-2.888	-2.578	0.0000
ΔIIM	-13.535	-3.5	-2.888	-2.578	0.0000
ΔCIM	-17.313	-3.5	-2.888	-2.578	0.0000
ΔOIP	-5.64	-3.5	-2.888	-2.578	0.0000
ΔIP	-23.731	-3.5	-2.888	-2.578	0.0000

Simultaneity

In this simultaneous equation model, the number of endogenous variables is 2 which are exports, EX, and intermediate imports, IIM. The predetermined variables are CIM, RER, IP and OIP. The first equation (1) excludes one variable, IP, and the second equation (2) excludes two variables, CIM and OIP. Therefore equation (1) is just identified and equation (2) is over identified. Therefore, there is no identification problem in using the simultaneous equation model (Gujarati 2003). We need to use Hausman specification test to test for simultaneity though.

Hausman Specification Test

We regressed the intermediate goods imports on all predetermined variables and computed the residuals from this regression. Then, we regressed the exports on its independent variables given in equation (2) with adding the residuals computed from the first regression as an independent variable. Since we cannot reject the null hypothesis that the coefficient of the residual in the last regression is zero, at 5% and 10% levels, we conclude that there is a simultaneity problem (Hausman 1978). Therefore, we use the method of simultaneous equations.

To avoid endogeneity, we took the lagged values of capital intermediate goods and OECD industrial production index. The same lagged values are used in the Hausman specification test and the two-stage least square regression.

Table 3. Hausman Specification Test Results

```
      Source |      SS        df       MS              Number of obs =      129
-------------+----------------------------            F(  5,   123) =    20.21
       Model |  .539842647     5   .107968529          Prob > F      =   0.0000
    Residual |  .657106487   123   .005342329          R-squared     =   0.4510
-------------+----------------------------            Adj R-squared =   0.4287
       Total |  1.19694913    128   .009351165          Root MSE      =   .07309
```

```
-------------------------------------------------------------------------------
       D.EXln |     Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
--------------+----------------------------------------------------------------
        IIMln |
          D1. |   1.588722   .3236963     4.91   0.000     .9479855    2.229459
              |
        CIMln |
          LD. |    .150619   .0852693     1.77   0.080    -.0181663    .3194043
              |
        RERln |
          D1. |  -.2841618   .2485802    -1.14   0.255    -.7762111    .2078875
              |
        OIPln |
          LD. |  -2.244175   1.059442    -2.12   0.036    -4.341276   -.1470742
              |
    IIMln_res |  -.7644905   .3380481    -2.26   0.025    -1.433636   -.095345
        _cons |  -.0058306   .0073024    -0.80   0.426    -.0202852    .0086241
-------------------------------------------------------------------------------
```

```
. test IIMln_res

 ( 1)  IIMln_res = 0

       F(  1,   123) =     5.11
            Prob > F =    0.0255
```

Simultaneous-Equation Model

We used the two-stage least squares method to estimate the model. All variables, but the real exchange rate and the OECD industrial production index are meaningful. The results are shown in Table 4, Two-stage least-squares regression.

Table 4. Two-stage least-squares regression

```
Two-stage least-squares regression
-----------------------------------------------------------------------------
Equation          Obs  Parms        RMSE     "R-sq"      F-Stat         P
-----------------------------------------------------------------------------
D_EXln            129     5      .1111553   -0.2697        6.54    0.0000
D_IIMln           129     4      .0608096    0.3284       15.16    0.0000
-----------------------------------------------------------------------------
```

```
-------------------------------------------------------------------------------
              |     Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
--------------+----------------------------------------------------------------
D_EXln        |
        IIMln |
          D1. |    2.18562   .423059      5.17   0.000     1.352357    3.018884
              |
        CIMln |
          LD. |   .2346785   .1181797     1.99   0.048       .00191     .467447
              |
        RERln |
          D1. |  -.0863668   .3616075    -0.24   0.811    -.7985943    .6258607
              |
        OIPln |
          LD. |   2.029331   2.007339     1.01   0.313    -1.924353    5.983015
              |
          dum |   .2608578   .0990171     2.63   0.009     .0658322    .4558833
        _cons |   -.031055   .0147148    -2.11   0.036    -.0600374   -.0020726
--------------+----------------------------------------------------------------
D_IIMln       |
         EXln |
          LD. |  -.2133389   .0645279    -3.31   0.001     -.340434   -.0862437
              |
        RERln |
          D1. |   .0890424   .1961293     0.45   0.650    -.2972567    .4753415
              |
         IPln |
          LD. |  -.2515383   .1087074    -2.31   0.021      -.46565   -.0374266
              |
          dum |  -.1432971   .0245458    -5.84   0.000    -.1916429   -.0949513
        _cons |   .0207828   .0055805     3.72   0.000     .0097913    .0317743
-------------------------------------------------------------------------------
Endogenous variables:   D.EXln D.IIMln
Exogenous variables:    LD.CIMln D.RERln LD.OIPln dum LD.EXln LD.IPln
-------------------------------------------------------------------------------
```

Conclusion

For countries like Turkey where exports are critically dependent on imports of capital and intermediate goods, there are bidirectional causalities which bring the issue of endogeneity. Covering the period from 2003 to 2013, we studied the dynamics Turkey's exports/imports in a simultaneous-equation model. In our analysis we found similar results to what was already in the literature. While imports of intermediate goods are vital in determining exports, capital goods imports are not as important as intermediate goods. Again in line with the literature, real exchange rates do not help us to explain the dynamics of exports and imports. The coefficients for the real exchange rate variable both in the exports and the imports equation are meaningless.

Future area of research includes using panel data on bilateral trade in between countries. Such a study can give more accurate results since each country will have its own industrial production data instead of one index for the rest of the world.

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The Impact Assessment of Central Bank Autonomy & Exchange Rate Regimes upon Exchange Rate Volatility in Pakistan

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Abstract

Exchange Rate Volatility is one of the chief apprehensions for the emerging economies, as there is a strong nexus between the exchange rate volatility and economic growth in the current era of globalization. The strong presence of exchange rate volatility had led to a bad investment climate in Pakistan. Economic growth has shown a lowly performance as compared to neighboring countries and weak financial markets has placed more stress on International Trade. So the main goal of this study is to assess the impact of Central Bank autonomy as an indicator of regulatory environment and role of exchange rate regime upon exchange rate volatility in Pakistan. Central Bank autonomy was measured as the reciprocal of the direct lending to the government from State Bank of Pakistan. A time series study is conducted from 1981 to 2012. Feasible Generalized Least Square Method and Distributed Lag Model are used in order to rationalize the uniformity of estimated results. Feasible Generalized Least Square Method was used because of the existence of serial correlation: the variables used in this study were autonomy of central bank, exchange rate regime, indebtedness, reserves, net foreign factor income, geographic concentration and terms of trade. The result of the models reveals that the exchange rate regime shows significant relationship indicating that more flexible exchange rate policy resulting higher exchange rate volatility in Pakistan. The autonomy of the Central Bank shows an insignificant relationship hence proving the ineffectiveness to implement and exercise exchange rate stability in Pakistan. The Exchange Rate policy in Pakistan has always been in the hand of fiscal authority as opposed to Central Bank. The shallow financial and capital markets in Pakistan did not support the Autonomous Central Bank to regulate an effective exchange rate stabilization policy.

Keywords: Exchange Rate Volatility, Autonomy of Central Bank, IMF Conditionalities, Exchange Rate Regimes

Introduction

The failure of Bretton Wood System in 1973 result in many developing as well as developed countries to move from the fixed exchange rate to managed or free floating exchange rate, which increases volatility of exchange rate. This volatility has influence on the economic growth and international trade in developing countries. What are the determining factors of exchange rate volatility[69]? So this has become the most important question in international economics and finance over the last thirty years. Many researches have been conducted by policy makers as well as academic researchers in analyzing the foundation of exchange rate volatility but still many gaps are to be filled to understand the exchange rate instability. The example of East Asian Crisis and Euro Crisis resulting in large exchange rate instability started to become concern for the policy makers in developing countries. In this research study we will discuss and analyze the impact of Autonomy of Central Bank[70] and switching of Exchange Rate Regime[71] stemming exchange rate volatility.

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[69] The extent to which there is movement upwards and downwards of the exchange rate over a time. (Deardorff's Glossary of International Economics)

[70] Autonomy of Central Bank is the refusal of Central Bank to give credit to the government. (Hossain & Arefin, 2005)

[71]"The instructions under which a country determined its exchange rate, specifically the system the monetary or other management authorities do or do not interfere in the foreign exchange market. Regimes include floating exchange rate, fixed exchange rate, dirty floating, crawling peg, currency board, and exchange controls". (Deardorff's Glossary of International Economics).

Exchange Rate Regimes, Interventions and Exchange Rate Volatility in Pakistan

Pakistan has seen recent experience of unnecessary volatility leading to unexpected and severe depreciation of Pakistani Rupees. In November 2012, the Pakistan Rupee records 104 per Dollar mark & reached to 109.25- at its lowest point in the history in terms of dollar. As a result of the exchange rate volatility foreign trade and investment decision become more problematic as volatility will tend to raise exchange rate risk[72]. The immense pressure on exchange rate had made the export growth to become negative in the past few years and this has cost Pakistan in terms of economic growth. In the 1971 the Pakistan was fixed with the pound sterling and subsequently with US Dollars because of the increasing influence in world. In the era of Zia ul Haq, Pakistan decided to adopt the dirty floating exchange rate where the exchange rate was determined under the monetary authorities and the exchange rate was determined on the daily basis with the help of central bank intervention so that the Pakistan Rupees did not fluctuate wildly. In the era of dirty floating exchange rate regime the Pakistan rupee did not widely fluctuate and it was the devaluation which reduces the power of rupee. In 2000 the free floating exchange rate system was introduced in Pakistan, where the exchange rate is mainly determined by the free forces of demand and supply in the foreign exchange market. The focus of this study is that how exchange rate volatility is influenced through the channel of exchange rate regime.

Fixed, Dirty Float and Free Floating Exchange Rate: Volatility and Misalignment

The decision on what exchange rate regime to implement has been one of the fundamental elements of the macroeconomic stability[73].The floating exchange rate regime will exhibit a large volatility in the short term due to the weakness of the macroeconomic fundamentals[74]. In the international economics the assets price is termed as exchange rate affected strongly by short-term financial flows which are subject to speculative attacks and herding. The integration of capital market resulted in transactions related to financial markets increasingly overlook variations in exchange rates. As a result of this manner, exchange rates may progress in their own short-term and long-term movements that overcome the goods and services market dealings. As one of the developing countries with massive current account deficit and high indebtedness, exchange rate volatility will be seen significantly in the floating exchange rate regime. The main reason for the volatility in the free floating exchange rate regime could be defined to the thin foreign exchange rate market and poor financial development which result in failure of hedging possibilities. Also the political instability and poor macroeconomic performance resulted in the instability in the exchange rate. In context of Pakistan the de facto exchange rate regime is categorized as the free floating exchange rate system. However the fear of floating because of exchange rate volatility induces the government to intervene in the form of buying and selling the foreign exchange reserves.

Exchange Rate Volatility Susceptibility for Crisis

Excessive volatility in exchange rate has led to ambiguity, increases the transaction costs and sinking international trade and increases inflation. This is a particularly serious concern for developing countries because stubborn exchange rate volatility has been associated with unmanageable trade deficits, as it will make the profits in the future uncertain and this will lead the risk adverse trade to reduce trade and the balance of payment crisis and this lower economic growth over the period of time[75]. It is also predictable that, with high uncertainty in exchange rate, the foreign domestic investment will also become lower as the expected depreciation or appreciation will make the interest rate to change that will make the investor choice to invest in the other international market[76].

Exchange Rate Misalignment and IMF Prescription

Exchange Rate Misalignment has been the core issue in relation to the exchange rate sustainability in many developing countries. According to IMF (International Monetary Fund) the overvalued exchange rate have result in the deterioration of agricultural sector and external position in African Countries. The exchange rate regime has also played a role in the exchange rate misalignment. IMF have always used

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[75] See (Arize, Osang & Slottje, 2000)
[76] See (Kiyota & Urata, 2004)

the policy prescription of devaluation of the currency and reducing the excessive fiscal spending of the government. The Indonesian crisis was another big example of the over-rigid exchange rate[77]. The IMF insisted the government to tighten the fiscal policy in order to bring back exchange rate on equilibrium to recover from balance of payment crisis. In the assessment from IMF the Real Effective Exchange Rate has shown some strength as opposed to the desired policies and IMF agreement. The several assessments have shown that the exchange rate has been over valued around 3-6 percent[78].

Institutional Framework for Sustainable Exchange Rate: Central Bank Autonomy

The exchange rate stability is one of the foremost goals to be achieved through the effective monetary and exchange rate policy. The autonomy could be in form of political, operational and legal where the central bank defines the goals and follow strictly rules to implement the independent autonomous monetary and exchange rate policy[79]. However in scenario of several developing economies the central bank did not feel autonomous mainly because of violation of fiscal discipline. The government will ask for the direct lending to finance the government spending and excessive lending will result in the fiscal discipline to be violated. The central bank will either have to increase the money supply to back the government and that will fuel inflation and as result this will put pressure on the exchange rate. This will result in the exchange rate to further depreciate leading to failure of exchange rate stability. So the failure of fiscal discipline will lead to currency crisis in any exchange rate regime. The Central Bank can stabilize exchange rate in two ways; firstly either by controlling domestic money supply and secondly by buying or selling of the domestic currency.

Macroeconomic Outcomes of Exchange Rate Volatility

The research study is to deal with the impact of Exchange Rate Regime and Autonomy of the State Bank of Pakistan on the exchange rate volatility. The relationship between the exchange rate regime, Autonomy of the Central Bank and exchange rate volatility will be examined and analyzed. The increasing exchange rate volatility is nowadays one of the serious concerns for policy makers in Pakistan. The exchange rate volatility leads to lower export growth as well as the foreign direct investment. The exchange rate variability will have negative impact on the volume of exports traded internationally as it will result in the price and profits to be uncertain in the future (Choudhry, 2005). In case of Pakistan where the exchange market did not have a hedging instrument against exchange rate risk, this will result in the economic agents to shift their preferences from domestic to imported ones as the forward exchange rate will be unclear as a result the export growth as well as foreign direct investment have shown declining trend.

Framework of Analysis, Methodology and Literature Review and Model Building Preferences

Exchange Rate Volatility in the Context of Exchange Rate Overshooting Hypothesis

The exchange rate overshooting model known for the famous overshooting hypothesis explain the high exchange rate volatility. According to the model assumption the result of any unanticipated exogenous shock will lead to the exchange rate to become overshoot and hence this will make outcome as higher exchange rate volatility in the short term period. In the 1990's the East Asian shows the exchange rate overshooting phenomena because of the accumulation of foreign debt which hence proof to be an exogenous shock result in exchange rate to depreciate sharply. In this section we will discuss about the determinants of the exchange rate volatility, taking into the account the different theories of exchange rate determination discussed above. Many of the determinants taken into account are different from traditional optimum currency area theory.

Dimensions of Central Bank Autonomy

The autonomy of the Central Bank in our study is the reciprocal of claims on central government divided by total domestic credit. A decrease in the ratio shows that direct financing to the government have

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[77] See (Nasution, A, 2000).

[78] One of the IMF conditionalities for the extended facility was the depreciation of the exchange rate around 5-10% to lower the exchange rate misalignment (IMF Letter of Intent)

[79] In Pakistan the State Bank of Pakistan has been gone through the radical legal and operational reforms of the 1997 and 2012 for the autonomy and in order to pursue an independent monetary policy. (State Bank of Pakistan)

increased resulting in the autonomy of central bank to be restricted. The lower will be the autonomy the higher will be the exchange rate volatility in the Pakistan. The main objective of the Central Bank is to accommodate the independent monetary and exchange rate policy. So the more autonomous the central bank the more will be exchange rate stability. So the expected sign will be negative. However this is subjected to as one of the main dimension of Central Bank Autonomy. The autonomy of the Central Bank is not just confined to the refusal or lowering the direct lending to the government as it is just one aspect of the Autonomy. According to Hossain & Arefin, (2005) the administrative autonomy also plays an important role in achieving macroeconomic stabilization. The administrative autonomy was measured as an index in form of appointment of the independent governors with full power of designing and implementing the exchange rate and monetary policy without any political pressure. Haan & Kooi, (2000) in his study established a measure for autonomy of central bank grounded on the actual average legal tenure of governors of central bank office for the era of 1950-1989 for the forty developing countries.

Institutional Autonomy of Central Bank; A pathway to Exchange Rate Stability

The autonomy of the central bank is one of the main important factors that will result in reduction of exchange rate volatility. The existence or non-existence of the direct lending to the government, the explanations, the practices and features in context of the credit facilities are accepted on whole the dire elements of the autonomy of the central bank in real application, most likely to be in the majority of circumstances, in which the autonomy of central bank is an important point (Segalotto, Arnone, & Laurens, 2006). The Central Bank is the institution that built up the exchange rate policy and has the sole responsibility of maintaining the external value of the currency. Through the management of foreign exchange reverse the Central Bank will stabilize the currency in the foreign exchange market as the wide fluctuation of exchange rate will hurt the export competeveness. The central bank intervention through the sterilization will help to lower exchange rate volatility. However the impossible trinity will lead to the Central Bank to choose at one time; either the exchange rate stability, independent monetary policy and capital mobility controls. The empirical evidence provides that the economic autonomy will be beneficial for the economic stability (Cukierman, Web, & Neyapti, 1992).

The less instrumental autonomy of the central bank implies that the excessive lending to the government will lead to the violation of fiscal and monetary discipline. The fiscal dominance will put pressure on Central Bank to reduce the burden of the public debt by decreasing the interest rate in the economy. The decrease in interest rate will put pressure on exchange rate and the capital outflows could lead to a depreciation of the currency. Also without Fiscal Dominance the Central Bank credibility will not be effective if the price stability is to be bringing through the exchange rate stability. The absence of fiscal dominance is important for any monetary policy regimes. The autonomy of central bank is very effective and significant in the case of floating exchange rate and on the other side it become under the pressure of other elements related to the fixed exchange rate regime (Segalotto et al, 2006). In present days the monetary and exchange rate policies are inseparably connected, predominantly in the economies with less capital controls and easy currency substitution. So this can be argued that autonomous central bank should be holding the decision of exchange rate regime in order to have exchange rate stability, if the central bank is responsible for controlling inflation (Baliño, & Cottarelli, 1994). In developing countries, the main objectives of central bank full autonomy aim at achieving three types of independence: Political, Macroeconomic and Financial independence. Macroeconomic independence indicates the formulation of monetary and exchange rate policies without any interference (Hossain & Arefin, 2005).

Choice of Exchange Rate Regime: Tradeoff between Credibility and Flexibility

The exchange rate regime has always been the core issue in the International Finance. Berger, Jensen & Schjelderup, (2001) discusses that floating exchange rate regime provides more flexibility and on the other hand the exchange rate with some government intervention will tend to produce more credibility. Floating exchange rate regimes deliver full option for monetary policy; however this advantage of flexibility carries out the issue which is known as time inconsistency. It is true that the floating exchange rate regime will lead to inflationary bias and that it would be increase discipline and credibility unless there will be decline in flexibility. The author discusses that some kind of fixed exchange rate regime have their capability to bring discipline and making the monetary policy further credible since implementation of negligent policy would ultimately clue to a collapse of foreign exchange reserves and failure of the tight exchange rate regime suggesting shock to policy maker in form of huge political cost.

Nexus between Exchange Rate Regime and Exchange Rate Volatility

The exchange rate regime is taken as the dummy variable. The exchange rate regime plays a significant role in explaining exchange rate volatility. As per IMF legislation de facto the floating exchange rate will only be determine through market and results in exchange rate to become volatile due to speculation attack in foreign exchange rate market. So the exchange rate regimes expect positive relationship and significant. The exchange rate volatility is not regime unbiased. According to Musa, (1986) who was one of the pioneer studying exchange rates volatility advocates that exchange rate volatility will be higher in the free floating exchange rate regime as opposed to some fixed or dirty floating exchange rate. The switch to free floating exchange rate system resulted in noteworthy increase in exchange rate volatility. The switching of exchange rate systems to free floating exchange rate regime illustrates a shock which make the foreign exchange market more volatile. The movement from managed to free floating exchange rate regime produces "instability outburst" as the burden caused by managed exchange rate in the form of band is now unrestricted (Kočenda & Valachy, 2006).

Another study which was done on the European countries provides empirical result that under the free floating exchange rate the volatility tend to be higher as compared to the fixed exchange rate regime (Baxter & Stockman, 1989). After the imposition of free float in 2000 exchange rate depreciated worryingly at 1.5 percent each month till attacks of September (9/11) happened and Pakistan rupee started to appreciate afterwards (Kemal, Haider, Khalid, 2004). The effect of exchange rate regime is also supported by the phenomena of the fear of floating where the countries who officially recalled their exchange rate regime as a free floating exchange rate still plays a part in determining exchange rate because of higher exchange rate volatility (Reinhart, 2000). According to Pozo, (1992) however the effect of switching from managed exchange rate to free floating regime is transitory as instability resulted during the early shift from managed to free floating come out in short run and returned to the equilibrium instead of showing variation[80].

Controlled variables of Exchange Rate Volatility

Studies recommend that emerging economies will hold large and adequate reserve accumulations to reduce exchange-rate volatility, mainly when these emerging countries have taken large external debt in form of foreign dominated currency (Aizenman, & Marion, 2003). Hviding, Nowak., & Ricci, (2004) emphasis on the influence and importance of International Reserve and its impact on the real exchange rate variation, hence concludes that reduction in exchange rate volatility is highly associated with large international reserves. High international reserve indicates the capability of the monetary authorities such as federal bank to make foreign exchange market stabilize with the help of intervention and likewise lessens the burden of external debt by increasing the sovereign debt rating while on the other side increasing sureness of solvency. The net foreign factor income which constitutes of remittances inflow and foreign domestic investment as increase will help the economy to payback its debt as well as increasing the foreign reserve. The foreign domestic investment is the strongest capital flow. In case of developing countries like the expected sign will be negative as it helps to reduce the exchange rate volatility with the help of check and balance on current account balance (Mirch & Ani, 2013). The higher remittances in many developed countries have been a major source of exchange rate stability as they increase the foreign exchange reserves and will provide a shelter to exchange rate in any exogenous shocks and result in exchange rate to appreciate or stabilize. According to Donaldson, Levi, et al, (2011) the exchange variation will be lower in the economy with net foreign factor income inflows.

The indebtedness which is quantified as the natural log of external public debt as per literature suggested will posited a positive relationship. As the public debt in the economy grew larger, this will result in more debt servicing. The government will print more money resulting in the inflation that will lead to increase the exchange rate volatility (Ize & Ortiz, 1987). Also if the debt rating will be lower for the country this will result in the probability of default and hence the government will not be able to sell the securities to the foreigners because of risk of default and so the government will have to pay back either by money creation that will not only increase the inflation but also dry up the foreign reserves that will put pressure on the exchange rate and hence generates volatility (Pontines & Siregar, 2005). The geographic concentration is calculated as share of top five largest export market destinations. The geographic concentration which is taken as proxy for export diversification also plays an important role in maintaining exchange rate stability. The Allen & Giovannetti, (2011) suggested that the export

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[80] According to Baxter & Stockman, (1989) this also depends on how you define the exchange rate variability as if it is the standard deviation of the first difference of the exchange rate then the regime will not be neutral, however if the standard deviation of DE trended data then the exchange variability will not be shown because of exchange rate regime.

concentration lowers the vulnerability of crisis through the channel of exchange rate. The shock to term of trade will have a serious impact on the variation in exchange rate. In the most developing countries with the commodity concentration faced a greater terms of trade shocks as it will result in the exchange rate to fluctuate. According to (Amano & Van, 1995) the variation in US Canada exchange rate have been attributable to the variation in the terms of trade with the assistance of the other monetary factors as the exchange rate have been termed as the relative price in two different countries. Edwards, (1987) also found that unstable external term of trade will affect positively to increase exchange rate volatility.

Statement of Research Hypothesis

From the previous section we have chosen seven independent variables along with the dependent variable form the previous section. From the selected we have drawn the following hypothesis in accordance to the research title.

Hypothesis 1

To pretest the proposition that Central Bank Autonomy, as estimated by the reciprocal of the ratio of claims on the government and total domestic credit in a year, will affect the Exchange Rate Volatility in Pakistan (Natural Logarithm of Official Exchange Rate LCU per US$, period average) significantly and negatively.

Hypothesis 2

To pretest the proposition that the Exchange Rate Regime (Free Floating=1, Dirty Floating=0) will affect the Exchange Rate Volatility (Natural Logarithm of Official Exchange Rate LCU per US$, period average) in Pakistan significantly and positively.

Elements of Research Design and Data Collection Preferences

The study is done at the macroeconomic level and in order to ensure the transitional effect the time series data is essential. The reference period for this research paper last for 31 years following from 1981-2012. Very few researches exist that provides empirical evidence of autonomy of central bank and exchange rate regime and their relationship with the exchange rate volatility. The purpose of this study is to justify the previous findings as well as to look in current time scenario to check whether such a relationship exists in the economic structure prevailing in the world. The main reason to use yearly time series data is that most of the variables data are available on yearly basis so it bounds the spacing for the time variable.

In order to conduct this research study different sources were consulted and analyzed for the collection of data on the variable used in this study. The data used in this study is taken form the reliable and credible sources in order to obtain the consistent and accurate result. The International Financial Statistics and World Bank are used to collect most of the data on variables because of their reliability and credibility. Some of the data is also collected from the Central Bank of Pakistan and Yearly Statistical Book as they are the most reliable and authentic data collector in the Pakistan.

Model Specifications and Modeling Choices

The econometric model used to estimate the results is Feasible Generalized Least Squares in order to account for serial correlation in the time series. After the Ordinary least squares regression with these variables the Durbin Watson test for serial correlation shows the value of 1.54 which lies between the values of du and dl at 5% significance level and this is implying the inconclusiveness of test, so to exclude any possibility of any serial correlation between the error terms and to yield better results GLS will be applied on the above variables. In statistics, this technique is used to estimate the factors which are unknown in the linear regression model. FGLS used an estimated co variance matrix but the true matrix is unknown.

Mathematical Derivations

$$\varepsilon t = \rho \varepsilon t\text{-}1 + \mu t$$

also equals $Yt = \beta 0 + \beta 1X1t + \rho \varepsilon t\text{-}1 + \mu t$ (1)

$\rho Y\,t\text{-}1 - \rho \beta 0 + \rho \beta 1X1t\,\text{-}1 + \rho \varepsilon\,t\text{-}1$ (2)

This second equation was derived after multiplying the first equation by ρ. However If ρεt-1 is removed from the equation, there will be no autocorrelation. Now subtracting the equation (2) from equation (1), the new equation which is equation (3) is free from serial correlation

$$Yt - \rho Y_{t-1} - \beta_0 (1-\rho) + \beta_1 (X1t - \rho X1t_{-1}) + \mu t \qquad (3)$$

Equation 3 can be rewritten as:

$$\mathbf{Y1^* = \beta 0^* + \beta 1\ X1t^* + \mu t} \qquad (4)$$

Estimation, Analysis and Conclusion

In this last chapter of study we will look at the estimated result of the model, their interpretation, the analysis of the findings, conclusion drawn and some policy guide drawn from the findings of the study as well as some limitation of the study in order to make this study more reliable and helpful for the policy guideline.

Estimated Result of GLS and Distributed Lag Model

Dependent Variable: Exchange Rate Volatility (Natural Logarithmic Official Exchange Rate)

	FGLS		Distributed Lag Model
Independent variables	Coefficients (z value)	Independent variables	Coefficients (z value)
Central bank autonomy	-.0189701 (-0.54)	Central bank autonomy (lag 1)	-0.048191 (-1.18)*
Indebtedness	2.372333 (10.36)*	Indebtedness (Lag 1)	2.528658 (21.46)*
Net foreign factor income	-.0977624 (-1.90)***		
Reserves	-.0020386 (-0.29)	Reserves (Lag 1)	-0.0077169 (-0.77)
Geographic concentration	.0073213 (4.04)*		
Exchange rate regime	.2583109 (4.54)*	Exchange rate regime (lag 1)	0.2499688 (3.48)*
Terms of Trade	-.0012497 (-1.15)		
Wald chi2(7)= 3567.23 Prob>chi2= 0.0000		F(6,24)= 382.91 Prob>f=0.0000	
Log likelihood= 43.5449 Estimated covariance's =1 Estimated autocorrelations = 0 Estimated coefficients =8		R-squared=0.9833 Adjusted r-squared= 0.9807 Root mse= .08794	

*Significant at 1%, **Significant at 5% ***Significant at 10%

Generalized Least Square (GLS)

$$ERV_t = f(Autonomy_t + ExchangeRateRegime_t + Reserves_t + NFFI_t + TOT_t + Geographic\ Concentration_t + Indebtedness_t)$$

Distributed Lag Model

$$ERV_t = f(Autonomy_t + ExchangeRateRegime_t + Reserves_t + +Indebtedness_t)$$

The estimated results show that it is a significant model with accurate predicted sign. All the variables were significant at 5 % level except the autonomy of Central Bank of Pakistan, Total Reserve in month of import and Terms of Trade. The value of Wald Chi square is very high which represent the goodness of fit and shows that majority of the variation in exchange rate resulted from the control variables.

Findings and Analysis of Findings

Autonomy of Central Bank of Pakistan and Exchange Rate Volatility

The Autonomy of the Central bank of the Pakistan shows a statistically insignificant result at all conventional level and negative relationship with the exchange rate volatility. In the second model the central bank autonomy will be have an effect on exchange rate volatility at "lag t-1" but is still insignificant at all levels. The result supports the highly insignificant hypothesis in case of Pakistan where the Central Bank still did not seem as the main authority to accommodate the monetary and exchange rate policy. The Central Bank did not have place any regulation on the financial markets and as result, the exchange rate stabilization policy did not work even the autonomy is given to the central bank. Pakistan is one of the developing countries which have undeveloped as well as shallow financial and capital markets that are not capable to work under free floating exchange rate because of the fear of speculation and week financial instrument as a result this will be not helpful for the exchange rate to be stabilized through any exchange rate policy.

The monetary policy has always been overwhelmed to the requirement of the fiscal and did not align with the exchange rate policy in Pakistan. The role of Central Bank has always been neglected in the Pakistan like many developing countries where the government plays the role of making fiscal policy as well as exchange rate policy. Laws are there which clearly shows that the Central Bank is more autonomous in using instrument, but these are just on the pieces of paper. So the finding give a clear view that in case of Pakistan the Central Bank did not play a role of building exchange rate policy, rather it is in the hand of fiscal authorities. Exchange rate stabilization in the floating exchange rate regime will only be beneficial when the economy of Pakistan is fully integrated in the global capital markets and have trade structure as well as the production sector well diversified, a strong and well developed financial sector with strong sensible standards. Also the autonomy of Central Bank will only be helpful if the macroeconomic conditions are in alignment with the exchange rate stabilization. The exchange rate policy in Pakistan always stays in the hand of the government. Apart from that the terms of trade shock plays a greater role in affecting exchange rate and it is not in the hand of the central bank rather than it depends on the export structure of the Pakistan. Ownership of reserves is also a consideration which may condition the degree of autonomy of the central bank in carrying out its monetary and exchange rate policies.

Exchange Rate Regime and Exchange Rate Volatility

The exchange rate regime shows clearly a significant and positive relationship with the exchange rate volatility and in the competing model it will increase exchange rate volatility at "t-1". The finding supports the hypothesis because the exchange rate regime switching of Pakistan tends to induce the exchange rate volatility when the shifting from the dirty floating (Fixed) exchange rate regime to another. In the managed floating rate sometimes called as the dirty floating there will be volatility as the central bank will intervene in the market and the overshooting of the exchange rate will not result as compared to free market. The finding can be supported in the view that after the imposition of free float in 2000 exchange rate depreciated worryingly at 1.5 percent each month till attacks of September (9/11) happened and Pakistan rupee started to appreciate afterwards. The sharp depreciation in the exchange rate of Pakistan in the period of 2012 also implies that the exchange rate was so volatile because of the market forces speculation. The finding suggest that with the free floating exchange rate system the exchange rate is determined mainly by the free market mechanism but because of weak financial markets and the presence of speculative attacks the exchange rate become volatile which is widely present in Pakistan. On the other hand the dirty floating which is still defined in the international economics as fixed exchange rate will have less exchange rate volatility as the central bank intervention will not result in the exchange rate to be affected because the exchange rate is not only determined by free forces of supply and demand and can maintain stability and competitiveness. The exchange rate is mainly subjected as an asset price that is strongly changed by the short term financial inflow that is influenced by speculation. The finding is also supported by the phenomena of the fear of floating where the countries who officially recalled their exchange rate regime as a free floating exchange rate still plays a part in determining exchange rate because of higher exchange rate volatility. In case of Pakistan exchange rate volatility is significantly greater like other under developed economies because of the less vibrant foreign exchange markets typically controlled by a very small amount of market players. In the free floating exchange rate the high capital mobility prevailing in the world, a little changes in the global portfolio allocation to Pakistan will result in the large volatility in the capital inflows and outflows resulting in the exchange rate to become volatile.

The indebtedness which represents the external public debt shows a positive and highly significant relationship with the exchange rate volatility and it will have effect on the exchange rate volatility in lag 1 in the competing model. The finding supports the hypothesis in case of Pakistan. The poor fiscal policy has always led the government to borrow external public debt from IMF and other countries. The Foreign

Reserves and the Exchange Rate volatility show a negative relationship with each other and it is not statistically significant at any conventional level. In the distributed lag model foreign reserve will reduce exchange rate volatility at "t-1" but will be insignificant at all conventional level. The insignificant results suggest that in the floating exchange rate regime the international reserve did not play as important role as in the case of fixed exchange rate. The Geographic Concentration coefficient shows a positive relationship with the exchange rate volatility with statistically significant at 1%. As the less markets destination will be for exports, it will increase the tendency for more exchange rate volatility. The terms of trade shows a negative and statistically insignificant relationship with the exchange rate volatility. The findings can be supported in a way that terms of trade will not be significant because the export structure of Pakistan is not diversified in terms of high technology exports and as a result the export value index did not increase. The net foreign factor income shows a negative and statistically a significant relationship at 5% level with the exchange rate volatility. The findings suggest that net factor inflows on a continued base establish one of the key elements for reducing volatility of the exchange rate in Pakistan. On the other hand the huge outflow of FDI and sudden stop of inflows shows a sharp depreciation of Pakistan Rupees against dollar.

Policy Guidelines and Policy Recommendations

The aim of the study is to answer the question that how the autonomy of Central Bank can be an important determinant in reducing exchange rate volatility and how exchange rate regime induces exchange rate volatility. The policy makers should look carefully at the macroeconomic condition prevailing in the Pakistan and then make the choice of the exchange rate regime. In order to gain from the floating exchange rate the economy should be wholly unified in the global financial markets and have diversified export structure, a durable and wide-ranging financial sector, and durable prudential principle. The Central Bank have an important role to play in ensuring the macroeconomic stability and the recent trend in the world is to ensure that the central bank is autonomous and implement an independent exchange rate monetary and policy. The Central Bank of the Pakistan should be made as an independent autonomous body who should work and implement polices without becoming hostages to the fiscal requirement. Without an autonomous central bank the exchange rate stability will remain as a challenging issuer and will negatively impact the already week economic condition.

Limitations of the Study

The biggest limitation to this research was that it is difficult to quantify the depth and the domain in the Autonomy of State Bank of Pakistan. The second concern was the limited data available. Thirdly, there was limited literature and data in the context of Pakistan. The amount of research done in Pakistan by foreign and indigenous researchers is far less than ones done in African and Latin America countries. This gives us limited room to maneuver around and to some level we had to resort to our own indigenous understanding of how to go about the determinants and the model specification.

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Use of Evolutionary Algorithm in the Investment Project Evaluation

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Abstract

In the realization of infrastructure projects, the interest shown in the Build-Operate-Transfer (BOT) model is on the increase. Through the BOT projects, the risks and awards of the public in the realization of infrastructure projects are transferred to the private sector. Implementing the BOT projects successfully depends on the ability to constitute a structure which enhances the possibility of the sponsors' achievement in the BOT tender. The debt to equity ratio, the concession length and the price variables are the critical financial factors in BOT projects. Thus, these factors must be designed in the way that they will look out for the interests of the participants of the project. In this study, a new approach regarding the project finance has been put forth by optimally integrating the major financial factors that provide financial viability for the project. The optimization equation and constraints were developed on the basis of the discounted cash flow analysis which is among the dynamic methods, and the calculations were made by utilizing the real-coded Evolutionary Algorithm for the non-linear behaviour of the objective function. In this way, a more efficient and productive support is provided for the financial decision-making process.

Keywords: Build Operate Transfer; Project Evaluation; Optimization; Differential Evolutionary Algorithm

Introduction

The implementation of industrialization, which is the main objective of the developing countries including Turkey, depends on the capacity to fulfil the quite a large of scale finacial needs of the infrastructural investments. The fact that the public infrastructural investment projects required in parallel with the economic growth could not be realized in time with limited budget means brought up the use of the Public Private Partnership (PPP) models in the developing countries (Directorate General of Investment Programming Monitoring and Assessment, 2012). The primary example of PPP project models is the Build-Operate-Transfer (BOT) model frequently used in the world and in our country.

In the BOT model, the project investment costs are covered by the project company, and thus, the construction and operation of the infrastructure facility is maintained. In return for this, the project company is supposed to meet the initial investment cost and make profit from this investment with the acquired revenues throughout the concession period. At the end of this concession period, the project company hands over the infrastructure facility to the government in a good working condition(Baser,2000).

BOT projects, when considered as a whole process, consist of several stages: Relevant government institution arranges an invitation to tender in order to build and operate an infrastructure facility; the private corporation or the joint venture company interested in this topic prepares their feasibility reports regarding this invitation and submits their financial proposal to the government; the tendering process which is the selection process of these proposals, performed by the government; finally, the project is developed, implemented and the facility is then operated and transferred (Baser, 2000). In general, the competitive tendering method is applied in BOT tenders (Islam et al, 2006) .

In determining the most advantageous proposal in BOT tendering, the Government considers the type, number and duration of the guarantees, the facility operation periods, costs, terms and conditions of finance, the base price and the conditions of shadow price as well. Apart from these, other important factors, such as the credibility of the project company, their experiences, technology transfer and labor employment, are carefully examined (Baser, 2000). No matter how clear the evaluation criteria may be, it is rather difficult to make a choice among the proposals relative to the project.

It is quite important for the companies to become preferred bidder for a BOT Project due to the fact that such projects provide earning a good profit. Winning a BOT Project is associated with submitting a desirable financial offer to the government (Islam et al, 2006). The projects with the lowest costs, the shortest concession length, the highest equity/debt ratio and with the most acceptable prices level of the products/services are the most desirable and advantageous projects according to the government (Tiong, 1996). In order for the project company to submit a desirable financial offer to the government, the components that can be altered within their own managerial skills, such as the length of the concession, the equity level and the unit prices/(tariff) levels of products/services, have been dealt with as critical factors (concessionary items) within the scope of the study.

The target of the project company is to maximize the expectation to win the tender by keeping reasonable level of profit. In order to be able to actualize this purpose, they need to submit an a desirable financial proposal to the government. Government intends to present product/service at a low price to consumers. Moreover, the government will intend to make profit from the facility at the end of the concession length. For such reasons, when assessing the BOT bids, the Government prefers those projects with low product/service prices and short concession length (Islam et al, 2006). In addition, the government requests the project company to have a reasonably high equity to debt ratio indicating that the company is economically powerful (Islam et al, 2006). In contrast to these, the project company prefers a higher level of product/service base-price for the profitability and a longer concession length. The company prefers a minimum equity level since the cost of equity is higher than the cost of borrowing. The expectations of the government from the project company in terms of the BOT Project are related to the adjustments of the suitable values of the concessionary items (Islam et al, 2006).

Under a certain profit margin, a properly-balanced concession length debt to equity ratio and base prices will increase the the possibility of the project company to win the tender. From this perspective, modeling of a BOT investment project in order to increase the potential of winning the BOT tender of the project company is an optimization problem.

The motivation of this study has been related to the integration of the issues of project finance and evolutionary algorithm, as well for devising a sophisticated methodology to analyze the financial viability of BOT projects in terms of the project promoters. The focal point of this study is to develop a financial optimization model that will analyze how the probability of winning the tender could be increased by determining the optimal combination of key financial factors under a certain profit margin level that also covers all the necessary financial constraints. The model will enhance efficiency in providing quicker decisions to design a competitive financial proposal and process effectiveness in yielding more transparency to reveal financial targets (Islam et al, 2006).

Financial Model

The well-known discounted cash flow techniques are used to derive the financial model.

Total Project cost: According to Islam (2008), the total Project cost is the sum of annual base cost, additional cost owing to inflation of base cost, and annual debt interest during the construction period, which is to be accumulated at the end of the construction period. Eg.(1) expresses the total project cost.

$$TC = \sum_{i=1}^{CP}(BC_{i-1} + EC_{i-1} + IC_{i-1}) \qquad (1)$$

Where BC_{i-1}=portion of base cost at the beginning of the construction period; CP= length of the construction period (year); i, index for the construction period, $i \in [1,CP]$; EC_{i-1}= inflation of annual base cost; IC_{i-1}= annual debt interest during the construction period.

Acording to Ranasinghe(1996) and Islam (2008), Eq.(2) expresses additional cost owing to inflation of annual base cost, calculated at the beginning of the CP.

$$EC_{i-1} = BC_{i-1}x\left\{\left(\prod_{h=0}^{i}(1 + r_h)\right) - 1\right\} \qquad (2)$$

Where EC_{i-1}= additional cost owing to inflation of BC_{i-1} for the ith year; and r_h= discrete inflation rate of debt in the hth year, $r_{h=0}$=0.

Interest on debt during the construction period: In accordance with Islam (2008),Eq. (3) represents the debt interest for the ith year, accured at the end of the CP.

$$IC_{i-1} = (1 - e)x\left\{BC_{i-1} \times \prod_{h=0}^{i}(1 + r_h)\right\}x \{(1 + r_b)^{CP-i+1} - 1\} \qquad (3)$$

IC_{i-1}=accured interest on debt fort he i^{th} year; r_b=interest rate of debt borrowed; and ; e= equity level.

Accumulated debt at the end of the construction period represents the future value of debt drawings and their interests during the construction period. In line with Ranasinghe (1996) and Islam (2008), Eq. (4) expresses the accumulated debt.

$$ADT = \sum_{i=1}^{CP}\left\{(1-ę) \text{ x } BC_{i-1} \text{ x } \left(\prod_{h=0}^{i}(1+r_h)\right) \text{ x } (1+r_b)^{CP-i+1}\right\} \qquad (4)$$

Debt repayment: Project sponsors have to pay the accumulated debt (ADT) for a specific number of years of the sponsor operation period. Using the capital recovery factor, Eq. (5) defines annual equal debt installments in accordance with Bakatjan et all. (2003) and Islam (2008).

$$ADI_j = ADT\left\{\frac{r_b x (1+r_b)^{LRP}}{(1+r_b)^{LRP}-1}\right\} \qquad (5)$$

Where ADI_j= annual equal debt installment in the jth year; and LRP= loan repayment period (year).

Interest on debt during the loan repayment period: Eq. (6) expresses the annual interests contained in annual equal debt installment.

$$INT_j = ADI_j\left\{1-\frac{1}{(1+r_b)^{LRP-j+1}}\right\} \forall j \in [CP+1, LRP] \qquad (6)$$

Where INT_j= interest on debt to be paid in the jth year. In addition ADI_J-INT_J= principal of debt to be paid in the jth year.

Gross revenue is a function of market demand and pricing, which is determined as:

Gross revenue is resultant upon product/service price and product demand (i.e., the combined effect of projected base demand and its annual growth over the operation period). Eq. (7) defines the annual gross revenue as a function of price and demand of a product/service[7].

$$REV_j = \left\{P_{j-1}\right\} x\left\{Q_{j-1} \prod_{k=0}^{j-1}\left(1+g_k^Q\right)\right\} \qquad (7)$$

Where OP= length of the operation period (year); REV_j=gross revenue in the jth year; P_{j-1}= unit price of a service (such as tarif) at the start of the jth year, $P_{j=0}$=base price; Q_{j-1}=product's demand at the start of the jth year, $Q_{j=0}$=base demand; g_k^Q =annual growth rate of base demand in the kth year, $g_{k=CP}^Q$=0; and j= index for the operation period, $j \in [CP+1,OP]$.

Eq. (8) defines annual tax payable to the government during the SOP in line with Wibowo and Kochendorfer (2005) and Islam (2008).

$$TAX_j = \max\left[0,\left\{r_t \text{ x } \left(REV_j - OMC_j - INT_j - DEP_j\right)\right\}\right] \qquad (8)$$

Where TAX_j= tax payable to the government in the jth year; r_t=annual tax rate; OMC_j= operation and maintenance cost for the jth year.

Depreciation: annual depreciation rate considering total project cost will be depreciated within the operation period by using the straight line depreciation method (Islam et al, 2006). Eq. (9) defines the rate of annual depreciation.

$$DEP_j = \frac{TC}{SOP} \qquad (9)$$

DEP_j=depreciation in the jth year; and SOP=sponsor operation period (year).

Annual profit before interests and tax, and annual net cash flow available to project promoters is defined as follows:

$$PBIT_j = \left(REV_j - OMC_j - INT_j - DEP_j\right) \qquad (10)$$

$$NCF_j^S = \left(PBIT_j - ADI_j + DEP_j\right) \quad \forall j \in [CP+1, SOP] \qquad (11)$$

Amount of profit to project promoters by undertaking the concession project is expressed in net present value (NPV). Combining Eq.(1) through Eq.(11), the equity NPV is defined as (Islam, 2008):

$$NPV^S = -\sum_{i=1}^{CP}\left\{\frac{ę \text{ x }(BC_{i-1}+EC_{i-1})+IC_{i-1}}{(1+R)^{i-1}}\right\} + \sum_{j=CP+1}^{SOP}\left\{\frac{NCF_j^S}{(1+R)^{ji}}\right\} \qquad (12)$$

Where NPV^S = net present value of sponsor's cash flow; and R= discount rate stipulated by sponsors.

The internal rate of return is the discount rate that makes the NPV zero as shown in Eq. (13).

$$\sum_{i=1}^{CP}\left\{\frac{\text{ę x}\left(BC_{i-1} \text{ x } \prod_{h=0}^{i}(1+r_h)\right)+IC_{i-1}}{(1+IRR^S)^{i-1}}\right\} = \sum_{j=CP+1}^{SOP}\left\{\frac{NCF_j^S}{(1+IRR^S)^j}\right\} \tag{13}$$

DSCR is the ratio of the annual cash available (after tax) to annual total debt service(Bakatjan et al, 2003), as defined in Eq.(14).

$$DSCR_j = \left(\frac{REV_j - OMC_j - TAX_j}{ADI_j}\right) \tag{14}$$

Where $DSCR_J$= debt-service coverage ratio in the jth year.

Eq.(15) defines the NPV of government cash flow discounted at the beginning of the construction period.

$$NPV^G = \sum_{l=CP+SOP+1}^{OP}\left\{\frac{NCF_j^G}{(1+R)^j}\right\} \tag{15}$$

Modelling the Problem of Bid-Winning

For a desired profit level, the NPV shown in the Eq. (12) can be obtained through various combinations of base prices, the concession length and the equity rate that cover all the financial constraints. The project owners should select values of the concessionary items that those selected values should provide the low values of the concession length and product/service unit price as much as possible on the desired profit level.

Maximization of a winning chance for a bid could be obtained by considering the maximization of the rate which proportions the net present values of cash flows of the unit year of the operation period into unit prices. Also, for funding the Project, a convenient level of equity rate should be selected by considering the financial strength of the project's sponsors (Islam, 2008).

The financial performance measurement referred to as Bid-Winning Index (BWI) is used to determine the lowest levels of a convenient equity level and the unit prices and concession length that is useful for maximizing the bid-winning potential of a BOT investment project. This index was developed inspired by the study of Mainul Islam (2008). It refers to the net present value of cash flows (reguired to realize a specific profit level) per unit prices and unit year of the sponsor operation period, sucject to utility of three concessionary item: base prices (2 products/services) and equity level.

The objective function of the proposed optimization model maximizes the bid-winning index for the BOT Project investment. The Eq. (16) defines the objective function.

$$Maksimum\ BWI = \left(\frac{NPV^S x\ \bar{U}}{P_{D_0}\ x\ P_{I_0}\ x\ SOP}\right) \tag{16}$$

The Eq. (16) clearly shows the objective function depending on the convenient values of the concessionary items (sponsor operation period (SOP), unit prices (P_D),(P_I) and the equity level (ę)). These four concessionary items, therefore, act as the decision variables of the proposed optimization model. When the objective function is analyzed from the sponsors' point of view, on one hand, while the decision variables maximizing the NPV value which can compete with other competitors are determined, on the other hand, it is being investigated to what extent the unit prices and sponsor operation period can be reduced in order to submit a tempting financial proposal to the government institution. The importance of utility$(\overleftarrow{U})$ in defining BWI is to reflect the usefulness of selecting a particular value of unit prices an equity level among a set of alternates concerning competitive tendering (Islam 2008). Utility is, therefore, a subjective measure, yet is a structured approach. It helps evaluate systematically the usefulness of unit prices and equity level (For more information, see Islam 2008) .

The defined BWI objective function is an improved form of Mainul Islam's (2008) study. The sponsor operation period is a discrete variable, whereas the unit prices and the equity level are continuous variables. For this reason, the reference optimization model becomes the mixed integer non-linear optimization problem. Also, with the inclusion of the utility function in the model, the problem has become a complex structure. Evolutionary algorithms are well-known in the solution of such problems.

Neighbourhood-based Differential Evolutionary (DE) Algorithm

Popular recently, the DE algorithm is a population-based, parallel evolutionary search algorithm used in the solution of optimization problems (Price et al, 2005). This algorithm was first introduced by K.Price in 1995. The first step of DE algorithm is to characterize the objective function through a proper coding of the chromosomes. In this sort of study, the unit prices of the services, concession length and equity

rate are coded as genes in the chromosomes. The DE algorithm operates with the real-valued coding system.

In this algorithm, the initial population is formed randomly and is evaluated (Panda, 2009). Afterwards, the algorithm performs the offspring generation and evaluation, and takes charge in the selection of the chromosomes that will provide the formation of the future generations. In DE, the reproduction operator (mutation and crossover) is used for each chromosome in the parent population to generate their own offspring. In DE algorithms, different from the genetic algorithms, a sophisticated and effective mutation operator is applied (Ozsaglam and Cunkas, 2008). The important parameters of DE are the population size (N), crossover constant (Cr) and mutation scaling factor (F) (Eke, 2011).

The operators of DE algorithm can be identified in different ways. What operators shall be used in the frame of what rules is shown as (Aksoy, 2007) :

'' algorithm / base chromosome selection/ the number of chromosome difference/ crossover type''.

In this study, a new $\bar{y}$ solution (offspring) is formed by using "DE/ri/1/bin" strategy. In order for each chromosome within the population to generate their own offspring, the $r_0 = i$ equality is ensured, and by selecting two r_1 and r_2 chromosomes randomly, a mutant chromosome is formed for each chromosome in the population (Liu et al, 2010). The mutation operator, as shown in the Eq. (17) for DE, is identified as the sum of the base chromosome and weighted differences of two randomly-selected chromosomes from within the population. The following Eq.(17) is used to generate a mutant chromosome.

$$v' = x^i + (F + rand(0,1) * (1 - F))(x^{r1} - x^{r2}) \qquad (17)$$

The term, F in Eq. (17) is referred to as the mutation-scaling factor and has a value at the range of [0,1+). The correct choice of the mutation factor directly affects the convergence (Aksoy 2007). Since the mutation operator is based upon the differences of chromosomes, selecting the chromosomes is an important concern. The repetition of these chromosomes as $r1 = r2$ in the mutation scheme may reduce the convergence of the algorithm (Price et al, 2005).

DE crossover operator is the process deciding that the parameters of the offspring chromosome come from the mutant chromosome "v_i" or the parent chromosome "x_i"(Panda, 2009). Thus, offspring are produced by crossover operator. The DE algorithm binomial crossover type as shown in the Eq. (18).

$$y_i = \begin{cases} v_{i,k}, & rand_k(0,1) \le C_r \qquad \vee\, k = k_{rand} \\ x_{i,k}, & rand_k(0,1) > C_r \qquad \wedge\, k \ne k_{rand} \end{cases} \qquad (18)$$

The term Cr in the Eq. (18) is a real value at the user-defined Cr [0,1] range and indicates the crossover probability and is referred to as the crossover factor. During the crossover operator, if the generated random number is smaller than or equal to crossover factor, the parameter of the offspring chromosome is taken from the parameter of the mutant chromosome; otherwise, the parameter is taken from the base (x_i) chromosome.

The selection operator in the neighbourhood-based DE algorithm compares the offspring chromosome with the parent chromosome and the neighbours of the parent in T number (Liu et al, 2010). İf fitness value of offspring is better from fitness value of it's parent, offspring replaces parent chromosome in the next generation; if not so, all the parent chromosomes remain as the individuals of the population at least for one more generation. If a high-quality offspring chromosome is obtained, it will have a better fitness value than most of the neighbours of its parents and will perform replacement with the one whose neighbourhood is the closest (Liu et al, 2010).

The selection operator for the minimization problems is shown in the Eq. (19) (Kapanoğlu, 2011).

$$x_i' = \begin{cases} y_i, & f(y_i) \le f(x_i) \\ x_i, & f(y_i) > f(x_i) \end{cases} \qquad (19)$$

This denoted method is generally referred to as the greedy selection (Pak, 2011). By this means, a significant advantage is gained in terms of convergence speed compared with the genetic algorithm (Eke, 2011). The diversity is enhanced through the neighbourhood concept compared with classical DE algorithm (Liu et al, 2010).

The Financial Optimization Model

The objective function in Eq.(16) is subject to the following constraints:

Financial viability: Eq.(20), guarantees financial viability of a BOT

$$NPV^S \geq 0 \tag{20}$$

Financial sustainability: The negative cash flows indicate sponsor's inability to repay the debt to the full amount as committed in the loan agreement (Islam 2008). Therefore, Eq.(21) ensures that no negative cash flows are acceptable during each year of the SOP.

$$NCF_{j+1}^S \geq 0 \tag{21}$$

Profitability: Governments may not allow sponsors to dive for an excessive profit [IRR^S defined in Eq.(13)]. Therefore, Eq. (22) states that sponsor's expected profit must be within a specific upper limit of IRR^S (Islam, 2008)

$$IRR^S \leq IRR_U^S \tag{22}$$

IRR_U^S = upper limit of IRR^S.

Debt servicing: A BOT Project is deemed bankable if the average of annual DSCRs projected over the loan repayment period is not less than 1.5 (Bakatjan et all, 2003 and Islam, 2008).

$$DSCR_{avg} \geq \tau \tag{23}$$

Where $DSCR_{avg}$ =average of DSCRs;and τ =lower limit of average DSCR (1,5).

Financial return to governments: Government return from running the project after the concession period till the end of the economic life of the project must be positive (Islam, 2008). Eq. (24) confirms government's concern for a positive NPV^G.

$$NPV^G \geq 0 \tag{24}$$

Range constraints for decision variables: Eq. (25) warrants that the values of decision variables must reside in the given bounds.

$$OP_{max} \geq SOP \geq OP_{min}, \quad P_{D0_{max}} \geq P_{D0} \geq P_{D0_{min}}, \quad P_{I0_{max}} \geq P_{I0} \geq P_{I0_{min}}, \quad ℮_{max} \geq ℮ \geq ℮_{min} \tag{25}$$

OP_{max} =maximum value of the operation period; OP_{min} = minimum value of the OP; P_{D0}= Domestic unit price; and P_{I0}= international unit price (per passenger)

DE algorithms cannot be directly applied to the solution of the constrained optimization problems, since the DE algorithm operates only through the objective function. (Kapanoğlu, 2011). Penalty functions are the most popular strategy for solving constrained optimization Problems (Goldberg 1989). In this study, a penalty strategy commonly used for applications has been adopted. The fitness value of the objective function is penalized through the following Eq.(26) according the greatness of the violation of the constraints. A large negative constant value are added into the fitness value of the chromosomes which located in infeasible solutions area, there will be a negative impact on the objective function depending on distance to the feasible solutions area.

$$P(x) = \sum_{i=1}^m (R_i * g_i^2(x)) \tag{26}$$

With the inclusion of the penalty term P(x) to the objective function, the BWI fitness function is defined in the Eq. (27) below:

$$Maksimum\ BWI = \left(\frac{NPV^S x\ \bar{U}}{P_{D_0} x P_{I_0} x SOP} \right) - P(x) \tag{27}$$

In the above Eq. (27), ''maximum BWI'' represents the fitness value of objective function. Where P(x) = penalty function; Ri = a large constant; gi = non-violated constraints; and m = total number of constraints. When "g$_i$" is negative, then, P (x) value is calculated, otherwise, P(x) is considered as zero. The advantage to this method are its flexibility of using information about the number of violated constraints, and ease of use.

The proposed algorithm is designed to maximize the chance of winning a concession agreement as stated in Eq. (16), which is therefore, considered as the objective function. The vector of decision variables consists of base prices, concession length and equity ratio. The financial constraints are shown in Eqs.

(20) to (25). Note that in cases of violation of the constraints, Eq. (26) will replace the objective function, and the infeasible solutions will be graded much more poorly than the feasible ones according to the degree of violation of the constraints. The algorithm is shown in Figure 1.
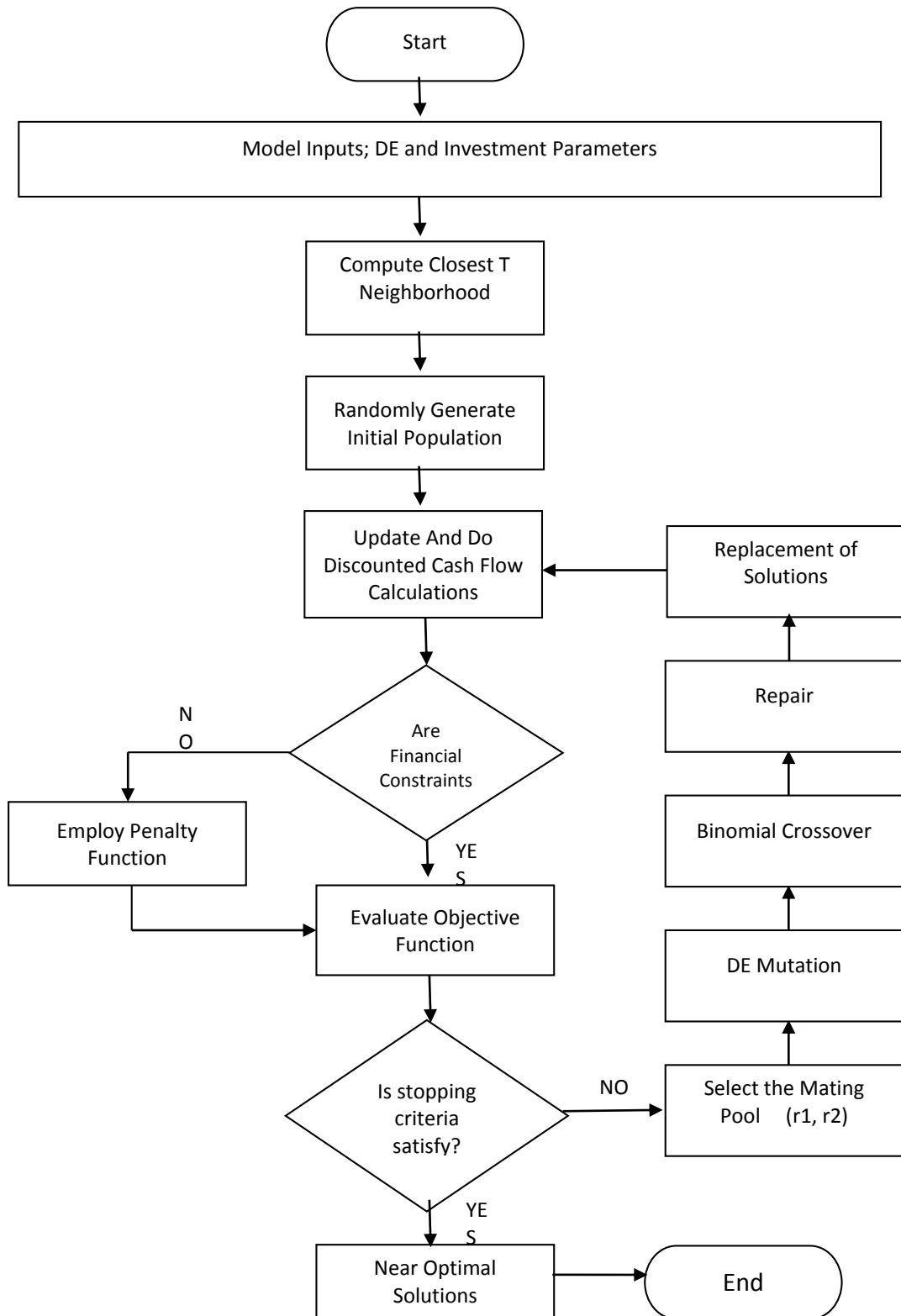
Fig. 1. Flow Chart of BOT Financial Optimization Model using DE

Results

The data of an airport BOT Project were obtained to evaluate the financial results from the viewpoint of sponsors. With these acquired data, financial models were developed by using the Eq. (1)-(15) expressed in the second section of the study. The data in Table 1 below are regarding an airport project in Turkey. The model inputs in Table 1 show the investment parameter values.

Table 1. Investment Parameters

Project Characteristics	Deterministic Values
Max Concession Period	49 year
Construction Period (CP)	2 year
Loan Repayment Period (LRP)	15 year
Loan Interest Rate (rb)	%7
Inflation Rate (rh)	%4
Tax Rate (rt)	%11
Discount Rate (R)	%10
Initial cost (BC)	438.276.878 €
Domestic Passengers Number (SOP 1. year, 1. 6 month)	1.592.360 person
Domestic Passengers Number(SOP 1. year, 2. 6 month)	1.452.585 person
International Passengers Number (SOP 1. year, 1. 6 month)	430.655 person
International Passengers Number SOP 1. year, 2. 6 month)	367.477 person
Price Variations	Constant
Passenger Growth Rate (Demand)	Different for each year and month

Sensitivity analyses were performed for the decision variables, in other words, the concessionary items. As the result of the analyses, the lower and upper threshold values, 0.20 and 0.40, were determined for the equity rate. The threshold values between € 2 and € 3 for the domestic unit price per person and the values between €10 and €15 for the foreign unit price were determined. The concession length (SOP) was ascertained between the ranges 17 years (2 year- construction and additional 15 year- loan payback) - 49 years.

Table 2. Parameter for Neighborhood -based DE (BWI Model)

DE Algorithm Parameters	Value
Population Size, N	30
Mutation Scaling Factor, F	0,5
Crossover Rate, Cr	0,5
Neighborhood Size, T	10
Penalty Coefficient, Pcoeff	10^9
Maxsimum Number of Generations, G	100

The size of the population should vary between 20 and 30 (Goldberg 1989). The population size of this model is set to 30. After successive attempts, the combination of crossover rate of 0.5 and a mutation rate of 0.5 and neighborhood size of 10 seem to produce the best result in terms of model convergence that is, producing acceptable results under stable condition. A large penalty coefficient (10^9) is adopted for using the penalty function. It was observed that 100 generations are good enough for arriving at a stable condition, and producing near optimal solutions. The algorithm is coded in the MATLAB software package. Results obtained from the model are shown in Table 3 where, for a particular level of profitability, decision-makers may choose near optimal decision vectors coupled with maximizing the probability of winning a concession agreement.

Table 3. Near-Optimal Decision Variables

IRR Level	Objective Function (BWI)	Optimal Decision Vector()*			
		Sponsor Operation Period (year)	Equity Ratio (%)	Unit Price Domestic (€)	Unit Price International (€)
13%	1.1246	19	25	2.00	11.57
14%	1.5737	21	25	2.05	12.00
15%	2.0094	25	25	2.10	12.00
17%	2.4437	31	20	2.7	12.00

Conceptually, if the other investment parameters remain unchanged, the sponsors can gain a reasonable profit level from any string of the values of the concessionary items. Under given profit margins, an acceptable combination of concessionary items that maximize the bid-winning potential of sponsors was determined. (See Table 3).

Results obtained from the model are shown in Table 3 where, for a particular level of profitability, decision-makers may choose near optimal decision vectors coupled with maximizing the probability of winning a concession agreement.

With the developed financial optimization model The Project company seeking to win the BOT tender can maximize their potential of winning the BOT tender without compromising on the profit by accepting these attractive combinations of the concession length, the equity level and unit prices.

Near-optimal values of the concession items help sponsors submit, as a whole, a competitive and financially advantageous offer to government. The deterministic DE (BWI Model) also determines the lowest value of the sponsor operation period (SOP) and unit prices.

For example, the sponsors may present a more competitive financial proposal by making profit at a rate of 15 % through utilizing these values (25 year SOP, 0.25 equity and 0.75 debt rate, domestic unit price 2.10 € and international unit price 12.00 €) . If the rate of return is selected as 13 % , such values in the Table 3 should be specified. If a higher rate of return from investment is preferred for example 17%, then these values (31 year SOP, 0.20 equity and 0.80 debt rate, domestic unit price 2.7 € and international unit price 12.00 €) should be selected.

Compared 13 % with 15% ; project company should prefer to increase the SOP instead of reducing equity rate, in order to increase profitability. Compared 15 % with 17% ; instead of increasing SOP more and more, project company should prefer to reduce equity level, in order to increase profitability. Because, more increasing SOP (concession lenght) might cause project company to lose the tender since government preference is short term project.

Conclusion

Simultaneous considerations of profitability as well as bid-winning prospects are vital to project promoters for evaluating the financial viability of BOT projects, particularly in order to make the financial proposal competitive. Based on the developed financial index, a deterministic, single-objective financial optimization model is proposed using neighborhood-based DE algorithms in order to find the optimal combination of key financial factors, namely: base prices of services, length of concession period, and equity ratio that would maximize the chance of winning a concession.

Despite the fact that there are numerous financial analysis models in the investment Project evaluation, these models are insufficient in undertaking the critical evaluation of bidding targets before the submission of the financial offers to the government. The private sector companies seeking to gain a competitive advantage in BOT tenders should specify the possible optimal values of the concessionary items as objectively as possible. In this way, they shall provide a financial benefit. When you want to calculate the return on investment, many analysts uses the simulation-based models. In such cases, evolutionary algorithms should be preferred as a priority.

The developed models improve the decision-making process of the private sector companies in reaching their BOT concession targets. It becomes possible to research into the combined effects of the concessionary items on the BOT project cash flows and ultimately, to determine the optimal values of the concessionary items that optimize the tender targets in the most effective and efficient ways. As the main consequence of the study, the developed optimization models are put forward as beneficial tools that the private sector companies can utilize in reaching their concessiom targets in the most effective and efficient ways.

The whole BOT process, particularly the succeeding stages of the tender/bidding stages, that is, the negotiation process was not integrated into the model. In the prospective studies, it is planned that the developed optimization models be expanded. In order for the BOT models to achieve the accurate results in terms of the private sector companies, there is the need to develop a new expertise in the fields of the management of bidding process and the follow-up of long-term agreements in particular. The BOT projects must be subjected to outstanding evaluations accompanied by qualified analysis, and necessary importances should be given to the planning stage before the implementation stage.

Attaining and maintaining such expertise continues to be an indispensable factor for the sake of being able to perform successful BOT projects.

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Selected One-Factor Models for Pricing of Synthetic CDOs

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Abstract

CDOs and synthetic CDOs were important catalysts of the financial crisis 2007-2008. The benchmark model for CDO valuation was Gaussian copula, particularly for its simplicity and mathematical tractability. Our research is focused on comparison of various copula models that determine the dependency structure in a CDO basket. In particular we test models based on NIG copula, t-copula, Gaussian stochastic copula. We apply these selected copulas on real-world data from stressed and unstressed period. It is shown that evidently the classical Gaussian copula is inappropriate model for CDO valuation particularly because it underestimates tail correlations which are crucial in crisis periods. As it is known that t-copula is powerful but hard-to-implement dependency engine due to less desirable mathematical properties, we present way how to implement it. In our study we present an integral transform that is fast and stable for t-copula implementation and which makes t-copula a tractable model applicable for pricing of CDOs.

Keywords: Synthetic CDO, Copula, Correlation.

Testing Time Series Momentum Strategies in Turkish Futures Market

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Abstract

Prolongation of financial asset's returns is considered as a kind of momentum. The fact that momentum can be used by agents in order to gain abnormal returns has become a substantial concern to the researchers in finance. Momentum strategies are found beneficial and proved to maintain significant abnormal returns. These strategies are majorly created in cross sectional setting. However, a time series strategy has been introduced recently. This study aims to present evidence of time series momentum abnormal returns in Turkish Futures Market. Insufficient number of studies which investigates Istanbul Stock Exchange is implemented. The study is important as it focuses on futures market and a new momentum strategy in Turkey. Both time series and classical momentum strategies are accepted especially in developed countries. Turkish literature could not give strong evidences of momentum returns. Capital Asset Pricing Model and t tests are employed in the study. The results of the study are consistent with findings of researches which investigated momentum in Turkey and other most developing countries. The abnormal returns are not satisfying in our research. However, It is show that using time series momentum can give abnormal returns for particular formation and holding periods. The returns are likely to decrease in longer holding periods. Since valid periods are differ between asset classes, choosing separate periods for each class might be useful for the ones who carry out a time series momentum strategy. Nonexistence of strong time series momentum profits can be explained by myopic behaviour and minor representative bias of investors. Momentum is country specific according to the literature. As a developing market, Turkey can deal with unstable conditions that may impair momentum returns.

Keywords: Time series momentum, Abnormal returns, Turkish Futures Market

Exploring Factors Influencing Generation Y Trust on Internet Banking

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Abstract

This paper is based on on-going research investigating factors influencing generation Y on internet banking in Malaysia. Growth of internet banking in Malaysia has been very encouraging since its introduction in the country in year 2000 by Maybank, one of the largest commercial bank in Malaysia which offer internet banking services known as www.Maybank2u.com including investment, pay bill, funds transfer, pay wave cards, and customers service. Malaysia's internet banking penetration rate stood at almost half of the population in 2013 and expected to reach 77% by 2015. Studies have shown that internet banking is more popular among the younger and more affluent banking customers. Hence, this research concentrate on internet banking users among Generation Y which reflects people born during 1980s and early 1990s, accounting for over 40 per cent of Malaysia's population. Children born during this time period have constant access to technology (computers, mobile phones) and involve a lot in online transaction. Previous research shows that trust is an important issue in internet banking given that lack of physical presence of bank branch and a physical interaction between the bank personnel and the customer. This paper intends to investigate factors influencing Generation Y trust on internet banking in Malaysia. The paper explores the role of product knowledge, susceptibility to interpersonal influence and customer satisfaction in determining consumer trust on internet banking. The conceptual framework proposes product knowledge and susceptibility to interpersonal influence to be positively linked with customer satisfaction and customer satisfaction to be related with trust. The present study employed quantitative (i.e. survey questionnaire) method in the collection of the primary data. The data collection process was conducted over a period of six weeks and survey questionnaires were distributed to students aged between 18 and 25 year old studying at a local university in the South of Peninsular of Malaysia. Students studying at this university come from all over Malaysia. A total of 151 survey questionnaires were received and accepted to be analysed. SPSS software was used to analyse the data. Descriptive statistics, t-tests and regression analysis were applied to analyse the data. Results showed that Generation Y consumer's trust on internet banking is influenced by product knowledge, susceptibility to interpersonal influence and consumer satisfaction. Limitations and directions for future research are discussed towards the end of this paper.

Keywords: Generation Y, Consumer, Trust, Internet Banking.

Marketing Strategies of Boutique Hotels: A Model Proposal and an Evaluation of Boutique Hotels in İstanbul

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Abstract

As a result of the acceleration of communication in 21st century, "internet" has become more and more important both for consumers and tourism enterprises. Tourists can easily access lots of information about destinations and tourism enterprises via internet and sharing of the holiday experiences through social media can also affect the decisions of potential consumers. For this reason, hospitality enterprises are able to compete by following the rising trends of tourism via communication technologies. New tourist profile prefers small and medium sized "boutique hotels" with originality in terms of structure, architecture, decoration, furnishing and service quality. In this study, boutique hotels for which it's more appropriate to develop media strategy by using effective and low-cost media tools rather than budgeting for marketing activities at very high rates will be treated and a Model will be developed. Then, recommendations will be given by carrying out a SWOT analysis on the marketing strategies of boutique hotels in İstanbul.

Keywords: Accommodation Sector, Boutique Hotels, Marketing Communications, Tourism.

Introduction

The world has become a global village in terms of tourism activities as a result of the advances in information and communication technologies since 1980s (Buhalis and Law, 2008, p. 609); the progress in the information and communication technologies also dramatically changes the business practices and industrial structures as well. Porter notes that the advanced information technologies offer better opportunities for the business enterprises to structure their distinctive strategic positions (2001, p. 65). For the enterprises and the stakeholders, maintaining effective communication and performing the transactions swiftly and timely is becoming a possibility through the information technologies.

The changing environment in the world also contributes to the diversification of the individual preferences. This is also visible in the emergence of alternative tourism options. The boutique hotels, offering comfort and a cosy environment for their guests, have been replacing large and luxury hotels. The most important sub-sector within the tourism sector in such a rapidly changing world is accommodation sector; hence, the boutique hotels have to adapt to the changing environment and take measures to address the customer expectations.

The main elements for the progress in the tourism sector include efforts to increase service quality, reservations via mobil internet, more scientific methods for revenue administration in the enterprises, pricing through diversification of distribution channels, adoption of new technologies and developments and usage of social media for sales and marketing activities.

The changes in the tourism and communication sectors in the world are analyzed in this study first; the importance of social media in the marketing strategies of the boutique hotels in tourism is further elaborated to develop a BOUTIQUE Model; a SWOT analysis is utilized to acquire the views of the boutique hotels in Istanbul. The marketing strategies of the hotels participating in the study are evaluated and further suggestions are offered based on this evaluation.

The Changing Direction of Marketing Communication and Marketing in Tourism Sector

A paradigm shift has been observed since 1990s from traditional marketing towards relational marketing approach (Grönroos, 1999, p. 307). In traditional marketing, marketing research used to be done and sales were tracked to evaluate the success rate of the marketing activities. These practices were guiding the enterprises in determining the customer loyalty and making changes in their products; however, serious and significant changes were observed in the feedback nation thanks to the new interactive technologies.

The intricate relationship between media and computing technologies offer great advantages of receiving feedback instantly and reaching out to greater number of purchasers. In other words, the pace, amount and quality of feedback distinguishes the relational marketing from conventional marketing (Duncan and Moriarty, 1998, p. 4-5). The two-way communication and instant feedback offer great opportunities for the enterprises to develop new marketing strategies.

Communication in marketing was performed via visual and audio media tools as well as print media outlets including newspapers based on the advances in technology since the second half of the 20th century. However, it is an undisputable fact that social media has become an integrated part of the marketing communication after the frequent use of the computers and cell phones in the 21st century and the spread of internet. Considering the developments in the global world in the tourism, it becomes evident that the marketing strategies should be adapted to the conditions on the ground in the tourism sector as well. As noted by Chiou, Wan and Lee, virtual experiment has started to play an important and crucial role in the tourism industry for the marketing strategies (2008, p. 146). Duncan and Moriarty note that the application and use of the new media and computing technologies would be used in the communication theory and marketing strategies which would yield extremely useful and productive results (1998, p. 10).

The rapid advance in the internet has dramatically changed the marketing rules. Marketing used to be understood as advertisement and branding in the past; in this period, the ads needed to be attractive to the audience and it was unidirectional from the companies to the consumers. However, these are no longer valid. For the enterprises to become successful, they need to rely on internet-based ideas and applications (Scott, 2010, p. 31-32).

In his book Purple Cow, Seth Godin compares the features of the TV industy age and the post-TV age as follows:

Table 1. Comparison between TV-Industrial Age and Post-TV Age

TV-Industrial Age	Post-TV Age
Average products	Remarkable products
Advertise to everyone	Advertise to the early adopters
Fear of failure	Fear of fear
Long cycles	Short cycles
Small changes	Big changes

Source: Godin, 2003, p. 17.

An enterprise may reach out to greater number of people by advertising in TVs and newspapers; however, this is not a proper strategy for particularly small-sized enterprises given that this is costly and that these enterprises survive on a small budget. As noted by Almeida and others, it is a reality that the payments made to the travel agencies helping the hotels find potential customers and seeking for extra customers mean serious costs and expenditures for the hotels (2012, p. 235).

Large-sized enterprises may be able to bear huge costs of traditional advertising because they may rely on large budgets; but it is also possible for them to pursue integrated marketing communication strategies by using social media as well. In addition, large-scale accommodation facilities can bear the huge costs and expand their portfolio of customers via travel agency activities. This indicates that large scale enterprises may be able to use different options in the marketing of the accommodation facilities because of their huge budgets. But the low cost of the social media tools compared to the other communication media offers great opportunities for the small and mid size enterprises. For this reason, small and mid size boutique hotels are included in this study because we consider that they will be successful in case they rely on the social media opportunities.

Social media has become more popular than other communication options and devices despite that it is a new invention. It is now widely used all over the world (Chan and Denizci Guillet, 2011, p. 345). Social media can be described as a virtual environment where internet users share their views via visual,

audio or print content on any event, development, incident, situation, person, product or service. It is obvious that the advertising in the media environment now has a different place and dimension because the nature of advertising is changing through new tendencies (Chiou, Wan and Lee, 2008, p. 146).

Tourism and leisure have become frequent parts of modern life. With the rapid growth of the tourism market, travel agencies started to rely on diverse channels to acquire travel information. Individuals used to get this information in the past from their relatives, friends, brochures or travel agencies. However, it should also be noted that the customers and guests are now able to get a brief sense of what they will get in your destination via images of the resorts online which is made possible by the advanced internet technologies (Chiou, Wan and Lee, 2008, p. 146). Advances in technology now enable the customers to have experience on what they will buy beforehand. This is called virtual experience (Klein, 1998, p. 196). Internet, also called interactive media, increases the benefits of loyalty for the customers through ongoing dialogue and reduces the costs of retention to the marketer (Klein, 1998, p. 195, 201).

Traditionally, most of the tourism enterprises and industries rely on brochures to advertise their services and products (Yamamoto and Gill, 1999, p. 138; Chiou, Wan and Lee, 2008, p. 146). However, brochures offer limited and brief information. It is observed that direct product experiences ensure sustainability and create stronger and lasting beleifs and attitudes (Marks and Kamins, 1988, p. 267; Smith and Swinyard, 1988, p. 7; Chiou, Wan and Lee, 2008, p. 146). Today, hotels spend efforts to make sure that the customers have virtual experience through industrial activities, panoramic demonstrations, animations and interactive photos. In this way, the customers are able to have a great experience without having to be present on the site. Obviously, virtual experience offers for the tourism industry more than the print sources do. And virtual experience enables the customers to have a taste of travel agencies over the internet. For this reason, the media tools preferred for the promotion of the destinations and tourism sites have moved from conventional advertising methods including brochure to virtual experience. As a media channel, internet has changed the traditional business model. Internet marketing, compared to the conventional marketing strategies, offer additional benefits including customer relationship management (CRM), direct marketing, electronic transactions; and as a result, they reduce the social costs and the costs of the enterprise (Fang and Lie, 2006, p. 296; Chiou, Wan and Lee, 2008, p. 147).

Social media plays a crucial role as a source of information for travelers; this tool becomes even more important (Xiang and Gretzel, 2010, p. 179). Accommodation services are supplied 7/24 throughout the year; consumers expect that this sector is accessible all the time, even weekends and official vacations. This becomes possible depending on the suitability of the business sources to follow the social media channels. It is necessary to use the idle times and periods by reliance on a coherent action plan and to respond to the questions and problems of the customers on a timely manner (Marketing Times for the Hotel & Tourism Industry, 30 July 2012).

There are four types of marketing activities performed over the internet in the world: business to consumer (B2C), business to business (B2B), consumer to consumer (C2C) and consumer to business (C2B). The popular media pays the utmost attention to the sphere of B2C. In this field, the goods and services are sold to the final consumers over the internet. Even though the popular media focuses on the B2C channels most, the importance of B2B sphere also grows. In order to reach out to the new customers and offer better service to the existing customers, the B2B marketing agents rely on online product catalogues and online commercial networks etc. In C2C online marketing field, the consumers share their products, services or their views on the discussion matter over the internet. In this field, internet serves as a perfect medium and tool for the customers and consumers to exchange ideas and products and to share their views (Kotler, Bowen and Makens, 2010, p. 485-487). The tourism enterprises may receive the messages directly from the consumers via C2B and analyze them; but the key here is that the enterprises need to track down the content of the messages from the C2C on the enterprise activities and to identify the customer expectations so that it uses these outputs as a basis for its future services.

Role of Social Media in Marketing Strategies of Boutique Hotels

Boutique hotels first appeared in leading cities of the UK and the North America in early 1980s. There are different definitions of the boutique hotel; but the common features that the accommodation sector representatives would agree on could be summarized as follows (Anhar, 13 December 2001):

- Distinguished by architectural design, identified by cosy and warm environment
- With no more than 150 rooms, offering customized service and a great experience of personal interaction and politeness to the customers and guests
- Appealing to people in age between early 20s and mid-50s with average or upper level incomes.

Boutique hotels which are pretty important for local development and business are also defined as follows (*T. R. Ministry of Culture and Tourism Board of Inspection*, 10.05.2005, Article 43):

> "Boutique hotels are accommodation units which display unique features in terms of their structural aspects, architectural design, equipment, decoration and material content, offer customized and high quality service to the guests and customers and have 10-60 rooms for their guests."

The common features of the boutique hotels are further detailed in article 43 of the directive on the documentation and features of the tourism facilities (no 27865, dated 5.3.2011 as amended) (See Appendix).

Boutique hotels are named after the notion of boutique which refers to the fashion in products and goods in the 1960s; it is a fairly new category in the accommodation sector and is defined with town houses and small size properties. Boutique hotels seek to offer a unique experience to the potential customers and are distinguished from the big hotels through this type of service. In this sense, they challenge the supremacy and domination of the renowned hotels and appeal to the customers. To this end, boutique hotels are lifestyle products with their unique architectural design and unique sense of hosting the guests (Page, 2011, p. 166). Lifestyle products may also be referred to as the products sold based on the activities of the individuals, personal interests and views. The personal interests are affected by lifestyles and the products they buy reflect this (Kotler and Armstrong, 1996, p. 151 and 241).

Today, most of the transactions in the world are performed over the digital networks connecting the people and the firms. The internet, hosting large and intricate computer networks, connects all the users in the world and offers a huge amount of information. Basically, the internet is able to change the choices and preferences of the customers in terms of pricing and product information. In the end, this leads to additional value and new methods for the marketing agents to consider the needs and expectations of the customers (Kotler, Bowen and Makens, 2010, p. 484).

The importance of online marketing has been growing in tourism industry. This medium offers a number of marketing tools for the entire tourism system and the enterprises. Social media is one of the crucial tools in this field. Social media enables the enterprises to establish direct interaction and communication with the customers and hear their opinions on their products and services through different internet platforms (Hvass and Munar, 2012, p. 93). Instead of forwarding the message to the audience by reliance on indirect media communication channels, social media is able to deliver a clear and strong message. Lee notes that social media has become an important tool of making business and serves as a channel ensuring that the customers express their views directly (2011, p. 271).

Boutique Model

Perception of tourists is changing in a changing world. The change in the tourist expectations diversifies the tourism services and also changes the accommodation styles. Displaying unique features with a small or medium size enterprise outlook, boutique hotels need to pursue different and appealing strategies and communication methods so that they would become more competitive and take a greater share of customers in the tourism sector.

The phases of the BOUTIQUE Model we are offering for the boutique hotels so that they would be able to use the potential rationally and attract potential customers to their services are specified in Figure 1 below:

1	• **B**oost the Awareness
2	• **O**ptimum Strategy
3	• **U**tility
4	• **T**racing
5	• **I**nfluencing
6	• **Q**uery
7	• **U**se the Results
8	• **E**arning

Figure 1. Boutique Model

Boost the Awareness

The purpose in the "awareness" strategy of the boutique model (the first phase in the model) is to raise awareness among the figures wanting to become boutique hotel runners and the local people as well as tourists in respect to boutique hotels. Because it has a unique style and structure, the investors who will make investment in boutique hotels should have some peculiar aspects. Ministry of Culture and Tourism plays a crucial role in raising this style of awareness. The ministry may consider offering a certifiable training for the enterpreneurs and the candidates involving all the processes from the creation to the operation of the boutique hotels. In case the investor understands the differences in running a boutique hotel, he or she will be able to identify the marketing strategies more effectively. They need to focus on the unique features of the boutique hotels and consider better options to attract the attention and interest of potential tourists to their enterprises. In famous tourist destinations in Turkey, local people run tourism enterprises to make some extra money particularly in high seasons. Potential investors among regular people should be identified and further trained so that they would launch a boutique hotel and offer a better service to the guests and customers. Additional efforts of awareness should be held in tourist areas to promote the boutique hotels so that potential tourists would become more aware of this service. This could be done by adopting efficient marketing communication strategies to reach out to the potential customers.

Optimum Strategy

When identifying its marketing strategies, the boutique hotel should define the target group and pursue communication strategies that are compatible with them. In doing so, they should rely on the techonogical advances in the field of communication. For instance, if a boutique hotel defines its target group as young people and middle-age customers using internet actively, social networks should be used more frequently to reach out them and media strategy should be devised based on the age groups. Internet tools such as e-mail, social media or cell phone apps should be used for the young people using the internet frequently whereas different options should be considered for less-frequent users.

The growing demand for customized vacation packages also contributes to the increased interest in the boutique hotels in association with the tendencies of the tourists seeking a different experience in service. Boutique hotels may appeal to the tourists who love art and culture with their different architectural design, historical texture and aesthetic structures; but they may also offer a different option for the tourists and guests who prefer thermal attractions where they may get massage or enjoy sporting activities. Because they are mid or small sized enterprises, the boutique hotels should focus on a specific market and area and adopt a strategy based on niche marketing. This strategy will enable the boutique hotel to become a recognized brand in the area it is active in.

"Internet has opened an incredible window of opportunity for the niche buyers that could be met with only part of the costs of the large budget ads to reach out to the target groups via messages" (Scott, 2010, p. 30). If internet is chosen in the boutique hotel as an active channel to reach out to the target group, first an internet site should be created. The image of the internet sites send messages to the visitors on how the boutique hotel is positioned itself. For this reason, the design of the internet site should be compatible with the image of the hotel. The internet site offers visual and audio content that would ensure that the visitors have first-hand experience and information. Therefore, the content and design of the site should be clear, informative and understandable and give details on the features of the hotel and the possible activities. The boutique hotel may identify the target group by sub-categorizing the tourists. And it may adopt different strategies for these target groups because the attitudes and habits of the tourists in different groups may be different in terms of social media usage. Therefore, the boutique hotels should develop different strategies for different target groups and further integrate them into one large and greater strategy. Instead of TV ads which may be costly, the boutique hotel may be promoted via thematic TV shows. There are specific shows focusing on vacation and the possible activities in different destinations. Boutique hotel representatives may want to take place in such shows and TV programs to promote their hotel and image by referring to the amenities at their hotels and the services they offer to the customers. In addition, it is also possible to use print media as well. These include newspapers, magazines and brochures. However, advertising in print media outlets may be time consuming and costly. Instead of this, therefore, the boutique hotels should focus on specific print media tools that the potential customers may find interesting. One of the best examples of this is Sealife magazine, published as monthly by IDO Inc. on a regular basis and distributed to the passangers free of charge. The passengers read the magazine during voyage or waiting for the vessel. Through reading the magazine, the passengers may get information on different tourism destinations and potential activities and attractions in these destinations.

The boutique hotels' reliance on social media to communicate with the target groups, reach out to the potential customers and on the internet is made possible by computers, cell phones and other similar devices. In today's world, customers make search first before buying anything over the internet, make comparison between different options including price and features and most importantly, they rely on the reviews by the former customers rather than the ads. For this reason, the boutique hotel should exist in social media through its visual and audio content and tools as well as through information in its official website; this will enable the customers to remain connected to the hotel which will be able to influence their decisions on how to spend the vacation. This will eventually improve the hotel's competitiveness.

The best and most efficient advertising and promotion is the positive review by a former customer who stayed at the hotel who shares this information and view with its close friends, relatives as well as the readers and users in a wider environment like the internet. The customers find the reviews and opinions of others and previous customers more useful than the promotion and ads by the hotel itself. For this reason, the hotel should focus on how to develop strategies that will increase customer satisfaction and encourage them to give positive reviews on their services and attractions. The customers should be tempted to give positive reviews; so the hotel should spend efforts to ensure that the customers are willing to do so and to respond to the calls by the hotel on this matter.

Utility

Utility, the third phase of the BOUTIQUE Model, ensures that the potential customers prefer boutique hotels as their accommodation in their vacations. The goal in this strategy is to convince the potential customers and guests that their experience in the boutique hotel will be fantastic and unique that could never be seized anywhere else. By this, the hotel makes a pledge that the customers will have a different taste of vacation during their stay at the boutique hotel. As part of this strategy, the advantages and attractive sides of the boutique hotel should be emphasized and the privileges the hotel offers should be underlined. And this message should be properly forwarded to the potential customers based on the strategy detailed in the second stage of this model. Proper measures should also be taken to ensure that the customers will prefer the hotel in their future vacations. To this end, a customer database should be created and the customer information should be managed effectively. For instance, the couples spending their honeymoon at the hotel should be offered a discount next year and some spoiling surprises may also be considered to appeal to these customers. The customers are made loyal and frequent guests by such moves; as a result, the hotel becomes a place they will experience a second honeymoon rather than a regular hotel among others. In a sense, the hotel becomes another home for these couples. Another example for exclusive and private days is birthdays; messages could be sent to the cell phones on birthdays; this will give the impression that the customers are remembered in a humane way by the hotel. And the customers may also be offered a treat for their birthdays. They may be offered one night free of charge if they stay three nights. This cannot be done in a luxury or big hotel; but for a boutique hotel, this is feasible because of their small size. Therefore, the boutique hotels may transform this into a great advantage. In his book "Small is the New Big", Seth Godin stresses that the small size enterprises are now more influential than ever. The enterpreneurs in the small sized enterprises are able to communicate with the customers more intimately and effectively; this enables them to offer swift and lasting solutions to the problems they encounter. According to Godin, small size offers flexibility and enables the enterprise to adapt to the rapidly changing environment and therefore increases the competitiveness of the firm. The owner of a small sized enterprise calls the customers by their names. Large size may have its own advantages; but it is obvious that small size offers great advantages in most basic examples. "Do not wait. Get small. Think big!" (2007, p. 217-218).

Kotler and Armstrong refer to a five-staged path for persuading the customers (1996, p. 498). These include the following:

- Building brand preference
- Encouraging switching to the brand
- Changing the customer perceptions of product/service attributes
- Persuading customers to purchase now
- Persuading customers to receive a sales call

Kotler and Armstrong note that an enterprise should build a brand first in order to persuade its target group because perception and recognition of a brand reflects quality and image. Boutique hotels should become a catchy brand in its field of service by diversifying their services and activities. For instance, the name of the hotel should come to mind immediately when a person is asked to respond to the question as to which hotel is the best in thermal tourism in the area. The service it provides should be so special and exclusive that the hotel should be the number one boutique hotel in its field in Turkey. a strong

image of the hotel will expand the sphere of influence of the hotel and attract greater number of customers from other areas. At the second stage, the potential guests should be informed on why they should prefer this brand and they should be convinced that they will have a great experience in case they choose it. The customers should be ablet to see the differences between the hotel and the one they spent their vacations in before when they make a comparison.

Tracing

The goal in the tracing strategy, the fourth stage in the BOUTIQUE Model, is to track down the views and opinions the customers expressed in respect to services, incidents, developments or products in the social media channels. The positive or negative reviews of the customers in the C2C communication on the matter under discussion play an important role for the enterprise and potential customers. From the perspective of the boutique hotels, the views and opinions the customers expressed in relation to their services and products reveal whether they are satisfied with these products and services, suggesting that the hotel should make some improvements or keep up with the way it is offering its services. This will eventually affect the decisionso of potential customers. For this reason, positive reviews posted in social media environment will contribute to the image and prestige as well as recognition of the hotel in case the hotel offers high quality service to its customers and guests. In form of WOM, this will be of great help for the enterprise to devise its future marketing strategies as well.

Another method to establish effective communication between boutique hotel and the customers is to open accounts in social media sites (Facebook, Twitter) for the hotel. Instead of opening a single account in one social media channel, the boutique hotel should consider other options as well to reach out to the customers. When the boutique hotel diversifies its services and its outlook, it may directly access to its target group when its internet site or social media account is shared through the relevant media groups that emerge by different areas of interest (culture, nature, sports etc). In this way, the target group becomes aware of the boutique hotel and its activities, read and analyze the reviews posted by the previous guests, evaluate the photos of the hotel and ask questions to the hotel administrators to get further information. They may also ask similar questions to the previous customers over the social media channel.

The boutique hotels that use the social media most effectively in the world are Roger Smith Hotel and Mr. and Mrs. Smith Boutique Hotel. The media strategies of Roger Smith are further evaluated below in greater details.

"The Roger Smith Hotel, a family run, boutique, art hotel located in the heart of midtown Manhattan, is promoted regionally, nationally, and internationally. The public spaces of the hotel are filled with colorful murals and beautiful bronze sculptures by artist-in-residence James Knowles, and its rooms are designed in a comfortable New England bed-and-breakfast style. The DeLima family has owned the hotel since they founded it in the 1930s. Knowles (husband of Suzanne De Lima Knowles), who is also the current president and CEO, has run the hotel since the late 1980s. He initiated the social media program with the Roger Smith team in 2006 with the video-based site Roger Smith News, which told stores about the interesting community around the hotel. This effort has since evolved into the hotel's video-based blog, www.RogerSmithLife.com. In the fall of 2008, Brian Simpson, now director of social hospitality, joined the hotel staff to run the restaurant, Lily's Simpson, who already had personal experience with Twitter, quickly realized that he could use Twitter, as well as Facebook, to interact with guests, build community, and share even more stories created around the hotel. The social media campaign grew rapidly and organically from there, says Adam Wallace, director of digital marketing. In 2008 the hotel added www.12seconds.tv to promote lunch specials in Lily's with a 12-second video of the plating of the dishes. It also started posting images taken all around the hotel on Flickr.

In the years following, the team at the Roger Smith experimented with other platforms and started separate blogs for different areas. For instance, they added a blog and Facebook page dedicated to the LAB Gallery, for those interested specifically in the art initiative. There are now accounts for the Roger Smith Hotel on each major social media platform.

CEO James Knowles encourages individual managers to create their own blogs and Twitter accounts to tell their own stories and build their own networks because they reach different people. "It all encourages word-of-mouth." The hotel Web site, at www.rogersmith.com (see the nearby figure), is the booking site, with all the basic information about the hotel, events, and Lily's Restaurant. However, their first blog, RogerSmithLife.com, remains the true hub for the hotel's online presence. It presents videos from YouTube, images from Flickr, live broadcasts from Ustream.com, an events schedule from Google Calendar, and blog posts about everything happening around the hotel.

Over time, the media channels have become more strategically focused. "We use Twitter and Facebook to build relationships and community, and to share the content that goes on the blog and other media channels. Each site has a different role and each site has been important to our online presence," Wallace explains. The combination of media and direct personal communication has helped the hotel build an active, supportive, and somewhat unexpected following. Although it began using social media to distribute artistic and narrative content, the hotel's expanded social media program has actually increased revenue from room bookings, private events, and restaurant usage. The hotel's extensive social media program itself has become a form of promotion. It hosts many public events related to social media that, in turn, help build its reputation. "We have gained exposure nationally largely through word-of-mouth in our social channels, but also from attending and speaking at conferences around the country," notes Wallace. Speaking with other thought leaders, he adds, is a great way to share ideas.

For metrics, the Roger Smith relies primarily on Google Analytics, but has installed Omniture on the hotel site. "We see a lot of incoming traffic to our blog from Twitter and some from Facebook. We track room bookings through a promo code and also word-of-mouth mentions on calls." The 10% discount offered on Twitter, Facebook, and the blog helps with tracking, while benefiting those who tie into the social media network. The hotel generally eschews sophisticated monitoring tools, relying on the staff's own constant online presence, plus Google Alerts, to see new blog posts and social web mentions. They have just added Revinate, a new tool specifically for hotels, to monitor social media." Revinate has been specifically designed to meet the unique needs of accommodation sector; and as a software program that can be easily used, it offers social media solutions to the accommodation enterprises (Revinate, n.d.).

Content for social media comes from many sources: employees; guests and visitors who post videos, photos, and blog entries and casually produced videos shot with Flip Video cameras, for example. Professional video comes from Panman Productions, an in-house production company. The production company handles live broadcasts, films events, and produces featured video content and stories. The hotel doesn't invest much in traditional advertising campaigns but incorporates some additional online marketing. It runs a limited PPC campaign, basic SEO on the booking site, and two e-mail marketing campaigns — one with monthly room specials and packages and another with event announcements and arts programming. Other than that, the company does a lot of cross-promotion, with Twitter and Facebook logos on the Web sites and in its e-mail signatures. It even places logos for its social media sites in elevators, and includes all the links on the hotel's Wi-Fi login page (Zimmerman and Sahlin, 2010, p. 30). This case study shows that Roger Smith is a boutique hotel but it is also able to carry out an integrated media campaign and strategy by reliance on a huge number of internet sites for marketing purposes. In this way, it is able to reach out to its potential customers and target groups through different social media networks.

Boutique hotels may create their own pages and sites in the social networks; in addition, they may also rely on these addresses and channels to inform the existing and potential customers on the current developments; the sites of social groups relevant to tourism may also be useful for the hotels. In addition, the hotels may review the views and opinions shared in these sites and mediums on their services so that they may improve their services or diversify their focus of activities.

In LonelyPlanet and IGoUGo, two prominent virtual tourism communities in the world, the visitors exchange their views and experiences in different issues in reference to their common interests (Xiand and Gretzel, 2010, p. 180). Internet sites www.tripadvisor.com.tr and www.neredekal.com in Turkey help visitors make their travel plans, compare the accommodation facilities, get information on the activities to be performed in the relevant destinations and provide details on transportation and other logistical matters; visitors are allowed to share their views in these sites as well as blogs and social networks associated with these sites. www.tripadvisor.com is a site that operates not only in Turkey but also in other parts of the world and is focused on the travel planning. TripAdvisor operates different web sites of 19 different travel media brands; all these sites attract more than 69 million visitors on a monthly basis (TripAdvisor, n.d.).

Influencing

Influencing, stage five in the BOUTIQUE Model, refers to the realization and fulfillment of the promises and pledges made to the potential customers. The boutique hotel should seek to offer a unique and fantastic experience to the customers by fulfilling the services and promises it made to become a different actor from its rivals. The key point here is that the boutique hotel should be focused on activities to improve the satisfaction of the customers throughout their stay. In order to fulfill the expectations and attract the customers, the hotel should prove that it did not mislead or deceive the guests by keeping its promises. This becomes influential over the guests and visitors.

Query

At this stage, the satisfaction or dissatisfaction of the customers is identified and what needs to be done to improve service quality is offered as means of recommendation. To this end, the satisfaction of the customers is measures by surveys during their stay at the hotel. In case of a negative perception or recview, proper measures should be taken immediately to addresss this problem. To find out about the customer expectations, the boutique hotel staff should communicate with the customers to get their views and opinions on the services and products so that the service offered is diversified. Mini surveys could also be held as the customers were leaving to measure their satisfaction. In addition, the views of the customers can be collected through surveys performed in the social networks. At the stage of developing different concepts, surveys are performed to get information and insights on the approach of the customers towards new concepts.

Use the Results

Marketing strategy is evaluated by using the results out of the query stage. In case customer satisfaction is poor, the existing strategy should be reviewed to identify the flaws and should be restructured and redefined. Based on the customer feedbacks, expectations are identified and the presentation of the services is renewed. The boutique hotel tries to convince its customers that it offers a different service than the rivals do through its new concept after revisions; in the end, it should also try to improve its image and prestige. Those who get positive results out of the reviews should remain focused on the activities that please and satisfy the customers so that they become loyal guests.

Earning

The goal in earning strategy, the last stage in the BOUTIQUE Model, is to ensure that all the parties (the customers, boutique hotel and the other stakeholders) will win. The boutique hotel will please and satisfy the customers via its high quality services; and the satisfied customers will contribute to the image of the hotel by Word of the Mouth communication and influence their relatives and friends so that they would prefer the hotel. The boutique hotel entrepreneur will be able to promote his and his hotel's reputation and image by using the internet and mobile systems effectively through the media strategy he would pick to reach out to the target group and maintain working communication with his customers. The boutique hotel may prefer the best and most proper strategy instead of conventional mass communication tools and devices to develop an integrated approach so that they deliver their messages to the potential customers in the most effective way possible and reduce the marketing costs. When its media strategy becomes successful, the boutique hotel may be able to reach out to greater number of customers and will further expand its customer portfolio given that the satisfied customers will also influence others. The boutique hotel will reduce the costs associated with its marketing activities and save money; it will also attract additional customers, become more popular and earn greater amount of revenue in the whole process. With the increase in the revenues, the boutique hotel will please and satisfy the customers.

When the boutique hotel makes more money and revenues, not only boutique hotel owner but also the customers and the environment will be positively affected by this. The customers will leave the hotel in satisfaction as they had a great and different experience; the boutique hotel owner on the other hand will increase number of customers and make more profit; the inflow of tourists and monies they spent in the area will boost the economy there. This will be a positive contribution to the profits of the local economic players. In this way, all the parties will win in this process.

SWOT Analysis and TOWS Matrix on the Marketing Strategies of Boutique Hotels in Istanbul

In this part of the study, questions were asked to the 12 boutique hotels active in Istanbul (T. R. General Directorate of Investments and Establishments) on their marketing strategies and a SWOT Analysis has been developed based on the responses by the boutique hotels (See Table 2). The factors identified upon the analysis are listed below every heading. SWOT Analysis table consists of four groups: strengths, weaknesses, opportunities and threats. A TOWS Matrix is also created based on strategies out of the factors identified in the analysis (See Table 3).

The TOWS Matrix was initially introduced for the formulation of company strategies. Subsequently, it was used as a conceptual framework for developing career strategies for individuals (Weihrich, 1982). In this article, the framework will be used to analyze marketing strategies of boutique hotels.

The strategy development, be it for a career, a company, an industry or a nation, requires a systematic analysis of the weaknesses (W) and strengths (S) of the respective system (the companies in our

discussion) which, in turn, operates within a larger external environment that poses threats (T) but also provides opportunities (O) to the system. These four factors are illustrated in the TOWS Matrix in Table 3.These four factors can become the basis for four distinct strategies. The most favorable situation occurs when a company (boutique hotels in our discussion) uses its strengths (S) to take advantage of opportunities (O) outside that company. This is called an S-O (or maxi-maxi) strategy because the company exploits opportunities using its strengths. But in a competitive market, boutique hotels can also face threats which in turn, might be overcome by its strengths. Such a situation is deemed an S-T (or maxi-mini) strategy because the goal is to maximize strengths by minimizing the threats. Every company also possesses weaknesses which must be overcome in order for it to take advantage of external opportunities. Such a W-O (or mini-maxi) strategy is often a developmental plan that attempts to convert a company's weaknesses into strengths. The least favorable situation in the TOWS Matrix occurs when acompany faces external threats in light of its weaknesses which may make it difficult for the company to operate in the competitive market. This strategy, shown as a W-T (or mini-mini) strategy in the Matrix, aims at minimizing both the internal weaknesses and the external threats (Weihrich, 1999, s. 10).

Table 2. A SWOT Analysis on the Marketing Strategies of Boutique Hotels in Istanbul

Strengths (S)	Weaknesses (W)
(S1) Customized service (S2) Membership in a design hotel (S3) usage of technology (S4) Word of Mouth Marketing (S5) Google organic search (S6) Social media use (S7) Personal communication (S8)War and luxury service for those who avoid complexity in big hotels **The hotel's;** (S9) Location (S10) Nature, concept, food (S11) Amenities (S12) Accessibility (S13) Reasonable pricing and high quality service (S14)Comfort offered to the customers (S15) Unique identity of each room *** (S16) Repeat Guest loyalty and increase of repeat guest numbers (S17) Owning different hotels in the same area (S18) Customer satisfaction (S19) Popularity (S20) Popularity (S21) Good relations with partners (S22) Becoming a renowned brand in the world (S23) Working with qualified staff (S24) Offering special advantages to the customers (S25) Unlike big resort or urban hotels (with the exception of the hotels in the south), leisure in boutique hotels	(W1) Lack of strong image and reputation in the country and in the world (W2)Lack of advertising activities (W3) Social unrest, riots and uprisings (W4) Noise pollution because of the location (W5) Insufficient physical conditions • *Lack of room capacity* • *No view in the rooms* • *Rooms may not be too large* • *Lack of standard/deluxe rooms* • *Inability to host group meetings or accomodations* • *Lack of grand meeting rooms* • *Lack of a ball room* • *Lack of a large breakfeast or diner room* *** (W6) Employment of staff who have no experience in the tourism sector; for this reason, training the staff may take long time and this may cause communication issues (W7)Inability to maintain communication with guests over 40 via social media channels (W8)Qualified personnel may want to work for international hotels rather than local hotels; for this reason, it may be difficult to employ qualified staff (W9) Newly launched international and boutique hotels (W10)Experiencing difficult in maintaining balance between pricing and utility (W11)Structural insufficiencies in the hotel

Table 2 (continued)	
Opportunities (O)	**Threats (T)**
Opportunities by internet channels and social media: (O1) Rapid recognition in the world	(T2) Competitive pricing policies of other hotels in the area
(O2) Customers may have easy access to the hotel information, maintain direct contact and communication and make online reservations instantly	(T3) Association of the hotel name and the location with the social unrest and demonstrations in the minds of the customers
(O3)Presentations and promotions are made over social media to increase the attractiveness and appeal of the hotel so that number of potential customers increases	(T4) Situation of the hotel in a relatively poor area may lead to undesired outlooks and images
(O4)Creating community (O5)Spread of online sales and reservations in recent years	(T5) Recent unrests and social incidents negatively affect sales and marketing activites
(O6)Contribution to hotel recognition and promotion (O7) Ensures that new trends and technologies are internalized rapidly	(T6) New national and international hotels join the market; they significantly make the competition bitter as they affect the decisions of the customers
(O8)Online sales contributes to profit making	(T7) Increase in the number of rivals makes the market even more competitive
(O9)Hotel rating sites offer great opportunities for the non-recognized boutique hotels	(T8) Some state policies (T9) Inability to have loyal employees because they are able to change their jobs very frequently
(O10)Boutique hotels are able to compete with the large budget hotels in terms of reaching out to the customers because of inexpensive information technologies	(T10) Negative comments in internet channels may raise serious doubts in the minds of the potential customers who have no experience with the hotel; this eventually negatively affects the sales and revenues
(O11) Hotel promotion reaches to large masses; hence, this contributes to sales	(T11) Expansion of the railway system in Istanbul which makes transportation more convenient; as a result, Istanbul becomes less important as it becomes accessible from other parts as well
(O12)Advantage of transforming the opportunities to sales through a good marketing policy online (O13) Creation of a department specifically focused on online sales in hotels and employment in these departments as a result of advance in internet technologies	(T12) Traffic problems in the area and the location is closed to traffic in some parts of the day
(O14)Comments and ratings in social media and internet sites visibly affect decisions by potential customers; therefore, the hotel is able to devise strategies based on the negative or positive comments	
***	
(O15) Promoting the hotel through a diverse set of sale channels and ability to reach out to more potential customers	
(O16)Growing popularity of the city of Istanbul (O17)Contribution of a popular location to sales and marketing activities	
(O18) Offering accommodation services in a tourist-intensified area	
(O19) Situation of the hotel in the historical peninsula	
(O20)Convenient transportation (O21)Safety in the area (O22) Reduction in marketing communication costs (O23) Changes in customers' demands and expectations	

Table 3. A TOWS Matrix on the Marketing Strategies of Boutique Hotels in Istanbul

Internal Factors External Factors	Strengths (S)	Weaknesses (W)
Opportunities (O)	**SO (Maxi-Maxi)** (SO1)Benefitting from the advantages associated with the location (SO2)Raising and improving brand recognition (SO3)Using information technologies effectively (SO4)Striking good balance between price and service (SO5)Improving customer satisfaction and loyalty (SO6)Placing emphasis upon importance of boutique hotel	**WO (Mini-Maxi)** (WO1) Improving brand recognition (WO2) Improving physical conditions (WO3) Placing emphasis upon advantages of the issue (WO4) Maintaining communication via diverse channels (WO5) Employing qualified staff (WO6) Ensuring price-utility balance
Threats (T)	**ST (Maxi-Mini)** (ST1) Improving competitiveness (ST2) Improving human resources (ST3) Openness to criticisms (ST4) Remaining calm vis-à-vis social incidents and unrest (ST5) Location is no longer a problem	**WT (Mini-Mini)** (WT1) Improving competitiveness (WT2) Improving security measures

SO (Maxi-Maxi) Strategies

This strategy expresses maximizing internal strengths and opportunities from external environment. To this end we have developed SO strategies by matching the overlapping factors in the SWOT Analysis (Table 2).

- *SO1: Benefitting from the advantages associated with the location*
  This strategy is relevant to the factors S9, S12, S17, S20, O16, O17, O18, O19 and O20.

The intensen and popular nature of cultural tourism in Istnabul turns the location of the hotel into an advantage. Convenient transportation, being located in the historical peninsula and closeness to the historical and tourist areas as well as other similar factors increase the importance of the location and becomes a marketing advantage that attracts greater number of tourists.

- *SO2: Improving brand recognition*
  S2, S4, S6, S7, S16, S17, S20, S22, O1, O2, O3, O4, O9, O15

Having improved brand recognition and becoming a world-renowned brand is a factor and element that may affect the choice and decisions of the customers. Reliability, high quality service and other similar factors and features may contribute to the image and recognition of a hotel as they may be appealing to the customers and guests. For instance, being a member in Design Hotels™ which displays unique features in terms of architectural design, authenticity and life and admits only 200 members throughout the world is a great prestige and advantage for a hotel. Some of them are global brand recognition, sales and distribution channels advantages, the Community's strong relationship to travel professionals and the industry's most advanced distribution technology; and they will result in efficient global distribution to maximize the member hotel's booking potential and increase the hotel's performance. A dedicated account director will support and assist the member hotel's in strategic decisions throughout membership. By connecting the member hotel with the opinion leading journalists from around the world the Community generate media contacts and positive publicity to increase the hotel's reach and visibility. A membership with Design Hotels™ will not only give global brand recognition, bolster marketing power, enhance booking productivity and boost the member hotel's profitability in the long-run; it will also help to achieve the best possible return on investment (Design Hotels™, 4 April 2014).

- *SO3: Using information technologies effectively*

S3, S5, S6, O2, O3, O4, O5, O6, O7, O8, O9, O10, O11, O12, O13, O14

Internet sites and social media use are channels that play crucial roles in attracting customers and reaching out to the target groups in an efficient way. Here it is believed that any information to be shared on the activities in the hotel, the celebrities staying at the hotel and entertainment options that may take the attention of the social media users will affect their decisions. Because the social media users will share the information on the services and products of the hotels (room, special food, wedding, parties or any photo on any detail of the hotel) and this will connect them to each other, this method seems to be an essential tool for the hotel. In addition, using information technologies is not effective just because it helps attract greater number of customers. It also offers opportunities to follow new trends and developments and use them in the business processes.

- *SO4: Maintaining good balance between price and values:* S1, S13, S24, O8, O10, O11, O22

Boutique hotels offer good service to the customers as a result of which they feel home. So in this respect, they compete with the five-star hotels by offering a warm approach to the guests. Speaking to the guest by his name in his second stay and knowing something about their personal preferences may be cited as an exclusive service that a boutique hotel may offer. Boutique hotels which seek to offer a unique vacation experience to the guests may set higher prices compared to the competitors because of their authenticity, architectural design, different rooms and style as well as additional services they offer. Using information technology is an important factor to reduce the costs; but it may also help increase the profitability of the hotel as well. Instead of focusing on how to reduce the price, the hotel may prefer focusing on what the customer may like and prefer and identify its new and additional services based on this. This may eventually affect the customer's decision to stay more and increase the profitability of the hotel as well.

- *SO5: Improving customer satisfaction and loyalty:* S4, S13, S16, S18, S24, O4, O14

The guests would be pleased and leave as pleased if they are convinced during their stay that they were hosted well and warmly and their needs were attended properly. If a customer is satisfied, he or she may become a loyal guest as well. These customers may also contribute to the image and recognition of the hotel through Word of Mouth Marketing which may result in the increase of the hotel customers. Internet sites and social media channels may contribute to this process as the customers are able to express their satisfaction in such environments and affect the decisionso f the potential customers. For this reason, spending efforts to increase customer satisfaction through diversification of the services, presentation of high quality service and surveys and polls of opinions depending on the changing needs and wishes of the customers is very important. For instance, a boutique hotel may change the firm they were previously working with after carefully reviewing the ratings and views of some customers on the quality of filter coffee served in the hotel. Or they may also change the reservation system as some customers may find the previous one complicated. As quality of service, the size and elegance of the suit rooms, World Travel Awards, unique concept and influential communication of the staff in the hotel with the guests may be cited as examples.

- *SO6: Placing emphasis upon the importance of boutique hotel*

S1, S7, S8, S10, S11, S13, S14, S15, S25, O2, O3, O9, O14, O15, O19

In order to become more competitive, boutique hotels diversify their services. To this end, they should send the message that they offer a distinguished style and experience of vacation to their customers compared to the regular hotels. As part of this endeavor and strategy, they should share photos, information, videos on their services in the social media channels and the internet to reach out to the potential customers at a reasonable price. The privileges the hotel offers are disseminated in the social media environment and reach out to large masses. Potential customers may find the reviews of previous customers and their exchange of views useful in making up their minds on where and how to spend their vacation. As a result, they may prefer the boutique hotels and try to have a different experience. Because the tourists preferring boutique hotels have greater tendencies to have fun and spend elegant time, placing emphasis upon the unique services and styles of the hotel may become useful and influential.

ST (Maxi-Mini) Strategies

Maxi-Mini Strategy expresses maximizing internal strengths and minimizing threats from external environment. To this end we have developed ST strategies by matching the overlapping factors in the SWOT Analysis (Table 2).

- **(*ST1*) *Improving competitiveness:*** S1, S2, S8, S9, S10, S11, S12, S14, S15, S22, S24, S25, T2, T6, T7

In order to improve competitiveness, the specific and unique features of the boutique hotels should be emphasized; and instead of low price, the distinguished service offered in the hotel and the unique experience that the customers may never find elsewhere should be emphasized. The balance between price and utility should be maintained well; costs should be miminized and attempts should be made to increase number of loyal customers.

- **(*ST2*) *Improving human resources***: S7, S19, S21, S22, S23, T9

Different methods should be employed to improve the staff loyalty to the enterprise; the staff should be motivated by award program based on performance; the staff's career development should be supported; only qualified personnel should be employed; they should be trained regularly; particularly, the staff who are able to communicate with the customers fluently and effectively should be preferred.

- **(*ST3*) *Opennes to criticisms:*** S3, S6, T10

Reviews by the former customers on the hotel in the social media platforms or other environments may contribute to the hotel's image and its ability to reach out to additional customers. However, research shows that customers tend to share their negative views more than they share their positive views. However, it is possible for a hotel to transform this into an advantage. Social media and internet now allow the users to track down the customer reviews and contribute to the print version of WOMM. The views shared or exchanged in the social media and the criticisms raised in these environments may be used by the hotel to change their attitudes or change their policies so that they may reformulate their services that the customers may find useful and preferable. Eventually, this contributes to the improved customer satisfaction.

- **(*ST4*) *Remaining calm vis-à-vis social events and unrest:*** S19, T3, T5

Any incident of social unrest in crowded areas may negatively affect the tourists and guests. However, these unpleasant events or developments may be addressed properly by remaining calm and improving security measures at the hotel so that the guests will no longer feel worried.

- **(*ST5*) *Location no longer a problem:*** S9, T11

Being situated in historical peninsula or serving in a very convenient area may be an asset and advantage. However, location may no longer be a threat for the hotels not fulfilling this criterion because of the improved transportation facilities and introduction of additional mass transportation channels. Different parts and points of Istanbul are now connected through subway, tube channel, railway system and other mass transportation options. These channels reduce amount of travel time and make the destinations accessible. For this reason, the hotels not situated in a convenient area may use this to address their disadvantage.

WO (Mini-Maxi) Strategies

This strategy expresses minimizing internal weaknesses and maximizing opportunities from external environment. For this purpose we have developed WO strategies by matching the overlapping factors in the SWOT Analysis (Table 2).

- **(*WO1*) *Improving brand recognition:*** W1, W2, O1, O2, O3, O4, O9, O15
  See the description on SO2 strategy.

- **(*WO2*) *Improving physical conditions:*** W5, W11, O23

By nature and definition, boutique hotels have a relatively smaller size and warm environment. Inevitably, in terms of number of rooms as well as the size of the physical locations, they have more restricted opportunities and services. Due to the restrictions and criteria set by the Ministry of the Culture and Ministry, the boutique hotels may not be able to change some of the features or increase their capacity as they wish. However, it is possible for them to change the physical conditions in terms of quality, appearance and design to avoid disadvantages. They may design the rooms, the ball room, meeting hall or diner in a unique style so that they become appealing to the taste of the customers and improve customer satisfaction.

- **(*WO3*) *Turning the advantages of the location into an asset:*** W3, W4, O16, O17, O18, O19, O20

Location of the hotel is important and it may offer some advantages. However, there also might be some disadvantages associated with it. In the ads and promotions, the advantages that may be associated with the location should be stressed and the positive sides of the location should be emphasized. In this way, the positive aspects will be considered by the customers in their decisions and choices.

- *(WO4) Maintaining communication through different channels:* W2, W7, O2, O9, O10, O11, O12, O14, O15

Social media and internet sites ensure access to the target group at a reasonable cost; they have also become an important channel in affecting the choices of the customers through their rich content. However, because some individuals, particularly older ones, only rarely use the internet, different channels should be used to reach out to them. A diverse set of marketing communication strategies to be based on print ads and personal sales should be employed to appeal to these people; and an integrated approach should be adopted as part of this strategy as well.

- *(WO5) Selection of qualified staff:* W6, W8, O8, O10, O13
  See the description on ST2 strategy.
- *(WO6) Striking balance between price and utility:* W10, O8, O10, O11, O22
  See the description on SO4 strategy.

WT (Mini-Mini) Strategies

This strategy expresses minimizing both internal weaknesses and threats from external environment. For this purpose we have developed WT strategies by matching the overlapping factors in the SWOT Analysis (Table 2).

- *(WT1) Increasing competitiveness:* W9, W10, T2, T6, T7
  See the description on ST1 strategy.
- *(WT2) Increasing security measures:* W3, T3, T5

Security and safety measures could be increased in order to ensure that the tourists are not affected by and concerned about social demonstrations, unrest and riots. Likewise, the customers could be told that the area is strictly controlled and protected by the security forces to make sure that they remain calm. A crisis unit should be created on this matter and crisis strategies should be invoked when necessary.

Conclusion

While there are no certain solutions in accommodation sector, a BOUTIQUE Model is offered in this study for the owners of boutique hotels so that they would follow effective marketing strategies to attract the attention and interest of the potential customers and guests and to appeal to their target groups. In addition, a SWOT Analysis is run in the study on the marketing strategies of 12 boutique hotels that operate in Istanbul. The findings out of the SWOT Analysis are evaluated and a TOWS Matrix is created to offer some concrete strategies. These strategies can be summarized as follows:

- Benefiting from the advantages of the location
- Increasing brand awareness
- Using information technologies effectively
- Balancing between price-quality and utility
- Increasing customer satisfaction and loyalty
- Placing emphasis upon boutique hotels
- Increasing competitiveness
- Strengthening human resources and picking qualified staff
- Being open to criticisms
- Remaining calm to the social upheavals
- Improving physical conditions
- Maintaining communication through different channels
- Increasing security measures

Advances in information technologies in recent years offer great opportunities and advantages by ensuring sales and reservations via internet, application of new information technologies to the business processes in the hotel, popular awareness and Word of Mouth Marketing through social media platforms where the customers are able to share and exchange their views; as a result, these advantages enable the enterprises to restructure their strategies. In addition, the hotels are able to reach out to the target groups through lower costs over these channels; and this eventually reduces the expenditures of the enterprise.

However, because different target groups have different attitudes and habits, proper communication channels should be preferred. For instance, agencies and online portals are more appropriate for the third category age group and elite segments; social media is a more convenient venue for young and middle age people.

Boutique hotels are institutions offering customized service whose greates marketing asset is customer satisfaction. Because local boutique hotels have no brand reputation and their accommodation prices are similar to those of the luxury hotels, customer ratings are crucial for their survival and competitiveness.

Emergence of an environment where the tourists are able to exchange their views on the service quality freely increases the quality of the guests; in addition, need for qualified staff has become evident for the boutique hotels.

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Appendix: Features of Boutique Hotels in Turkey:

T.C. Kültür ve Turizm Bakanlığı Teftiş Kurulu Başkanlığı (The Republic of Turkey Ministry of Culture and Tourism Board of Inspection), 10.05.2005, Article 43:

Boutique hotels display the following features:
a) Decorated and furnished with modern, reproduced and antique items
b) Comfortable rooms that meet the standards of the five-star hotels
c) A large lobby that is inclusive of sufficient amount of sitting area; in case of insufficient room, a separate hall attached to the lobby as a sitting room
d) Administration room
e) Minimum a second class restaurant offering a la carte service for at least 75 pct of the hotel capacity; in any case, the capacity should not be less than 50 guests
f) Air conditioning in public areas
g) Uninterrupted room service
h) Laundry and dry cleaning services
i) Parking lot
j) Delivery of at least one newspaper to be picked by the customer and housekeeping service on a daily basis
k) Elevators and stairs
l) Serving with qualified and well-trained staff; number of staff should be at least half of the hotel capacity
m) Separate changing and locker rooms, toilets and baths for men and women
n) At least one of the following units should exist:
1) One of the following units: A pastry that will host at least 50 people and offer a space of 1.2 square meters for every person; a cabaret, movie theater, a hall for performances; a library with a minimum area of 60 square meters
2) Indoor or outdoor swimming pool
3) At least three of the following units: gym hall, bowling-billiard hall, library, Turkish bath, steam room, salted steam room, hot stone room, a sauna equipped with an alarm, massage units, skincare units, sports hall, tennis court, skiing facility, wall tennis hall or other similar units offering similar services

Proposals of Insurance Model to Interest Free Banking

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Abstract

Since the ancient times, humankind has always been faced with hazardous situations, struggled to survive and experienced loss of lives, property and valuables at the end of these combats. Societies have been applied several measures to minimize these losses and damages that they experience along with their lives. Indeed, because it is usually not possible to compensate the economic losses by the people incurred these damages, the insurance mechanism has arisen, which constitutes a precaution mechanism against adverse circumstances that could be faced in the future and this material burden has been shared among individuals by distributing it to extensive masses of people in the expense of a small premium to compensate their losses. In our contemporary era, the insurance sector has economic benefit more than its social dimension; and one of the reasons which prevent its expansion in a country with Muslim majority such as Turkey is the religious preferences and social life style of the people. From this point of view, the present study aims to investigate how insurance process in the interest-free banking can be applied in terms of practical and theoretical ways.

Keywords: Banking, Interest Free Banking, Insurance, Takaful

Introduction

Societies have faced risks constantly along their lives since the old ages and used various methods that could simply be called insurance in order to protect themselves from those risks. Risk is the possibility of happening of an undesired occurrence in the future. Insurance, on the other hand, is a social institution organized with the purpose of minimizing the risks that individuals and entrepreneurships face and which they would have hardship in covering on their own and eliminating damages by spreading and sharing them when they occur.

From a financial point of view insurance brings unexpected damages together in a pool and exchanges the expected cost of damages into insurance cost. In this way, the cost of damages and the risk that occurs are shared among all members of the pool.

The importance of insurance business in developed countries has increased because of its functions such as preventing socioeconomic losses, providing capital accumulation and loan opportunities, increasing social welfare and tax incomes, and contributing into employment. Funds created in insurance sector are used in state bonds and real estate fields. The reasons for investments in state bonds can be mentioned as safety, high liquidity opportunities, tax advantages and availability to be used as assurance. The reasons for them to be used in real estates despite the low productivity can be outlined as value increase that might occur in real estate prices and those increases can be added to the capital and they can be used as assurance easily.

When it is examined in relation with beliefs, insurance business that holds great economic benefits as well as social ones has not shown the necessary development in Muslim countries such as Turkey. The ban on interest, undeserved gain and gamble because they are seen as unfair earnings, and because the insurance was not explained well enough by religious authorities and the failing in construction of the institutional structure   affected people negatively and caused them to look at insurance processes negatively. Intensive work in developing non-interest insurance philosophy and applications are in progress in Islamic countries in recent years (Khorsid, 2005, p. 30).

This study aims to theoretically examine the insurance transactions in non-interest banks that run non-interest finance transactions and to bring in 3 model suggestions for non-interest banks. The study has three parts. The first part will deal with insurance business while the second part will be about non-interest banking. The third part will cover non-interest insurance, non-interest insurance types, insurance work by non-interest banks and how this service is provided.

In the conclusion and evaluation section, information obtained in this study will be evaluated and results reached and suggestions will be put forth.

Concept of Insurance

Insurance, a word of Latin origin, and it means a mechanism of taking precautions at present time against negations that might occur in the future and covering the damages of victims from a joint pool. Insurance business consists of the philosophy of protection from a risk. As a single person or institution does not have the power of eliminating the risks that might occur and covering the cost without sharing the risk with others will bring a heavy burden. The philosophy of helping each other can be accepted as the main reason of the birth of insurance business.

Insurance establishment is the best defense vehicle against the incidents that are possible to occur. Insurance business, which was born out of the need of assistance, solidarity and assurance against unexpected events that individuals or institutions might face, has become a part of industrial, commercial and social lives. Insurance business is an indication of economic and social development in developed countries (Tayfun, 1997, p. 14). Insurance, which is described as an arrangement that redistributing the unexpected losses financially collects possible losses in a pool that holds great risks and converts possible losses into insurance cost (compensation) (Dorfman, 1994, p. 2). In this way, the cost of having a risk for individuals and institutions reduces with the shared risk, thanks to the financial system provided with payments of insurance premiums. In addition, collected premiums form big economic funds (Obaidullah, 2005, p. 120).

The economic functions that insurance provides in terms of risk management can be sorted as follows:

- The insured can leave the conservative production policies that reserve a fund with insurance for risks and use modern risk management applications and use the capital tied in those funds.

- It provides a suitable loan opportunity to the entrepreneur who has his possessions insured and transfers the benefits to the insurance company as mortgage.

- It makes possible to take braver steps for the entrepreneur by sharing the partial risks they take (Ergenekon, 1995, pp. 2-3).

- Insurance, by lifting the limitations on investments by taking risks under insurance and makes the capital tied to funds and opens the way for broader investments.

- Insurance companies pay their share of taxes while handling the insurance works and carrying out economic actions. With this aspect, insurance is a great source of tax for the state budget (Güvel, 2004, p. 29).

- By lifting the blocks in front of international trade with types of insurances such as exports loan insurance and transportation insurance, it makes foreign trade volume expand (Atalay, 2004, p. 23).

Insurance, which is the second biggest source of funds, makes institutional savings while forming great funds in economy. In general, insurance;

- Transfers the risks, ,

- Eliminates the effect of damages and losses,

- Forms funds (Sayılgan, 2004, p. 143),

- Compensates damages,

- Eliminates fears and worries regarding the future,

- Provides loans (Rejda, 2002, p. 27),

- Contributes into the balance of payments (Ünal, 1994, p. 40).

Non-Interest Banking System

When the history of non-interest banking is examined that is based on sharing profits and losses, it is seen that the need for non-interest banking emerged with industrialization movements in Islamic countries in the 20th century and the sudden increase of oil prices in 1970s. Individuals' savings were evaluated on a base of profit-loss partnership but with the industrialization, a non-interest bank was needed to bring together those individuals' savings to fund great investment projects.

Since Islam does not permit earning without working, it has a clear attitude against the interest. According to Islam, interest, which makes wealth to be owned by certain circles, eliminates the principle of justice and living in a society with brotherly feelings, as well as the principle of having equal risks.

Interest literally means increase, excess, plus value, multiply, addition and growing. Islam divides interest into two: Interest of debt (nesia) and interest of excess (fadl). Debt interest means that the amount payable at the end of the term is more than the debt. Excess interest is the interest occurs during the buying and selling of property or money.

Islam brought in the mechanism of "profit partnership" instead of interest, which is a gain that is not worked for and based on capital and made the profit, related to production of capital owners` halal. That's why profit and loss partnership emerged as an alternative to interest in Islam.

Non-interest banking model has two goals: Final goal and short-term goal. The final goal is eliminating the exploitation, unfairness, cruelty and imbalance caused by interest by singling it out and presenting an alternative that the interest does not rule, that operates all banking transactions and funds the economy. Its short-term goal is assisting the country development, making it powerful economically, eliminating a series of problems caused by economic backwardness, helping economic units needing funds, attracting the savings of Muslims who are in fear of Allah into economy in a halal way, using them in investments and bringing the country economy to a level that can compete with non-Muslim economies (1993, p. 50).

Goals of non-interest banking can be summarized as follows (Akın, 1986, p. 116):

a- Expanding the frames of relations with banking sector by spreading non-interest banking services,

b- Arranging tools in a way to attract savings and funds and making them join halal profit of investments that are suitable to Islamic principles,

c- Providing funds for the needs of various sectors and making those who need them use the funds in certain methods,

d- Making arrangements so that economic and social development and income distribution are made fairly to the whole society and providing other banking services.

When functions such as main expenditures, organization structures and collecting and offering financial resources to finance those who need funds for investments, it will be clear that non-interest banks are organized in a very similar way to the banking model that operates with classic interest. However, there are fundamental differences between non-interest banks and classic banks. The difference between their goals and methods they follow is reflected on the names of accounts open in those banks. For example, "saving collection" methods of interest banks are named as time deposit and current accounts, but non-interest banks' "saving collection" accounts are named as current account and participation account. Private current accounts are accounts where the money is withdrawn partially or fully, the account holder is not paid anything in return and capital payment is guaranteed. Participation accounts are special partnership accounts that produce a result of profit or loss that would occur through the operation of funds and that does not pay any previously decided income to the holder or guarantee the full payment of the capital. On the other hand, fund provision transactions are made with financial supports, profit/loss partnership, financing the holder against goods, etc. Institutional Finance Support is a process in which the cost of all commodities, real estates and services required by the institution (loan client) are paid by the non-interest bank to sellers/providers and in return the institution owes the total amount. In a way, institution's capital is provided. Individual Finance Support is a process in which the cost of individual needs such as cars and buildings bought by the individuals directly from sellers are paid by the non-interest bank to sellers/providers and in return the buyer owes the total amount. Financial Renting is provision of movable or immovable goods within the financial renting laws and marketing for rent by the non-interest bank. Financing the Document Provided in return of Goods is a process of providing finances in return of the document of delivery within the Foreign Trade and Foreign Exchange regulations. Investment of Profit/Loss Partnership is the process of providing finances to natural or incorporated persons who need financing to join their profit or losses in all their activities or a certain activity or profit or loss that would occur in buying and selling of a good. A Contract of Profit and Loss Partnership between the customer and non-interest bank is signed. Joining shares in profit and loss and assurances, if there is any, are clearly shown in the contract.

The non-interest bank idea which first emerged in around 1955 and applied in 1960s found a large field of application in the Middle East, Africa and Far East and then spread to Europe and America. Many

banks in Europe and America   (Citibank, Union Bank of Switzerland, Kleinwort Benson, ANZ Grindlays, Goldman Sachs, United Bank of Kuwait and Arab Banking Corporation) established units that operate in non-interest banking principles. Significant increases are seen in banks' departments that run on non-interest banking rules in Europe and America.

Ideological structure of non-interest banking and insurance are summarized so far. Since the banking system in many countries forms the base of economy and insurance and because they are almost the only source for using the funds collected for insurance, non-interest banking is examined and methods for using the funds are tried to be summarized. In the following section, insurance business in non-interest banking will be taken up and their relation with Islamic banking will be shown when necessary.

Insurance Business in Non-Interest Banking System and Model Suggestion

In Muslim societies since the early years of Islam, the services provided by modern commercial insurance services were provided by compulsory and/or voluntary institutions such as *blood money, zakat, foundations, pension funds, Akhism guild, and guilds*, which could be described as religious social security systems, by often waiting for a return from Allah and therefore, insurance in modern sense was not needed.   Historically, it is known that there were regulations in those areas. However, gaps occurred in operating classic institutions as results of developments and changes occurred over the time made those institutions lose their importance. Therefore, individuals and societies looked for different alternatives to protect themselves from risks they might face in life and insurance came out as an institution as an answer to their needs.

Insurance concept has been a matter of argument among the Islamic lawmen in Muslim societies for long years; some scholars argued that insurance was lawful but some others rejected it saying that insurance consists interest, gamble and strangeness.

Today, in non-interest banking system, modern commercial insurance is operated as a transaction of takaful. Takaful means *mutual protection* in Arabic and it consists a financial support to policyholders and their inheritors in case the losses and damages written in the agreement occur.

Takaful; is the definition of modern insurance processes in Islamic economic system. Takaful system covers the needs of individual and joint sectors with the investments it makes. Takaful enterprises that offers individuals a program which plans long term saving and investment goals is divided into two as family takaful enterprise and general takaful enterprise. Family takaful enterprise holds long-term agreements like 10, 15, 20, 40 years and they can be resembled to life insurance processes in modern insurance. General takaful processes on the other hand covers modern insurance's non-life insurance branches like fire, accident, engine and engineering (Billah, 2006, p. 3).   .

There is three models in takaful based on concession, partnership and representation. Since the concession model comes across as a model in which the participants do donations or concessions in order to widen their takaful funds, it finds an application space in social or public enterprises or programs with no profit targets. This model is used for aids accumulated from donations participants make voluntarily for people with fewer opportunities in society. In partnership model used by profit organizations, there is a distinction between policyholders and shareholders, and takaful or insurance enterprise. Takaful funds taken under control with a partnership agreement signed with shareholders are directed to investments and a profit from those investments is expected. Policyholders take the role of fund provider or rab'el maal. In partnership, takaful enterprise takes a share from the profit obtained through investments. In representation model, policyholders voluntarily give takaful enterprise the authority to use their funds, together with the fees for representation. In this model too, profits obtained are shared between the takaful shareholders and policyholders with a ratio defined previously (Obaidullah, 2005, pp. 128-134).

Takaful processes need a serious knowledge and experience. But non-interest banks are thought to reach the same success as basically non-interest banks have similar takaful operations like investment and concession. From non-interest banking point of view, three different models have been prepared and points to be pay attention to in those models and responsibilities can be summarized as follows:

1.   Providing and increasing participation with a good advertisement. The important point here is that takaful shall not be sold. Invitation to takaful should have participation goal.

2.   Takaful should be explained to masses,

3.   To develop a suitable management system to operate takaful program fully,

4. Holding registers of participating members correctly,

5. Making investments in line with Islamic rules,

6. Developing new takaful products,

7. Determining members' participation shares fairly with a sense of equality,

8. Paying the takaful gains when the participant asks for it,

9. Determining the amount of concession by participants.

The first model is prepared on the basis of representation. In representation-based processes, what is basic is a person's transfer to another person or group of authority to act on behalf of himself. Non-interest banks can make investments and do takaful processes with the representation they receive from participants.
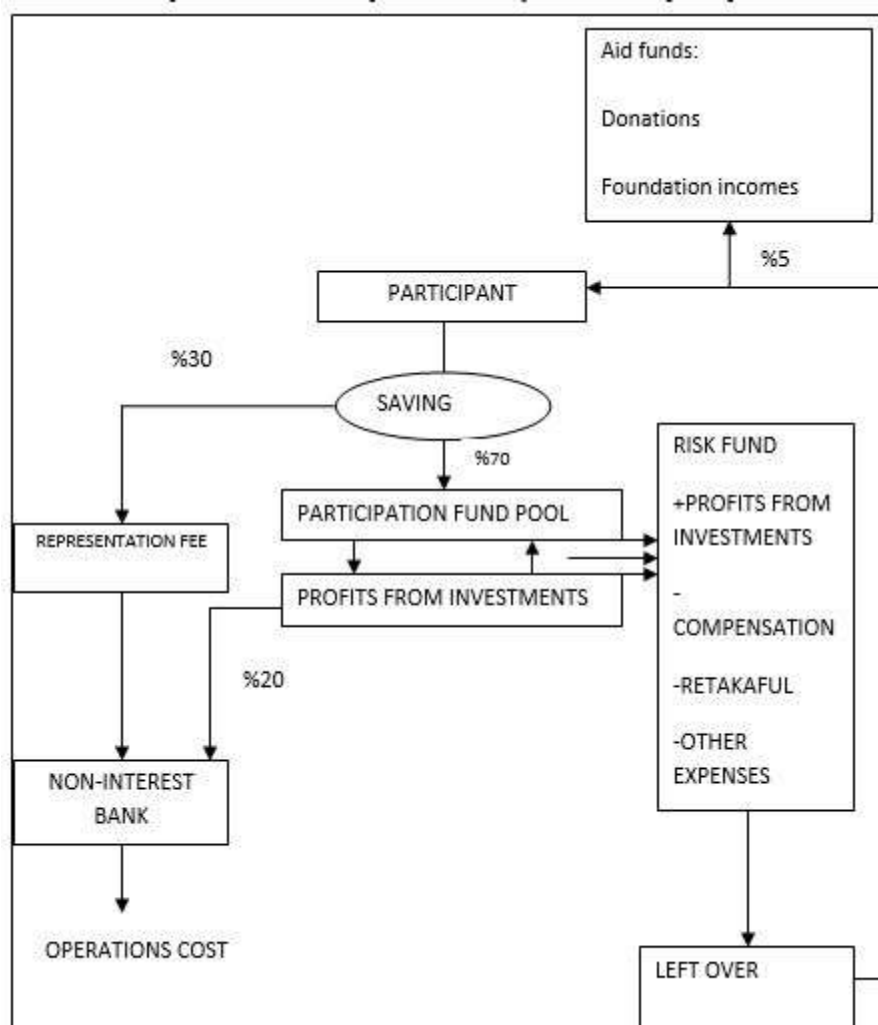
Fig. 1. Model 1

In the first suggested model, non-interest bank provides participation with promotion and ads of takaful. Participant gives representation to manage his savings in investments to non-interest bank voluntarily. Non-interest bank takes 30 % of savings as representation fee. It manages the 70 % by investing it in Islamic rules. Costs regarding the investment and takaful operation costs belong to non-interest bank. The non-interest bank takes 20 % of profit obtained, while the 80 % is transferred to the risk fund. After a deduction of compensation and retakaful costs, the left portion is transferred into the participant's account.

In addition, foundation, donation and other incomes of participants in non-interest bank can create a pool that would benefit the group with fewer opportunities. Participants make donations to this pool from the

value left for them. People who have limited financial opportunities and participants whose opportunities became limited can benefit from this pool.

By changing this model slightly, another model as shown below can be created. In this new model, non-interest bank can take a share from the money left over. In this case, the non-interest bank does not take any share from the profit made with investments.

The share non-interest bank will take from the left over from risk fund is 15%. In this model too, operating and investment costs will belong to non-interest bank.
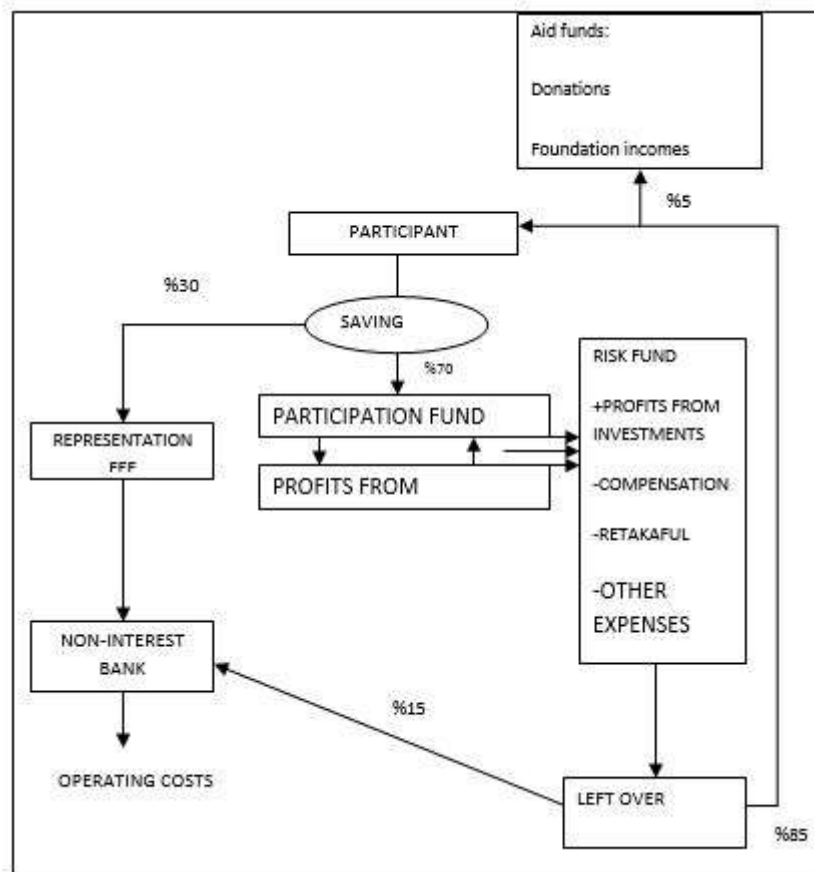
Fig. 2. Model 2

Another model can be formed on the basis of partnership. As known, partnership is a kind of risk capital based on labor-capital partnership.
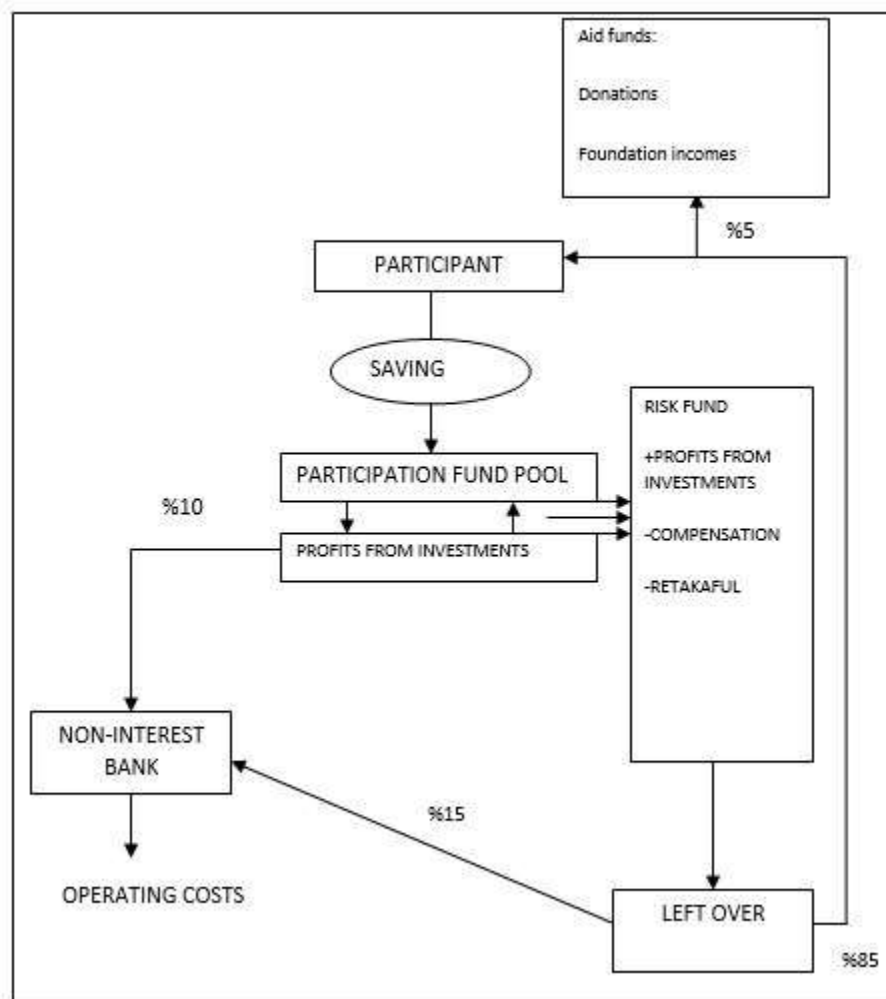
Fig. 3. Model 3

In this model, savings are used in investments on behalf of participant and profits are shared between participant and non-interest bank. The only difference of this model from the other model is that the participant does not give representation to the bank but receives shares from non-interest bank's investment profit and from the value left in risk fund.

Conclusion

As long as the risks exist, it is the religion's responsibility to form institutions to protect those who are exposed to risks. While bringing a solution to this, it is necessary to do valid processes from belief's angle and to protect those who are exposed to risks proportionately with the participation share they pay. The important thing is how this system will be established and how the insurance enterprise will be run. The existence of non-interest banks that will form the basics of the system will also be the base for operating the system. The second important point is regulating the relations between the participants and the institution, among the members of the institution and with the state on religious rules. Then, institutions that will operate with those rules will carry out the functions of fund raising in economy and protection according to individual risks.

It has been thought that three models of takaful processes can be applied in non-interest banks. In the first model studied, participant gives representation to non-interest bank voluntarily for it to run his saving in investments. Non-profit bank takes a pre-decided portion of saving as representation fee and it uses the left portion to make investments suitably. Non-interest bank takes a share of profits from the investments and the rest is transferred to a pool where risk funds are formed. After the deduction of paid compensations and retakaful fees, the rest is transferred to participant's account. Participants make donations to a pool of foundations, donations and other incomes from the value left for them and people who have limited financial opportunities and participants whose opportunities became limited can benefit from this pool.

The second model can be formed by changing the first one slightly. The only difference of this model from the first model is that the non-interest bank can take a share from the funds left in the risk fund and in return it will not take any shares from the profits obtained from investments. In the final model, savings of participants are used in a base of partnership and again profits are shared between the participant and non-interest bank. The only difference of this model from the other two models is that participant does not give representation to the non-interest bank and non-interest bank takes a share both from investment profit and risk fund.

In all three models, savings of participants are used in investments, profits are added to their accounts and to an aid fund so a social security forms on its own for the group with limited opportunities. When looked from this angle, results of these model applications will be as follows:

1. Gives society confidence,

2. Damages of unexpected losses will reduce,

3. Because of new investments, it will give energy to the economy,

4. Increases employment rate,

5. Increases national income,

6. It will attract the savings of those who do not use insurance because of interest applications into the economy,

7. Increases economic welfare,

8. Opens a door of assurance for the group with limited opportunity automatically with aid and donation funds.

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A Fuzzy TOPSIS Approach to Ecopreneur Selection

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Abstract

Supply chain network coordinates flow of components from different suppliers to produce a product that meets the customer's value expectations. Traditionally, companies consider price, quality and lead time for selecting appropriate suppliers. Increasing environmental concerns and government regulations have forced companies to reduce pollution from purchasing raw materials, manufacturing, distribution and selling products. In addition, in a complex business environment, supply management professionals should have flexibility skills to act entrepreneurially. New emerging businesses can make huge profits by covering socio-economic, socio-environmental and eco-efficiency issues. However ecopreneur selection is a strategic key to project success, construction industry lacks a systematic approach. The following paper presents a fuzzy TOPSIS decision-making tool to rank candidates according to the linguistic preferences of experts. A comprehensive case study is also presented to depict the process in detail.

Keywords: Supply Chain Management, Ecopreneur selection, Fuzzy TOPSIS method

Introduction

The properties of raw materials heavily impact features of the final product. Supply Chain Management can be defined as designing, planning, executing and controlling a network. This process collimates flow of raw materials from vendors to manufactures, and utilizes companies to manage their suppliers [1]. It also encompasses transportation and storage of commodities from place of origin to the place of consumption. Products and services needed by the ultimate consumer heavily influence connected networks [2]. The overall objective of SCM is to generate net value, create a competitive advantage, organize supplies with demands, and monitor project performance.

Suppliers are one of the most important parts of an organization. Companies outsource provision of raw materials, products and services to a supplier who can provide satisfactory, economic, and on time products [3]. In other words, purchasing and procurement of an enterprise depends on the merchandise of its suppliers. Considering the fact that dangerous substances may seriously harm the environment, selecting an appropriate vendor who can offer right quality products at a right time in a right manner becomes extremely important. Traditionally, companies consider cost, quality, delivery time and services as criteria to evaluate the performance of suppliers. Today, the process of purchasing is more sophisticated.

According to Bhutta and Huq (2002) [4], selecting a supplier is a consequential decision making challenge with multi attributes. Environment friendly and recyclable substances, ecological management systems and life cycle analysis are critical issues in designing a network (Lee et al., 2009). Increasing awareness of environmental protection, government regulations, and long-term profitability transform sustainability to a main consideration of developing enterprises [4, 5]. The main role of suppliers in demonstrating ecological function and environmental sustainability changes supplier selection process to a serious issue in purchasing management (Kou et al. 2010). Speedy changes in business circumstances push purchasing and supply managers to acquire a new set of P/SM flexibility skills to effectively resolve business complications [6]. Innovation is the most important attribute which distinguishes entrepreneurs from owners of small businesses (Carland, 1984). However the risks are inevitable, they can be taken, threaten, transferred, or terminated by entrepreneurs [7]. In addition, flexible supply chains are more capable to adapt to uncertainties in the customer's demands.

Ecopreneur is an entrepreneur who is not only concerned about making profit, but also about environmental issues (Schuyler, 1998). Sustainopreneurship, environmental entrepreneurship and eco-capitalism are common terms for ecopreneurship. Global population growth, increasing life expectancy, climate change, resource scarcity, lack of equity in the world and human right are the major drivers for ecopreneurialism.

The first section illustrates a Fuzzy triangular membership function as a basis for our calculation. The following section introduces a method for solving Multi Criteria Decision Making problems. In a

detailed case study, creativity, innovation, and sustainability are added to the criteria for a supplier selection. Then according to a set of cost and benefit criteria, construction experts rate the importance of each criteria, and also performance of the nominated entrepreneurs. Finally candidates are ranked from the best to worst based on the Fuzzy TOPSIS algorithm.

Theory

As construction projects become increasingly dynamic, the need to change the whole way of the company increases [8]. Traditionally owners make decisions based on their subjective judgment. This procedure is not rational enough to be defendable [2]. In addition, it is not practical for large projects that need a systematic approach.

Prior to selecting ecopreneurs, owners should evaluate their candidates in accordance with their recorded history [5]. The chance of making accurate decisions decreases as projects become more sophisticated. On the other hand, most of the risk analysis methods are based on numerical data and need quantitative calculations. If data are insufficient, stochastic methods are used to simulate data. When data are not available, subjective judgments are the only way to quantify risky elements. Fuzzy set theory is a mathematical tool to identify, evaluate and monitor risky endeavours. This theory is used for those projects that data regarding the probability of the occurrence of risk events or their monetary consequences is inadequate or unavailable. This qualitative method can be a competitive advantage for those enterprises that do not have an accurate source of information. However human judgments are ambiguous, exact numerical values are needed to simulate real life problems.

Zadeh introduced fuzzy set theory to resolve vagueness of human cognition. Fuzzy have many applications in vast range of sciences [11, 12, 13]. In this theory, each element has a unique degree of membership expressed in terms of discrete values. Let consider μ as a member of a fuzzy subset F. The membership function $h_f(\mu)$ can have a real value between 0 and 1 which implies the range of probability.

$$h_f(\mu) = \begin{cases} 0 & \mu \leq a \\ \dfrac{\mu - a}{b - a} & a \leq \mu \leq b \\ \dfrac{c - \mu}{c - b} & b \leq \mu \leq b \\ 0 & \mu \geq c \end{cases} \qquad (1)$$
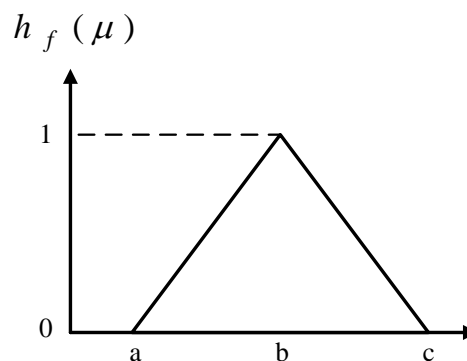
*Fig. 1. **Triangular membership function***

A triangular fuzzy number is defined as (a, b, c) where parameters represent pessimistic, most likely, and optimistic value respectively. Consider two triangular fuzzy numbers:

$$F = (F_1, F_2, F_3) \text{ and } G = (G_1, G_2, G_3) \quad (2)$$

$$F \pm G = (F_1 \pm G_1, F_2 \pm G_2, F_3 \pm G_3) \quad (3)$$

$$kF = (kF_1, KF_2, kF_3) \quad (4)$$

$$F^{-1} = (\frac{1}{F_1}, \frac{1}{F_2}, \frac{1}{F_3}) \quad (5)$$

$$d(F, G) = \sqrt{\frac{1}{3}[(F_1 - G_1)^2 + (F_2 - G_2)^2 + (F_3 - G_3)^2]} \quad (6)$$

Method

Because of incomplete and imprecise information, owners cannot make an accurate decision about future performance of candidates [4]. In this case, decision-making tools can help owners to determine the best alternative. Technique for Order of Preference by Similarity to Ideal Solution (TOPSIS) is a classical method for solving Multi Criteria Decision Making (MCDM) problems. This method is based on the concept that the highest ranking alternative has the shortest distance from Positive Ideal Solution (PIS), and is furthest away from Negative Ideal Solution (NIS). It simplifies trade-off between multi criteria and performance attributes, and avoids pair-wise comparisons [9, 14]. Finally, this method ranks alternatives based on their relative closeness to ideal solution. TOPSIS consists of the following steps:

R is a normalized fuzzy-decision matrix, where B and C are sets of benefit and cost criteria:

$$R = (a, b, c) \quad (7)$$

$$R = [r_{ij}]_{mn} \quad (8)$$

$$r_{ij} = (\frac{a_{ij}}{c_j}, \frac{b_{ij}}{c_j}, \frac{c_{ij}}{c_j}), j \in B \quad (9)$$

$$c_j = \max_i c_{ij}, j \in B \quad (10)$$

$$r_{ij} = (\frac{a_j^-}{c_{ij}}, \frac{a_j^-}{b_{ij}}, \frac{a_j^-}{a_{ij}}), j \in C \quad (11)$$

$$a_j^- = \min_i a_{ij}, j \in C \quad (12)$$

Assume a decision group D_k with k decision makers. Aggregated fuzzy rating is defined as:

$$a = \min_k \{a_k\}, \quad b = \frac{1}{k} \sum_{k=1}^{k} b_k, \quad and \quad c = \max_k \{c_k\} \quad (13)$$

Weighted normalized decision matrix v_{ij} is calculated by multiplying the normalized matrix r_{ij} with weights of criteria, where w_j is the weight of the j th attribute:

$$v_{ij} = r_{ij} \cdot w_j \quad (14)$$

$$v = [v_{ij}]_{mn}, \quad i = 1, 2, ..., m \quad j = 1, 2, ..., n \quad (15)$$

Positive Ideal Solution (PIS, A^*) and Negative Ideal Solution (PIS, A^-) are calculated as:

$$A^* = (v_1^*, v_2^*, ..., v_n^*) \quad (16)$$

$$A^- = (v_1^-, v_2^-, ..., v_n^-) \quad (17)$$

$$v_j^+ = \max_i \{v_{ija}\} \quad (18)$$

$$v_j^- = \min_i \{v_{ija}\}, \quad i = 1, 2, ..., m \quad j = 1, 2, ..., n \quad (19)$$

Compute distance of each alternative from PIS and NIS:

$$d_i^{+} = \sum_{j=1}^{n} d_v(v_{ij}, v_j^{*}), \ i = 1,2,...,m \qquad (20)$$

$$d_i^{-} = \sum_{j=1}^{n} d_v(v_{ij}, v_j^{-}), \ i = 1,2,...,m \qquad (21)$$

Closeness Coefficient CC_i for each alternative is calculated as:

$$CC_i = \frac{d_i}{d_i^{-} + d_i^{*}}, \ i = 1,2,...,m \quad (22)$$

Rank alternatives according to the descending order of CC_i.

Results

According to the detailed literature review, the most important criteria for evaluation of socio-environmental performance of entrepreneurs were selected. Cost, quality, operational delivery, service level, environmental management, corporate social responsibility, technical knowledge, reputation, creativity and flexibility were the most important criteria (Table 3). C1 is cost criteria and the rest are benefit criteria. For cost criteria as value increases, desirability decrease. The more benefit values, the more preferable the candidate. Environmental and construction expert were asked to score those criteria according to their importance for an ecopreneur selection (table 4). Linguistic preferences are determined in seven states from Very Low to Very High (Table 1). Experts used linguistic terms to rate performance of each alternative for a given criteria ranging from Very Poor to Very Good (Table 2). A1, A2, A3 are nominates evaluated by decision-makers D1, D2, D3. Using MATLAB simulation (Attached File), ecopreneurs are ranked according to their relative distance to PIS and NIS (Table 13).

Table 1. Linguistic variable for relative importance weight of criteria [10]

Linguistic Variable	Fuzzy Numbers
Very Low (VL)	(0,0,0.1)
Low (L)	(0,0.1,0.3)
Medium Low (ML)	(0.1,0.3,0.5)
Medium (M)	(0.3,0.5,0.7)
Medium High (MH)	(0.5,0.7,0.9)
High (H)	(0.7,0.9,1)
Very High (VH)	(0.9,1,1)

Table 2. Linguistic Variable for Rating [10]

Linguistic Variable	Fuzzy Numbers
Very Poor (VP)	(0,0,1)
Poor (P)	(0,1,3)
Medium Poor (MP)	(1,3,5)
Fair (F)	(3,5,7)
Medium Good (MG)	(5,7,9)
Good (G)	(7,9,10)
Very Good (VG)	(9,10,10)

Table 3. Criteria for ecopreneur selection

	Criteria	Definition
C_1	Cost	Price performance value, coordination with sector price behaviour, transportation, pollutant
C_2	Quality	Process improvement, Quality management, Quality assurance, Reject rate
C_3	Operational delivery	Lead time, Order fulfil rate, Order frequency
C_4	Service level	Responsiveness, Willingness, Stock management
C_5	Environment	Eco-design, Restriction of hazardous materials, ISO 14000, Environmental policies, Staff environmental training, Use of environmentally friendly materials, Environmental management system, carbon emission
C_6	Social responsibility	Respect for the policy, The right of stakeholders and employees, Information disclosure
C_7	Technical knowledge	Management system and related competencies, staff technical training
C_8	Reputation	Green image, positive and effective partnership with other green suppliers, customer reviews and satisfaction
C_9	Creativity	creative destruction, new products, degree of innovativeness of R& D green products, applying risk management solutions
C_{10}	Flexibility	Adapt to uncertainties, adopt to customers' demand

Table 4. Linguistic assessment of decision makers

Criteria	DM_1	DM_2	DM_3
C_1	VH	VH	H
C_2	M	MH	H
C_3	H	H	VH
C_4	MH	M	M
C_5	M	MH	H
C_6	M	M	M
C_7	M	M	MH
C_8	H	MH	MH
C_9	ML	M	M
C_{10}	M	M	H

Table 5. Fuzzy weights of criteria

Criteria	DM_1	DM_2	DM_3	Aggregate Fuzzy Weights
C_1	(0.9,1,1)	(0.9,1,1)	(0.7,0.9,1)	(0.7,0.97,1)
C_2	(0.3,0.5,0.7)	(0.5,0.7,0.9)	(0.7,0.9,1)	(0.3,0.5,1)
C_3	(0.7,0.9,1)	(0.7,0.9,1)	(0.9,1,1)	(0.7,0.93,1)
C_4	(0.5,0.7,0.9)	(0.3,0.5,0.7)	(0.3,0.5,0.7)	(0.3,0.57,0.9)
C_5	(0.3,0.5,0.7)	(0.5,0.7,0.9)	(0.7,0.9,1)	(0.3,0.7,1)
C_6	(0.3,0.5,0.7)	(0.3,0.5,0.7)	(0.3,0.5,0.7)	(0.3,0.5,0.7)
C_7	(0.3,0.5,0.7)	(0.3,0.5,0.7)	(0.5,0.7,0.9)	(0.3,0.57,0.9)
C_8	(0.7,0.9,1)	(0.5,0.7,0.9)	(0.5,0.7,0.9)	(0.5,0.77,1)
C_9	(0.1,0.3,0.5)	(0.3,0.5,0.7)	(0.3,0.5,0.7)	(1,0.43,0.7)
C_{10}	(0.3,0.5,0.7)	(0.3,0.5,0.7)	(0.7,0.9,1)	(0.3,0.63,1)

Table 6. Rating of A_1

Criteria	DM$_1$	DM$_2$	DM$_3$	Aggregate Fuzzy Weights
C_1	F	MG	MP	(1,5,9)
C_2	MG	MP	F	(1,5,9)
C_3	MG	MG	MP	(1,5.67,9)
C_4	F	P	MP	(0,3,7)
C_5	MG	MG	F	(3,6.33,9)
C_6	P	VP	MP	(0,1.33,5)
C_7	MP	MP	F	(1,3.67,7)
C_8	MP	MG	MP	(1,4.33,9)
C_9	F	MP	MP	(1,3.67,7)
C_{10}	P	MP	F	(0,3,7)

Table 7. Rating of A_2

Criteria	DM$_1$	DM$_2$	DM$_3$	Aggregate Fuzzy Weights
C_1	G	MG	VG	(5,8.67,10)
C_2	G	F	G	(3,7.67,10)
C_3	F	MG	MG	(3,6.33,9)
C_4	MG	MP	F	(1,5,9)
C_5	VG	G	MG	(5,8.67,10)
C_6	F	MP	MG	(1,5,9)
C_7	G	VG	G	(7,9.33,10)
C_8	F	MP	MG	(1,5,9)
C_9	G	VG	G	(7,9.33,10)
C_{10}	F	MP	MG	(1,5,9)

Table 8. Rating of A_3

Criteria	DM$_1$	DM$_2$	DM$_3$	Aggregate Fuzzy Weights
C_1	MG	MG	G	(5,7.67,10)
C_2	MG	MP	MG	(1,5.67,9)
C_3	G	F	G	(3,7.67,10)
C_4	MP	F	MP	(1,3.67,7)
C_5	G	MG	MG	(5,7.67,10)
C_6	MP	P	F	(0,3,7)
C_7	MG	G	MG	(5,7.67,10)
C_8	G	MG	F	(3,7,10)
C_9	MG	G	MG	(5,7.67,10)
C_{10}	G	MP	MP	(1,5,10)

Table 9. Normalized fuzzy decision matrix

Criteria	A_1	A_2	A_3
C_1	(0.11,0.2,1)	(0.1,0.12,0.2)	(0.1,0.13,0.2)
C_2	(0.1,0.5,0.9)	(0.3,0.77,1)	(0.1,0.57,0.9)
C_3	(0.1,0.57,0.9)	(0.3,0.66,0.9)	(0.3,0.77,1)
C_4	(0,0.3,0.7)	(0.1,0.5,0.9)	(01,0.37,0.7)
C_5	(0.3,0.63,0.9)	(0.5,0.87,1)	(0.5,0.77,1)
C_6	(0,0.13,0.5)	(0.1,0.5,0.9)	(0,0.3,0.7)
C_7	(0.1,0.37,0.7)	(0.7,0.93,1)	(0.5,0.77,1)
C_8	(0.1,0.43,0.9)	(0.1,0.5,0.9)	(0.3,0.7,1)
C_9	(0.1,0.37,0.7)	(0.7,0.93,1)	(0.5,0.77,1)
C_{10}	(0,0.3,0.7)	(0.1,0.5,0.9)	(0.1,0.5,1)

Table 10. Weighted normalized fuzzy decision matrix

Criteria	A_1	A_2	A_3
C_1	(0.08,0.19,1)	(0.07,0.11,0.2)	(0.07,0.13,0.2)
C_2	(0.03,0.35,0.9)	(0.09,0.53,1)	(0.03,0.4,0.9)
C_3	(0.07,0.53,0.9)	(0.21,0.59,0.9)	(0.2,0.7,1)
C_4	(0,0.17,0.63)	(0.03,0.28,0.81)	(0.03,0.21,0.63)
C_5	(0.09,0.44,0.9)	(0.15,0.61,1)	(0.15,0.54,1)
C_6	(0,0.07,0.35)	(0.03,0.25,0.63)	(0,0.15,0.49)
C_7	(0.03,0.21,0.63)	(0.21,0.53,0.9)	(0.15,0.43,0.9)
C_8	(0.05,0.33,0.9)	(0.05,0.38,0.9)	(0.15,0.54,1)
C_9	(0.01,0.16,0.49)	(0.07,0.4,0.7)	(0.05,0.33,0.7)
C_{10}	(0,0.19,0.7)	(0.03,0.32,0.9)	(0.03,0.32,1)

Table 11. Distance between Supplier's Criteria and PIS

	C_1	C_2	C_3	C_4	C_5	C_6	C_7	C_8	C_9	C_{10}
$d(A_1, A^+)$	0.71	0.68	0.6	0.61	0.62	0.51	0.66	0.67	0.52	0.76
$d(A_2, A^+)$	0.87	0.59	0.52	0.54	0.54	0.41	0.45	0.66	0.40	0.69
$d(A_3, A^+)$	0.87	0.66	0.48	0.58	0.56	0.46	0.51	0.56	0.43	0.69

Table 12. Distance between candidates' criteria and NIS

	C_1	C_2	C_3	C_4	C_5	C_6	C_7	C_8	C_9	C_{10}
$d(A_1, A^-)$	0.54	0.54	0.55	0.38	0.51	0.21	0.36	0.52	0.29	0.42
$d(A_2, A^-)$	0.08	0.63	0.57	0.50	0.61	0.39	0.59	0.53	0.46	0.55
$d(A_3, A^-)$	0.08	0.55	0.66	0.38	0.59	0.30	0.56	0.62	0.44	0.61

Table 13. Total score of candidates

	d^+	d^-	CC_i	**Rank**
A_1	6.34	4.30	0.404	3
A_2	5.67	4.90	0.463	1
A_3	5.80	4.77	0.451	2

Conclusion

Historical data are the most accurate source of information. Whenever companies lack adequate and precise data, subjective perception of experts is the only source of information. To select proper ecopreneurs, a set of criteria is formed to comply with objectives of the organization. Sustainability covers socio-economic, socio-environmental and eco-efficiency issues. In a developing global market, companies need ecopreneurs to improve their competitive advantage. However process of selection is a key strategy to project success, construction industry lacks sufficient quantitative research on a comprehensive decision-making tool. Limited documented data about candidate's performance led decision makers to quantify fuzzy expressions. Fuzzy TOPSIS method translates these linguistic terms to be a basis of rational judgments.

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Clustering Countries based on their Healthcare Status and Anlaysis of Correlation between Economic Development and Healthcare Status

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Abstract

Healthcare status is determined with data regarding the health indicators of the world population. This status is important for preventing the contagion of diseases around the world in an early manner. If healthcare resources were distributed equally around the world, disease rates would decrease significantly. Health is also affected by economic and social factors. Gross Domestic Product (GDP) is used to determine the status of countries' development levels, which grow parallel with their health statuses. Developed countries take advantage of economic prosperity to reform their healthcare policies. Therefore, the improvements in the health of a given country are expected to correlate with its economic development. Our aim is to examine correlation between the health status and level of a country's development and explain the distinction of countries. The study will introduce some of the indicators of health status around the world. According to the European Community Health Indicators Monitoring reports, there are 88 indicators used to monitor the status of healthcare of world. However some of these indicators are not measurable for all countries for some reasons. The indicators we used were health conditions, well-being, human functions, death, health behaviors, living and working conditions, personal resources, environmental factors, health systems performances and community and health system characteristics. We clustered the countries based on their health status using these indicators.. Health status can be expected to correlate with the level of development of countries and has been used to explain the discrepancy between levels of countries' developments. This condition is crucial to understanding health statuses of countries around the world. Political attention towards healthcare has supported recoveries in economic and social factors. If the decision makers can effectively determine that health care status and apply health care planning, recoveries and improvements can be made.

Keywords: Healthcare, Economic Development, Correlation

Introduction

The characteristics of health care services and systems have been a major concern of worldwide organizations regarding the way current health conditions are identified. Many organizations have recently provided assessments of the health status in countries with the aim of improving health policy. Measurement of health care status in the world was introduced through framework defining the purpose of monitoring health services and systems by the European Community Health Indicators (European Community Health Indicators [ECHI], 2014).

There exists literature on monitoring and comparing of health status by the gender, mortality, age, and state. The study of Park and colleagues (2006) was designed to determine the health profile of young adults, the context of young adulthood and presenting measures of health status. The report of the World Health Organization (2011) explains many indicators about maternal, newborn and child health for evolution purposes, as well as planning and management. The Canadian Institute for Health Information (2012) has collected and analyzed information on health and health care in Canada with the aim of identifying the health status in the region. The other purpose of this report was to define the role of health regions that determine how resources are allocated. Another report compared health disparities by race and ethnicity (Center for Multicultural Health, 2010). There are similarities between the approach expressed by health indicators in this study and those described by (The San Francisco Department of Public Health, 2012) and the Community Health Status Assessment Report (2011). The correlation between utilization of medical service, health insurance and health status was examined to use detection of medical expenses. For this report, the correlation between health status and having any type of health

insurance coverage is U-shaped (O'Hara and Caswell, 2013). The article has assessed the performance of health systems in various countries using the econometric methodology of the fixed-effects model (Tandon et al., 2014). Some organizations focus on specific areas in health such as a maternal monitoring, newborn, and child health. UNICEF (2012) published a report on the levels and trends of child mortality. According to this report, in 2011, %80 of under-five deaths in the world occurred in only 25 countries, and about half in only five countries: India, Nigeria, Democratic Republic of the Congo, Pakistan and China. The National Organization on Aging's (NIA) research areas are concerned with understanding the nature of aging, and supporting the health and well being of older adults. The NIA's report presented statistics on non-communicable diseases such as heart disease and cancer. The finding of this report was that Americans were less healthy than their European counterparts. A great deal of the findings of previous works in this field corroborate the necessity for studies on the determination of health status in the world such as knowledge system to monitor health at European Union level (European Commission, 2003).

This article uses data to present a health status of countries around the world. We analyze social indicators, mortality, morbidity, risky behaviors, and health care access and utilization, identifying the most significant gender and racial/ethnic disparities. We create groups of health status by using cluster analysis. Our aim is to examine the correlation between the health status and level of a country's development to explain the distinction between countries based on the hypothesis that health status can be expected to correlate with the level of development of countries.

Health Care Indicators

There are widely varying health indicators about knowledge of health status is created and provided public access by ECHI. The indicators were used on the analysis of existing researches by authors and organizations. In this paper we used data collected for these indicators for measurement of current health status in the world. According to the ECHI report there were 88 indicators for monitoring and comparing. However 50 of these indicators were already implemented. All of indicators are grouped under the following headings.

Table 1. Indicators for measurement of current health status

Demographic and socio-economic	Health status	Determinants of health	Health interventions: health services	Health promotion
1. Population by sex / age - Old-age-dependency ratio 2. Birth rate, crude 3. Mother's age distribution 4. Total fertility rate 5. Population projections 6. Population by education 7. Population by occupation 8. Total unemployment 9(a). Population below poverty line 9(b). Income inequality	10. Life expectancy 11. Infant mortality 12. Perinatal mortality 13. Disease mortality 14. Drug-related deaths 15.Smoking-related deaths 16. Alcohol-related deaths 17. Mortality 18Communicable diseases 19. HIV/AIDS 20. Cancer incidence 21. Diabetes 22. Dementia 23. Depression 24. AMI 25. Stroke 26. Asthma 27. COPD 28. Low birth weight 29. Injuries: home 30. Injuries: road traffic 31. Injuries: workplace 32. Suicide attempt	42. Body mass index 43. Blood pressure 44. Regular smokers 45. Pregnant women smoking 46. Total (recorded + unrecorded) alcohol consumption 47. Hazardous alcohol consumption 48. Use of illicit drugs 49. Consumption of fruit 50. Consumption of vegetables 51. Breastfeeding 52. Physical activity 53. Work-related health risks 54. Social support	56. Vaccination coverage 57. Influenza vaccination 58. Breast cancer 59. Cervical cancer 60. Colon cancer 61. First antenatal visits 62. Hospital beds 63. Physicians employed 64. Nurses employed 65. Mobility 66. Medical technologies 67. Hospital in-patient discharges 68. Hospital day cases 69. Hospital day cases/in-patient discharge ratio 70. Average length of stay 71. General practitioner 72. Outpatient visits	85. Policies on environmental tobacco smoke (ETS) exposure 86. Policies on healthy nutrition 87. Policies and practices on healthy lifestyles 88. Integrated programs in setting, including workplace, schools, hospital

	33. Self-perceived health 34. Chronic morbidity 35. Activity limitations 36. Physical and sensory functional limitations 37. Musculoskeletal pain 38. Psychological distress 39Psychological wellbeing 40. Health expectancy 41. Health expectancy, others	55. PM10 (particulate matter) exposure	73. Selected surgeries 74. Medicine use 75. Patient mobility 76. Insurance coverage 77. Expenditures on health care as percentage of GDP 78. Survival rates cancer 79. Case-fatality of AMI and stroke 80. Equity of access 81. Elective surgeries 82. Surgical wound infections 83. Cancer treatment 84. Diabetes control	

Methods

This study uses the health care indicators, which were carried out in close collaboration with EU Member States, the European Commission, Eurostat, WHO, OECD and other international organizations. These indicators can identify health care below five main chapters to summarize the main features of demographic and socio-economic and situation of health care service and systems. To determine the health status for all the countries in the world, we conducted a review of electronic databases that used by worldbank.org and europa.eu. Our dataset included 203 countries and 70 variables about health care indicators. However we removed some countries and variables because of missing values. According to context of determination of health status for world, we examined the 28 variables and 174 countries. We adapted 28 variables concerning the rates of death, birth, and fertility, life expectancy, population ages and gender, age of dependency ratio old, young and working, public and private health expenditures (% of GDP), immunization, and the prevalence of some infectious diseases. Some indicators presented information about averages of the world and rates of some countries for comparative purposes.

Table 2. Socio-demographic profile

	World	USA	Switzerland	UK	Turkey	China	Myanmar	Eritrea
Urban population	3,688,166,019.00	259,371,476.00	5,900,212.00	50,739,548.00	53,523,455.00	699,330,440.00	17,540,220.00	1,338,135.00
Rural population	3,330,445,662.00	54,542,564.00	2,096,649.00	12,873,181.00	20,473,673.00	651,364,560.00	35,257,099.00	4,792,787.00
Population, female	3,480,720,541.00	159,488,496.00	4,055,099.00	32,285,476.00	37,655,879.00	650,847,295.00	27,177,429.00	3,073,210.00
Population, male	3,537,196,081.00	154,425,544.00	3,941,762.00	31,327,253.00	36,341,249.00	699,847,705.00	25,619,890.00	3,057,712.00
Birth rate, crude (per 1,000 people)	19.4	12.60	10.30	12.80	17.10	12.10	17.40	37.40
Death rate, crude (per 1,000 people)	8.00	8.10	9.00	8.90	5.70	7.20	8.50	7.00
Age dependency ratio (% of working-age population)	53.6	49.8	47.6	53.1	49.8	36.4	43.8	82.8

Table 1 contains rates of population by area and sex group. As of 2012, world population exceeded 7 billion according to the World Bank. The world population was divided as between urban (3,688 billion) and rural (3,330 billion). In general, the urban population of developed and developing countries is

higher than the rural population. However, less developed countries show a different distribution. The urban/rural population ratio in Myanmar is measured at 0.50 and in Eritrea is at 0.28. The global sex ratio is approximately 1.016 males to 1 female. The sex ratio of China is higher than the average of the world. However sex ratio of developed countries is lower than average of world. Birth rate compares the average annual number of births during a year per 1000 people. According to table 1, the birth rate of the world is 19.4 per 1000 people annually. The death rate of the world is 8.0 per 1000 people annually. Here, at the highest levels of birth rate, lower death rate as well as higher working-age population pushes more less-developed countries and developed countries into the socio-demographic profile in comparison to level of development.

Table 3. Health Status

	World	USA	Switzerland	UK	Turkey	China	Myanmar	Eritrea
Life expectancy at birth, total (years)	70.80	78.7	82.7	81.5	74.9	75.2	64.9	62.2
Mortality rate, infant (per 1,000 live births)	34.90	6	3.7	4.1	12.2	12.1	41.1	37.20
Mortality rate, infant, female (per 1,000 live births)	32.60	5.5	3.4	3.6	11	11.2	36.3	32.80
Mortality rate, infant, male (per 1,000 live births)	37	6.6	4.00	4.5	13.4	12.9	45.8	41.5
Adults (ages 15+) living with HIV	32,100,000.00	..	..	..	..	..	190,000.00	15,000.00
AIDS estimated deaths (UNAIDS estimates)	1,600,000.00	..	..	..	..	..	12,000.00	1,200.00
Tuberculosis death rate (per 100,000 people)	13	0.1	0.2	0.5	0.5	3.2	48	4.6

Table 2 comparatively shows values of some health status indicators. The world's life expectancy at birth is 70.80. The life expectancy in developed countries is higher than those of less developed nations. Similarly, infant mortality rates in developed countries are lower than those in less developed countries. Furthermore, the mortality rate for males is higher than for females.

According to Table 2, more than 32 million people live with HIV in the world. The rate of patients with HIV in the less developed countries are higher than those of the others. An estimated 1,6 million people died of AIDS. The number of people who died of AIDS in least developed countries is higher than others countries. The tuberculosis death rate in developed and developing countries are in the range 0.1 to 0.5. However this rate is extremely high in least developed countries.

Table 4. Health Services

	World	USA	Switzerland	UK	Turkey	China	Myanmar	Eritrea
Health expenditure per capita (current US$)	1,030.90	8,895.10	8,980.00	3,647.50	664.6	321.7	19.8	14.7
Health expenditure, total (% of GDP)	10.2	17.9	11.3	9.4	6.3	5.4	1.8	2.6
Health expenditure, public (% of GDP)	6.1	8.3	7	7.8	4.7	3	0.4	1.2
Health expenditure, private (% of GDP)	4.1	9.6	4.3	1.7	1.6	2.4	1.4	1.4
Immunization, BCG (% of one-year-old children)	89.3	..	..	..	96	99	87	99
Immunization, Pol3 (% of one-year-old children)	84	93	96	97	97	99	87	99
Immunization, measles (% of children ages 12-23 months)	84.2	92	92	93	98	99	84	99

The indicator for health expenditure rate plays a central role in the study of the factors that determine the health status of countries in the world. The health expenditure for the world per person per year was around $1,030 in 2012. Health expenditure per capita in developed countries is higher than average of

world expenditure. On the other hand, total health expenditure in least developed countries has highly low percentage of GDP. In general public health expenditure is higher than private health expenditure without private spending of excluding USA. The prevalence of immunization in the world has a high percentage because immunization rates are important part of prevention of contagious diseases.

This dataset consisting of 28 variables was used to determine health status in the world. We focused on methods for determining the number of clusters in a dataset. We used hierarchical clustering analysis for the relationship discovery. Hierarchical clustering algorithms can be applied to merge a hierarchy of clusters grouping similar data items. This study focused on hierarchical clustering because it did not require us to pre-specify the number of clusters (Manning et al., 2008: 377). For clustering we used the merge criterion in Ward's method that means sum-of-squares for a given number k of clusters is usually larger than the minimum for that k (http://www.stat.cmu.edu/~cshalizi/350/lectures/08/lecture-08.pdf, 2009). In this study, this dataset of using cluster analysis is to discover natural groupings of the countries in JMP.

Results

This data includes information about demography and socio-economic situation, health conditions, human functions, death, health behaviors, personal resources, health systems performances and community and health system characteristics. A number of the health status group can be considered in division of health services and systems in the world. The observed number of clusters might be explained in this way to determinate of health status of countries in 13 different groups. The clusters consist of the following countries:

Table 5. Some samples of cluster membership

	I. Cluster	I. Cluster	II. Cluster	III. Cluster	IV. Cluster	V. Cluster	VI. Cluster
1	Afghanistan	Rwanda	Liberia	Chad	Ethiopia	India	Albania
2	Angola	Sao Tome and Pri	Sierra Leone	Equatorial G	Haiti		Algeria
3	Benin	Senegal		Guinea	Iraq		Antigua and
4	Burkina Faso	Sudan		Nigeria	Lao PDR		Armenia
5	Burundi	Tanzania		South Sudan	Papua New Guinea		Azerbaijan
6	Cameroon	Togo			Syrian Arab Republic		Bahamas, T
7	Comoros	Uganda			Timor-Leste		Barbados
8	Congo, Dem. Rep.	Yemen, Rep.			Vanuatu		Bhutan
9	Congo, Rep.	Zambia					Brazil
10	Cote d'Ivoire						Brunei Daru
11	Eritrea						Cabo Verde
12	Gabon						Chile
13	Gambia, The						Cyprus
14	Guinea-Bissau						Dominican
15	Kenya						Ecuador
16	Madagascar						El Salvador
17	Malawi						Fiji
18	Mali						Grenada
19	Mozambique						Jamaica
20	Niger						Kazakhstan

Table 5. Some samples of cluster membership (II.part)

VI. Cluster	VII.Cluster	VIII.Cluster	IX. Cluster	X. cluster	XI. Cluster	XII. Cluster	XII. Cluster	XIII. Cluster
Lebanon	Belarus	Bangladesh	Belize	Botswana	Bahrain	Argentina	Luxembour	Denmark
Libya	China	Cambodia	Bolivia	Lesotho	Kuwait	Australia	Macedonia	Finland
Malaysia	Egypt, Arab	Djibouti	Colombia	Micronesia,	Oman	Austria	Malta	Hungary
Mauritius	Indonesia	Mauritania	Costa Rica	Samoa	Qatar	Belgium	Moldova	Iceland
Mexico	Iran, Islamic	Pakistan	Ghana	Solomon Isl	United Arab	Bosnia and	Montenegr	Japan
Mongolia	Korea, Rep.		Guatemala	Swaziland		Bulgaria	New Zealar	Netherlands
Peru	Maldives		Guyana	Tonga		Canada	Poland	Norway
Saudi Arabi	Myanmar		Honduras			Croatia	Portugal	Slovenia
Seychelles	Philippines		Jordan			Cuba	Romania	Sweden
St. Lucia	Russian Federation		Kiribati			Czech Repu	Serbia	Switzerland
St. Vincent	Thailand		Kyrgyz Republic			Estonia	Slovak Rep	United King
Trinidad and Tobago			Namibia			France	Spain	
Tunisia			Nepal			Georgia	Ukraine	
Turkey			Nicaragua			Germany	United States	
Turkmenistan			Panama			Greece	Uruguay	
Venezuela, RB			Paraguay			Ireland		
Vietnam			Suriname			Israel		
			Uzbekistan			Italy		
						Latvia		
						Lithuania		

Table 4 shows the distribution of some samples of countries. This table may explain the relationship between level of development and health status. In general, distinction of countries is based their level of development. "Denmark, Finland, Hungary, Iceland, Japan, Netherlands, Norway, Slovenia, Sweden, Switzerland, UK" have the most advanced health care systems in the world. The other developed countries are situated in the same high-power cluster. The least developed countries are located together in the similar low-power cluster, however they have some different health policies.

In the histogram, comparing distributions with probability density showed that the count all of the cells in range is not equal. The numbers of cluster are as follows: I. Cluster 29, II. Cluster 2, III. Cluster 5, IV. Cluster 8, V. Cluster 1, VI. Cluster 37, VII. Cluster 11, VIII. Cluster 5, IX. Cluster 18, X. Cluster 7, XI. Cluster 5, XII. Cluster 35, XIII. Cluster 11.

Fig.1. Histogram for the distribution of countries in the cluster
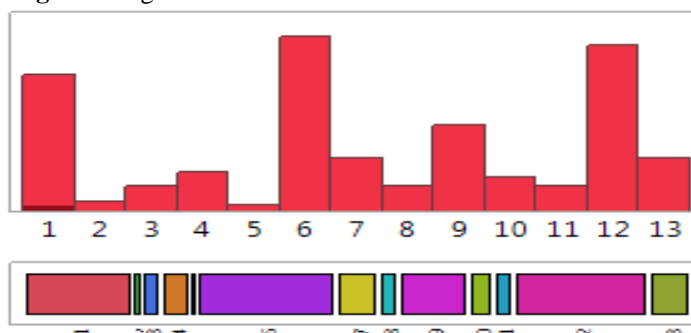
The least developed countries frequently accumulate in first cluster. Nonetheless, developed countries accumulate in the 13th Cluster and 12th Cluster. The Figure 2 demonstrates distance between actual the clusters with level of development.

Fig. 2. A comparison between the level of development and health statuses
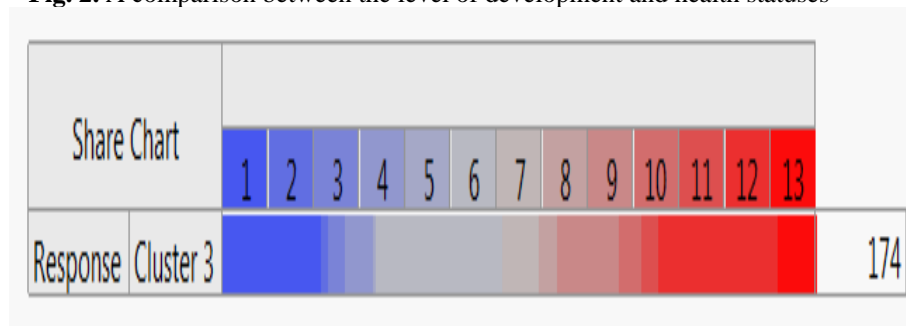
We might be observed moving through the clusters at the Figure 2. The division of level of development with health status is similar in manner. However, this moving does not consist of precise information about relationships between the health statuses and level of development. To identify the relationship of interest, we used the Spearman's correlation coefficient (ρ =0,669, p=.0001), which explains the relationship between the variables is significant. The correlation means that there is a strong relationship between group of health status and level of development.

Conclusions

This paper has introduced a new way of determining the groups of health status in the world. This study produced results, which corroborate the findings of a great deal of the previous work in this area. The study was based on previous findings indicating that a decision regarding a health condition in the world has indicators such as feature of demographic and socio-economic, health condition, current situation of health services and systems. By way of comparison with related Table about descriptive statistics, we note that the average of the world is roughly higher than the rate of least developed countries for all of indicators, however it is lower than the rate of developed countries. Arising policy and situation of countries have different tendencies therefore one indicator doesn't give information about actual status. For example, if we are interested in health expenditure of public and private, we may say that the UK and Switzerland do not appear in the same category. The decision about health status of the world is based on to observation all of indicators.

On the question of determination the number of cluster the countries' health status, this study found that the world might be divisible by 13 statuses. All of the clusters are different characterizations about their status. First cluster comprises poor countries, which is greatly affected by poverty, malnutrition, civil war, and communicable diseases. Public health in these countries suffers from lack of resources and small numbers of health providers relative to population. The second cluster is Liberia and Sierra Leone, which is provided medical services and improvement to basic sanitary conditions by UN and nongovernmental organizations (U.S. Department of State, 2013). The third cluster and fourth cluster consists of the other least developed countries. Their health conditions are gradually improving. India has a universal health care system and health policy about enhancement of standard of living and the improvement of public health (Kishore, 2005:197). The next six clusters consist of developing countries that these countries' health status is different from each other. The standard of care in the public sector in Bahrain, Kuwait, Oman, Qatar, and United Arabic Emirates are high for a middle-income country by the statistics of World Health Organization (WHO, 2014). The twelfth and thirteenth clusters comprise the developed countries. Denmark, Finland, Hungary, Iceland, Japan, Netherlands, Norway, Slovenia, Sweden, Switzerland, UK have the most advanced health care systems in the world.

This also accords with our earlier observations, which showed that these countries have relationships between their level of development and their category of health status. The descriptive index of association between these parameters is calculated using Spearman's correlation coefficient. The findings further support the idea of strong relationship between the level of development and category of health status.

The policy makers can pay attention to the recoveries in economic and social factors for improvement of health status. The level of development and health status are directly associated with each other. If the decision makers can effectively determine their countries position of socio-economic and health condition that health care status can then be applied to health care planning, and recoveries and improvements can be made.

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A Consultative Hotel Sales Force Conundrum: Are we being Commoditized out of a Job?

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Abstract

Consultative hotel group sales forces generate approximately 50 to 70 percent of top-line revenue for full service hotels and resorts. Their customers and market niches are B-2-B (Business-to-Business – Group Business) versus B-2-C (Business-to-Consumer – Individuals). Traditionally, these salespeople have successfully obtained their sales by building potential customer relationships throughout the entire sales cycle and effectively differentiating their hotel/meeting venue value offerings. With the evolving Internet and social media channels, the efficacy of traditional hotel selling methods is being dramatically transformed. Yet, transition from traditional selling methods and those created by technological changes have yet to be fully reconciled. In the United States today, three significant problems are negatively affecting the traditional operating methodologies of the consultative hotel group sales force: (1) *Commoditization* - Creation of similar hotel brands in STR (Smith Travel Research) categories drives perceived commoditization. Steadily, the top three STR scale categories of hotel brands– *Luxury, Upper Upscale,* and *Upscale* – are trending toward commoditization through industry *Best Practices* emulation, (2) Buying/Selling power has shifted to buyers **-** Traditionally salespeople controlled the entire sales cycle (from initial lead to closed sale). Traditionally, at the beginning of the cycle, salespeople *cold-called* to enter new prospective customers into the cycle. Today, these prospective customers have redefined cold-calling*, interruption marketing.* As a consequence, buyer/seller contact increasingly does not take place until the middle of the sales cycle, (3) the rise of third-party intermediaries – These are rapidly growing global meeting planner/hotel venue match-making platforms, such as *C-Vent*, and sub-contracted buyer-representing sales forces, such as *Helms Briscoe*. They intermediate, of form a block, between traditional hotel sales forces and their potential customers. Today's sales force is increasingly perplexed. What is happening? This study is both conceptual and qualitative/exploratory. It attempts to provide a guide for perplexed hotel sales forces and their managers. As a conceptual paper and derived from a literature review, informal interviews, and the authors' several decades industry and academic experience in consultative hotel group sales, two preliminary descriptive models are developed. As a qualitative study, these two models are then compared with industry realities to assess correspondence using systematic qualitative research.Results show that new variables, such as third-party intermediaries and the rising informational power of buyers are threatening existing in-house hotel salesperson roles. They are frustrated with the lack of traditional seller/buyer relationship-building contact throughout the entire sales cycle. They are being transformed into glorified order-takers as third-party intermediaries often control which hotel property/venue makes it to the short-list. Their time is being consumed by the massive number of RFPs (Requests for Proposals) generated by third-party electronic platforms. And, from corporate best practices, their once highly differentiated properties now fall into look-alike commodities. A rethinking of industry selling methods and a requirement for hotel group sales is needed. The two models of this study may provide guidance to integrate traditional selling with that of the Internet age.

Keywords: Commoditization, Third-Party Intermediaries, Consultative Selling, Hotel Group Sales Force.

The Impact of Brand Value on Shareholder Value: the Case of Turkey

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Abstract

Acquisitions and mergers in the mid-1980s confirmed the importance of brand value. It's claimed that as an intangible asset, brand has an economic value and manifests itself in the market value of the firm. The impact of brand value on market value of the firm also reveals itself in shareholder value. In the present study brands from the Most Valuable 100 Turkish Firms list are included for the years 2010-2013. Four different measures of shareholder value are utilized: While Economic Value Added (EVA), and Market Value Added (MVA) are performance based measures, Tobin's q and Return on Asset (ROA) are traditional measures. The purpose of this study is to describe a rationale for the relationship between brand value and shareholder value for publicly held companies in Turkey. As a result, the study aims to contribute the empirical literature on marketing and finance by demonstrating the role of brand value in driving shareholder value.

Keywords: Brand Value, Shareholder Value, Economic Value Added, Market Value Added, Return on Asset, Tobin's Q

Introduction

The last few decades have brought along and dramatic economic transformation from manufacturing to information and knowledge-driven services. This case let intangible assets such as brand, know-how, and intellectual capital to attract attention. The source of competitive advantage has shifted from manufacturing assets to market based intangible assets like brand (Ramaswami, Srivastava, & Bhargava, 2009). By this way, marketing managers spend a considerable portion of their budget to build and sustain brand value (Madden, Fehle, & Fournier, 2006).

Brand is taken as a corporate asset that has an economic value by most of the practitioners and academicians. But, especially through mergers and acquisitions, the importance of brand value was realized in mid-1980s. The acquisition prices represented nearly 10 times multiple of targeted firm's book value of tangible assets. This case indicated that the acquirer paid not only for tangible assets but also for intangible assets such as brand. For example, an executive of Cadbury Schweppes stated that only $20 million of the $220 million his company paid to acquire the Hires and Crush from Procter Gamble, Inc. in 1989 was for physical assets. The remainder was referred to as "brand value" (Kerin & Sethuraman, 1998: 260). Brand value represents the source of future earnings and cash flow as well as an asset of a company for acquirers, executives, investors, or consumers. The 10 times higher price than book value arises from the brand value based expectations of future earnings and cash flows.

Marketing as a separate department emphasizes the effort for building brand awareness in consumer perspective; in contrast finance department focuses on the financial outcomes of brand value, such as shareholder value, in financial-market perspective (Krasnikov, Mishra, & Orozco, 2009). However, adoption of value based management implies that the ultimate purpose of the firm is to contribute to enhancement of shareholder returns. Furthermore, marketing investments are recognized as long term investments. This is because investing in customer relations will result in retention, increased sales, and thus increased cash flows in the future (Doyle, Value-Based Marketing, 2000). As a result, brand is also taken as long term investment which creates shareholder value. This perception led to the integration of marketing and finance. Thereby, traditional assumptions that market performance will automatically translate into the best financial results has been expired. Marketers have moved beyond traditional financial measures such as sales volume, market share, and gross margin to other financial measures such as shareholder value (Srivastava, Shervani, & Fahey, 1998) However, there is not enough empirical study examining the impact of brand value on shareholder value. Therefore, this paper aims to provide empirical evidence for the relationship between brand value and shareholder value. Another contribution of the study is the use of economic value added and market value added in search of relationship between brand value and shareholder value.

Theory

Brand Value

Brand value is a strong tool in determining the present and future value of a brand. A brand value determined definitely plays an important role in increasing the value of assets, in increasing market share, in decreasing financing costs and, in being qualified as a benchmark firm for the competitors. Reaching all these gains certainly depends on employing a suitable brand valuation method. There are three main methods to determine brand value. These are consumer based, financial based and mixed valuation methods. When considered in terms of basic characteristics, in consumer-based models brand value is seen as a qualitative structure introduced by scorecard. It is not possible to verify this value experimentally. In selecting the factors utilized to define brand power, subjectivity is too high and all the efforts are exerted to read customer's mind about brand value. In financial models, quantitative measurements are performed to calculate a monetary value of brand assets. The customers' perception is not taken into consideration; rather, brand value is determined for mergers and acquisitions and, licensing e.g. The last one mixed models are the ones mostly developed by independent valuation companies. These models aim to assess a monetary value for brands. This model comprise of the data on profit, market and psychographic situation of the brand. Namely, mixed models link the quantitative and qualitative factors together (Zimmermann, Klein-Bölting, Sander, & Murad-Aga, 2002).

This paper uses brand values determined by BrandFinance that is an independent valuation company. Many of mixed valuation methods such as; Interbrand (Barth, Clement, Foster, & Kasznik, 1998; Madden, Fehle, & Fournier, 2006; Eng & Keh, 2007; Bröls, 2010; Johansson, Dimofte, & Mazvancheryl, 2012), Financial World (Kerin & Sethuraman, 1998; Eng & Keh, 2007) are performed to demonstrate brand values of companies in the literature.

Shareholder Value

The core logic of shareholder value is that the primary goal for a company is to maximize the firms' value for shareholders either by paying dividends and/or increasing the stock price. The market value of a firm is net present value of all future cash flows expected to be incorporated to the firm. Shareholder value is created when the market value of the firm that comprise of profitable investments exceeds the book value. That is to say shareholder value accrue when investments of the firm generates greater economic return than cost of capital (Bick, 2009).

So far several measures have been used as indicator for shareholder value. First group is traditional performance measures whereas second group is composed of value based measures. Some of traditional performance measures are; return on asset (ROA), return on equity (ROE), earnings per share (EPS), free cash flow to firm (FCFF) and, Tobin's q (TQ) e.g. As to some examples for the second group, economic value added (EVA), market value added (MVA), cash value added (CVA) e.g. could be referred. Many studies have been conducted, examining the relationship between the indicators mentioned and financial performances of firms. Tough Rhoads (1999) and other few scholars of finance assert that traditional performance indicators lack the ability to measure firms' real performance in a way that could mislead the managers, there is no consensus supported by empirical evidence about that value-based performance indicators are more explanatory than the traditional ones.

In this paper, four different variables as shareholder value indicator are employed. Two of them, selected among traditional performance measures, are return on asset (ROA) and Tobin's q (TQ), and remainder are among value-based ones, are economic value added (EVA) and market value added (MVA).

Brand Value and Shareholder Value

It is important to study the association between brand value and shareholder value because adequate prediction of future financial performance is important for forecasting earnings and free cash flows, analyzing liquidity and financial flexibility, performance measurement, valuation of business units, recourse allocations and other decisions in the firm (Verbeeten & Vıjn, 2010).

Many researches have been conducted to investigate the impact of brand on firm performance. Some of these researches asserted that brands significantly impact firm performance (Morgan & Rego, 2009; Rao, Agarwal, & Dahlhoff, 2004; Verbeeten & Vıjn, 2010), brands having economic value create wealth for shareholders (Aaker, 1996; Doyle, 2001; Kerin & Sethuraman, 1998; Bharadwaj, Tuli, & Bonfrer, 2011), brands increase the profitability of a firm by both reducing cost and increasing revenues (Keller, 1993). Kerin & Sethuraman (1998) examined whether an increase (decrease) in market to book value is

occured when brand value increases (decreases) on 52 US consumer goods companies listed in the years of 1995 and 1996. As a result, they ascertained a positive relationship between those to variables. Besides, they identified that "brand value – shareholder value" relationship was not sensitive to total sales and the growth rates of total sales. Barth, Clement, Foster, & Kasznik (1998), employed financial brand value data of Interbrand and Financial World, they investigated the regression between brand value per shareholder and stock return by taking book value of equity and net income as control variables. They explored that brand value has a prominent positive effect on the stock returns and stock prices. Kim, Kim, & Sohn (2009), emphasized the different aspects of brand and examined how brand affects financial performance of Korean Hotel Companies. They set a positive relationship between financial performance - measured as income per room- and brand value. Mortanges & Riel (2003), searched the relationship between brand value calculated through Young and Rubicam's Brand Asset Valuator Model and some independent variables such as total shareholder return, earnings per share and market to book value. They analyzed the changes in the variables mentioned as a function of the changes in brand value. In conclusion, they established that brand had a distinct effect on firm's market value. Kallapur & Kwan (2004), conduct a study to measure the reaction of stock prices against the capitalization of brands developed internally in 33 British companies in the years between 1984 and 1998. They observed a positive development in stock prices within the following 21 days after the capitalization of brand. Madden, Fehle, & Fournier (2006), using brand values of Interbrand created a portfolio composed of 111 most valuable companies of the world. They concluded that firms with strong brands brought a higher return at a lower risk level according to control variables. Eng & Keh (2007), , in their study based on brand values by Interbrand and Financial World, ascertained that there is a significant positive relationship between brand value and financial performance (return on assets is used as the indicator of financial performance) but this positive relationship declines in time and the effect of brand value on stock return is minimal. Ohnemus & Jenster (2007-8), investigated brand – financial performance relationship in 11 different sectors for more than 40 countries. As a measure of financial performance, they took return on asset (ROA) for the companies out of financial sector and return on equity (ROE) for those in financial sector. As a result, they concluded that the companies with a higher branding level provide a higher return by 3-7% relative to the companies with a lower branding level or no branding. Mizik & Jacobson (2008), focused on impact of brand value on stock returns and unexpected changes in financial performance measured via accounting data. In their study on 275 listed firms with monobrand, they explored that the existence of brand affects stock return directly or indirectly. Krasnikov, Mishra, & Orozco (2009), as the result of a cross-sectional regression with a data on 108 firms in different sectors for the years of 1995 through 2005, identified that brand value in a certain t year leads to an increase in cash flow, Tobin's q and stock return; in t+1 year, it leads to a decline in the volatility of cash flow. Gerzama, Lebar, & Rivers (2009), determined the brand value through Brand Asset Valuator (BAV) Model in order to show the effect of brand on the current and future performance of companies. Consequently, they explored that a change in brand value affects stock returns indirectly or directly. Indirect effect shows itself on current earnings. They found that the firms of which brand value rises in a certain period generate earnings over the expected. The reason why they call that effect of brand "indirect" is that this higher earnings level is also relevant to expectations on future earnings and cash flows. Suggestion that brand value has a "direct" effect on the value of company is relevant to the belief that rise in brand value cause a decline in company risk and rise in growth rate in the future in eyes of investors independently of current sales or profits.

Methods

Hypotheses

Although some authors criticize traditional performance measures as being cost based and back-ward looking, those measures are still mostly used as performance indicators. However in finance literature there isn't any consensus about value based performance measures' superiority to accounting measures in terms of their explanatory powers. In this context, in addition to economic value added (EVA) and market value added (MVA), return on asset (ROA) and Tobin's q (TQ) are also taken as shareholder value indicators.

ROA is an indicator of the profitability of invested assets. In other words, it demonstrates whether the company manages its assets efficiently to make profit. Brand is also taken as an asset of a firm. It requires some marketing expenditures as promotion and advertising for increasing its value. In addition, as brand value increases, the effectiveness of the abovementioned marketing expenditures will also increase. This naturally will result in cost advantage for those firms. Besides, if the brand value of a company rises, consumers will be willing to pay premium. Thus, first hypothesis is as follows:

H_1: Brand value is positively related to return on asset.

Tobin's q is a ratio of a firm's market value to book value. If the market value reflects only recorded assets of firm, Tobin's q takes the value of 1. This means substitution cost of firm's tangible assets is equal to the firm's market capitalization. These kinds of firms have no intangible assets which constitute of intellectual property rights such as patents and brands for reducing its cost and creating competitive advantage. On the other hand, if Tobin's q is greater than 1, the market value of firm exceeds the firm's tangible assets. That firm has not only tangible but also intangible assets. In this case brand as an intangible asset will increase q value. Thus, second hypothesis can be stated as follows:

H_2: Brand value is positively related to Tobin's q

"EVA can be defined as surplus value created by an investor or a portfolio of investments. It is the most common indicator for economic profits of a company and performs a technical analysis that stresses the importance of cash flow increases over weighted average cost of capital" (Tabara, 2013). As an asset brand would be a part of invested capital. By the increase of brand value the consumers would be inclined to purchase and repurchase. It signals an increase in brand's credibility and reduces customers' perceived risk (Erdem, Swait, & Valenzuela, 2006). This case results in decrease in cost of debt that is an important constituent of weighted average cost of capital. Therefore, third hypothesis is stated as follows;

H_3: Brand value is positively related to economic value added

MVA is the difference between firm's market capitalization and invested capital. If a firm wants to create shareholder value, it should maximize this difference. MVA can be created by two ways. First is to increase the market capitalization, and the second is to make effective investments. The relationship between brand value and MVA is based on market capitalization. The stock price is expected to be affected from the changes on brand value. Now final hypothesis is as follows;

H_4 Brand value is positively related to market value added

Data and Research Method

Four sources are used to compile data set. The data on brand value measures are obtained from BrandFinance database. The data on firms' financial statements are obtained from Borsa Istanbul, Public Disclosure Platform and Is Yatirim database. Science BrandFinance has announced the most valuable Turkish firms for a 4 years term, it has been inevitable to limit the analysis period to 2010-2013. Monobrands, brands ranked among the lists for all years of the period, brands listed in Borsa Istanbul and brands of non financial sector are included in the analysis. Overall the foregoing criteria resulted in a sample of 41 firms.

The main dependent variables of interest in this research are ROA, TQ, EVA, and MVA. They are calculated as follows; ROA is defined as net income divided by total asset. It provides information about future profitability to investors. TQ is defined as market capitalization plus total liabilities less equity divided by total assets (Maury (2006)). TQ is accepted as an indicator that expresses investors' expectations regarding a firm's potential to generate future revenues. EVA is defined as net operating profit after tax less capital charge, the latter is the multiplication of average weighted cost of capital and invested capital. It indicates residual wealth, in other words; income that exceeds invested capital. MVA is defined as market capitalization less invested capital. If the market capitalization of firm exceeds invested capital, it means the shareholder value increases. In addition to brand value (BV) as the independent variable, three control variables are included: Earnings before interest and tax divided by total sales (EBITTS); net operating profit after tax divided by total assets (NOPATTA); and market value of firm divided by book value of firm (MTB,). Market value is calculated by multiplying company's share outstanding by current market price of one share. The descriptive statistics for variables are in Table 1.

Panel least squares method is utilized in the regression analysis to test hypotheses. The following regression models are estimated and discussion of the estimation results is in the following section.

$ROA_{i,t} = \alpha + \beta_1 BV_{i,t} + \beta_2 EBITTS_{i,t} + u_{i,t}$

$TQ_{i,t} = \alpha + \beta_1 BV_{i,t} + u_{i,t}$

$EVA_{i,t} = \alpha + \beta_1 BV_{i,t} + \beta_2 NOPATTA_{i,t} + u_{i,t}$

$MVA_{i,t} = \alpha + \beta_1 BV_{i,t} + \beta_2 MTB_{i,t} + u_{i,t}$

Table 1. Descriptive Statistics for Brand Value and Shareholder Value

	Mean	Median	Maximum	Minimum	Std. Dev.	Probability
BV	7.49E+08	2.39E+08	5.07E+09	28441600	1.03E+09	0.000000
EVA	3.68E+08	96419493	3.20E+09	-1.23E+08	5.84E+08	0.000000
MVA	1.44E+09	2.02E+08	1.78E+10	-5.56E+09	4.19E+09	0.000000
TQ	1.722.076	1.382.849	8.907.853	0.389453	1.376.826	0.000000
ROA	0.059064	0.060140	0.435626	-0.155002	0.071672	0.000000
NOPATTA	0.121390	0.114372	0.624874	-0.058861	0.085247	0.000000
EBITTS	0.117481	0.071645	5.079.350	-0.170918	0.398448	0.000000
MTB	3.628.641	1.833.623	7.459.702	0.217952	8.117.743	0.000000

Resource: Authors' calculations.

Results

The panel data covers 41 firms and a period of 4 years from 2010 to 2013. The data set is balanced, meaning that dataset includes observation of every each variable for every firm and every year. Four different models are tested. The estimation results of these models are provided in Table 2. The results support H_1, H_3, and H_4. The support for H_1 comes from the fact that brand value has a positive effect on return on asset (β_1=1.311, p <0.01). The control variable used in this regression is EBITTS. This variable is an indicator of firm's capacity of creating funds. The sign of this variable in the regression is in line with the expectation in the related literature. That is, EBITTS is positively related to ROA. According to marketing literature, firms with strong brands are likely to have large sales volumes. Our finding supports this theoretical expectation. The finding that brand value has a positive effect on economic value added (β_1=0.419, p <0.01) supports H_3. The control variable in this regression is NOPATTA, and it is positively related to EVA. It is worth noting that firms with high brand value and high fund creating capacity have also high economic value added. Finally, the finding that brand value has a positive effect on market value added (β_1=1.318, p <0.01) supports H_4. However, the relationship between TQ and brand value is not statistically significant.

Table 2: Estimation Resutls

	ROA	TQ	EVA	MVA
BV	1.31E-11[***]	1.31E-10[i]	0.419886[***]	1.318.515[***]
EBITTS	0.024982[*]			
NOPATTA			1.59E+09[***]	
MTB				5.9598926[i]
N	164	164	164	164
R^2	0.054881	0.009685	0.624848	0.120829

*p < .10, **p < .05, ***p < 0.01 i= p>.10
Resource: Authors' calculations.

A few limitations of this paper must be acknowledged. The study's time frame is too short (2010-2013). However, it is due to the lack of brand value data. Brand valuation is a rather new topic for Turkey. Future studies could use longer time series to investigate the relationship between brand value and shareholder value. In addition, brand is an intangible asset that demonstrates its effect in the long-term. Lack of data does not allow for such a long term analysis.

As mentioned above, this paper aims to provide an empirical analysis of relationship between brand value and shareholder value for the most valuable firms in Turkey. Our findings suggest that four different measures of shareholder value are correlated with brand value. ROA is not only an indicator of profitability, but also capital intensity. According to the logic in ROA' calculation, if the total assets of a company increase, ROA should decrease. But the increase in brand value tends to increase the efficiency of total assets. For instance, the consumer who prone to buy goods with high brand value is also willing to pay premiums for those goods. On the other hand, by licensing its valuable brands across

diverge categories; efficiency of total assets can be increased. In addition, the increasing brand value leads to higher future income.

The firms have positive economic value added by two ways. First; if firms use current capital efficiently, it will create positive EVA. Second, if firms don't invest into the project that yield lower than weighted average cost of capital, then it will create positive EVA. Brand value leads firms to use their invested capital more efficiently. As the brand value increases, the cost of creating and sustaining brand value will decrease. By this cost savings, the need for invested capital will decrease. Secondly, high brand value reduces the debt cost for the firms. Especially debtors and investors perceive high brand value as an indicator of increasing cash flows and income.

Similar cases are notable for market value added. If the firms want to create positive market value added, they either yield higher market capitalization with the same invested capital, or use their invested capital more efficiently with the same market capitalization. In addition to this, firms can create positive market value added by yielding the same market capitalization by less invested capital. Increase in brand value raises customer loyalty, and customer loyalty is likely to reduce firm's vulnerability to competitive actions. This is because of the fact that loyal customers are less likely to use another brand as a result of price reduction or other competitor promotions. High customer retention and low vulnerability to competitive actions, in turn, translate into lower volatility of cash flows as customer continues to purchase a firm's offerings (Bharadwaj, Tuli, & Bonfrer, 2011). An increase in stock prices leads to increase in market capitalization. Firms with high brand value are attractive stocks for investors. The reason behind this is that high brand values signal higher cash flows. Thus, high brand value enables firms to have high market value.

This discussion suggests that brand is a long term investment. Therefore, marketers always must take the effect of being a brand on financial performance into consideration, and financers must perceive the brand as a long term investment in their budget planning.

Conclusions

In conclusion, our empirical analysis of the relationship between brand value and shareholder value provides four main findings. First, brand value has a positive effect on return on asset; second, brand value has a positive effect on economic value added, third, brand value has a positive effect on market value added and finally the relationship between TQ and brand value is not statistically significant.

Brand value and brand valuation terms are very recent research topics for Turkey. As a result, there is not appropriate and adequate data about brand values of the Turkish firms. This is the most adverse limitation of the research effort in empirical research. Nevertheless, our results provide an insight to consumers, investors, and managers about brand's effect on shareholder value in Turkey. Further studies on this topic with different variables and for longer terms will extend the scope of understanding in this area.

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Sport Sentiment and Stock Market Returns: Case of Istanbul Stock Exchange (BIST)

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Abstract

Stock market and investor decisions are popular research areas in finance. The effects of anomalies and psychological biases of behavioral finance on stock returns are also accumulate great attention. Changing moods of investors impede rationality and cause unexpected price changes. Affiliations of sports fans and match results can affect investor behaviors. There are lots of academic studies which focus on sports matches and stock market returns. The literature analyzed English football teams (Palomino et.al., 2009; Aston et. al, 2003), Boston Celtics basketball teams (Brown and Hartzell, 2001) and Turkish National Football matches (Dilek, 2013). Edmans et. al. (2007) also studied cricket and rugby scores. OLS and GMM estimations and GARCH models are employed in the literature. The aim of our study is to determine relationship between stock returns and sport sentiment. Regression analysis is used in order to decet significant effect of national football matches. We find that sport sentiment significiantly affects BIST sport index returns in the period between 2011-2014 in Turkey. Investor moods positively react to national footbal matches. Turkish national football match days can be suitable for timing of stock market investments in BIST.

Keywords: Sport sentiment, BIST, Behavioral Finance, Stock Returns.

Sampling Frequency and Empirical Analyses of Term Structure of Interest Rates and Exchange Rates

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Abstract

Studies in international asset pricing models investigating term structure of interest rates start with theoretical dual country models. These stochastic models try to explain the interest rate movements in both countries simultaneously. The natural extension of such models is to develop the exchange rate dynamics between the two countries. The extended models are then tested rigorously for their empirical performance. Numerous such theoretical models have indeed been examined in the finance and economics literature. The emerging conjecture from the recent studies is that higher frequency data provide a more accurate separation of continuous and jump components of a dynamic process in the empirical analysis. Stochastic processes may not be fully utilized for monthly or quarterly data since certain processes such as jumps may be smoothed out for these low frequencies. Thus, the empirical performance of these types of models may vary due to the frequency of the data. In this paper, I explore a sophisticated multi-country multi-state quadratic stochastic model in the context of the sampling frequency for the same sample period. I document important differences in the coefficient estimates, statistical properties of the parameters, and empirical performance of the model are documented. The paper proposes the importance of the sampling frequency of the data used in an empirical analysis and suggests that high frequency data should be used in empirical performance tests, reflecting the realities of the fast trading environment of financial markets.

Keywords: Exchange Rates, Interest Rates, International Finance, Stochastic Models.

Investment and Competition in Turkish Mobile Market

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Abstract

This paper aims to specify factors related to the investment in mobile market in Turkey. Panel data from the three main carriers, which occupy over 90% of the Turkish mobile market, is utilized. In order to control network effects as well as the endogeneity of variables, the Arellano–Bond dynamic panel estimation is adopted. As a result, several technical and economic variables are revealed to have affected the investment in mobile market of Turkey. A positive relationship between the investment and the Competition Index calculated based on the sales generated by the operators is detected. Number of subscribers and sales revenue also reflect positive relationship with investment while GDP growth rate and average revenue per user seem to have negative relationship with it. The results can be applied not only towards understanding mobile development, but also to the mobile markets in other countries.

Keywords: Investment, Competition , Mobile Market, Dynamic Panel Data, Turkey

Introduction

The relationship between the telecommunication technologies and related factors has been studied by various researchers in the literature including another study on OECD countries in general, conducted by the authors of this paper. This study aims to build a country-specific model revealing the relationship between the investments made by the mobile operators in Turkey and related factors, using the data for all mobile operators in Turkey. Turkey has been one of the fastest emerging countries in terms of adapting the telecommunication technologies with significant investments made by the operators as indicated in the following section. Thus, it is arguably a good example in analyzing the telecommunication issues.

Among others, Ahn and Lee (1999) were first to undertake a cross-country modeling of mobile services using International Telecommunication Union data for a single year, in terms of mobile phone diffusion in the world. In that study, a complementary relationship between mobile and wireless services is found.

Ng etal. (2013) investigate the relationship between broadband penetration and the Gross Domestic Product (GDP) growth for the member countries of the Association of Southeast Asian Nations (ASEAN) from 1998 to 2011. The result reveals that broadband deployment has a positive relationship with economic growth and it is a key factor in the explanation of Gross Domestic Product growth.

Kang etal. (2012) examine the effects of mobile telecommunications competition on mobile network investment in China. According to the results, fixed effects and dynamic panel data models using Chinese regional panel data over the period 2003–2009 show a consistent positive correlation between the mobile market concentration and mobile network investment in the industry.

In a report prepared by CTIA-The Wireless Association (2013), the wireless industry is more dynamic, innovative, and competitive than ever before. The best indicator of the industry's vibrancy is argued to be the capital investment record.Wireless carriers continue to investtens of billions of dollars in their networks, deploying 4G technologies at unprecedented rates in both urban and rural areas. Consumers are the beneficiaries of this virtuous cycle of investment and innovation – today, the number of active wireless connections exceeds the U.S. population, and over half the handsets owned by American consumers are smartphones. In addition, the 4G wireless networks impact all sectors of the economy, from intelligent transportation to electrical smart grids to mobile health services, as well as helping to transform the lives of seniors and persons with disabilities.

Akematsu and Shinohara et al. (2012), specifies factors promoting the 3G mobile in Japan by applying the Arellano–Bond estimator which enables the calculation of an unbiased estimator by using an exogenous or predetermined endogenous variable. In addition to this, the system generalized method of moments (GMM) is used. The factors are represented by value-added services. The results, reflecting

315

the importance of value-added services, can be applied not only to the next generation mobile development, but also to the promotion of 3G networks in other countries.

Lin and Wu (2013) examine the determinants of broadband adoption by applying Arellano–Bond GMM dynamic panel data estimation with more complete panel data for OECD countries. They also examine and compare the determinants in different stages segmented by adopter categories. The results reveal different determinants in different stages. The key determinants are income, education, and content in the innovator and early adopter stage; platform competition and previous broadband penetration in the early majority stage; and broadband price in the late majority and laggard stage. Thus, suggesting the governments implement strategies appropriate for each stage.

Zaber and Sirbu (2012) conduct an empirical analysis of the impact of spectrum management policies on the diffusion of 3G mobile services. The results obtained show that alongside the economic and information technology characteristics of a country, the policy decisions regarding spectrum band, technology standards but not spectrum award procedure play significant roles in 3G take up. A time-series panel data set of the evolution of 3G from 2000–2009 across 126 countries was used to conduct the analysis. Insights gained from this study of the 2G to 3G transition is argued to provide guidance to regulators now contemplating the transition to newer generations.

Zentner (2012) quantifies the relationships between Internet adoption and changes in advertising expenditures on traditional offline media types. A panel of 11 years of data at the country level that contains information on advertising expenditures by medium and Internet penetration for more than 80 countries is used for this purpose. It is found that increases in Internet penetration are negatively correlated with changes in advertising expenditures on newspapers, magazines, and television.

Li and Shiu (2012) investigate the key factors influencing the rate of Internet penetration in China. Given the significant differences in Internet penetration rates across different regions in China, panel data for 31 Chinese provinces over the period 2003–2009 are analyzed in a dynamic modelling framework to shed light on the main factors influencing the Internet penetration rate in each region and obtain implications for the digital divide in Internet penetration for China.

Xia (2011) studies the Chinese mobile market and offers heuristic analysis and insights on several issues based on archival documents and interviews. The implications are suggested to be considered to 3G policies, regulations, deployments, and evolutions.

Mobile Market in Turkey

Market Overview

Turkey is a developing country of 780 thousand km2 area and approximately 75.6 million population 2012 census (TUIK, 2012) and a population density of 98 person/km2. Nearly 75.2% of the population lives in cities with 10 thousand or more population. On the other hand, the number of residential areas with population of 1 thousand or less is 32540 which accommodates to only 12.3% of the total population. Currently, approximately 99% of the total population has GSM coverage by at least one mobile operator (Fig. 1). The remaining 1% resides in 2128 residential areas which are populated less than 500. Since covering these areas is not economically viable for operators, bringing coverage to these areas is considered as a duty of the State. From another perspective; increase in telecommunication penetration boosts economic growth, increases productivity and reduce the differences between regions' development levels.

In Turkey, mobile services have started to be offered by mobile operators, Turkcell and Telsim, since 1994. However, first Concession Agreements were signed between the Ministry of Transport and mobile operators in 1998. As a result of these agreements, the operators received licenses for 25 years (until 2023). In 2000, two more licenses were granted to Is-Tim and Türk Telekom which used the brands Aria and Aycell, respectively. Aria was merged with Aycell to become Avea, in 2004. Based on the agreements, the coverage liability is defined for residential areas with 10 thousand or larger population. The biggest operator covers 99.17% of total population, while the second covers 99.05% as of September 2012 (Mobile operators, 2012). All operators considered together, the coverage rises up to 99.65%, provided by more than 90 thousand base station sites all over Turkey. This rate is among the best coverage rates throughout Europe. Taking into consideration the difficulties such as landscapes, many small residential areas and low population density in Turkey, it can be discussed that it is the best.

Methodology and Data

The variables that are expected to have effect on the investments made by the GSM operators in Turkey are analyzed in this study by working on the quarterly data available between 2008 and 2013. Lack of data before 2008 is the major restriction of the study. The data used here are obtained from Turkish Statistical Agency (TUIK: http://www.turkstat.gov.tr/PreHaberBultenleri.do?id=13584) and Information Technologies Agency (BTK). Panel data analysis is used since the operators and time dimension is used together. Dynamic panel data analysis is preferred as investments in previous years are expected to affect current investments. The Arellano–Bond linear dynamic panel data estimation model (Arellano& Bond, 1991) is used in order to solve the endogeneity, heteroskedasticity, and autocorrelation problems that exist among the variables. Arellano-Bond (1991) and Arellano-Bover (1995)/Blundell-Bond (1998) are models developed for this purpose. Both of them are especially designed for situations with small T, large N panels. Their usage on datasets of such characteristics is safe (Roodman, 2006). Its reliability for the models with large T and small N is still being tested.

There are three GSM operators involved in our study with 72 quarterly data. Similar to what is being indicated by Akematsu and Shinohara et al. (2012) where they studied 3G mobile phone development in Japan with large T and small N dataset, our goal is not calculating the exact values of the variables, rather finding out their signs.

Akematsu and Shinohara et al. (2012) have obtained the results similar to ours using methods of the ordinary panel data analysis, the maximum likelihood estimation, the instrumental variable estimation, and the Arellano–Bond dynamic estimation.

It is observed that unit root problem exists only for the marketshare variable, thus it is used in the model only after taking its first difference.

Conducting the unit root tests of the variables, it is detected that unit root problem does not exist since the H_0 hypothesizes which states that it exists are rejected for each variable.

On the other hand, the Arellano–Bond linear dynamic panel data estimation model is executed by using xtabond2 command to solve all these problems detected. This command also provides that endogenous and autocorrelation tests as well. H_0 hypothesis stating that instruments used in sargan test are valid. Sargan is applied to test the instrumental variables used for the solution of endogeneity problem (endogenous). On the other hand, Arellano–Bond tests AR(1) and AR(2) are executed to test the auto correlation problems. In the AR (1) test, the lagged value of the dependent variable used in the model causes the rejection of H_0 hypothesis which states that there is no auto correlation. (The presence of the lagged dependent variable MP_{it-1} gives rise to autocorrelation). Thus, AR(2) test needs to be viewed (Roodman, 2006). Our model is resulted as expected, as the H_0 hypothesis stating that there is no autocorrelation in AR(2) test is accepted. Moreover, wald test has resulted statistically meaningful.

Models

In order to analyze market related variables which have effect on mobile sector investments, four models are used here. The models are developed according to the correlation among the variables. As indicated in Table 1, there is a high correlation among Sales, Number of Subscription, and Market Share. That is why these three variables are used separately in different models. On the other hand, HHI_Sale and Traffic variables are also not used in the same models to avoid the multi-collinearity problem.

Table 1: CorrelationTable

0	Inv	Sales	N. of subs.	Market share	ARPU	traffic	**HHsubsr**	HHsales
Sales	0.1805	1						
N. of subs.	0.3273	0.887	1					
Market share	0.2848	0.9655	0.9195	1				
ARPU	0.033	0.7756	0.4749	0.7124	1			
Traffic	-0.1177	-0.5636	-0.3185	-0.5999	-0.8264	1		
HHI_subs	0.3058	-0.5112	-0.2129	-0.3678	-0.6199	0.3079	1	
HHI_sale	0.1264	0.6252	0.3781	0.6496	0.8539	-0.9959	-0.3366	1
GDP growth	-0.4891	0.1085	0.011	0.0723	0.0112	0.0183	-0.3641	-0.0132
L.GDP growt	-0.5591	0.1067	0.0275	0.0618	0.0213	0.0173	-0.3689	-0.0112

Four models below are developed avoiding the multicollinearity problem:

Model 1:

$lninv_{it} = \alpha_0 + \beta_1 ln\ inv_{it\_1} + \beta_2 L.lngrowthit + \beta_3 lnsales_{it} + \beta_4 lnarpu_{it} + \beta_5 lnatraffic_{it} + \beta_6 lnHHsubsr_{it} + u_i + \pi_t + v_{it}$

Model 2:

$lninv_{it} = \alpha_0 + \beta_1 ln\ inv_{it\_1} + \beta_2 L.lngrowthit + \beta_3 \mathbf{dlmrshr}_{it} + \beta_4 lnarpu_{it} + \beta_5 lnatraffic_{it} + \beta_6 lnHHsubsr_{it} + u_i + \pi_t + v_{it}$

Model 3:

$lninv_{it} = \alpha_0 + \beta_1 ln\ inv_{it\_1} + \beta_2 L.lngrowthit + \beta_3 \mathbf{lsubscr}_{it} + \beta_4 lnarpu_{it} + \beta_5 lnatraffic_{it} + \beta_6 lnHHsubsr_{it} + u_i + \pi_t + v_{it}$

Model 4:

$lninv_{it} = \alpha_0 + \beta_1 ln\ inv_{it\_1} + \beta_2 L.lngrowthit + \beta_3 ln\mathbf{lsubscr}_{it} + \beta_4 lnarpu_{it} + \beta_5 lnatraffic_{it} + \beta_6 lnHHsales_{it} + u_i + \pi_t + v_{it}$

The dependent variable Investment represents the investments made by the operators in quarterly periods.

Invit_1 is the lagged value of the dependent variable. The new investments are expected to occur in relation with the investments made in the previous periods. The sufficiency of the earlier investments will be effective on the new investments to come. Thus, a positive relation is expected. Kang and Hauge et al. (2012) have identified such a relationship in their study.

Growth variable represents the growth rates observed in GDP quarterly. Based on the economic theory, one-lagged values of GDP growth rate are used in the models. The change in GDP is expected to affect the upcoming period's value. The existence of this relationship can also be seen the correlation table above. It is observed that the correlation between investment and lagged value of GDP growth is higher than the one with current period's growth rate.

Sales variable represents the sales revenue of the GSM operators.

ARPU is the average revenue per subscriber gained by the operators.

Traffic variable is the total time of phone calls made by the subscribers.

HHI_subs and HHI_sale variables are the Herfindahl-Hirschman indexes developed to measure the level of competition in the mobile market. HHI_subs is calculated based on the market shares of operators in terms of their subscribers while HHI_sales shows their market shares based on their sales. Both indexes are calculated in the same way by taking the sum of squares of their market shares. It is expected that HH indexes end up with the positive meaningful results. Kang and Haugee et al. (2012) have observed this relationship in their study on the investment and competition relation in China.

Market share variable shows the market shares of the operators based on their sales revenues. Kang and Haugee et al. (2012) have found out a negative relationship between market share and investment.

Subscribers variable provides the number of subscribers of the operators in the given periods.

To avoid the negative effect of seasonality on the regression model when using quarterly data, these variables are isolated from the seasonality. Moreover, the logarithmic values of the variables are used in the models.

The factors u_i veπ_t are individual specific and time specific parameters showing the variables that are not included in the model, v_{it} is the factor showing that homoscedasticity assumption exists in the model while serial correlation does not.

Results and Discussion

In all models it is seen that the investments in previous periods have positive impact on new investments to come, as expected. This may have also resulted from the fact that the telecommunication investments require long time.

There is a negative relationship with average revenue per user (ARPU) in three models. It is observed that investment increases while ARPU decreases. It is possible to think of it as the increasing competition results in lower revenues due to the lower prices for the services provided. This situation leads the operators into new ways of beating the competition, thus increasing the investments. A similar negative relationship is observed between traffic and investment. The reduced traffic can be interpreted as an operator losing ground, which in turn leads to new investments.

Between investment and HHI_subs a meaningful relationship could not be determined. On the other hand, a positive relationship between investment and the other competition index HHI_sale is detected in the fourth model, as expected similar to the literature. Operators tend to invest more as competition increases. Variable such as ARPU, traffic, and HHI_sale index reflects on the effect of competition on investment. Another finding supporting this view is negative meaningful relationship between the market share and investment detected in the second model where investments of operators decrease as their market shares increases.

A positive meaningful relationship between investment and sales revenue and subscribers is observed in models 1, 3, and 4. More investments are needed to meet the increasing demand and satisfy the current subscribers as the revenue and number of subscribers increase. Moreover, the increased revenue enables more investments.

Table 2: Arrelano-Bond Dynamic Panel Data Regression Estimation Models for Mobile Investments

	Model 1	**Model 2**	**Model 3**	**Model 4**
	b	b	b	b
L.inv	.2301697**	.2223495**	.2392811**	.1997527*
ARPU	-.7954748**	-0.3432315	-.5211124*	-.4721453**
Traffic	-.0864436**	-.0678078**	-.0746266**	
HHI_subs	0.2227579	0.2635004	0.0108884	
HHI_sales				.0691977**
Sales	.4683079***			
Market share		-1.857236**		
N. of subscriptions			.5369773***	.5013276***
L.GDP growt	-.2037712***	-.2015644***	-.1907196***	-.2242665***
_cons	1.94806	3.669682	4.46668	4.050905***
wald test	61.15565***	62.25219***	64.76354***	69.21409***
ar2	1.070223	0.7477525	1.040833	0.8661425
Sargan	48.34744	57.16047	49.57055	64.67661
N	69	69	69	69

*, **, *** indicate significance at the 10%, 5%, 1% level, respectively.

On the other hand, a negative relationship exists between investment and GDP growth rate. It is seen that investment decreases while GDP growth rates increase. Various reasons might cause this. 2008 and 2009 are the years when significant investment have been made to adopt 3G technology. Low GDP growth rates in this period due to the global financial crisis, high investments on 3G and later on decreasing investments, increasing growth rates in the following years after crisis can explain this relationship. Although statistically meaningful results are obtained, competition and bandwidth adoption (2G, 3G or 4G) seem to be more effective on investment than the GDP growth rate.

Conclusion

The relationship between the telecommunication technologies and related factors has been studied by various researchers in the literature. This study aims to build a country-specific model revealing the relationship between investment and competition factors, using the data for all mobile operators in Turkey. Turkey has been one of the fastest emerging countries in terms of adapting the telecommunication technologies with significant investments made by the operators.

Panel data from the three main carriers, which occupy over 90% of the Turkish mobile market, is utilized. In order to control network effects as well as the endogeneity of variables, the Arellano–Bond dynamic panel estimation is adopted. The results can be applied not only towards understanding mobile development, but also to the mobile markets in other countries.

The variables that are expected to have effect on the investments made by the GSM operators in Turkey are analyzed in this study by working on the quarterly data available between 2008 and 2013.In order to analyze market related variables which have effect on mobile sector investments, four models are used here. The findings reported in previous section can be summarized as follow:

- A positive meaningful relationship between investment and sales revenue and subscribers is observed while a negative relationship exists between investment and GDP growth rate.
- Between investment and HHI_subs a meaningful relationship could not be determined. On the other hand, a positive relationship between investment and the other competition index HHI_sale is detected in the fourth model.
- There is a negative relationship with average revenue per user (ARPU) in three models.
- In all models it is seen that the investments in previous periods have positive impact on new investments to come, as expected.

On the other hand, due to the fact that 3G technology is recently adopted in Turkey, lack of data available prior to 2008 has been a restriction faced during this study. Thus, determining only the direction of relationship between the variables indicated has been the goal of this study. Drawing on the conclusions reported here, adoption of 4G technology and its indicators will be studied in a future study.

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The Effect of Economic Growth and Inflation on Stock Returns: A Panel Data Application

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Abstract

The studies determining factor with impact on stock return rates represent prominent research aspect of financial literature. The present study investigates the impact of economic growth and inflation on stock return rates. To that end, relevant data from Turkey and Brazil, Russia, India and China known as the BRIC Countries were utilized. These quarterly data were obtained from the EVDS System of the R.T. Central Bank and World Economic Outlook Database covering the period after 2003. In the study, firstly structural analysis of variable series was performed and their stability was tested. Then, correlation among variables was tried to be revealed by means of application of panel unit root, panel cointegration and panel causality tests on series. Along with the information obtained as a result of the present study, a certain contribution to the financial literature was provided by investigating the impact of economic growth and inflation on stock return rates for developing countries including Turkey and BRIC Countries.

Keywords: Inflation; Stock Returns; Economic Growth

Introduction

One the most significant factors which drives investors to the developing markets is the advantage of reduction in overall risk through international diversification. On the other hand, the opportunity offered by the developing markets to acquire higher returns especially invites corporate investors. The most important determinant regarding investors' preferences in the stock market is obtained return rates on an individual stock. Particularly corporate investors are in desire to know factors which have impact on stock returns and their significance in respect to their impact to protect themselves from risks and to gain more profit. Accessing information concerning factors influencing stock returns affects investor's preferences regarding their investments on stock according to the variations in these factors (Ayaydın, 2012:46)

According to the financial theory, prices of capital market instruments depend on expected cash flows and expected discount rates. Hence, it is revealed that expected cash flows and discount rates are affected by macroeconomic variables (Chen, Roll, et al., 1986; Geske and Roll, 1993; Fama, 1981). In this angle, there are numerous studies in the literature investigating the relationship between stock returns and macroeconomic variables. These relationships are mostly examined for developed countries such as the U.S. (Mukherjee and Naka, 1995; Lee, 1992).

Applications of financial liberalization caused by globalization started in the last quarter of the twentieth century and which has expanded progressively in the beginning of the twenty-first century have increased international capital movements and caused migration of investors' funds from the developed countries to the developing ones. BRIC Countries are considered the most recognized developing markets. The BRIC markets include Brazil, Russia, India and China economies; and they are nominated as the most powerful economies of the world in the coming 40 years. Several economies such as Turkish economy have potential to reach performance of the BRIC Countries. Whereas studies investigating the relationship between stock returns and macroeconomic variables are common in developed markets, there is scarcity in concerning this investigation for the BRIC countries and Turkey, which constitute primary motivation of the present study.

The reference of "BRIC" used to indicate prominent developing economies was first used by Jim O'Neill, Head of the Goldman Sachs Research Group, in his report in 2001[81]. In another report published by Dominic Wilson and Roopa Purushotaman in 2003, it was assumed that the BRIC countries would

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[81] Goldman Sachs, Global Economics Paper No. 66, Building Better Global Economic BRICs, 30 November 2001 (by Jim O'Neill). This report reflects the estimations regarding economic shares of the BRIC countries for a 10-year projection. Major subject of this study is to combine BRIC countries and rearrange the G7 countries.

catch up with the economies of the developed countries soon and these countries would be main drive of the new demand growth and spending power which balance slowing economy and population of the developed countries. When available human resources and natural resources of the BRIC Countries are considered, it seems that this growth is irrepressible (Atabay, 2012:404). Each BRIC country has unique characteristics. While Brazil is the largest country in the Latin America, the most substantial power in the future will be based on its rich natural resources. Majority of countries, including China, have made enormous investments in Brazil to utilize from its natural resources. Similarly, Russia is rich in terms of natural resource, and additionally it has significant human resources in science and engineering disciplines. India and China have substantial human resources as well; the economies of these countries have shown important growth (Hitt, Li and Worthington, 2005). The importance of the BRIC countries is rooted in their size of economies. Other than these non-OECD member four countries with the largest economies, none of the developing countries has annual GDP over $1 Trillion. Except Russia, other three countries have shown an economic growth significantly higher than others during 2008 crisis (Atabay, 2012:405).

While it was assumed that the BRIC Countries which are indicated as the fastest growing markets of the world would have two folds production compared to the G7 Countries by year 2050, it is expected that additional eleven countries including Turkey would be in this classification. Accordingly, Turkey and other three countries (Mexico, Indonesia and South Korea), are considered as promising countries with the highest potential in this 2050 perspective. In this regard, position of Turkey in the world economy and its integration to the capital markets together with the BRIC Countries are gaining importance.

Literature Search

The theoretical framework of the relationship between the stock return and macroeconomic variables is consisted of discounted cash flow or discounted dividend payment model which has significant place in stock valuation (Kasman, 2006: 89). According to the model, stock price is determined by the total of the present value of expected cash flows in the future and present value of the expected prices of the stock in future for the period of n. Any change in regard to expected cash flows or discount rate would eventually affect stock price and its return rate. Since the discount rate in the model is sum of the risk-free interest rate and risk premium, any stock price in an economy accordingly the certain return on a stock is affected by macroeconomic developments in that economy. The fact that dividend payments, significant determinant of stock value, and discount rate are under influence of macroeconomic variables lies under the foundation of the relationship between stock return and macroeconomic variables (Chen et al., 1986: 385; Flannery and Protopapadakis, 2002: 752; Humpe and Macmillan, 2009: 112-113; Wang, 2010: 150).

There is no any consensus regarding the relationship between stock return and inflation rate in the literature. While several researches concerning this relationship suggest that there is positive correlation, others suggest vice versa. As studies suggesting positive correlation rely on Fisher hypothesis (Fisher, 1930), others suggesting negative correlation considers Representation hypothesis (Fama, 1981). According to the Fisher's hypothesis (Fisher, 1930), stocks provide protection against inflation. This hypothesis assumes that market interest rate includes expected real interest rate and expected inflation rate, and that there is direct positive correlation between stock return and inflation (Lin, 2009: 783-785; Alagidede and Panagiotidis, 2010: 91). This situation means that investors are able to offset the losses in their purchasing power by making investment in stocks (Bodie, 1976: 460). To support this hypothesis, Kessel (1956) suggests that increasing inflation rates elevates stock returns. This claim is supported by studies of Solnik and Solnik (1997), Abdullah and Hayworth (1993), and Ryan (2006). According to these studies, the positive correlation between stock return and inflation rate is beads on the logic that investors make investment on stock to obtain protection against inflation. Similarly, in Choudhry (2001)'s study covering 4 developing market (Argentina, Chile, Mexico, and Venezuela) Spyrou (2004)'s study covering 10 developing markets (Argentina, Chile, Mexico, Brazil, Thailand, South Korea, Malaysia, Hong Kong, Philippines, and Turkey), İbrahim and Aziz (2003)'s study covering Malaysia market, Ratanapakorn and Sharma (2007)'s study covering the U.S. market, Horobet and Dumitrescu (2009)'s study covering Central and Eastern European countries (Czech Republic, Hungary, Romania and Poland), Arjoon et al., (2010)'s study covering the South Africa, and Alagidede and Panagiotidis (2010)'s study covering 6 Africa countries, researchers determined positive correlation between inflation rate and stock returns. Ely and Robinson (1997) investigated whether stock prices protect investors against inflation. Researchers revealed strong positive correlation between stock returns and inflation.

On the contrary to the economic theory mentioned above, some studies concerning particular countries determined that there is negative correlation between inflation and stock returns (Bağcı, 1990; Ewing, 2002; Özçam, 1997). According to these findings, it can be drawn a conclusion that investing in stock can provide protection against inflation. Despite of the positive relationship arguments, the negative relationship between inflation and stock returns relies on studies of Nelson (1976) and Bodie (1976). These results were supported by studies conducted through various methods by Geske and Roll (1983), Solnik (1983), Chen, Roll et al., (1986), Lee (1992). In studies of several researchers such as Bodie (1976), Jaffee and Mandelker (1976) for the U.S., Mukherjeeve Naka (1995) for Japan, Maysami and Koh (2000) for Singapore, Mutan and Çanakçı (2007), Erbaykal, Okuyan et al., (2008) for Turkey, a negative correlation between inflation and stock returns was determined. According to these findings, it can be suggested that investing in stock market does not have protection quality for investors against inflation. In studies conducted for various markets, there is no significant correlation found between inflation and stock return [Bilson et al., (2001) for Turkey; Li et al., (2010) for the U.K.; Floros (2004) for Greece].

When studies investigating the relationship between stock markets and economic growth are considered, it can be seen that there is a solid correlation between development of the existing financial system and economic growth; and there is positive relationship between yields gained from capital markets and economic growth (Çakar, 2005: 3). Studies such as Levine and Zervos (1998), Arestis et al., (2001), Bekaert et al., (2001), Müslümov et al., (2002), Dritsakis and Adamopoulos (2004), Aslan and Küçükaksoy (2006), Ang and McKibbin (2007) are the ones which reveal this relationship. While some of these studies investigate the correlation between stock markets and economic growth, some of them consider the relationship between developments of capital markets and economic growth as a whole.

Gürsoy and Müslümov (2000) determined strong positive correlation between stock market and economic growth. Caporale et al. (2005), in his study including stock markets of 5 South Asian countries, propounds that stock markets increase efficiency of investments and thus, they contribute into the economic development. Likewise, Hondroyiannis et al. (2005) presented contribution of development of Greek stock market into the economic growth.

Karagöz and Armutlu (2007) conducted a causality analysis for the relationship between financial development and economic growth and examined period between 1988 and 2006 for the relationship between the IMKB 100 Index and GDP of Turkey. As a result of their study, they concluded that growth in the national GDP has effect on increment of stock market index.

Kaplan (2008) reported a bilateral and long term relationship between Turkish stock market and economic growth. In their studies concerning Pakistan, Shahbaz et al. (2008) they found that there is strong relationship between development in stock market and economic growth. According to the study of Enisan and Olufisayo (2009), development of stock market in 7 Saharan countries causes economic growth.

Theoretical Explanations of the Model and Data[82]

In the present research, panel data analysis was utilized. Since panel data is composed combination of time series and cross-section data, whereas they present variation over the time because of the time dimension, they present variation over the units because of cross-section dimension. Therefore, panel data models are formed so that they include both dimensions. Since there is variation based on both time and units, it is possible to create different models. As it is possible to create models with fixed and variable coefficients, it is possible to create fixed and random effect models with single and two factors as well (Güriş and Çağlayan, 2005: 12).

Panel data analysis has numerous advantages compared to the analyses containing only one of the time series or cross-section data. These advantages enumerated below:

1) Better control over heterogeneity effect among groups,

2) Since panel data method combines cross-section and time series, there is greater number of observation, which increase degree of freedom and allows more reliable estimations,

3) Allowing acquisition of effects which cannot be obtained through merely cross-section or time series analyses,

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[82] This part is compiled from Ebru YALÇIN, İktisadi Büyüme ve Dış Krediler: Ampirik Bir Çalışma, TCMB Dış İlişkiler Genel Müdürlüğü, Ankara, Eylül 2005.

4) It is possible to reduce multicollinearity among explanatory variables,

5) Increasing efficiency of the econometric estimators,

6) Since working with repeating cross-section observations, panel data method is more appropriate to study on variation dynamics,

7) Panel data allows working on models with more complicated behaviors.

In the present research, due to the advantages of the panel data analysis compared to one of the analysis methods of the cross-section or time series, panel data analysis method was found appropriate. The panel data set analysis is composed of n pieces of cross-sectional units. Such that, i = independent variable, t = period; i = 1, 2,....,n. t = 1, 2,....,t. If each t period contains n units of observation, the total number of observation in the data set is equal to nt.

When conventional regression model which constitutes framework of the panel data analysis is considered;

$y_{it} = \alpha + \beta x_{it} + e_{it}$

Where, yit is dependable variable, xit is set of explanatory variables, β is slope coefficients, eit is error term vector and fixed cross-section coefficient. While i denotes the number of group in the model (i = 1....,n); t denotes duration of time for each group (t = 1....,n). In the equation above, whereas the fixed term varies according to time and cross-sections; the coefficient of the independent variable only varies according to the cross-sections. In other words, the panel data method above relies on the assumption that there is heterogeneous relationship between the dependable and the independent variables (Erkan, 1999: 81). As the time series, the research considers the period between January 2003 and December 2013; as the cross-section, data of 3 different variables were analyzed.

The equation above is status of panel data analysis in which all coefficients are kept fixed for all cross-section units. Another important issue in the panel data analysis is how to define the starting point. Starting point can be hold fixed or existence of different starting points can be allowed for different cross-sections. In case dismissing the constant of fixed starting point, there are two alternative methods which are known as fixed effects model and random effects model for determination of starting point. In the fixed effect model, it is assumed that the starting point will have different fixed value for all cross-section units of starting point. On the other hand, in the random effect model, the starting point is defined as random variable. Making selection either of these two methods constitutes the first step of the panel data analysis. In case assumptions of the random-effects model are true, each of the two models presents consistent results, however, results of the random-effects model are more efficient. In case assumptions of the random-effects model are not valid, the random-effects model presents inconsistent results (Müslümov, Hasanov and Özyildirim, 2002:11-12).

The estimation processes in the scope of fixed effects (LSDV- fixed effects models) and random effects model (REM-random-effects model) in the panel data analysis will be discussed.

By using panel data, there are five different models to be estimated: 1) Conventional Least Squares Model (OLS), 2) Single-Factor Fixed Effects Model (LSDV), 3) Single-Factor Random-Effects Model (REM1), 4) Two-Factor Fixed Effects Model (LSDV and TIME), and 5) Two-Factor Random Effects Model (REM2).

Conventional Least Squares Model (OLS); in this model represented with the equation above, data of all groups are collected in a single pool without dummy variables which represent specific effects of each group; and effects of the explanatory variables on the dependable variables are investigated.

Assumptions of the OLS model:

$E[e_{it}] = 0$,

$Var[e_{it}] = 2$,

$Cov[e_{it}, e_{js}] = 0$, while (t _ s) or (i _ j).

Single-Factor Fixed Effects Model (LSDV) 189; The basic purpose of this model, which was referred as least squares dummy variables, is to estimate an unknown fixed term (α) representing specific effect of each group in data set. The LSDV Model to be estimated is represented in closed form.

$y_{it} = \alpha + \beta x_{it} + e_{it}$

With the Matrix notation, this model is represented as;

$$\begin{bmatrix} y_1 \\ y_2 \\ . \\ . \\ y_n \end{bmatrix} = \begin{bmatrix} i & 0 & ... & 0 \\ 0 & i & ... & 0 \\ . & . & . & . \\ . & . & . & . \\ 0 & 0 & ... & i \end{bmatrix} \begin{bmatrix} \alpha_1 \\ \alpha_2 \\ . \\ . \\ \alpha_n \end{bmatrix} + \begin{bmatrix} x_1 \\ x_2 \\ . \\ . \\ x_n \end{bmatrix} \beta + \begin{bmatrix} e_1 \\ e_2 \\ . \\ . \\ e_n \end{bmatrix}$$

The performance test of the coefficients belong to the dummy variables relies on the F-statistics test. Null hypothesis (H0) and the alternative hypothesis (H1) are given below:

$H_0 : \alpha 1 = \alpha 2 = ... = \alpha n$

$H_1 : \alpha 1 \neq \alpha 2 \neq .. \neq \alpha n$

The null hypothesis indicates that effective estimation model is OLS. Only if, F-statistics lies on its table value, it is concluded that coefficients of dummy variables are different; and the null hypothesis is refused. Instead of OLS Method, the LSDV model is used as an estimation method.

Fixed cross-section coefficient in the OLS model takes different values in the LSDV model. The basic purpose of the model is to estimate these different fixed coefficients which are specific to the individual groups. While the essential assumption in the OLS model is that status that fixed cross-section coefficients specific to the groups remain unchanged, this coefficients differ in the LSDV model.

Single-Factor Random Effects Model (REM1); Alternatively this model is referred as Error Component Model. In the REM1 model, different than the LSDV model, it is assumed that αi are not fixed coefficients; instead, they are independent random variables. REM1 can be denoted as below, which is consisted of two parts:

$y_{it} = \beta x_{it} + v_{it}$

This is specific effect term which belongs the group i which does not differ over time.

To determine whether to use the REM1 or the OLS model in the estimation, it is required to conduct group-wise heteroscedasticity test to the groups in the model. To that end, Lagrange Multiplier Tests and Likelihood Ratio Test statistics are utilized. The null hypothesis indicates that group variances are equal (inter-groups fixed variance).

According to the LM-test statistics, in case the H0 hypothesis is not accepted, REM1 model is preferred to the OLS model. In the panel data analysis, the most significant issue encountered in model selection phase is whether the group-specific effects are perceived as fixed or random. Therefore, it is important issue to select whether the LSDV or the REM1 models as an estimation model. While specific coefficients which belong to the groups are fixed in the LSDV model, these coefficients in the REM1 model are drawn randomly from a sampling. Thus, for the LSDV model, while the OLS is the most effective and the Best Linear Unbiased Estimator (BLUE), in the REM1 model, the GLS is the Most Effective and Unbiased Estimator.

In the study of Hsiao (1993), determination of group-specific effects either as a fixed or random is left to the researchers (Gür, 1998). Content of data, conditions in which data is acquired, and applied acquisition method are important in this process. However, each of the two models has unique disadvantages. In the fixed effects model, there is an issue in terms of degree of freedom; in the random effects model, there is problem because there is no any correlation between specific effects and explanatory variables and it relies on arbitrary assumption as well.

At this point, the Hausman model definition test statistics is commonly. This test assumes that group-specific effect is random. Based on the null hypothesis which assumes that there is no correlation between the explanatory variables and group-specific effects, whereas the LSDV and the GLS models are consistent, the OLS is not effective. If it is assumed that there is correlation between group-specific effects and explanatory variables, the OLS is consistent. Accordingly, Hausman test is utilized to determine whether there is correlation between explanatory variables of the model and group-specific effects. While higher values of the Hausman statistics are preferred in the LSDV model, smaller values are preferable in the REM1. Hausman test statistics has chi-square distribution. In the cases when the test statistic value is greater than the values in the table, the hypothesis which asserts that there is no correlation between group-specific effects explanatory variables is rejected. Thus, the LSDV model is preferred to the REM1 model.

Two-Factor Fixed Effects Model (LSDV and TIME); In this model, there is group effect (α_i) for each individual group, there is time effect (γ_t) for each time period, and there is a constant coefficient (α_0). The LSDV and TIME model is denoted as below:

$$Y_{it} = \alpha_0 + \alpha_i + \gamma_t + \beta\, x_{it} + e_{it}$$

Two-Factor Random Effects Model (REM2); As it has same structure with the REM1 model, in addition to the group-specific effect which is determined randomly, there is time-specific effect as well. The REM2 model is denoted as below;

$$y_{it} = \beta\, x_{it} + w_{it}$$

Where, $w_{it} = \gamma_{it} + e_{it} + \alpha_i$

In this study which investigates the effects of the economic growth and inflation over stock returns, economic growth and inflation variables are taken as independent variables: inflation (ENF) and economic growth (GDP). The dependable variables, stock returns, are denoted as HSGET. The study considers quarterly data from Brazil, Russia, India, China and Turkey covering the period of 2003-2013. The stock returns are calculated based on closing prices published on the official stock market websites of the relevant countries. Inflation and economic growth data was accessed from the Federal Reserve Economic Data, www.gdpinflation.com and R.T. Central Bank EVDS system.

Balanced panel data set analysis is conducted in the study. In the balanced panel data set, there is equal amount of data regarding periods and independent variables; there is no difference in periodical data or no missing data.

Evaluation of Empirical Findings

To determine the appropriate model among the established models, it is necessary to evaluate results of several tests. If it is first considered that whether the conventional least squares model or fixed effect model is to be preferred, the results of the conducted F-test are needed to be evaluated. As it can be seen from the Table 1, the F-test result of the OLS model is 78.81. Since it is lower than fixed effect model's F-test results of 67.14 and 36.30, it can be concluded that fixed effect model is more appropriate compared to the OLS model. Furthermore, when R^2 values which indicate explanatory strength of the model are taken into account, it is notable that explanatory power of the fixed effect model is higher then the OLS model. Lagrange Multiplier Test (LM) result is considered to compare the OLS model with the REM1 model. Higher test result of the LM test supports the REM1 model. Moreover, 1% significance level of the probability value of the LM statistics supports this finding. On the other hand, according to the Hausman test statistics employed in comparison of the fixed effects model and random effects model, random effects model was found appropriate. Furthermore, since two-factor models take time factor into account different than the single-factor models, they are found more appropriate.

After all these tests, it was concluded that two factor random effect model (REM2) is more appropriate as a model. The eventual regression equation based on the REM2 model application was presented below:

$$HSGET = 17108.84734 - 181.02736\ ENF + 460.98447\ GDP$$

In terms of stock returns, 65% of the variation can be explained by the variables in the model. The rest 35% is explained by the other variables excluded from the model. When the present model is investigated, the significance level of the inflation rate and economic growth rates were 1% and 5% respectively. While inflation rate variable has negative effect on stock return, economic growth variable has positive effect on stock return. It can be said that variables in the model, inflation rate and economic growth figure have solely significant effect on stock return. In addition, 1 unit variation in inflation rate and in economic growth is going to result in 181.02 and 460.98 units of change in stock return respectively. Of these two variables, inflation rate effect is found stronger compared to the economic growth based on their individual t values.

Table 1: Test Results of the Model

	OLS	LSDV	REM1	LSDV and TIME	REM2
ENF	-214.026 (0.0000)[*]	-165.681 (0.0000)[*]	-185.491 (0.0000)[*]	-161.889 (0.001)[*]	-181.027 (0.0000)[*]
GDP	386.671 (0.0289)[**]	468.928 (0.0039)[*]	427.158 (0.0054)[*]	592.411 (0.0065)[*]	460.984 (0.0103)[**]
R^2	0.62	0.67	0.60	0.68	0.65
F Test	78.81	67.14		36.30	
Haussmann Test			32.35		4.54
Lagrange Multiplier Test			40.84		42.49

* 1% significance ** 5% significance *** 10% significance

Result

Developing countries' economies and their stock markets are taking more attention than ever due to their potential to be on the focus in the future, their stock market which yield more average return on investment compared to the developed countries, and their low correlation with stock markets of the developed countries. Rational investors considering making investment in stock market need to follow variables effective on stock returns. Stocks can be affected by both systematic and non-systematic several variables. It is important to determine significance of these variables on stock returns in terms of optimal capital allocation for budgeting and structuring effective portfolios. The present study investigates effects of economic growth and inflation on stock returns in regard to Turkish and BRIC stock markets for the period of 2003-2013. Obtained results reveal that while there is positive relationship between the stock return and economic growth, there is negative relationship with the inflation rate.

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Sustainable Entrepreneurs: The Role of Small Businesses in Global Sustainable Efforts

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Abstract

One of the major buzzwords in the business world today is sustainability, yet many companies lack the necessary skills to become "green". Companies that practice sustainable development often incorporate environmental and social concerns when conducting business. More recently, the term, "sustainability" also refers to the need to address the key global problems regarding environmental sustainability; protecting our physical environment for future generations; and filling the social and economic needs in developing countries. According to the 2013 Global Corporate Sustainability Report by the United Nations (2014a), even though companies are making commitments in defining goals and setting policies regarding sustainability, more work is needed regarding implementation. The report also states that large companies are leading the way regarding sustainability efforts. On the other hand, smaller companies are more challenged to move from commitment to action. In this paper, we argue that small entrepreneurial companies can play a central role in global sustainability efforts. We explore the challenges that confront small entrepreneurial businesses compared to large corporations. In particular, we focus on the role of agricultural entrepreneurs in the global sustainability arena. Recommendations for social entrepreneurs are discussed.

Keywords: Global Sustainability, Entrepreneurship, Agriculture

Introduction

As stated in the Global Corporate Sustainable Development Report, "The unabated rise in the scale of materials consumption has increased global environmental, social and economic pressures" (United Nations, 2014a, p.1). The combination of a continuously growing population in conjunction with rapidly diminishing ecological resources poses a real threat to nations across the world; and governments are struggling to create realistic plans to lessen their impact on the environment. Change must come from governments and filter down through corporate businesses, all the way to small local businesses.

In 1987, The Bruntland Commission report placed sustainable development at the forefront of various issues concerning many governments and companies, yet there was uncertainty as to what role governmental agencies should play due to the lack of knowledge on sustainability and the disconnect between organizations (Adeoti, 2000). As highlighted by Goetz, Partridge, Deller and Fleming (2010), a government shift towards entrepreneurship and agriculturally knowledgeable businesses would likely have a more positive impact because it would place the responsibility on individuals who have a greater knowledge base, and hence suggest effective changes. While large governmental bodies need to accept some responsibility and work towards making themselves sustainable, current studies also emphasize the benefits of small entrepreneurial ecological startups (Deller et. al, 2010).

Despite the importance of entrepreneurial efforts in global sustainability, the literature primarily focuses on large companies. This paper argues that entrepreneurs should take the leading role in sustainable ventures with active support from government agencies to aid in funding, awareness, and discussion. We specifically focus on the role of agricultural entrepreneurs in the global sustainability arena. Below a brief review of the sustainability literature is presented. We then focus on the role of agricultural entrepreneurs in sustainability efforts. Based on the literature, our findings suggest that despite the challenges faced by agricultural entrepreneurs in advancing the global sustainability issues, these entrepreneurs have many opportunities in making a difference. Finally, we discuss recommendations for agricultural entrepreneurs.

The Role of Sustainability

The term sustainability has many definitions and interpretations. Grayson, Jin, Lemon, Rodriguez, Slaughter and Tay (2008) define sustainability as, "how countries can meet the needs of their people today without compromising those of future generations" (p.1). The United States Environmental

Protection Agency states that, "Sustainability creates and maintains the conditions under which humans and nature can exist in productive harmony, that permit fulfilling the social, economic and other requirements of present and future generations" (United States Environmental Protection Agency, 2014, p.1). However, for the purpose of this paper, sustainability is defined as, "Development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (United Nations, 2014b, p. 1).

The literature on sustainability stresses the need to adopt a clear and comprehensive understanding of sustainability. Adeoti (2000, p.64) calls for increased knowledge in the area and notes that, "One of the major problems with sustainable development efforts, particularly in developing countries, is that people are ignorant of the whole concept of environmental sustainability and the underlying rationale". Without a clear understanding of sustainability and how to apply the concept in practice, businesses cannot fully transition to ecologically sound institutions.

While numerous business ventures promote sustainability and awareness, various difficulties and challenges hinder forward growth, such as a lack of available resources and a lack of government policy support. In the Global Sustainable Development Report, the United Nations (2014a) suggests that building on pre-existing systems, while adding modern technologies to emphasize growth and development can help the sustainability efforts. Adeoti (2000), however, emphasizes that the application of appropriate technologies in fostering sustainable development is not easy.

Adeoti (2000) further elaborates on this theme of sustainable technology with two suggestions. First, the implementation of modern technological advances can assist in lessening the impact of businesses' production and consumption behaviors on the environment. Second, technology can help change the growth path of the existing unsustainable economic behaviors and shift businesses into more sustainable practices (Adeoti, 2000). The inclusion of technological developments can help in addressing two main current concerns and trepidations for future generations: over-exploitation of natural resources and environmental pollution. The first step in reducing the over-exploitation of natural resources and environmental pollution is the education of small enterprises in developing nations regarding sustainable practices and guidance to change (Adeoti, 2000). For example, if governments educate the small third-world businesses about gas emissions and recycling, they can help shift perspectives and increase understanding about sustainable issues. Once a higher level of education is reached, the implementation of technological advancements can begin across the world for multiple types of companies.

Inherent in the notion of technological implementation is the importance of collaboration between stakeholders. In particular, collaborative social entrepreneurship involves external agents, cooperation, and other various elements, such as sharing resources, that support businesses and entrepreneurs across fields (Montgomery, Dacin & Dacin, 2012). In facing the central issue of how to control the current use of natural resources for people today and in the future, collaboration offers beneficial aspects. For example, global initiatives among various stakeholders provide the opportunity for the implementation of collaborative social entrepreneurship, which can enable cooperation among businesses and entrepreneurs across fields. One environmentally-friendly example is the implementation of grass-fed meats. This trend has addressed concerns about pharmaceutical additives into livestock feed, as well as consumers' desire for cruelty-free living situations for the animals (Montgomery et al., 2012). Farmers are effectively using the natural resources available to them in conjunction with support from external businesses to promote the safety of this meat.

Svendsen and Laberge (2005) also highlight this positivity: "Convening social networks and groups of individuals or organizations in order to allow for collaboration to occur and to tap resources, knowledge, and expertise of the participants can facilitate unique solutions and whole-system innovations which draw on collective intelligence" (p.100). The three main phases of convening social networks are: outreach, collective learning, and innovation (Montgomery et. al, 2012). Businesses today need to integrate these phases as a means to increase their company sustainability and knowledge base. Change will not happen immediately, but by being open to new information and ideas from multiple business fields, companies allow themselves to explore a variety of sustainable opportunities previously unknown to them.

Similarly, Benford and Snow (2000) define collective action frames specifically as, ''action-oriented sets of beliefs and meanings that inspire and legitimate the activities and campaigns of a social movement organization'' (p. 611). Collective action involves bringing parties together for a shared purpose, or an end goal, and to further mutual interest. In particular, multivocality or "the ability to combine these numerous voices as well as to speak to stakeholders in an accessible manner and straddle audiences" (Montgomery et al., 2012, p. 384) can play a role in the communication between different members of

the sustainability field and assist external individuals wishing to enter into sustainable field. Once clear communication lines are established, businesses can move to integrate ecologically-friendly practices that will improve future economic conditions.

Adeoti (2000) offers two potential suggestions for companies in order to better integrate sustainable practices. First, they must support the current trends of economic development and demonstrate the impact of economic production and consumption behaviors on the environment. Second, they should change the existing unsustainable economic behaviors of their companies to an environmentally sustainable growth model (Adeoti, 2000). In line with the Global Sustainability Report (United Nations, 2014a), Adeoti (2000) also notes that there is a difference between how large, medium, and small businesses are able to implement sustainable practices. The larger companies have more resources and money to work with, but often times the smaller businesses struggle to implement sustainable practices due to financial constraints and the need for extensive training (Adeoti, 2000). Yet, these smaller businesses often have a more significant impact on their surroundings, local community, and would greatly benefit from increased global environmental awareness. Below, we discuss the role of agricultural entrepreneurs, a form of small businesses.

Agricultural Entrepreneurs

In the United States, there is a growing concern over the lack of food and resources to grow crops that feed both US citizens, as well as the world at large. CropLife America (2014), the nation's largest crop protection agency, states that, "Food production capacity is faced with an ever-growing number of challenges, including a world population expected to grow to nearly 9 billion by 2050 and a falling ratio of arable land to population" (p. 1). The United States Department of Agriculture Community Food Projects program puts an emphasis on entrepreneurship in combination with existing federal food projects to support local farmers, and this venture relies on local knowledgeable people in the area for information and assistance. Community food projects give people opportunities to work together and create something meaningful for both their local region and have a greater impact on the world. This initiative, also known as the community food security movement, places a large emphasis on a:

> "whole-systems approach to food security…an integrative approach that combines community food panning, direct marketing, community gardening and urban food production, strengthening food assistance, farmland protection, food retail strategies, community and economic development." (Gottlieb & Fisher, 1995, p.193).

When recognizing business opportunities, farmers play a central role in local food projects. Strategic planning is a key factor in the creation of profitable farmer businesses. There is a need for cooperation, networking skills, innovative abilities, and risk taking, including acceptance of failure. Collective social entrepreneurship allows each participant to share resources and knowledge, split costs, gather multiple viewpoints on a topic, and allows them to get their message out on a larger-scale more efficiently to promote sustainability. Sharing resources across business fields can further add value and benefit the local and government entities. One popular approach to farming, named the Community Supported Agriculture (CSA), began in the United States in 1985. Under this perspective, consumers pay a fee to the farm or growers and collect a share of fresh produce at the end of the week (Allen, 1999). Interestingly, the U.S. Department of Agriculture Community Food Projects program puts an emphasis on entrepreneurship in combination with existing federal food projects, such as CSAs. The reliance on local knowledgeable people in the area where the project is centered allows agricultural entrepreneurs to feel empowered and provides them with a connection to a larger initiative.

Based on the above, one can see that the innovations in agricultural sustainability are important for sustainability opportunities. The World Business Council for Sustainable Development believes that, "integration of sustainability thinking into a business's innovation process - not as a negative or limiting factor in the creative process, but as an opportunity- is in its best business interests" (El-Kafafi & Liddle, 2010. p. 24- 25). As the world's population grows, ecological challenges will increase and harm ecosystems in conjunction with pressures placed on natural resources. Innovation is essential for global sustainable development if the current practices become ineffective, and new ideas, including technological developments, can shed light on important issues. Businesses need to make their decisions and actions "market-driven and consistent with societal values and expectations" in order to become profitable (El-Kafafi & Little, 2010. p. 24- 25). Staley (2005) declares:

> "Markets, in contrast, depend on entrepreneurship and risk taking to innovate and push the envelope of current technologies and investments that often run counter to mainstream or conventional wisdom in order to be successful. The key to market governance is the ability to

deploy, evaluate, and cultivate numerous choices and avoid adopting specific technologies, particularly if they have higher average costs" (p.234).

Sustainable entrepreneurs who implement innovative environmentally-friendly practices have a significantly positive impact on the economy both globally and nationally. Agricultural entrepreneurs can develop alternative models for agriculture production that may be economically feasible and environmentally-friendly. These alternative methods of agricultural production may be transferred to developing countries assuming that the basic technologies are adaptable to various contexts. Farmers with innovative abilities, networking skills, and risk taking, are more likely to develop innovations in agricultural sustainability.

Discussion

The importance of global sustainability is not a new concept. In his essay, Thomas Malthus (1782) theorizes that the world's natural resource endowments are incapable of meeting the uncontrolled demands of population growth, and hence the whole of the human race is in jeopardy of unmanageable supply crises, particularly in the long run. Adeoti (2000) emphasizes the significance of Malthus's (1782) position that small and medium scale enterprises, in particular, have the potential to combat three main issues: a natural environment constraint to development; an economic or financial constraint to development; and social constraints to development arising from equity across populations (Adeoti, 2000). It is the job of environmentally concerned citizens to discover how to control the current use of natural resources for people today, and reduce pollution in the future.

Specifically, given that food scarcity is a very important issue both in the political and ecologically realms, increasing awareness and education levels about the value of sustainability on a global level can further aid in protecting the environment's resources. For example, the United Nations Global Compact emphasizes the need for further work in this area of the sustainability field (United Nations, 2014a). In our paper, we demonstrate that sustainable entrepreneurs are central to furthering the message and procedures required of businesses wishing to become more environmentally friendly. Based on the literature, we found that while large companies are better able to implement "green" practices, often the smaller businesses offer more potential growth and possess a greater ability for change. Even though these larger companies are making commitments in defining sustainable efforts, the smaller companies, especially agricultural entrepreneurs, can make a difference with respect to global sustainability efforts despite challenges.

We offer various recommendations to social entrepreneurs. First, the use of collaboration in businesses across various industries enables the sharing of information and resources, which can provide good opportunities to further sustainability efforts. These efforts can be at the local or global level. Collaboration may occur between social entrepreneurs and local non-profit organizations. For example, the Sustany Foundation, a non-profit organization in Tampa, works on helping local businesses, such as restaurants, implement sustainable practices. The Sustany Foundation also builds awareness in the community by organizing events that feature local sustainable businesses In addition, social entrepreneurs can partner with global organizations interested in environmental issues such as, global hunger and ecological sustainable food production. For example, social entrepreneurs can partner with Action Against Hunger ACF International, a global humanitarian organization that is committed to eliminating world hunger. Second, with respect to the agricultural social entrepreneurs, local farmers possess a strong knowledge base and are involved first-hand in the local sustainability movement. The farmers should become further integrated in the community, holding events, and possibly partnering with larger name-brand health food grocery stores, such as Whole Foods, to promote their message and increase sustainability awareness. Agricultural organizations, such as CSAs, offer an excellent example of how local agricultural businesses can further sustainability efforts through education and awareness. Finally, social entrepreneurs should learn about new innovative approaches in sustainable technologies. Specialized training in sustainable technologies will provide entrepreneurs with the necessary skills to implement sustainable action plans.

In conclusion, entrepreneurs can play a central role in the global sustainability movement. While larger companies are leading the way in sustainable efforts, small businesses can also have a positive impact in building awareness and having a significant influence on global environmental issue. The collaboration between various stakeholders dedicated to sustainability efforts hold the potential to have a significant impact on global ecological concerns.

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Influence of Sport Facility Design Dimensions on Customer Satisfaction

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Abstract

Strategic planning of sport facilities has been found to influence customer satisfaction and it can be argued that satisfying customers is at the center of the marketing concept (Greenwell et al., 2002). Marketing literature addresses that the place where the product is purchased or service is rendered. It has an effect on consumer behavior and purchase decisions. For example a poorly designed sport facility can have negative impact on customer perceptions and affects their attitudes and behaviors (Kotler and Armstrong, 1999). Perceptions of the sport facility's physical environment contribute to approach and avoidance behaviors that lead to attendance. Participants of sport facilities who enjoy spending time are expected to be more likely to want to return. Conversely, a negative experience at the facility is expected to reduce the desire to attend (Wakefield and Sloan, 1995). Spending many hours in the facility, sport participants' positive or negative or negative effects increase of its aesthetic qualities. Participants of sport may be affected by the appeal of the facility's architectural design, by the colors of the walls etc. or in order to prevent participants from accessibility problems facility designers must use signage and layouts effectively. Another initial concern of participants approaching the sport facility is accessibility. According to Wakefield (1996) many people don't want to have to spend excessive time searching for parking spaces or walking long distances from their cars to the facility. Customer satisfaction is an important outcome of exposure to the physical facility. According to Day (1984) customer satisfaction is a post-choice, cognitive judgment connected with a particular purchase decision. So, the aim of the study is to explain the dimensions of sport facility design on customer satisfaction. In order to explain perceptions of participants about facility design a questionnaire was developed, incorporating items revealed in deep interviews and focus groups with people attending fitness facility. The questionnaire consisted of two parts. The first part is comprised of 29 statements related perceptions of participants about facility design. A total of 29 statements were presented, and participants were asked to indicate their perceptions about facility on a five-point Likert scale, ranging from 5 to 1 (5=strongly agree, 1=strongly disagree). The second part of the questionnaire included demographic variables and individual differences (gender, age, education, occupation and income status). The sample of the study comprised of people attending Anadolu University Fitness Facility, in Eskisehir Turkey. The researchers first briefly explained the research purpose, and then gave the questionnaires to willing participants. A total of 170 questionnaires were distributed, 126 of which were completely answered, resulting in a return rate of 74 percent. In order to evaluate and transform the data set in terms of meaningful factors, factor analysis (Principal Component Factor) was applied. The sample consisted of 126 Turkish people of whom 72.2 percent were male 27.8 percent were female, and the percentage of education respondents was 96.8 university students. Respondents ranged in age from 18 to 36 years. There was a total of 29 items that could determine facility design perceptions; thus principal factor analysis was used to sort out and classify these variables as well as to convert into main factors. For the facility design variables the KMO amounted to 0.830, which indicated that sample was adequate for factor analysis. The factors related facility design could be examined in six dimensions. Then the factors named 'service', 'layout design', 'psychological satisfaction', 'signage and orientation', 'accessibility and ventilation'. The coefficient alpha was measured to calculate the internal consistency of the data and assess the quality of the instruments (Hopkinson & Pujari, 1999). The total of scale reliability was 0.90, thus the dimensions had high coefficient scores greater than the exhorted level of 0.70 (Kim et al., 2003; Nunnaly, 1978).

Sport facility participants' perceptions are affected from the services they have and environmental experiences like architectural design, layouts, signage etc. Designers, managers or marketers of sport

facilities should care about participants wants and needs about facility design and environmental factors. Findings from this research provide managerial implications that can be used to better manage and market a fitness facility. In this way, sport managers and marketers can enhance their organizations by engaging in strategic activities designed to enhance the participant experience with the offering. As all with research, this study is not free of some limitations and suggests avenues for future research consideration. The current study focused specifically on a limited number of people and was limited to those who participate sport in a single sport facility in a Turkish city, Eskisehir. Furthermore, the focus on Turkish people places the research in a particular context. Consequently, the results may not adequately represent the total population in Turkey. Although the sample was appropriate for a survey on facility design dimensions' effects on satisfaction and the results may differ if other people in different regions are studied.

Keywords: Sport Facility; Sport Facility Design; Customer Satisfaction; Perception; Sport Marketing.

The Changing Term "Individualization"

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Abstract

This article shows the transformation of the term "individualization". In former days the focus was on the person as an individual. Nowadays there is a more situation-orientated view. The situation factors are: time, place, use, person/individual, knowledge, mobility and technology. In this paper we analyze them with examples. In combination with competitive factors like speed, costs, individuality, convenience, learning, trust, omnipresence and multifunction, four typical applications, news, games, financial transactions and social networks, will be analyzed. We thus conducted a survey with the target group "young adults". The results show that individualization is not at the forefront. This is because most of the participants believed that individualization already exists in the preferred and chosen application. A brief integration of individualization into the organizational theory as a basis for situation-based marketing shows the theoretical background. Modern management uses an updated database, like (mobile) Customer Relationship Management. Therefore companies have already relevant IT systems and verified customer data. They only have to improve their systems and use them for suitable offers.

Keywords: Individualization, Situation Approach, Competitive Factors, Situation Factors, Mcrm, Organizational Theory

Introduction

To date the term individualization has been spoken of in the literature in a narrow sense (Hildebrand, 1997). All the activities of the business company have been based on the behaviour of the customer and his individuality. Today behaviour is changing – from person to situation. This means that the personal preferences of customers change from situation to situation.

These changes are accompanying the usual economic and technological developments. Just take a close look at e.g. smart phones and tablet PCs with the convenient use of preferred applications (apps). Apps are taking over our daily life more and more. Even if users use different operating systems (IOS, Android,...) on their preferred smart phone and tablet PC, they will always have the same applications. Also cloud computing and users' free space can be seen as market drivers for more individualization.

This paper shows the changing term individualization. In this context, we can implement the Situative Approach or the Contingency Approach in the organizational theory (e.g. Child 1992, Lawrence/Lorsch 1967, Kieser/Kubicek 1992). The Situative Approach like Situative Marketing does not have any standardized understanding in research but can be specified in different approaches like Contextual Marketing, Direct or One-to-One Marketing, Geographical Marketing, Individual Marketing, Customer Relationship Marketing, etc. (Kenny/Marshall 2000, Grönroos 1990, Bruhn/Homburg 2010).

In a study of individual preferences we used the target group "young adults" because they are used to smart phones or tablet PCs with different apps. Even if they do not use the specific applications in question, they can evaluate them.

Traditional Individualization

To understand the changing term individualization, we must take a look at developments in the last 50 years. They have been influenced by three typical factors:

- General economic factors of companies: e.g. almost complete markets, globalization, competitive strategies (Porter 1990), less customer loyalty.

- General technology factors: e.g. acceptance and use of internet technology, acceptance of e-/m-commerce, better hard- and software opportunities, but also the information overload of customers/users

- Customer behaviour/society: e.g. demographic changes, permanent changes in values, significant price and quality sensitivity, information overload.

During this period we saw the customer and his individuality in his personality. This means in the literature we saw the person as an individual. With the changing understanding of marketing and the introduction of individual marketing, all business activities were focused on this person. The following figure shows "traditional individualization".
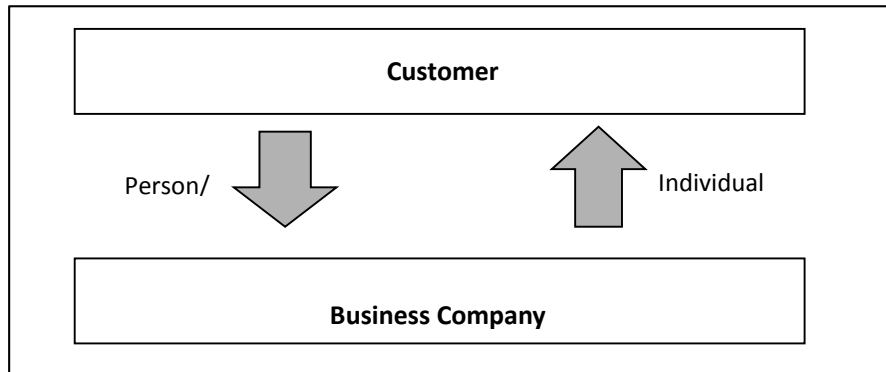
Fig 1: Traditional individualization

The person as an individual is the centre of all activities of the business company. Today behaviour is changing – from person to situation (Kriewald, 2008; Homburg 2011). Personal preferences of customers change from situation to situation.

These changes are accompanying the usual economic and technological developments. However, individualization is more like pseudo individualization in the form of product configuration on the basis of standard products, e.g. Dell computers. Companies prefer this kind of individualization because otherwise they would have to develop numerous "segments of one" from the small market segments. This kind of selling is very expensive (e.g. Kotler, 1989). Pine and Piller use the term "Mass Customization". They explain this form of selling as a combination of mass products and individualization where the customer becomes a co-producer (Pine, 1993; Piller, 1998). But individualization is only seen here in the preferences of the customer.

New Understanding of Individualization

Due to the changing environment which has been discussed above, we can broaden individualization depending on the situation, in which the customer is found.

The following figure describes the situation of the customer with seven specific situation factors. These personal situation factors are defined by individual requirements. The situation indicates these factors:
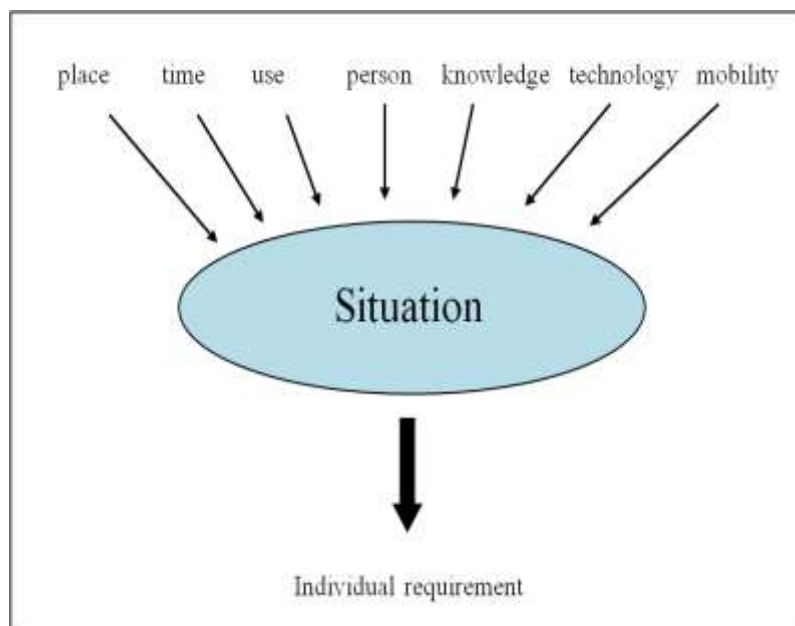
Fig 2: Situation factors and individualization

- Place: the place being the geographic coordinates. For example, the customer is at home and therefore he is interested in other offers (for instance, TV programmes) than when he is on the way to work (for example, traffic info).

- Time: this factor describes the point of time, which could be on a regular basis or sporadic, at the present time or later, short or long. For example, current trading info for making changes to investment portfolio.

- Use: in this situation the target is meant; the current target and how this target can be reached. The aim may also determine the usefulness or the direction. But then other situation factors will come into play and influence this factor. For example, when buying a product, the target could be visiting a city (for shopping).

- Person: personal habits influence the situation at a high level. Besides this, individual preferences are so different that we can say that this factor is the most important one. This factor influences the situation massively. The person as a whole is the meaning understood by traditional individualization. But this situation is also affected by the user's mentality. Customers who are mentally blocked act differently in a situation to customers who are mentally fit. For example, a store is closed due to an inventory day and the customer wants to buy a specific product which can only be purchased at that store or one specializing in the same range of items. The customer knows that about 400m away there is a store where he could buy the specific product. If the customer is mentally fit, he would take this choice. If he does not know the possibilities, he would not go to the other store and might be frustrated.

- Knowledge: this factor describes the knowledge of the customer and the collected knowledge. The knowledge of the business company has not been examined. Most of the time knowledge is unconsciously available, but the situation is formed by unconscious and conscious knowledge. For instance, you receive the most updated traffic info on FM radio stations.

- Technology: this factor asks about technology or device used. There are huge differences between stationary devices and mobile ones, with or without radio or wireless equipment and software. Knowing about the technology used is important for the potential offers. But not all devices are able to have all equipment on board, e.g. Java Applets and PDF data cannot be read on several mobile phones.

- Mobility: mobility does not only mean the geographic position of a user/customer. It also relates to the means of transportation, e.g. car, plane, train, on foot. If the customer is on a train, he is not in a position to react to offers. However, a user/customer in a car could react to offers next to his route.

These comments show that more than one factor – not just the person – influences the situation of the individual. It also tries to explain that influences affect specific factors to varying degrees and that these factors are more or less independent. This means the interaction of all factors influences the situation. Hence, these factors are necessary for customer satisfaction. But the degree of influence of the factors has an effect on the offer, e.g. the customer orders flowers with a call from his mobile on the way home. He points out that it is urgent and he wants an SMS after the delivery. The salesman tells him that an email is also possible. Another time the same customer orders flowers via mobile internet. He says that the delivery could also be made the next day and he again wants the status of the delivery as an email. Now we can see that different factors form the situation: technology (mobile phone, SMS, email), knowledge (different confirmation methods, ways of ordering), place (mobile, stationary), mobility (customer acts variable), time (pointing out urgency) and use (ordering flowers). What are not really necessary are the person and his individuality. The person and his individuality are not really crucial here.

After evaluating each single situation we see that when placing the first order, the use, the technology, the time and the place are at the forefront of the situation but in the second situation, the technology and the mobility are more prominent in the evaluation (Kriewald, 2007).

The following figure shows all the factors for the new understanding of individualization and the need for individualized offer.
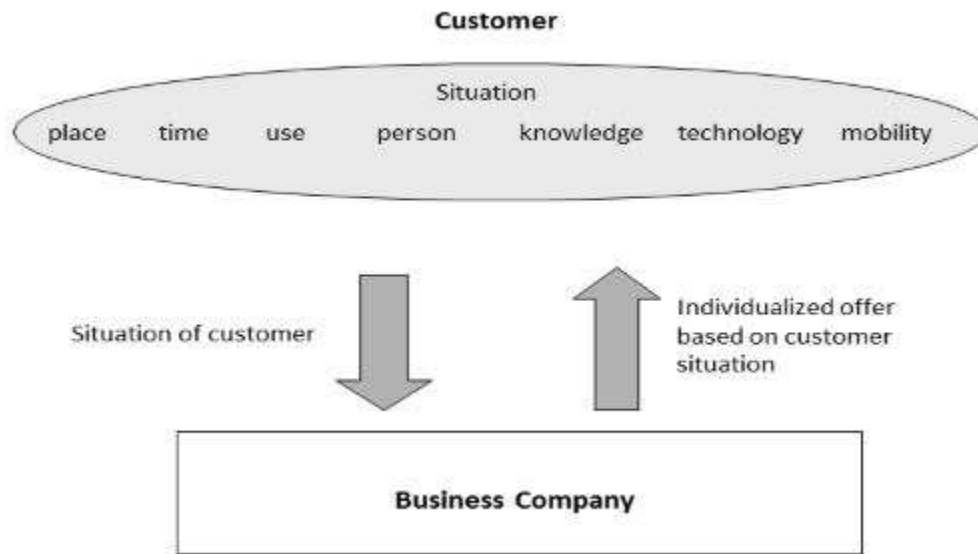
Fig.3: New understanding of individualization

Now it is up to the company to use situation factors for individual offers. Therefore it is necessary to update the database of the company regarding some situation factors. This could be the *casus belli*. To obtain all the information, the company must have huge databases and staff who fill in the needed data or buy the essential information such as the geographic point, e.g. from the mobile phone provider. Here we can say that mobile phone providers have the best position in the value chain.

Theoretical Basis and Implementation

The following paragraph shows how the new situative specialization can be integrated into Contextual Marketing. In the second half of the twentieth century we find the first scientific publication on the Situative Approach or the Contingency Approach (Child 1972; Lawrence/Lorsch 1967; Thompson 1967, Kieser/Kubicek 1992, p. 45). This research broadened the System Approach. Methodological innovation methods were integrated into the previously known organizational research. Relationships between companies and their subsystems were declared with interaction factors (Rühli 2002, p. 117; Ebers 1992, p. 1817). As a result we saw that different situative factors influence organizations. But we cannot generalize these research results (Ebers 1992, p. 1823; Kieser 1995, p. 156). Even at the end of the 1970s the situative approach of the organizational theory lost its dominant position.

Companies are understood as open systems with exchanging factors to other stakeholders (Link 1985). But companies must handle the complexity of their environment and the permanent changes. This has led to contextual marketing as a new situative specialization. We have integrated geomarketing, direct- or one-to-one-marketing, individualized marketing and content marketing into our new situative specialization with the described situative factors.

The figure below shows the development of contextual marketing.
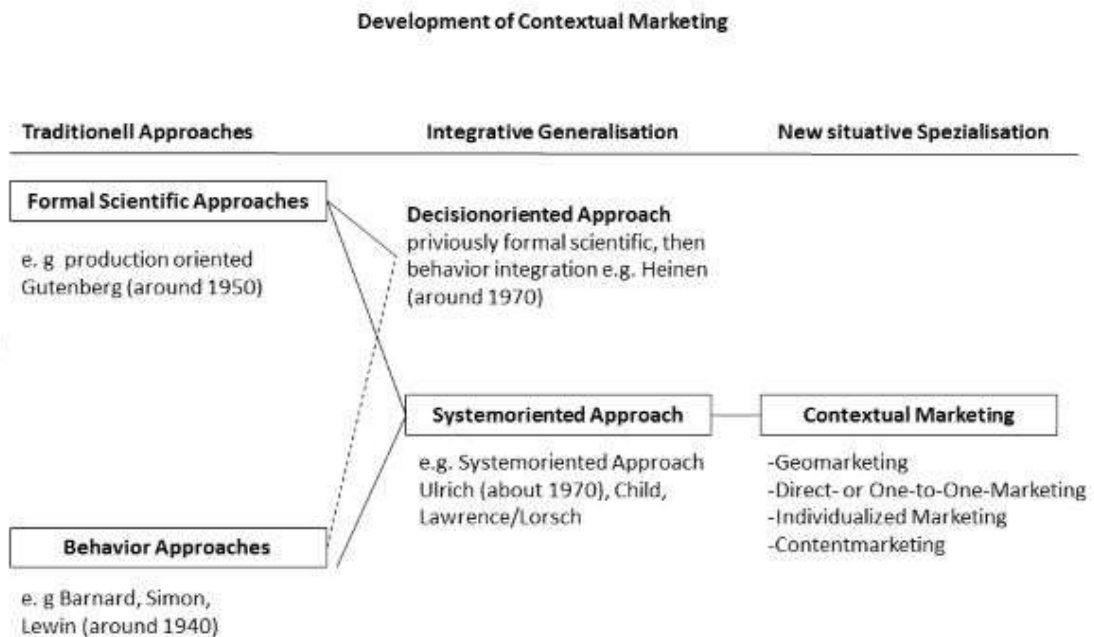
Fig. 4: Development of contextual marketing

Study of Individual Preferences in Target Group "Young Adults"

"Apps" – Applications will not be rejected from all surfaces of smart phones and tablet PCs; even Microsoft's new operating system "windows 8" uses apps. The hype about these little icons is not about to end. Behind these icons users will find convenient applications like educational tools (like online tutorials, videos), business utilities, games, news, social networks. When we take a close look at this market, we find market players like Apple Inc. or Google Inc. Apple's "App Store" with more than 850,000 apps and about 5000 million downloads is the market leader on devices like the iPhone, the iPad and the iPod. Google's "Android Market" with about 620,000 apps and 17 million downloads serves devices with android as their operating system (www.apple.com; ww.androlib.com/appstats.aspx). This market potential was the basis for our study.

In an additional study we showed the connection between competitive factors such as speed, convenience, individuality, omnipresence, multifunction, the learning process, trustworthiness and cost savings and the new understanding of individualization (Kriewald 2007; Link/Seidl 2010). In this study we tried to show the connection between the competitive factors and four typical services on smart phones or tablet PCs: news, financial services, games and social networks. The target group "young adults" was asked to rate how they saw each service and each competitive factor on a scale from 1 (bad) to 5 (very good) if they were to download and install a typical app. Even if they did not use a particular application, most of them knew them and could evaluate them.

The following figure shows our results.
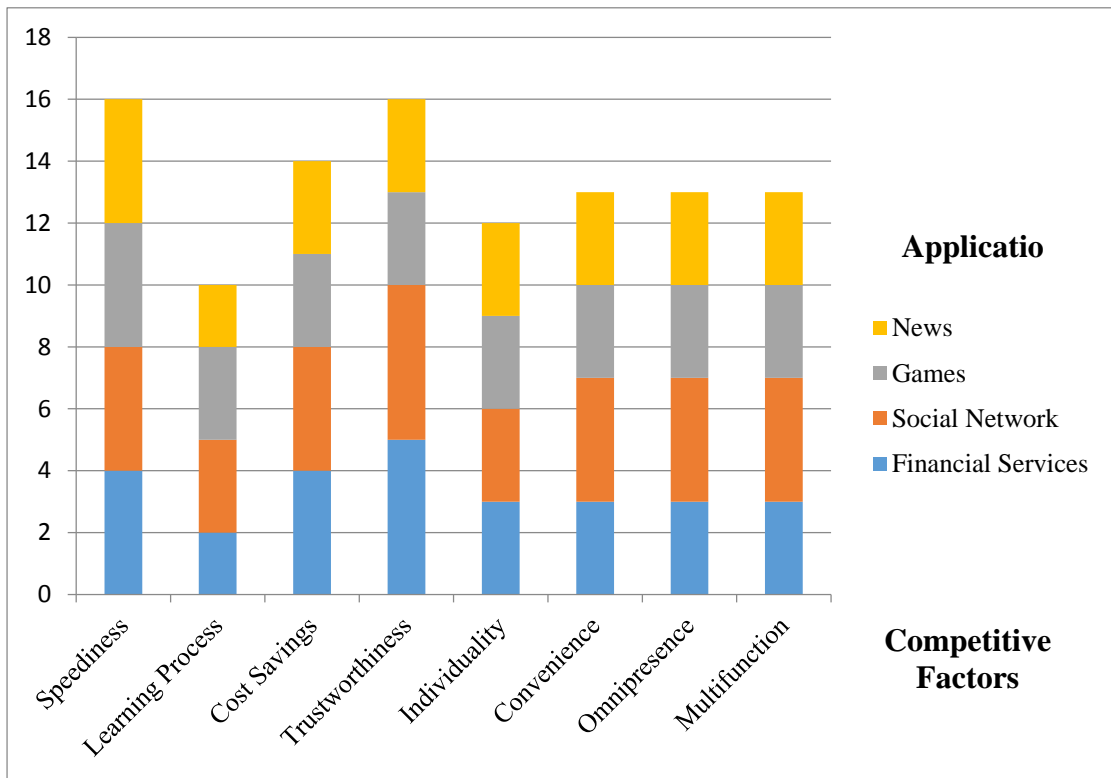
Fig. 5: Selected applications and competitive factors

As an important result we see trustworthiness and speed rated the highest. Individuality is not as important as expected and it is already integrated into the features. We know the app market is huge and some apps are light versions which are available at a reduced price or in some instances free of charge. Users decide to install an app on e.g. recommendation, cross selling or price.

As there is no really competitive factor, we must focus on the above-mentioned situation. This means individual requirement is based on situative factors.

Economic Results

At the end of such an analysis it is usual to see an economic result. Using situation factors for an individual offer has parallels with the theory of Customer Relationship Management (CRM), especially with mCRM (mobile CRM). This means if a customer is satisfied with the individual offer in view of his current situation, he will not change to a competitor. If a company has a wide range of products, the customer will not look at a competitor because he is satisfied (Kriewald 2007).

The following figure shows the specific impact of situation factors, cross-selling opportunities and some rationalization. Rationalization will come with the use of databases.
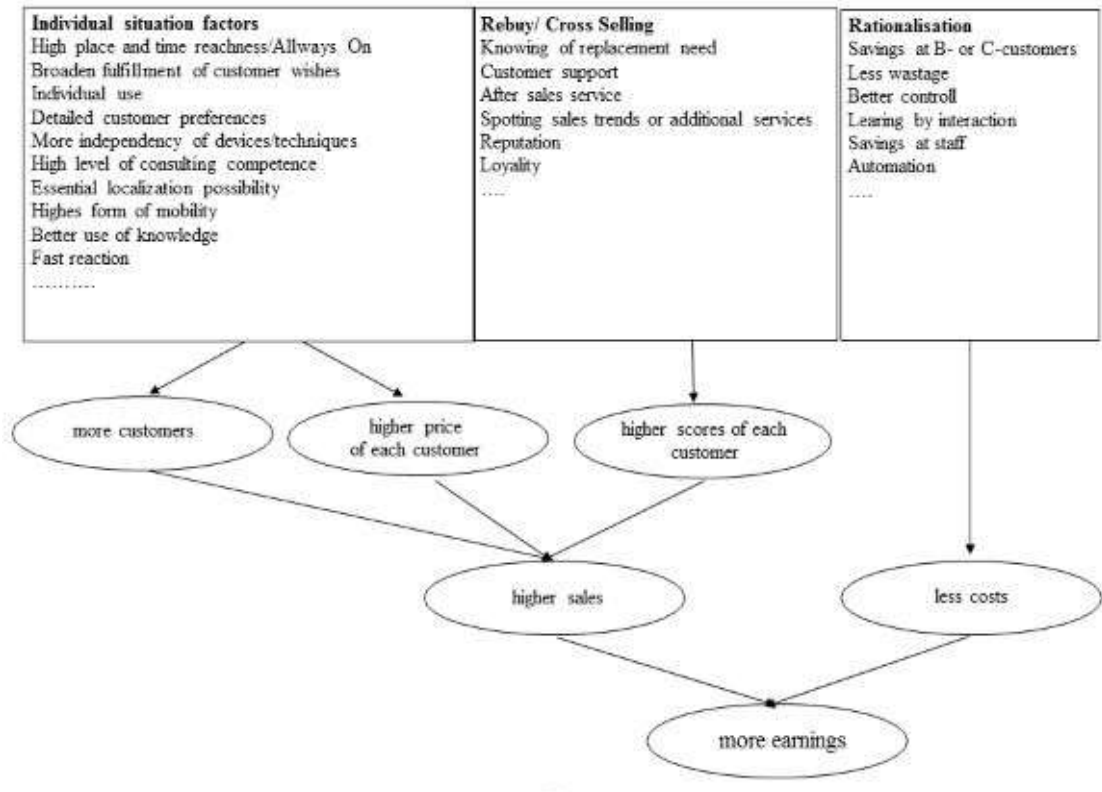
Fig 6: Specific impact of situation factors on more earnings

Conclusion

The new understanding of individualization is based on the changes to the person as an individual during the last 50 years. This has parallels with the changing marketing theories. Nowadays, the customer wants to fulfil his individual requirements in almost all situations he finds himself in. This leads to a changing understanding of individualization. The new understanding of individualization is based on the different situation factors which the customer is in. The situation factors are: place, time, use, person (as known in the traditional understanding of individualization), knowledge, technology and mobility.

Using (m)CRM and the situation factors, companies have a way of being permanently successful with their customers. The only restriction could be seen with the collection of geographical data. Therefore companies must buy this data, be a mobile service provider, or have strategic alliances with one.

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Brand Islamization: Marketing with Islam in Mind

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Abstract

In today's world, Muslims comprise one of the fastest growing consumer markets (1.5 billion people), thereby prompting a growing interest in understanding Muslim consumers and developing strategies and tactics to target this huge market. Subsequently, this provides a substantial growth opportunity for multinational companies (MNCs). Although this hefty market is not homogeneous, it is characterized by certain values that essentially all Muslims share. The tastes and preferences of Muslim consumers are beginning to converge upon some global norm. The global acceptance of the beverage Coke, Levi's jeans, Apple iPhones, and McDonald's hamburgers are all examples. Nevertheless, MNCs have to customize their products, brands, and advertising messages to appeal to Muslim consumers around the world. There is evidence to advocate that religious beliefs can influence purchase behavior and response to branding and advertising messages. Branding is about addressing consumers' values and desires. If an MNC wishes to tap into a market of 1.5 billion people, it has to satisfy the needs of that market and pitch with the market's values in mind. Marketing of products and services in the Muslim world presents a very perplexing task to MNCs due to the difference in political, economic, and socio-cultural aspects of this group. However, this group cannot be ignored as they represent 20% of the world's population—a figure that is expected to rise to 30% by 2025. Currently, more MNCs are taping this big market with messages that appeal to Muslim values. While this may be happening, very little has been written academically about marketing to Muslims. The purpose of this paper is to present actual cases of how MNCs tailored their brands and promotions to target Muslim consumers in the Middle East. Analysis of such cases would reveal managerial decision-making framework that relates Islamic values to the implications for advertising in general and branding in particular. The paper will also strive to answer questions like: Is Islamic branding a myth or a reality? Is it appropriate to approach branding based on religion? Conclusions and recommendations will be provided for international marketers developing messages and brands for Muslim consumer segments. The study gains its significance from two major factors: (1) The sheer size of the Muslim consumer market; (2) the novelty of the topic itself as it remains conspicuously under-researched.

Keywords: Marketing; MNCs; Brand Management; Muslim Consumers; Halal Products.

The Effects of Legibility on Behavioral Intentions through Pleasure and Dominance Emotions: The Case of Business Events

Deniz Yüncü

Abstract

This research built a conceptual model to show how attendances' perceptions of event legibility influence behavioral intentions through emotions in the seminar as a business event. An Mehrabian-Russells' PAD model was proposed to explore the linkages between customers' perceptions and emotions (pleasure, arousal and dominance) and between customers' emotional states and behavioral intentions. Structural equation modeling was employed to test the causal relationships among the hypothesized relationships. Based on customer surveys, the findings are that organizational clarity had significant effects on the attendance pleasure while wayfinding and devices had significant effect on attendances pleasure and dominance. In addition, pleasure and dominance had significant effect on behavioral intentions.

Keywords: Servicescape, Legibility, Emotions, Behavioral Intentions, Business Events, Seminars.

Introduction

Servicescape is a topic both on tourism and marketing and has been investigated for the last twenty years. Especially, it is a subject that has been investigated on various branches of tourism: hotels, restaurants, cruises, congress, festivals, and sport facilities. One of the most common models which is Stimuli-Organism-Response Model (SOR) of Mehrabian and Russell has been used to examine the emotional and behavioral responses of tourists/costumers of servicescapes in this study.

Mehrabian and Russell's Stimuli-Organism-Response Model (SOR) is one of the most influencing models which explains the effect of physical environment on human behavior. At this model, an individual's emotional responses are placed as a means between environmental stimuli and behavior. Physical environment or environmental stimuli initially affect the emotional reactions of a person, and then these emotional reactions affect a person's behaviors toward the environment which is defined as approach or avoidance. The SOR model was analyzed and it was found that this model is valid in various service environments such as in retail stores, hotel management (Namasivayam&Lin, 2004; Heide&Gronhaug, 2006; Mattila 1999; Contryman&Jang 2006; Sim et al., 2006), catering management (Tse et al., 2002; Andaleeb&Conway, 2006; Ryu&Jang, 2007; Namasivayam&Mattila, 2007; Jang&Namkung, 2009; Kim&Moon, 2009), festivals (Lee et al., 2008) and sport facilities (Wakefield& Blodgett, 1996; 1999; Hightower et al., 2002).

The aim of this study is to investigate the effects of legibility categorized as an experimental servicescape in terms of seminars, one of the tourism facilities, on participants' emotional responses and behavioral intentions. When studies related to legibility were examined, it was observed that quite limited studies had been conducted in environments where tourist/participant-environment interactions occur, such as in retail environments. In terms of tourism literature, except the studies of Newman (1995; 2007) and Foxall and Hackett (1994), none of the studies examined in the related literature did not investigate tourism experience and environment legibility. However, as it is known, tourism is a phenomenon which includes individuals' travels to foreign places. Nevertheless, according to most relevant research, there is a focus on general servicescapes such as atmosphere and ambiance, and it was observed that in terms of investigation, legibility dimension was ignored which has a vital contribution on shaping customers' experiences.

Because of these reasons, especially, the legibility dimension which enables the individual to move easily in a foreign environment and enrich his/her experience should be investigated. In this study, the effect of legibility dimension as a part of a seminar event, which is defined as an experimental servicescape, one of the most popular business facilities, on relationship between participants' emotional responses and behavioral intentions was investigated. More specifically, the aim of this study is to investigate:

1. the effect of legibility dimensions on participants' emotional responses
2. the effect of participants' emotional responses on behavioral intentions.

Literature Review

Servicescape and Legibility

Studies showed that servicescape has a great effect on customers' product perception (Donovan&Rossiter, 1982; Turley and Milliman, 2000). In marketing literature, as a servicescape dimension "legibility" was first examined by Foxall and Hackett (1994) for its spatial feature of an international congress center. In the study, the legibility of the congress center was investigated as one dimension which was called as "wayfinding". Another study on legibility was conducted by Newmann (2007) who tried to define the legibility dimensions and to determine the effects of these dimensions on airport visitors' emotional responses. In the study, the legibility dimensions of an airport was investigated in two dimensions which were "place organization" and "wayfinding".

Although there has been limited number of studies on the concept of legibility, in the field of environmental psychology, legibility is considered as a theoretical basis and many studies were conducted. Legibility has been defined as an environmental stimulant in the field of environmental psychology (Lynch, 1960; Kaplan&Kaplan, 1978; 1979; 1995; Weisman, 1981; Passini, 1984), and as an extension of servicescape in the field of environmental tourism and marketing (Foxall&Hacket, 1994; Titus&Everett, 1995; Newmann, 1995; Newmann, 2007).

In general, legibility is an environment being able to form a mental image and the probability of being able to organize it as a consistent pattern (Lynch, 1960:2). In the preference matrix model developed by Kaplan and Kaplan (Kaplan and Kaplan, 1978; 1979; 1992; 1995), legibility was considered as an environmental stimulant in individual's place references and defined as constructing a place with distinctive elements in a good way to enable the individual find his/her way in the environment and turning back to his/her starting point easily. According to Kaplan and Kaplan, the basic need for information related to certain environments and places affects individual's differences (Kaplan, 1995: 58). Moreover, Passini (1984: 6) defines legibility as creating meaning on the targeted information and as the environment being convenient for inferring the information and as environment quality. This definition emphasizes that environmental legibility plays a vital role for customers in finding their way/directions in the service environment (Titus&Everett, 1995: 107). When these definitions are considered closely in relation to tourism and event experience, it is seen that legibility plays an important role for tourists or event participants while they find their ways and try to reach the information they look for in the physical environment.

The first study on legibility was conducted by Lynch (1960). Lynch (1960:2) investigated legibility as a psychological structure and defined legibility as realizing an environment easily and the easiness of organizing it with a specific pattern. According to Lynch, a legible environment can be a concrete reference system or an information organizer. It is seen that to explain the legibility concept in the field of environmental psychology, various researchers investigated various dimensions (concepts) such as organization and clarity (Lynch, 1960; Nasar, 1994, 2000; Oostendorp&Berlyne, 1978; Deng and Poole, 2012), wayfinding (Lynch, 1960; Weismann, 1981; Passini, 1984), signing/ equipment (Lynch, 1960; Newmann, 1995, 2000; Doğu&Erkip, 2000). Similarly, Köseoğlu (2012) stated that in the literature, it is seen that different dimensions were used such as order, simplicity, consistency, intelligibility and perception and all these concepts express the features which exist because of the structure of the place (Köseoğlu, 2012). The subdimensions of the concept legibility determined after the literature study are presented below.

Organizational Clarity

Lynch used the concept legibility as a spatial organization and used the term "order" to explain legibility. In addition to Lynch, Nasar (2000; 1984) used the terms "order" and "clarity" to examine the legibility dimension. Nasar (1984) used the concepts conformity, legibility and clarity together to explain the relation between "term" and environmental organization, and stated that the concept "order" is related to environmental organization. In this aspect, order is defined as the quality and the quality degree of the balanced relation among the parts of the environment and place (Nasar, 2000). Clarity reflects the definability of various elements which are closely related and the process of realizing an environment (Deng&Poole, 2012). Similar to the definition of clarity/order factors by Nasar (1984), Ostendorp and Berlyne (1978), the "order" dimension is related to environment organization such as suitability, similitude and clarity capacity/size. While conformity, suitability and similitude concepts are related to how elements improving the harmony of the environment is brought together, legibility is the ability to organize and to realize all parts of the place in a harmonial pattern which include all these concepts (Lynch, 1960).

Wayfinding

Another dimension taken into consideration while investigating the legibility concept is wayfinding (Lynch, 1960; Weisman, 1981; Passini, 1988; Newman, 2007). Basically Lynch (1960) defined legibility as easy wayfinding of an individual in an environment and well-construction of certain elements in the place so that the individual finds his/her way in turning back to the starting point easily. Similarly Weisman (1981) defined legibility as an element that aids the individual in wayfinding in a physical environment. Moreover, Passini (1988) defined legibility as easing the information quality in a place or an aid for wayfinding in a physical environment. Considering these, it is seen that not only the dimensions of order and clarity but also wayfinding is a structure that provides environmental legibility.

Devices

Devices used in an environment are elements that provide wayfinding, and as a result, support the legibility of an environment. Maps, signs and other visual elements are defined as necessary elements for wayfinding in an inexperienced place (Doğu&Erkip, 2000). It is possible to define event programs which are printed during the event and published on websites virtually as a means that provides legibility within the scope of the events. Event programs prepared for this purpose can be examined as an important factor in providing the legibility of the event.

Legibility, Emotional Reactions and Behavioral Intentions

To understand the effect of legibility, which is effective on a participant of an event like in physical places, defined as an environmental stimulant on individual's emotional, cognitive and behavioral responses, it is benefited from environmental psychology which studies human-environment interaction. In environmental psychology, various models which explain the effect of the stimulants in physical environment on human behavior were developed. The most commonly used model among these developed models in the field of marketing and tourism is Stimulus-Organism-Response (SOR) model developed by Mehriban and Russell (1974; 1976) (Figure 1).
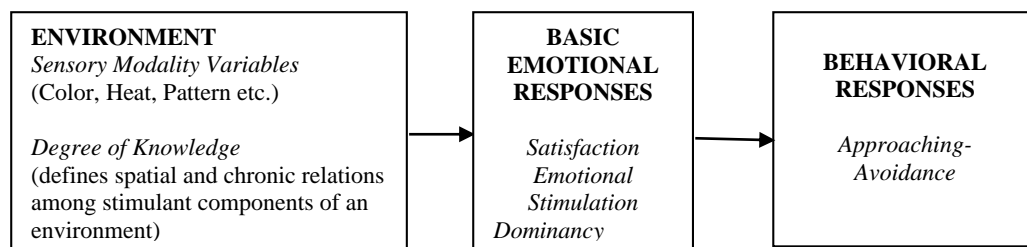
Fig. 1. Mehrabian-Russell's Stimulus-Organism-Response Model
Reference: Adapted from Mehrabian, A.&Russell, J. A. (1976)

According to SOR Model, environmental stimuli (S) cause emotional response (R) on the individual. These emotional responses which are defined as approach and avoidance effect the behaviors of the individual toward the environment/organism (O). Although this model by Mehrabian and Russell was not developed for different consumption environments such as retail stores, hotels, restaurants and facility places, it is the most accepted model to explain servicescape effects on customer behavior (Donovan&Rossiter, 1982; Donovan&Nesdale, 1994; Wakefield&Baker, 1998; Lin, 2004).

The Effect of Legibility on Emotional Response

According to M-R Model, environment effects an individual's behavior via the changes in emotions. Mehrabian and Russell think that in environmental circumstances, three basic emotional states intervene the approach-avoidance behavior. In M-R model, emotional responses were measured by emotional stimulation and dominance scale (PAD Scale). Pleasure, emotional stimulation and dominance towards environmental stimuli are three orthogonal dimensions which are the basis for any emotional responses, and they are emotional expressions that are evaluated based on the individual's own statement. Pleasure is related to feeling good, happy, joy and the degree of satisfaction in a particular situation (Mehrabian&Russell, 1976: 18). Mehrabian and Russell considered emotional stimulation as an emotional dimension which is different from Berlyne (1967: 12) who defined it as a process in central nervous system. Emotional stimulation is defined as an emotional expression with one dimension which is lined towards over excitement of sleeping state and it is stated that it is related to the degree of excitement, move, or feeling his/herself active during an emotional stimulation state

(Mehrabian&Russell, 1976: 18). The feeling of dominance depends on the feeling of not being restricted or on the various ways of movement freedom. The dominance feeling is defined as the individual's feeling of control of his/her state. This feeling can be prevented by organisms which restrict the behavior forms or by organisms which ease different behavior (Mehrabian&Russell, 1976:19-20).

In the field of marketing and tourism, four basic theories taken from psychological literature are used to explain the emotions on consumers caused by consuming experience. These are Izard's (1977) DET-Differential Emotions Theory, Plutchik's (1980) CME-Circular Model of Emotion, Mehrabian and Russell's (1976) PAD-Pleasure Arousal Dominance and PANAS Positive and Negative Affect Schedule order models. Among these models, because of the advantages that PAD model offers, the PAD scale is preferred to be used in many studies measuring consumers' emotional responses in the field of marketing. Firstly, when compared with other emotional models, bipolar PAD Scale by Mehrabian and Russell is found more beneficial since it includes also the low level stimulant effect. At the same time, Holbrook (1986) stated that Russell's model does not include discriminant validity problem. Furthermore, Wirtz (1994) stated that the prediction and explanation power of bipolar emotional model provides a very good external validity. Therefore, when the marketing and tourism literature is examined, it can be seen that Russell's cylical bipolar affective scale is used in most of the studies that examine consumption and the emotions that depend on this consumption.

In the field of tourism, it is stated that servicescape has positive effects on customer pleasure and on their emotional stimulation feelings in studies which were conducted in various consumption places such as hotels, restaurants and events. It has been determined that Ryu and Jang (2007) in large scale restaurants, Kim and Moon (2009) customer satisfaction of ambiance in thematic restaurants (Ryu&Jang, 2007; Kim&Moon, 2009) and emotional stimulation (Ryu&Jang, 2007) are the most powerful effects of servicescape on emotions. Kim and Moon (2009) found that besides ambiance, seating comfort, seating order and electronic equipment have an effect on the feeling of satisfaction. In addition, Lin and Mattila (2010) the theme decoration of the restaurant have a positive effect on customer satisfaction and emotional stimulation and only this effect is created in lower level in emotional stimulation dimension. Wakefield and Blodgett (1994) found that in the servicescape of stadiums where sport facilities take place, there is a direct correlation between the aesthetic appearance of the stadium with its crowd and seating order and the functional features and the variable of emotional stimulation which is defined as the excitement level of audience. In the study on festivalscapes, Lee and the others (2008) found that the festival program content, festival staff, festival place, food, gifts, suitability and marking have a direct effect on festival participants' positive emotional responses.

The Effects of Emotional Response on Behavioral Intentions

In the S-O-R Model of Mehrabian and Russell, it is stated that an individual's behaviors affected by the feeling of satisfaction which appears by being affected by the stimulants in the environment is caused by the feelings of emotional stimulant and dominance (Russell&Mehrabian, 1978: 355). Researchers defined all the responses that an individual gives as approach and avoidance. While the approach behavior is defined as the desire of being in a physical environment, interaction with the environment and with the individuals in the environment, acting together, discovering the environment, carrying out the given task or as the desire of improving the satisfaction level, avoidance is defined as just the opposite of these behaviors.

In the studies conducted in the field of tourism, the findings showed that the emotional response caused by servicescape defined as environmental stimulant in consumption environments are closely related to behavioral intentions of customers. Ryu and Jang (2007), Jang and Namkung (2009), Kim and Moon (2009) studied the effects of servicescape on behavioral intention. In these studies, it was observed that via emotional responses, servicescape is directly related to behavioral intentions such as revisit, recommendation, staying in the restaurant for longer and spending more money. It was seen that at places where the facilities take place such as sport stadiums and festival places, emotional responses caused by servicescape have effects on behavioral intentions of the facility participants (Wakefield&Blodgett, 1994; Wakefield et al., 1996; Lee et al., 2008).

Hypotheses

It is seen that servicescape has effects on customers' or participants' emotional responses and behavioral intentions via the related literature. Depending on this, Figure 2 displays causal relations among emotional responses, behavioral intentions and legibility structures defined as an extension of experimental servicescape in seminar which is an event with business purposes. Subsequently, the model with its legibility dimension examines the causal and structural relations between emotional responses

such as satisfaction, emotional stimulant and dominance and behavioral intentions. Hypothetically, organizational clarity, wayfinding and devices effect the emotional responses of seminar participants and then the emotional states effect the behavioral intentions. Thus:

h_{1a}: Organizational clarity has a positive effect on pleasure

h_{1b}: Organizational clarity has a positive effect on arousal

h_{1c}: Organizational clarity has a positive effect on dominance

h_{2a}: Wayfinding has a positive effect on pleasure

h_{2b}: Wayfinding has a positive effect on arousal

h_{2c}: Wayfinding has a positive effect on dominance

h_{3a}: Devices have a positive effect on pleasure

h_{3b}: Devices have a positive effect on arousal

h_{3c}: Devices have a positive effect on dominance

h_4: Pleasure feelings have a positive effect on behavioral intentions

h_5: Arousal feelings have a positive effect on behavioral intentions

h_6: Dominance feelings have a positive effect on behavioral intentions
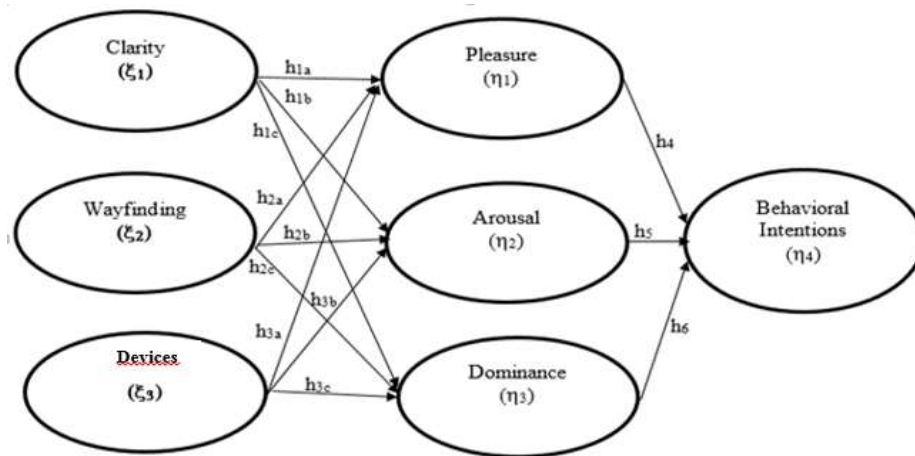
Fig. 2. A proposed hypothetical model

Method

Study Seminars and Sample

The population of the study was from the VII. Research Method Seminar organized in Antalya. Research Method Seminars have been organized since 2002 to improve knowledge and experience on research methods and techniques for academicians and post-graduate students. In the study the whole population participated in the study and the study included 230 seminar participants. Data of the study were collected through face to face questionnaire. On the last day of the seminar, the questionnaire were given to 230 seminar participants and 134 completed questionnaires were taken into consideration.

Scale Development and Questionnaire

The Scale of Events' Legibility

It is seen that to explain legibility in the field of environmental psychology different dimensions are used: Simple, consistent, understandable, perceivable etc. All these concepts express the features that result from the place structure. There is a need to differentiate place dimensions to measure place legibility using these concepts (Köseoğlu, E., 2012). Therefore, in this study, to measure the legibility of an event, the dimensions of the events was differentiated and the legibility dimension was evaluated with organizational clarity, wayfinding and devices.

Each event has its own particular physical environment and various features. An event's servicecape is multidimensional and retails stores compared to other service environment such as malls are much wider and complicated. Moreover, in the present literature, no legibility scale developed for an event exists. Because of these reasons, there is a need to develop a scale to determine and define the basic structures which form the legibility dimension of seminar events.

The scale development study was based on the scale development paradigm suggested by Churchill (1979) and other researchers (Anderson&Gerbing, 1988). In the first stage, basic structures forming the legibility concept were determined based on the related literature review conducted by the researcher. Elements that form legibility of an event in the field of environmental psychology, evolutionary aesthetics, and marketing are determined as: *"Organizational clarity"* (Lynch, 1960; Nasar, 1997; 2000; Kaplan&Kaplan, 1995), *"Wayfinding"* (Lynch, 1960; Foxall&Hacket, 1994; Newman, 2007), *"Devices"* (Kaplan&Kaplan, 1995). After this stage, at the stage that was suggested by Churchill (1979) as the second stage, to determine the expressions, again literature review was carried out and 22 items were determined. Considering this, the studies of Lynch (1960), Passini (1988), Weisman (1981), Titus and Everett (1995) and Newman (2007) were taken as basis for this study. The third stage includes simplifying the scale which includes items determined at the first stage, literature review and it includes determining the content validity of the scale. At this stage, one expert instructor fin the field of environmental psychology and two expert instructors in the field of tourism were asked to evaluate the items/expressions in the scale determined at the second stage. This stage was conducted to be certain about the expressions that represent the scale dimensions. As stated in previous studies, in general, university instructors act as experts or referees of the dimensions of a scale (Anderson&Reynolds, 2003; Babin&Burns, 1998). At this stage, the instructors were given the conceptual definitions of the dimensions which provide legibility of an event and they were asked to evaluate each expression that represent the dimensions. In addition to this, the instructors were asked to check the clarity of the words, in the expressions, the length and form of the expressions. As a result of this stage, two items were taken out of the scale and the number of items decreased from 22 to 20. At the fourth and fifth stages the data were collected and via exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) scale simplification study was conducted. The pilot study stated by Churchill could not be conducted since the seminar was not organized for the second time in the same year.

PAD Scale

In addition to the legibility scale in the study, the PAD (Pleasure-Arousal-Dominance) scale developed by Mehrabian and Russel (1976) was used in the study to determine the emotional responses which the seminar participants display legibility. The original version of the PAD scale was developed in English by the researchers. The scale was adapted to different languages to measure the emotional response of customers/participants from different cultures by various researchers (Russell et al., 1989; Chebat&Morrin, 2007; Davis et al., 2008; Brengman, 2002; Soriano&Foxall, 2006). Nonetheless, since the Turkish version of the scale does not exist, there was the need to adapt the scale to Turkish language initially. Translation equilavence method was used for the Turkish adaptation of the scale because this method is the most commonly used method to carry out the comparability study of the scale in different languages (Brislin et al., 1973; Mullen, 1995; Soriano&Foxall, 2006). The translation equivalence of the scale can be achieved by translating and retranslating the scale (Brislin et al., 1973; Mullen, 1995). Berry (1980: 10) states that translation equivalence, one of the methods of conceptual equivalence operational method, is the translation of the scale from its original language to the target language by a bilingual person and the retranslation of the scale to its original language by another person. Nevertheless, Mertens (1998) stated that it is important to avoid word to word translation but to consider linguistics, cultural and regional features of the language during the translation process. To achieve the Turkish equivalence of the scale, at the first stage, the original PAD scale was translated into Turkish by three university instructors who teach English at university. The aim of the use of the emotional expressions in the scale was explained to the instructors and they were asked to translate the English emotional expressions of the scale to Turkish. After the first translation, problems occurred in direct translation of these adjective pairs which took place in the original scale: "awed-important", "aroused-unaroused", "controlling-controlled, "influenced-influential"; "in control-cared for". However, at the first stage, the original expressions in the scale were directly translated into Turkish by the instructors. At the second stage, a university instructor whose native language was English but taught Turkish in Turkey was asked to translate the Turkish scale to English. At this stage, the English translation of the adjective pairs which were pointed as problematic in the Turkish translation process was not consistent with the expressions in the original scale. Thus, the problematic adjective pairs were translated to adjectives which have similar equivalence in Turkish without losing their meanings. In the related literature, it was seen that researchers who used the PAD scale in their own languages experienced problems and changed these adjectives in a way that would not cause the loss of their meanings.

Behavioral Intention

To measure the behavioral reactions of seminar participants in this study, behavioral intention scale which was developed by Zeithaml, Berry and Parasuraman (1996) and includes revisit intention dimensions and word of mouth communication (WOM) as determining factors.

Questionnaire

The questionnaire consists of 20 expressions to determine the legibility dimensions of the event, 15 expressions to determine the emotional responses towards the legibility of the seminar participants, and three demographic questions to determine the demographic information of the participants. The scale expressions related to the legibility and behavioral intention were structured as 7-point Likert scale. Also, a separate column, *"No idea"* was added to the scale for the participants who did not have an idea about the given expression, and data expressed as "no idea" was entered as lost data during the data analysis.

In the study, the emotional responses caused by satisfaction, emotional stimulation and dominance dimensions were measured by semantic differential scale which uses opposite adjectives, has 7 points, and is a bipolar degreed scale (Osgood et al., 1957; Heise, 1969; Al-Hindawe, 1996). Questions related to the demographic information of the participants were designed as a nominal scale and where only one choice can be selected.

Data Collection and Data Analysis

At the data analysis preparation stage, initially the missing data problem was worked on. To solve the problem of missing value situation, LISREL 8.8 program was used by applying the multiple-imputation method. In addition to the missing data problem, the data distribution was examined to determine the techniques used for the exploratory and confirmatory factor analysis. The critical kurtosis value is 2 and for skewness it is defined as 2 in statistics (Hair et al., 1998). The variables related to the data of this study was found between the determined range of kurtosis and skewness. Therefore, it was accepted that data related to variables displayed normal distribution and principle component analysis and varimax techniques in exploratory factor analysis were used.

Results

Exploratory Factor Analysis and Confirmatory Factor Analysis

Legibility Scale

To assess the dimensionalities of legibility constructs, an EFA was conduct with Varimax rotation. The EFA results revealed three factors for the legibility construct explaining 72.28% of total variance. The first dimension labeled clarity, comprised nine items that were representative of respondents' perceived *organisation clarity*. The second dimension labeled *wayfinding* comprised five items representing respondents' easily wayfinding in seminar's hotel. The third factor labeled *devices* comprised three items representing respondents perceived information of seminar' program. The reliability coefficients calculated were .94 for organisation clarity, .82 for wayfinding, .77 for devices. CFA was then conducted on the three-factor legibility construct with correlation matrix and maximum likelihood estimation. Based on the results of the first CFA made one modification between items (C1 and C5 items). When made modification between items, X^2/df was 1.8, which is below the desired threshold of 2.0. The goodness-of-fit indeces reflected acceptable fith with RMSEA of 0.08 which is satisfactory. The other goodness-of-fit indices were all above their cut-off values with the CFI (CFI= .95), the GFI (GFI=.83) and the IFI (IFI=.97). These results suggested that the measurement model adequately fit the data. The psychometric properties of each latent structure were evaluated separately through examining the completely standardized loading, t-value, R^2, construct reliability and average variance extracted. As seen Table 1, the standardized loadings (above .40), t-values (above 1.96 for p=0.05), construct reliability scores (above .70) and average variance extracted measures (above .50) lend evidence to the convergent validity for event' legibility scale.

Table 1. CFA for Legibility Scale

	CSL	t value	R^2	CR	AVE
Organizational Clarity				.94	.67
C1 The seminar web site provides sufficient info. about payment	.83	7.40	.68		
C2 The seminar web site content is easy to understand	.92	6.18	.85		
C3 The seminar web site provides understandable info about application procedure	.85	7.46	.71		
C4 The seminar web site is easy accessible	.84	7.08	.71		
C5 The seminar web site provides sufficient info about conference hotel.	.73	7.85	.54		
C6 The seminar web site's content is well organized	.86	6.86	.75		
C7 The seminar web site provides sufficient info about seminar	.81	7.59	.65		
C8 The seminar web site provides all the info I require about seminar	.81	7.46	.66		
C9 The seminar web site is legible.	.66	7.98	.43		
Wayfinding				.83	.50
W1 Architecture of the hotel helps way finding	.81	6.01	.66		
W2 Hotel's entrances and exits are easy to find	.76	6.62	.58		
W3 It's easy to move through hotel corridors	.74	6.82	.55		
W4 Rest rooms of the hotel are large enough	.51	7.84	.26		
W5 The hotel is easy reachable	.67	7.31	.45		
Devices				.82	.62
E1 The seminar programme provides sufficient info about educations	.89	4.96	.79		
E2 The seminar programme is settled easy understandable.	.92	3.92	.84		
E3 The seminar schedule is settled clearly	.47	8.04	.22		

PAD Scale

The EFA results revealed two factors for the PAD scale construct explaining 68.15% of total variance. The first dimension labeled pleasure and second dimension labeled dominance. The reliability coefficients calculated were .937 for pleasure, .843 for dominance. CFA was then conducted on the two-factor PAD construct with correlation matrix and maximum likelihood estimation. X^2/df was 1.2, which is below the desired threshold of 2.0. The goodness-of-fit indeces reflected acceptable fith with RMSEA of 0.04 which is satisfactory. The other goodness-of-fit indices were all above their cut-off values with the CFI (CFI= .99), the GFI (GFI=.93), the IFI (IFI=.99), the NFI (NFI=.98) and the SRMR (SRMR= .03) . These results suggested that the measurement model adequately fit the data. As seen Table 2, the standardized loadings (above .40), t-values (above 1.96 for p=0,05), construct reliability scores (above .93 for pleasure and .79 for dominance) and average variance extracted measures (above .67 for pleasure and .56 for dominance) lend evidence to the convergent validity for PAD scale

Table 2. Overall CFA for the PAD Scale

	CSL	t value	R^2	CR	AVE(%)
Pleasure				.93	.67
Unhappy-Happy	.84	12.10	.71		
Annoyed-Pleased	.80	10.96	.64		
Unsatisfied- Satisfied	.84	11.92	.71		
Melancholic-Contented	.85	12.27	.73		
Despairing-Hopeful	.85	12.06	.72		
Bored-Relaxed	.81	11.24	.65		
Dull-Jittery	.77	10.57	.60		
Dominance				.79	.56
Submissive-Dominant	.91	12.17	.83		
Insignificant-Important	.57	6.79	.33		
Guided-Autonomous	.74	9.39	.55		

Testing the Structural Model

After confirming the measurement models, the structural model was examined. The results of the standardized parameter estimates and t-values are reported in the Table 3. To identify the fit of the structural model, the overall fit index and supplementary goodness-of-fit indices were used. The Chi-square value ($X^2_{(134)}$=42.41) was found as significant. However, other fit indices indicated a marginally acceptable level (RMSEA= 0.026, GFI=0.094, AGFI=0.89, CFI=0.99, SRMR=0.053). As shown in Table 3, organizational clarity, wayfinding and devices have a significant influence on visitors' pleasure feelings while wayfinding and devices have significant influence on visitors' dominance feelings. According to these findings, h1a-h1a and h3a-h3c supported. Furthermore, as hypothesized in h4 and h6 visitors' pleasure and dominance feelings were found to have a significant effect on behavioral intentions

Table 3. Structural Model: Standardized Coefficients, t-values

	$\square_\square$ Pleasure	$\square_\square$ Dominance
$\square_\square$ (Organizational Clarity)	$\square_{\square\square\square}$=.54 **(3.75)****	$\square_{\square\square\square\square\square}$.24 (1.54)
$\square_\square$ (Wayfinding)	$\square_{\square\square\square}$=.25 **(2.23)***	$\square_{\square\square\square\square}$ .25 **(2.02)***
$\square_\square$ (Devices)	$\square_{\square\square\square}$=.72 **(5.33)****	$\square_{\square\square\square\square}$ .34 **(2.28)***
	Behavioral Intentions	
$\square_{\square\square}$(Pleasure)	$\square_{\square\square\square\square\square\square\square}\square\square\square$ **(8.11)****	
$\square_{\square\square}$(Dominance)	$\square_{\square\square\square\square}$ .17 **(2.18)***	

*p=<0.5, **p=<0.1

Discussion

The study explored the relationships among events' legibility, attendances' emotional responses (pleasure and dominance) and behavioral intentions based on environmental psychology and marketing literature. Based on M-R model, current study proposed a theoretical model and tested it in a seminar as a business event. The most contribution of the current study is in its empirical demonstration of how event attendance perceive legibility and how perception directly influences attendance emotions and indirectly affects their behavioral intentions.

The scale developed in this study provides an opportunity for quantitative measurement of legibility structure which is measured qualitatively and is explained more conceptually in particularly in the field of environmental psychology. Different from the studies focusing on the environment of the building at testing servicescape and legibility, in the present study, the legibility dimension also includes multiple places such as hotels and destinations where the event takes place rather than the solely physical place and websites as virtual event environment. Considering this, different from the other studies, in this study, not only the legibility of the physical place but also the virtual website which is a part of event experience were considered as an environment which the event takes place. In the studies conducted in the field of marketing, legibility dimension was considered as one structure but the dimensions which are the basis for that structure were ignored. In this study, the dimensions which are the basis of legibility were investigated considering both physical place and virtual place and with this purpose, this study benefited from studies in the field of environmental psychology. Thus, it is though that more comprehensive approach was provided to understand the structure of legibility in detail. This study identified three dimension representing event legibility (organization clarity, wayfinding and devices) and examined how these legibility dimensions influence attendances emotions and behavioral intentions.

Kaplan and Kaplan (1979; 1987; 1992; 1995) who explained legibility in terms of evolutionary aesthetics which focuses on tracing in the stages of mankind development process of the individual's environment preference stated that basic information need related to specific environment and places effects individual's preferences; and therefore, "clarity" is an important element related to the individual's preference of the environment/place and the interpretation of these places. Similarly, it is seen that this approach is also valid for event experience. In the study, it was found that "organizational clarity" is important for the occurrence of satisfaction of the participants which in turn influences participant behavioral intentions. As it is known, an event website can be considered as a virtual environment which

informs seminar participants and prepares them for their potential experiences. Moreover, the event program prepared can be defined as another element which provides information which shapes event experience of the participants. Thus, the information presented for the participants in the websites and event program provide the participants the opportunity to understand and interpret the event experience by the help of the organization, presentation and amount of the information presented. In line with this, when the event planners design the event websites, it would be effective for them to consider the necessary information related to the processes before and during the event in terms of forming the participant satisfaction and it would be effective for the participants' reattend to the event.

The study revealed that wayfinding and devices which provide the legibility of the seminar event are effective on participants' satisfaction feelings. The findings obtained from the present study show that the classic approach presented for cities by Kevin Lynch is valid also for event experience. The basic principle which Lynch (1960: 49) points for the legibility of a city or place is individual's easy understanding the place organization and signs and finding their way and directions effectively. Similarly, the architecture or place organization of the hotel where the seminar is organized enables the participants find their ways and directions in the hotel and this causes the emergence satisfaction feeling of the participant and the reparticipation to the event. It is believed that at the event preparation stage, the architecture and place organization of the hotel where the event takes place should be considered at the first hand during the hotel choice.

Furthermore, in related literature, limited number of studies on measuring the dominance feeling of the customers have been conducted. Donnovan and Rossiter (1982), who investigated the effect of servicescape on customers' dominance feelings, stated that ta causal relation could not be found between retail environment servicescape and dominance feeling. However, different from the mentioned study, in this study, a positive causal relations was found between wayfinding and devices dimension and participants' dominance feelings. Moreover, the arousal dimension, which was measured by using the PAD scale developed by Mehrabian and Russell (1976), was omitted from the analysis since it could not provide distinguishing validity and it was not used in the theoretical model analysis. It is believed that the reason for this result is the emotion which is stated at the translation equivalence stage which includes the adaptation of the adjectives in this dimension into Turkish, and along with the hardship experiences, the participants were not able to exactly understand the adjective pairs in the arousal dimension. Therefore, there is a need for a study which aims at determining the adjectives to be used in arousal dimension in the Turkish scale.

Several limitations of the present study should be mentioned. First, since data from this study were collected from participants of seminars as business events, results may not be generalized to other types of the business events. Second, although the sample size (N=134) in the study seems enough for structural equation modelling, it is quite low. In addition, the use of a convenience sampling approach could decrease external validity. Thus, future studies should consider developing a systematic design to better represent the population.

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The Cluster Activities in Sustaining the Competitive Advantage and an Overview of Cluster Activities in Turkey

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Abstract

The concept of cluster which Alfred Marshall defines, as the foundation of industrial areas/concentrations, in recent years has become one of the most popular concepts especially with Michael Porter's perspective on the subject and his definitions. In today's competitive structure, large-scale enterprises, are always ahead of the race to complete and especially small and medium-sized businesses remain behind in the competition thus the importance of the concept of clustering, started to be understood more clearly. Especially for SMEs, providing a competitive advantage in the clusters has a leverage effect. Clustering activities, providing a number of benefits in terms of innovation, cost efficiency and, manufacturing, and started to be more common in the industrial sector, and especially the surveys in the world have proved that the clusters made important contributions in the service sector. In this study, the cluster activities created in Turkey so far will be examined in general, the deficiencies and cluster gains from operations will be analyzed.

Keywords: Clustering, Competitive Advantage, The SME

Introduction

The economic, social, cultural transformation and changes have affected the conditions of competition and changed them a great deal. Now many of today's businesses act together and tend to be able to continue their activities in collaboration rather than polarization. Undoubtedly the new economy we are in, defined also as the digital economy era, has a considerable effect on the formation. Especially with the impact of information and communication technology, businesses are finding the opportunity to access all kinds of information, consisting of all the new trends in the world easily and follow them closely. In today's global market one of the most frequently encountered trends in recent times, is "clustering".

Clustering is the activities carried out in collaboration by the businesses and supporting organizations in a specific geographic region, and a specific place in the value chain of the sector to achieve a determined common goal. Although there are many different elements in the emergence of clusters, the primary ones are; closeness to the natural resources/raw materials, closeness to the physical characteristics and cultural traditions and customs. Clustering as a means to increase competitiveness, especially emerges as a model for small and medium-sized enterprises. Value chain is an effective key to gain competitive advantage on the other hand clustering provides businesses significant gains in subjects that can help to be more competitive such as; innovation, cost advantages, quick acting, producing better quality goods and services, quick access to information, focusing R&D activities.

Clusters, usually naturally occurring embodiments. However, in time with support from many institutions, the size of the cluster and its competitive structure can progress in a positive sense. Although on the basis of cluster formation, the company/companies is the focal point, universities, different educational and research institutions, supporting organizations, institutes, development agencies, the business community and the state have very important roles. Successful clusters thanks to these actors are able to continue their activities.

The Cluster Concept

Clustering based on Marshall'sconcept of industrial zone became legendary with Michael Porterand has become more applied for the last 20 years. The first studies on clustering and is referred to Marshall. Marshall's (1890) "Principles of Economics " is considered a classic among the studies on this subject. In this study, Marshall, has examined the industrial concentration and found that this concentration has a positive contribution in terms of finding workers for the firms in the region (Quotedin: Asheim et al. 2006: 5). In the 1990s, the direction of cluster studies has been changed by Porter. Porter (1990), in his book " The Competitive Advantage of Nations ", has argued that the main force behind the cluster concept is the local competition. Porter raddressed the issue that the success of a nation's export

companies depend on Competitive Diamond where the national factors exist. The great erinteraction between the input conditions, demand conditions, business strategy andcompetitive structure and related/supporting organizations forming the competitive diamond, the higher productivity of the firms will be achieved.

According to Porter, the increasing level of prosperity, depends on high productivity of firms in the country orregion and to continue in this situation on a stablemanner. Porter (1998) in one of his studies has examined competition in the new economy and investigate the effects of clustering on the competition.

In addition to the important work of Marshall and Porter, many studies on clustering have been done in time. Some of these studies are: Enright (1998), in his study aimed to identify the similarities and differences of clustering based strategies that emerge in countries and regions dealing with globalization–localization connection points. Industries and companies trend towards globalization in the direction of (sub-national) regions of the importance of the distinctive features of the reduction of the impression emerges in the opposite direction, some industries and economic activities localization tendency simultaneouslyarises. Rosenfeld (2002) in a study he carried out, stated that clusters pass through certain stages and have a life cycle. Walter W. Powell (1990), examined the network structure in high-techregional economies and vertically integrated network area sand gave examples of network structure in theseareas. Philip Cooke (2002) who is known for his studies on clustering and local innovation systems examined bio-tech industry cluster in one of his studies. The study has identified a way that shows the local sectoral innovation systems work at the local regional level, also gave some examples from Cambridge, and Massachusetts (Quoted by: Sharp and Dulupçu, 2010: 444-447).

Although there are many studies conducted on the cluster, there isn't a common definition. According to Michael Porter (1998) the cluster is a combination of firms operating in the same area and businesses, the same value chain, operating in cooperation with each other and at the same time competing with each other and on the other hand the related entities and their supporting institutions (universities, government agencies, professional associations, technology and innovation centers, banks, insurance companies, logistics companies, etc.). ECDO (Economic Cooperation and Development Organization) defines clusters in the following way. Clusters are the manufacturing network of firms that have a strong connection, knowledge-producing agencies and customers. All of the components above are in the same production chain and provide each other added value (ECDO, 1999: 157). UNIDO (United Nations industrial Development organization) defines cluster as a geographical and sectoral concentration of the firms which produce or sell the associated products (Quoted in: Alsac, 2010:8). According to Bulu who has many studies on clustering; clustering is a network formed by firms or businessess including independent suppliers connected with manufacturing chain and add each other added value, knowledge-producing institutions (universities, research institutions, engineering companies), supporting institutions (agencies, consulting companies, banks, insurance companies), customers and clustering supporting related public institutions (such as KOSGEB), civil society organizations and local government (Bulu, 2009: 17). Certain concepts coming out from the the definitions regarding the clustering are; competition, networking, value chain collaboration and sectoral/regional concentration.

Table 1: Definition of cluster and clustering according to some writers

Writer	Year	Definition
Enright	(1996, pp.191)	"Regional clusters are, industrial cluster of member firms that are close to each other. "
Rosenfeld	(1997, pp.4)	"Clustering in the simplest sense can be defined as the concentration of firms that can create synergy, because of their geographic proximity and dependence.
Feser	(1998, pp. 26)	"Economic clusters are not just related and supportive industries or organizations, more often they are competitive and supportive organizations for their connections.
Swann and Prevezer	(1996, pp.139)	" Clusters, is industrial company groups in a given geographical area ,"
Swann	(1998, pp. 1)	"Cluster is a group of large firms in related industries in a particular place. "
Simmie and Sennett	(1999, pp. 51)	"Innovative clusters, can be defined as many connected industrial or service producing firms usually usually in a high degree cooperation by a supply chain by and working under the same market conditions
Roelandt and den Hertog	(1999, pp.9)	"Clusters can be defined as the network of strongly connected firms (including specialized suppliers) and manufacturers. "
Crouch et al.	(2001, pp.63)	"In a general sense clustering; is the tendency of the firms carrying out similar activities, to be installed close to each other. without any obligation ."
Van den Berg, Braun and van Winden	(2001, pp.187)	"Cluster which is a popular definition is mostly related to locak networks."

Reference: Martin, 2002: 15 and 2002, 24 in Lublinski adapted by Alsac, 2010: 9.

Competative Advantage- Clustering Relation

Competitive advantage, refers to organizational capability in a relation to the formulation of strategies that can bring the firm to a more convenient location in the market. Businesses that can use their skills can reach competitive advantage (Timurcin, 2010: 128). Competition, is necessary to survive, whereas to be successful it is essential to be above competition. At today's value economy being above the competition raises a number of important opportunities for businessess, economy, consumers and markets. In the economy, including business and economy, as consumers (Bond, 2008: 86).

 The competitive conditions in the global system make it more difficult for SMES to continue their activities in the market alone. Clusters can create new competitive structures and can provide competitive advantage for the businesses. Clusters, by strengthening the access to specialized inputs, services, labor force, information, facilitating inter-firm coordination, lowering transaction costs, providing a constant comparison of performance, increase business productivity and efficiency. Clustering stimulates innovation by helping to perceive the opportunities which provide the future productivity increase and formation of newer products, and enabling the businesses to foresee the needs of the industry and trends. Clusters also accelerate the commercialization process thanks to encouraging the emergence of new business areas that can extends and strengthen themselves. Clustering also makes it easier to establish new businesses. Clustering provides the advantage of cost and being different, superiority of source and capability (Çağlar, 2008). Today, the cluster approach also has become frequently discussed in in enhancing the competitiveness of the countries. Whatever the level of industrilization many countries are engaged in projects about clustering due to the impact of clustering by providing increase in competitiveness. In the world of the first activities related to clustering emerged in the United States. Information technology in the development of having Silicon Valley having an important place in the development of information technology became the first example of clustering in America and the success provided many clustering examples in many fields such as; food, textile construction materials, defense industry and education (Erkut, 2011: 58). On the other hand, the London-based financial clusters, automotive clusters in southern Germany, textile clusters in northern Italy, wine clusters in California, software companies in Oslo are also considered as clusters having great importance and advantage.

Clusters In Turkey

As well all over the world especially in the last 10-15 years clustering model seems to be popular in our country. The basis of clustering studies in Turkey is Competitive Advantage of Turkey Platform carried out in 1999 under the leadership of Michael Porter. The private sector also supported this platform, various public institutions, civil society organizations, universities, development agencies also participated. Platform seeing a great demand both in the private sector and the public sector, returned

into more corporate structure in 2004, has continued to operate as the National Competitiveness Research Institute Association (URAK)

Activities carried out about clustering studies by CAT platform are summarized as follows (Sanal, AD: 18.02.2009 Quoted by: Keskin, 2009:168) :

The support of the business world (Koç Holding) , state agencies (The support of the business world (Koç Company), state agencies (State Planning Organization, Undersecretariat of Treasury, Ministry of Industry), universities (Middle East Technical University, Sabancı, Koç, Bogaziçi, Yeditepe, Banks (Garanti Bank), professional organizations (TÜSIAD, KOSGEB) and the media (World Journal) was gained.

➢ The sectors that may provide competitive advantage were identified and the analysis was completed. Clustering studies in these sectors started.

➢ Turkey's national economic performance and business environment analysis has been completed.

➢ In 2001 Sultanahmet pilot study achieved success.

➢ Master's and doctoral theses on clustering started to be written, articles for journals were prepared and Tv. programmes were made.

➢ It was decided to return independent institutionalization in Turkey and the studies initiated under the project (CAT) were decided to be institutionalized under the name of URAK (The National Competition Research Institute Association) so URAK was founded.

➢ In October 2003 Bartın Local Development was launched by the cooperation of KOSGEB, DPT and KOSGEB, DPT and Undersecretariat of Treasury 's.

➢ Istanbul clustering inventory work began.

➢ With "Clustering Methodology Project" funded by the European Union Commission, in 2004 some studies were started such as; Adıyaman Textile and Ready to wear sector, Şanlıurfa Organic agriculture and Diyarbakır Marble Sector. To determine the impact of the programme a study was done among 320 clusters in Adıyaman Textile sector by GAP GİDEM, and it was seen that since 2004 36 new investment has been done and 4650 new workers have been employed.

On the other hand; a two-year termed" National Clustering Policy Development Project" was prepared financed 6 million Euros by the European Union (EU) Pre- Help resource. This project aims to develop the competitive sectors in our country so these sectors can be a basis for national clustering and contribute the competitive strucure that will provide export growth (Sanal, AD:14.05.2013). Project consists of three basic components. These components; National Clustering Strategy for Improving Process Capacity Building in the main stakeholders, the preparation of the National Clustering Strategy Document and creation of Macro Cluster Mapping and the Strategic Road Map. The 10 clusters whose road maps were within the framework generally accepted international themes are: under the themes of Innovation and Entrepreneurship Mersin Processed Food and Ankara Software, in the area of Cluster Formation Konya Automotive Parts and Mugla Yacht Production and Yacht Tourism, in the area of cluster Database development Eskisehir- Bilecik- Kütahya ceramics and Izmir, Organic Food, in the area of factor conditions Manisa Electrical and Electronic Equipment and the Marmara Automotive clusters (Sanal, AD: 15.05.2013). 32 cluster categories were identified for Turkey after the project implemented by DTM. These categories are:

Table 2. Cluster Categories in TURKEY

Aerospace and defense-related machinery and equipment	Forestproducts
Agricultural products and processed food	Furniture
Analytical instruments and medical supplies	Toys
Ready to wear	Heavy machines
Automotive	Information Technology
Pharmaceutical industry	Jewellery (precious metals processing)
Building materials	Leather products
Business services	Lighting and electrical products
Chemical products	Metal industry
Communications equipment and services	oil and gas products and services
construction materials and services	Plastic
Distribution (wholesale)	Power generation and transmission
Education and knowledge creation	Publishing and Printing
Entertainment	Textiles
Financial services	Tourism
Shoemaking	Transport and logistics

However, some measuring activities for measuring clustering potential have stiil been done in different cities. For example, with the nearly three -decade-long work carried out by Konya Chamber of Industry, primarily cluster potential was surveyed with a random sampling method on 1400 firms and as result of research 12 industry clusters were determined to have the potential of clustering. These sectors are Machinery and Equipment Manufacturing Industry, Automotive Industry, Basic Metal Industry, Food and Beverage Manufacturing Industry, Furniture Manufacturing Industry, Leather and Leather Products Manufacturing Industry, Plastics and Rubber Products Manufacturing, Textiles and Textile Products Manufacturing Industry, Paper and paper Products Manufacturing Industry, Non-Metallic Mineral Products, Manufacturing and Fabricated Metal Products Manufacturing.

In our country, there are quite successful completed and ongoing clustering studies. Some of these applications:

Sultanahmet Region Tourism Clustering

The project incorporated by CAT was carried on between 2000 and 2005 and was conducted in 3 sections. Porter's Diamond Model was used in the analysis of competitiveness, clustering and development analysis and analysis of competitive level. 4 main factors were evaluated including entry conditions, firm strategy and competitive structure, demand conditions, related and supporting organizations, including 4 main factors were evaluated. Following analysis of the competitive level, surveys for clustering analysis were prepared and with a special software program they were evaluated so analysis was performed according to the method of network cluster. This analysis results in finding the central players, and leading players that will help clustering development. In the process of developing clustering, a local committee was including representatives of succesful industries. Project subgroups were formed to begin clustering development. Many projects for the development of the physical structure of clustering including restoration of historical places, street and directional signs renewal in Sultanahmet region have been implemented by the local committee. After the work done by the association established in the region increased their confidence in the players and enters new joint ventures have become more comfortable. Sultanahmet tourism district today has become arbiter more than ever in the Turkish and international tourism. Besides, thanks to the marketing training, in cultural tourism and especially in the use of internet marketing techniques, a worldwide success has been achieved. Sultanahmet hotels are now finding half of their customers via the Internet and at a good

OSTIM OSB Competitiveness and Cluster Analysis Study

The concrete steps in clustering in OSTIM Organized Industrial Zone were taken in 2007.. In the last quarter of 2007 -Level Analysis of International Competitiveness of the sectors in OSTIM was conducted through the cooperation with URAK.This study was aiming to provide infrastructure for clustering.This analysis was also done to find answers to the question" in which sector OSTIM İS more competitive compared to Turkey and the world. The collected data was analyzed with the help of Diamond Model with the goal of making OSTİM's economic development more planned and sustainable. The international competitiveness of all sectors in the region are revealed. As a result of the

research carried out in OSTIM it was determined that the most suitable sector for the clustering studies is Defense Industry Sector. At this stage with the collaboration with URAK and studies began. In clustering analysis phase, at OSTIM Organized Industrial Zone, 77 companies were identified engaged in production of defense industry and face -to-face semi - structured questionnaire developed by URAK was applied to these companies. In-depth interviews were conducted with ppinion leaders and civil society organization representatives in the region, as well as 17 company executives managers or representatives. In addition,2 focus group meetings were held with the participation of 13 company managers to consolidate survey implementation and data obtained from individual interviews. In this context, all of the players involved in the cluster were included in the scope of operation. As a result, in the study quantitative and qualitative research methods were used in conjunctionand variation method was also conducted. In other words, in the study detailed data was obtained using several methods simultaneously and reliability of the study was increased. The obtained sector cluster map was analyzed by the network method developed by Urak. Following this analysis, the intensity of sectoral clusters, supply chain structures, central and peripheral members were determined. Based on the evaluation of the survey results the industry sector maps were created. The leading players in the cluster were determined using these maps (Sanal, AD: 17.05.2013).

Izmir Organic Food Cluster Study

Launched in 2008, the Izmir Organic Food Cluster Project can be evaluated both in micro and macro senses; in micro sense the aim was to create a study involving all parties of the organic food industry, such as production, certification, export, resale and final consumer. This study would contribute to industry's national and international competitiveness and innovation capacity and also the micro-based model would be used in medium and long term in the whole country. In the macro sense, the project was prepared with the aim of contributing to the creation of Turkey clustering policy. In the project; Aegean Exporters Union and cooperation with the Association of Ecological Agriculture and Izmir Development Agency (İZKA) support is available. Izmir Organic Food Cluster Project Activities; Izmir Organic Cluster Coordination Unit Operations, Manufacturing and Supply Chain Operations, Distribution Channel Operations and Marketing Communications activities are good examples for the activities involved in the project. So far, the following activities have been carried on; Izmir Ecomarket's establishment, Organic Agriculture Project in Yarımada, Buca Karacaağaç Organic Village 's creation, and the project of development of International Competition for Organic Products. (Sanal, AD: 19.05.2013)

Some other cluster studies performed in our country are the following (Sarıtaş, 2012: 5):

- The United Nations Development Programme (UNDP) and the GAP Region Clustering GIDEM Studies
- Istanbul Textile and Apparel Exporters' Association (İTKİB) Fashion and Textile Cluster Formation in Turkey
- Bartin Cluster Development Project
- Konya Chamber of Industry Cluster Studies
- Elazığ Province and Elazığ Chamber of Commerce (ETSO) Cluster Based Strategic Economic Development Project
- Tekirdağ Province, KOSGEB, Tekirdağ-Çorlu-Çerkezköy-Malkara Chamber of Commerce Cluster Based Strategic Economic Development Project
- AGFORIS - Agriculture Food Industry Clustering Project; Financial Resources: The EU
- Esbas (Livestock and Space Cluster)
- Denizli and Usak Home Textile Cluster
- Marmara Automotive Cluster
- Izmir Organic Food Cluster
- Manisa Electrical and Electronic Products Cluster
- Adiyaman Textile Cluster
- Eskisehir Ceramic Cluster
- Bodrum Yacht Cluster
- Konya Automotive Parts Industry Cluster
- Mersin Agriculture and Food Cluster

Conclusion

In the century we are living with the effect of globalization, scientific, technological, social, and cultural changes undoubtedly affect businesses too. Businesses must provide sustainable competitive advantage in a global marketplace as well as providing, more goods and services with lower cost. The cluster model will provide the most important benefit for the businesses to be more innovative in their activities, to give more importance to R&D efforts, In today's market in which global competition is more important than national competition, clusters increase productivity and efficiency, make it easier to access modern knowledge and technology, reduce the cost using of local suppliers, provide new business areas, support employment and strengthen cooperation between university, industry and civil society organizations. Especially in our country we face the clustering as an approach that directs SMEs to compete together under the same purpose and the benefits are becoming more widely understood. If clusters and competitiveness valuation is made, it is clearly seen that the businesses having similar activities should not be isolated from each other, conversely they should carry on the activities in cooperation using technology and information. This embodiment may arise some problems such as; the firms structural or cultural incompatibilities, lack of entrepreneurial spirit, full participation in the cluster failure, the lack of financial means, unrealistic expectation. These negative thoughts should be corrected with confidence established among businesses. It is an undeniable fact that creation of new clusters especially with the support of the private sector, public institutions, civil society organizations and universities, will contribute to national economy and increase our country's competitive potential.

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Disaster Risk and Urban Regeneration Practices in Urban Residential Areas: An Example in Bursa/TURKEY

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Abstract

In the 21st century, the question of renewal and regulation of urban living areas imposes great responsibilities in all countries of the world. Sustainable life on our planet of increasing pouplation will be possible with the sustainable conversion of urban residential areas. Renewed city planning eliminates the risks of increasing environmental disasters. This study aimed to evaluate the most appropriate environmentally sustainable urban residential practices in the framework of urban planning for permanent housing made after a disaster, primarily earthquakes in cities. Besides the basic need for shelter and long-term psychological and economic damage suffered by people in disasters, the desire to create housing and an urban environment is inevitable. In this context, there are great responsibilities on both the state and local authorities. By ignoring the needs of society in disaster areas, large investments made in the running of new physical environments have not always had good results. Thus, research to be made from this point has taken planned settlement as the basis for new residential areas in the selection of urban residential areas in high risk disaster areas with low and mid-income populations in city centres and outlying slum areas. This study aimed to determine appropriate residences to comply with people's urban quality of life expectations and to be an indicative resource for local authorities. To this end, a questionnaire was applied using non-random sampling in nine areas included in the urban regeneration plans of the province of Bursa which has historically experienced large earthquakes. The data obtained were statistically analysed using SPSS software package.

Keywords: Urban Regeneration; Disaster Risk;Bursa

Introduction

The rapid growth of cities in the 20th century, particularly the unregulated urbanisation in developing countries, has reduced the quality of life in cities by a considerable degree. Cities have grown in an unplanned and uncontrolled way without any attention paid to the capacity for benefits of ecological systems. This unplanned and uncontrolled growth has had negative effects on the ecosystems of the city and made the cities far from sustainable in ecological terms. Sustainable cities require integrated planning, taking both society and ecology into account. In this sense, cities are a combination of housing and a sustainable development approach. Ecological planning has become a significant tool for sustainable cities (Ertürk, Sam, 2011).

On a global scale, the population of cities overtook that of rural areas in 2008, leading to the term, 'urban millenium'. It is predicted that in the coming years there will be areas of population growth in the lage metropolises of developing and less developed countries in particular (UNFPA, 2008). However, excessive growth in areas of fertile land, water resources, socio-economic and cultural importance around developed cities destroys the functional properties of natural resources and intensive use overstretches their capacity, increasing the 'risks of natural disaster' which cities are currently facing. Throughout the world there is increasing incidence of natural disasters such as earthquake, tsunami, volcanic eruption, landslide, tropical cyclone, flood, drought, environmental pollution, deforestation and desertification (Gülkan, Balamir ve Yakut, 2003).

The spread of disaster high risk areas has led to the development of a new disaster and risk perception internationally. Studies oriented to risk reduction have made 'reducing damage and preparation' the priority in this new perception in the face of potential dangers rather than 'search and rescue and treating injuries'. Especially after the United Nations declared 1990-2000 the 'International Decade of Reducing Natural Disasters', many international meetings made common declarations and agreements in policies of reducing disaster-related damage. These studies stated the priority of disaster management in addition to precautions to be taken and risk management and the development of a programme directed to reducing disaster damage and the development of a sustainable state of preparation was accepted as a part of the global mission.

It has become important to take precautions on a residential scale and in different sectors to reduce damage caused by disasters and not to create new risks. The most common reason for intervention in an area is the level of the 'urban' scale which will increase the effectiveness of the precautions taken. In the process of making urban areas liveable, safe and resistant to and prepared for disaster, the main tools are 'town planning' and 'construction processes' appropriate to the regulations which will reduce existing risks and prevent new ones by taking the disaster risks into account. These processes benefit from determining targets and principles for the location of disaster-resistant structures, and with urban development in areas away from danger and renovations, risks are prevented or reduced to a minimum in the construction process. Residential properties in dangerous areas are moved to other areas or are made resistant to disaster (Ulutürk, 2006). In this context, the regeneration applications in town planning will be seen as a response to the economic, social, physical and environmental deterioration and destruction at certain time intervals in urban areas (Akkar, 2006).

Urban regeneration is defined as the economic, social and physical renewal of a location. According to Roberts and Sykes (2000), urban regeneration is stated as 'an active, comprehensive integrated vision which leads to the resolution of urban problems within the search for improved economic, physical and social conditions of an area to be changed'. Parallel to making cities more liveable and improving physical surroundings with urban regeneration, it is aimed to raise the quality of urban life with economic revitalisation. In this sense, the subject of urban regeneration is to realise both qualitative and structural change of the city (Tekeli, 2003). In short, the basis of the urban regeneration system is to ensure sustainability of the city by changing urban residences and/or renewing urban life by taking into account the renewal of city culture together with all environmental factors (Turok, 2004).

In the second half of the 20th century, Turkey entered a very rapid urbanisation process and this process led to haphazard city growth, significant loss of natural and historical heritage and left valuable agricultural land, forests, wells and water basins, flood plains, filled in areas and landslide areas under structural pressure. The construction which rapidly increased after the 1950s was not publicly inspected, and by ignoring illegal constructions it was assumed that decisions had been taken that they were of adequate quality and 'amnesty laws' came into being. This attitude of accumulated human and economic values in cities facing natural disasters, resulted in high risk assumptions in unsafe environments and poor building stock. Physical, social or economic regeneration requiring policies in the development of vision and creating solutions to the problems which arise have been examined in cases which have started urban regeneration processes (Görgülü, 2009). When applications in Turkey are examined, the view of planning changed with the predominant neo-liberal concept after 1980 and a fragmented, market-centred approach was taken rather than integral planning (Keleş, 2012) and Turkish planning in the concept of urban regeneration has started to be discussed in literature.

From 2013 onwards, the population of urban centres reached 91.3%, and thus in Turkey which has 98% high risk areas for earthquakes, the risk of natural disasters in cities has increased. Besides the great loss of life, direct and indirect economic losses were seen in the earthquakes of 1992 Erzincan, 1995 Dinar, 1998 Adana - Ceyhan, 1999 Kocaeli – Düzce and 2011 Van. Even if the effects of disasters are generally measured as the number of collapsed buildings, it should not be forgotten that in locations suffering disaster, significant problems can be created in terms of the physical plans of that city, the infrastructure systems, public areas, the social structure of society and disaster safety.

Strategic plans have to be developed for before and after a disaster to provide at least a survival level from the negative effects of natural disasters such as earthquakes, floods and storms. To be able to maintain the damage which may ocur after a disaster to a minimum, studies have been made in 3 stages. These are, (a) disaster prevention studies which should be made before a disaster, (b) studies of rescue, aid and temporary shelter which should be made immediately following the disaster and (c) studies made after a disaster on sanitation and reconstruction (Kiper, 2001).

In fact, in Turkey, a noticeable result of the understanding of the importance of the disaster risks of urban dwellings and particularly of the problems of unhealthy, illegal structures after a disaster, was the passing of the law no 6306, 'Law related to the renewal of disaster-risk areas', which was published in the Official Gazette on 31.05.2012. The aim of this law was to define the methods and principles related to the liquidation and renewal of areas at risk and structures at risk in other areas (structures of completed economic life, collapsed in the earthquake or at risk of damage) and to encourage improvement of a healthy and safe living environment, conforming to the normal standards of art and science (Öngören, Çolak, 2013). Thus a comprehensive urban regeneration process was started in urban areas at risk of disaster and in areas of at-risk residences with the aim of raising the quality of life in urban areas and creating healthy and safe living areas. .

To be able to define the disaster risk, to first determine the dangers which may lead to a disaster, the places, the size, the frequency, the recurrence intervals and the areas which may be affected, it is necessary to make an inventory of all the factors which can be affected by these dangers such as population, structure and infrastructure, economic and social values and environmental factors. Thus in the event of the danger occurring, it is possible to estimate the value of the physical, social, economic and environmental losses (Kadioğlu and Özdamar, 2008). In the determination of the disaster risk of a settlement unit, the elements which will be affected by the danger can be assigned to three groups (Ünlu, 2005).

These are:

1. Physical environment elements

2. The socio-cultural characteristics of the settlement

3. Administrative and legal elements

In many studies related to housing planning, different approaches and methods have been used and by developing structural variables (age, household size, income, education, residence quality, residence size, length of abode, ownership, societal links etc), have been tested in various areas (Cadwallader, 1996; Ertürk and Sam, 2011; Lu, 1999; Speare, 1974). The quality of housing against external risks is of critical importance in housing and environment satisfaction (Fried, 1982; Lu, 1999; Tognoli, 1987). There are several variables in studies conducted with the aim of improving housing quality. Elements of home and building comfort which are factors providing a good quality of life for the residents include the size of the residence, number of rooms, practicality, water, apart from in required areas such as toilet and bathroom, newness and maintenance of the building, adequate infrastructure (electricity, water, natural gas, sewerage, telephone etc), light and ventilation, insulation and heating, elevators in multi-storey buildings, carpark, garden and swimming pool (Fernandez et al., 2003; Lu, 1999; Türkoğlu, 1997).

Satisfaction with housing and the environment refers to the environment lived in by individuals. The housing environment consists of 'the perceived quality of the residence' comprising the residence, the neighbourhood and various services and accessibility of facilities (Amerigo ve Aragones, 1997; Lu, 1999). The services and accessibility of facilities in the residential environment are especially closely linked. In this respect the various services offered by the city, the facilities for public benefit, community relations and accessibility of business centres are important. Empirical studies have determined a close relationship between the characteristics pertaining to residential environment and accessibility, and centralisation as a main factor with movement of the city centre to the business area and the importance of accessibility to business and shopping and centres has been reported (Bender et al, 1997; Kellekçi and Berköz, 2006; Loo, 1986).

In this study, the physical, social and environmental characteristics related to residences and residential areas were evaluated from the results of a questionnaire applied to families living in areas to be regenerated in the context of residential projects in urban regeneration applications in the city of Bursa, which is located in a first-degree earthquake region.

Research Methods and Results

The study comprised the evaluation results related to factors influencing the choice of family home and the demographic characteristics defined as a result of the questionnaire applied to families living in the neighbourhoods of Akpinar, Alacahirka and Pinarbasi in the borough of Osmangazi, Bursa.

The data obtained in the research project were defined by non-randomised convenience sampling methods. Statistical Package for Social Sciences (SPSS v17.0) statistical program was used for the evaluation of the data.

Alacahirka and Pinarbasi neighbourhoods are old settlement areas in the city centre. Akpinar neighbourhood is a settlement area near to an industrial estate with irregular and self-made construction.

The research was conducted with 324 individuals living in Akpinar, Alacahirka and Pinarbasi.

Table 1.1 Demographic characteristics

Gender	Number	%	Income (TL)	Number	%
Female	160	49.7	Below minimum wage	1	.3
Male	162	50.3	Minimum wage	19	5.9
Marital status			680-1000	57	17.7
Single	93	29.0	1001-1500	89	27.6
Married	213	66.4	1501-2000	74	23.0
Divorced	7	2.2	2001 and above	82	25.5
Widowed	8	2.5	**Occupation**		
Educational level			Unemployed	10	3.2
Illiterate	3	.9	Manual work	54	17.1
Literate	13	4.0	Clerk	20	6.3
Primary school	117	36.3	Industrialist	3	.9
High school	92	28.6	Farmer	1	.3
Further Ed.	30	9.3	Craftsman	49	15.5
University	61	18.9	Retired	30	9.5
Masters	6	1.9	Housewife	74	23.4
Family type			Career	9	2.8
Nuclear	282	88.4	Student	41	13.0
Extended	37	11.6	Driver	5	1.6
			Other	20	6.3

The study participants were 49.7% female and 50.3% male, of whom 66.4% were married, 29% single, 2.5% widowed and 2.2% divorced. The educational status was determined as 36.3% primary school, 28.6% high school, 18.9% university and 9.3% further education. The family type was nuclear in 88.4% of respondents and extended in 11.6%. Income level was determined as 1001-1500TL in 27.6%, 2001TL and above in 25%, 1501-2000TL in 23% and 680-1000TL in 17.7%. Occupations were stated as housewife by 23.4% of respondents, manual worker by 17.1%, craftsman by 15.5% and retired by 59.52%.

Table 1.2 Frequency of Variables

Type of accommodation	Number	%	Satisfaction with residential environment	Number	%
Flat in a single apartment block	150	47.3	Not at all satisfied	38	12.8
Flat in an apartment block of a housing complex	73	23.0	Not satisfied	117	39.5
2-3 storey house in a housing complex	6	1.9	Neither satisfied nor dissatisfied	106	35.8
Single storey detached house	39	12.3	Satisfied	28	9.5
2-3 storey detached house	49	15.5	Very satisfied	7	2.4
Residence location			**Satisfaction with accommodation**		
Open on one side	85	26.6	Not at all satisfied	46	15.0
Open on 2 sides	138	43.3	Not satisfied	139	45.4
Open on 3 sides	51	16.0	Neither satisfied nor dissatisfied	94	30.7
Open on all sides	42	13.2	Satisfied	22	7.2
Other	3	.9	Very satisfied	5	1.6
Residence sq metres			**Satisfaction of resistance to earthquake and disasters of the residence**		
50m^2 and below	5	1.6	Not at all satisfied	43	14.1
50-90m^2	74	23.6	Not satisfied	117	38.5
90-120m^2	146	46.5	Neither satisfied nor dissatisfied	90	29.6
120-150m^2	71	22.6	Satisfied	48	15.8

369

150-180m²	14	4.5	Very satisfied	6	2.0
180m² and more	4	1.3	**Demand for the residential environment to participate in urban regeneration**		
Satisfaction with services provided by the Local Authority			Yes No No opinion	124 88 88	41.3 29.3 29.3
Not at all satisfied	25	8.2			
Not satisfied	119	39			
Neither satisfied nor dissatisfied	109	35.7			
Satisfied Very satisfied **Satisfaction with the location of the residence**	38 14	12.5 4.6	**Satisfaction with the size of the residence**		
Not at all satisfied	4	1.3	Not at all satisfied	3	1.0
Not satisfied	17	5.4	Not satisfied	24	7.8
Neither satisfied nor dissatisfied	61	19.6	Neither satisfied nor dissatisfied	63	20.6
Satisfied	154	49.4	Satisfied	138	45.1
Very satisfied	76	24.4	Very satisfied	78	25.5

Of the study participants, 47.3% were living in a flat in an apartment block, 23% in a flat in an apartment complex, 15.5% in a detached 2-3 storey house and 12.3% in a detached single storey house.

The houses were open on 2 sides in 43.3%, open on 1 side in 26.6%, open on 3 sides in 16% and open on all sides in 13.2%. The size of the homes were stated as 90-120m² in 46.5%, 50-90m² in 23.6%, 120-150m² in 22.6% and 150-180m² in 4.5%.

The participants were satisfied with the location of their home in 49.4% of cases, very satisfied in 24.4%, and neither satisfied nor dissatisfied in 19.6%. Satisfaction with the size of the home was stated by 45.1%, very satisfied by 25.5% and neither satisfied nor dissatisfied by20.6%. Dissatisfaction with the residential environment was reported by 39.5%, neither satisfied nor dissatisfied by 35.8%, and not at all satisfied by 12.8%. Dissatisfaction with the residence was reported by 45.42%, neither satisfied nor dissatisfied by 30.7% and not at all satisfied by 15%. The residents of these neighbourhoods were dissatisfied with the services provided by the Loccal Authority in 39% of cases, neither satisfied nor dissatisfied in 35.7%, satisied in 12.5% and not at all satisfied in 8.2%. In relation to the resistance of the residence to earthquakes and disasters, 38.5% expressed dissatisfaction, 29.6% were neither satisfied nor dissatisfied, 15.8% were satisfied, 14.1% were not all satisfied and only 2% were satisfied. Of the participants, 41.3% wanted their residence to be a part of the urban regeneration plan, 29.3% did not want this and 29.3% had no opinion on this subject.

Finally, regression analysis was applied to the variables of satisfaction with the residence, the residential location, the size of the residence, the type of residence, the services provided by the Local Authority, the resistance of the residence to earthquakes and disasters and the residential environment. Multiple linear regression to estimate the parameters of the equation was applied with y dependent and x independent variables:

The model was created as: $y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \ldots\ldots B_6 x_6 + \varepsilon$

The variables were expressed as: β_0=constant, y=satisfaction with the residence, x_1=satisfaction with the type of residence, x_2=size of residence, x_3=satisfaction with Local Authority services, x_4=satisfaction with residential environment, x_5=resistance of the residence to earthquakes and disasters, x_6=location of the residence.

The results of the regression analysis indicated no multiple connection problems with no strong correlations between independent variables in the multiple correlation matrix. High correlation between independent variables shows multiple connection problems. In the analysis, R^2 =0.65 was determined. This value shows that 65% of satisfaction with the residence can be explained by the variables of

residential location, the size of the residence, the type of residence, the services provided by the Local Authority, the resistance of the residence to earthquakes and disasters and the residential environment. To determine whether or not there was a problem of auto-correlation in the model, the Durbin Watson statistic was examined. This was found to be d=1.767 and as this was close to 2, it showed that there was no problem with auto-correlation.

To ascertain whether or not the regression equation is useful in a general sense, the F test can be applied. The values of F=80.012, p=0.000 were found to be statistically significant (p<0.05). Thus a direct relationship was determined between satisfaction with the residence and the variables of residential location, the size of the residence, the type of residence, the services provided by the Local Authority, the resistance of the residence to earthquakes and disasters and the residential environment.

To evaluate the effect of each independent variable, the coefficient table was examined. The parameter values obtained from the estimated result of the model and their relationship to t values are shown in Table 1.3.

Table 1.3 Coefficients Table

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
	B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1 (Constant)	2.231	.276		8.070	.000					
A1b	-.352	.043	-.343	-8.224	.000	-.607	-.456	-.303	.780	1.283
A3a	-.085	.041	-.082	-2.083	.038	-.258	-.129	-.077	.869	1.151
B11	.078	.037	.086	2.091	.038	.384	.129	.077	.794	1.259
c1	.427	.042	.447	10.049	.000	.687	.530	.370	.686	1.457
c24	.174	.036	.191	4.854	.000	.426	.289	.179	.876	1.142
A2a	.001	.034	.002	.044	.965	-.176	.003	.002	.899	1.112

In the explanation of satisfaction witth the residence, apart from residential location, all the parameters are seen to have individual significance (p<0.005). When the standardised coefficient beta values are examined in Table 1.3, it can be said that the most significant independent variable is residential environment.
The tolerance and variance inflation factor (VIF) values were examined to determine whether or not there was a multiple connection problem in the model. Low tolerance and high VIF values indicate multiple connections between the independent variables. The regression equation for the estimated satisfaction with the residence was obtained as $\hat{y}=2.231-0.3525 \, x_1-0.085 \, x_2 +0.078 \, x_3+0.427 \, x_4+0.174 \, x_5+0.001 \, x_6$

Conclusion

When examining the effect of natural disasters on human settlements, it is necessary to consider cities separately as their characteristics are different to other types of settlements and the effects of natural disasters should be evaluated separately. This is because cities differ from other settlement units in respect of the intensity of demographic and socio-economic activities such as specialised work force and intense economic activity of the population apart from agriculture, and these structural characteristics carry a high risk in the face of all kinds of dangers. Particularly because of the devastation caused by large earthquakes, in areas where there is a high possibility of a large earthquake, partial or whole urban regeneration work can be put into effect to counter these risks. In this context, the impact of the Marmara earthquake of 1999 in Turkey brought about a need for urban planning to create cities which are more comfortable for the community for peaceful, modern living, with social facilities and green areas, providing a higher level of satisfaction. The Marmara earthquake also revealed that the existing housing stock was at risk.

Through the application of a questionnaire to families living in residential areas due to undergo urban regeneration related to the housing projects of the urban regeneration application of the city of Bursa, which is located in a first-degree earthquake region, this study evaluated the relationship between physical, social and environmental factors and housing.

Most of the questionnaire respondents (47%) lived in a flat in an apartment building, with most (43.3%) living in a home that was open on three sides. The mean size of the home was stated to be 90-120m^2 by 46.5% of respondents. Satisfaction with their residential environment was reported by 39.5% and satisfaction with the residence by 45.4%. Services provided by the Local Authority were stated as satisfactory by 39% and 38.5% of the respondents were satisfied with the earthquake resistance of their residence.

Regression analysis was applied to the Akpinar, Alacahirka and Pinarbasi neighbourhood variables of satisfaction with the residence, the residential location, the size of the residence, the type of residence, the services provided by the Local Authority, the resistance of the residence to earthquakes and disasters and the residential environment and in the explanation of satisfaction with the residence, all the parameters except residential location were found to have individual significance and the residential environment was determined to be the most significant independent variable.

Further studies by residential planners, designers and producers in accordance with demographic and socio-economic characteristics of the users, are expected to shed light on the level of satisfaction with home and environmental quality.

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Perceptions of Risk and Cigarette Package Warning Labels of Adults in Turkey

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Abstract

Total and per capita cigarette consumption data display that increases in real tobacco prices and smoking ban in public and enclosed areas are not permanent mechanisms to decrease cigarette consumption in Turkey. The most widely used methods are public spots and framed messages on cigarette packages however; shaping those framed messages requires the knowledge of smokers' risk perceptions toward continuing smoking and quitting smoking. This study aims to analyze whether cigarette smokers are more risk seeking than non-smokers and to investigate the most effective type of framed message in reducing smoking level and increasing one's ability to quit with the help of a questionnaire. By this way, validity of prospect theory for cigarette smokers is reviewed. Furthermore, risk perceptions of smokers for continuing smoking and quitting smoking are compared. There is no enough evidence that cigarette smokers are more risk seeking than non-smokers. Moreover, the most effective type of framed message for the overall risks is significantly discovered to be the loss-framed and it can be concluded that prospect theory is not valid for smokers. Finally, it cannot be stated that cigarette smokers perceive quitting smoking riskier than continuing smoking.

Keywords: Cigarette Smokers, Risk Attitudes, Framed Messages, Prospect Theory

Introduction

Several of the most threatening health problems like stroke, heart attack and lung cancer are due to cigarette smoking (Global Adult Tobacco Survey, 2008). Total and per capita cigarette consumption in Turkey has been at very high levels in recent years although there is a decrease after 2009 due to the increased real tobacco prices caused by tax increases of Turkish government and to the smoking ban in public and enclosed areas (Country Report – Tobacco in Turkey, 2012). However, this decrease is not permanent as total cigarette consumption started to rise again in a few years. According to the Turkish Tobacco and Alcohol Market Regulatory Authority (2012), this pattern is also confirmed by the data of volume of tax-paid sales of tobacco products.

The crucial point of analyzing cigarette consumption is its negative health effects, even deaths. For example, number of tobacco-attributable deaths under the scenario of increasing prevalence will be more than two times that of under the scenario of decreasing prevalence in Turkey by 2050 (Yürekli et al., 2010).

However, decreasing the prevalence of smoking is not straightforward since cigarette has different properties compared to other goods. First of all, it increases future smoking by creating addiction. Second, it has some intergenerational and intragenerational effects such as negatively affected babies whose mothers smoked during pregnancy, decreased future national income due to the increased health expenditures spent on smoking related diseases, increased negative externalities caused by passive smoking and taking smokers as role models. Third, cigarette smokers are aware of increased probability of catching diseases in the future however; a considerable part of the smokers delay their quitting decisions and another significant part does not plan to quit since short-run negative effects of smoking are not as harmful as its long-run negative effects (Press Release of Global Adult Tobacco Survey, 2012). For example, people believe that addictive substances such as heroin and cocaine are substantially harmful in the short run compared to cigarettes (Orphanides & Zervos, 1995). For this reason, these substances are less common than cigarettes and their effects on the general society are less than those of cigarettes.

Therefore, importance of taking effective precautions to avoid prevalence of smoking is emerged and there is a room for government regulation and policy. However, reasons behind smoking the very first cigarette and preferring to continue smoking are needed in order to develop effective mechanisms to decrease the prevalence of smoking. Smokers who are conscious about the negative health effects of smoking are required to be investigated in terms of their risk perceptions and risk attitudes.

The aim of this paper is to compare the risk perceptions of cigarette smokers and non-smokers and investigate whether cigarette smokers are more risk seeking than non-smokers. Moreover, effects of gain-framed avoidance, gain-framed benefit and loss-framed messages on cigarette package warning labels on adults' perceptions of reducing smoking level in society and increasing one's ability to quit smoking are examined. By this way, validity of prospect theory for cigarette smokers is reviewed. Furthermore, risk perceptions of smokers for continuing smoking and quitting smoking are compared.

This study aims to make a modest contribution to the issue of designing framed messages by synthesizing different points of view presented in the literature. This study also investigates whether it is effective to have only loss-framed messages on cigarette packages like nowadays in Turkey. Yet reasons of smoking the very first cigarette and preferring to continue smoking are beyond the scope of this paper.

The rest of the paper proceeds as follows: Past studies are presented in section 2. In section 3, methods and procedures employed in the paper are explained whereas results are put forward in section 4. The last section concludes.

Theory and Issues

There are many studies intended to explain behavioral differences between smokers and non-smokers. Most of these studies analyzed smokers from a rationality perspective and some studies evaluated smokers as irrational (Chesney & Hazari, 1998; Goodin, 1989; Slovic et al., 2004).

On the other hand, some studies advocated the view that smokers are rational. Becker and Murphy (1988) suggested the rational addiction model where addictions can be modeled as specific kinds of rational, forward-looking and time-consistent behaviors. The reason a rational and forward-looking person becomes addict is the adjacent complementary pattern of optimal consumption according to Becker, Grossman and Murphy (1994). That is, a larger stock of past cigarette consumption increases the marginal utility of today's consumption and in order to increase the marginal utility of consumption in the future, current cigarette consumption must be increased.

Moreover, Rachlin (2007) stated that addicts are not less rational than non-addicts. The crucial difference is that addicts have higher discount rates and lower discount factors than non-addicts, i.e. addicts choose small-sooner gains to larger-later gains.

Furthermore, Orphanides and Zervos (1995) presented addicts as rational agents who cannot perfectly foresee their potential to become addicts since cigarettes have unknown addictive power.

Blondel et al. (2007) tested the rationality of drug-addict people over some expected utility and non-expected utility theories and concluded that addicts are more risk seeking than non-addicts but are not less rational whatever the theory is. This paper mainly utilizes from the risk measurement methods employed in Blondel et al. (2007) in order to investigate whether cigarette smokers are more risk seeking than non-smokers.

There are numerous studies about different prevention mechanisms of cigarette smoking. Blondel et al. (2007) proposed an increase in the average prices of cigarette packages. In contrast, Orphanides and Zervos (1995) indicated that even if prices increase enormously, demand for cigarettes will not reduce much for addicted individuals since their price elasticity of demand for cigarettes is low. Furthermore, Orphanides and Zervos (1995) stated that a ban or any other restriction on cigarette consumption will not be Pareto efficient under some conditions. Moreover, this study also showed that spreading incorrect and exaggerated information about the potential harms of addictive goods is not an effective way to prevent smoking. Besides, Krohn et al. (1983) found that commitment to education has the strongest positive effect on preventing smoking and smoking cessation. However, this study analyzes only the effects of framed messages on cigarette packages as a way to prevent and/or cease smoking behavior.

It is not straightforward to design framed messages on cigarette packages. According to Kahneman and Tversky (1979), prospect theory stated that people are risk averse in the gain space however; they are risk seekers in the loss space. For this reason, individual's perception can differ with the type of framed message although they declare the same fact (Goodall & Appiah, 2008). For example, equivalent statements of quitting smoking makes a person healthier in the long run, quitting smoking significantly decreases the risk of heart attacks, strokes, lung cancer and other diseases in the long run and smoking significantly increases heart attacks, strokes, lung cancer and other diseases in the long run do not have the same power to convince smokers to quit smoking. The first statement is considered as gain-framed benefit message emphasizing the benefits of not smoking, the second one is considered as gain-framed

avoidance message emphasizing the threat that can be avoided by not smoking and the last one is considered as loss-framed message emphasizing the negative effects of smoking.

Goodall and Appiah (2008) indicated that quitting smoking is related with certain outcome of a decreased risk of illnesses. Therefore, prospect theory suggested that warning labels cigarette packages are more effective when they are gain-framed rather than loss-framed since people generally prefer unrisky choices in the gain space, i.e. quitting smoking. This paper is mainly inspired from the method of study used in Goodall and Appiah (2008) in order to examine the effects of gain-framed and loss-framed messages on adults' smoking-related attitudes and behaviors. However, this study eliminates some of the items asked in the questionnaire of Goodall and Appiah (2008) to simplify measuring the risk perceptions.

However, this inference of prospect theory does not have to be always true. For example, Toll et al. (2008) showed that addict persons who perceive quitting smoking as highly risky due to weight gain, loss of attention and/or concentration, social ostracism, loss of enjoyment and craving for cigarettes reported fewer days to the first cigarette when they are exposed to gain-framed messages. This study integrates the approach of Toll et al. (2008) regarding the risk perceptions of cigarette smokers toward quitting smoking.

Moreover, findings of Goodall and Appiah (2008) contradicted with the findings of prospect theory since this study showed that loss-framed messages, especially highlighting the risks associated with adolescents' appearance such as teeth spots, are more effective in preventing smoking than gain-framed messages.

This study is a synthesis of different points of view presented in the literature on the issue of validity of prospect theory for cigarette smokers. Moreover, this study employs distinguishing points of reviewed studies in the literature and aims to bring up an integrated approach of evaluating adults' perceptions of risk and warning labels on cigarette packages in Turkey.

Methods and Procedures

An experiment with the help of a questionnaire[83] is implemented to 19 cigarette smokers and 16 non-smokers[84]. Most of the sampled subjects are drawn from the population with the criterion of being a visitor of a tobacco shop in a shopping center in Ankara at the first weekend of June in 2013. This sampling method is chosen in order to randomize the subjects responding the questionnaire and to ensure the generalizability of the results found in this study.

At the beginning of the questionnaire, subjects are given the information that this survey is presented as a part of a research study about smoking decisions of individuals.

The first part of the questionnaire aims to regard individual characteristics like age, sex, race, employment status and income. Samples of smokers and non-smokers are randomized and therefore, comparison between their attitudes toward risk and warning labels are statistically meaningful provided that their mean values are not significantly different at 5% significance level with the help of two sided student's t-test (Table 1).

Table 1. Individual characteristics

	Smokers (s)	Non-smokers (ns)	Two sided p-value between s and ns
Age in years	43,1 (10)	44,1 (11)	0,79
Percentage of men	30% (0)	40% (1)	0,72
Percentage of whites	100% (0)	100% (0)	-
Rate of unemployment	10% (0)	0% (0)	0,37
Income per month (Turkish Lira)	3315,8 (2572)	2537,5 (1212)	0,28
Oldness in consumption (years)	19,2 (10)	-	-
Number of consumed cigarettes (pieces)	12,6 (8)	-	-

Values in cells are mean values and values in brackets are standart deviation values.

Second part of the questionnaire targets to compare risk perceptions of cigarette smokers and non-smokers and to investigate whether cigarette smokers are more risk seeking than non-smokers. For this

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[83]The questionnaire can be shared upon a request from the author.
[84]Total sample cannot be considered as a small sample however; samples of smokers and non-smokers are seperately small samples. Therefore, this can be evaluated as a restriction of this analysis.

reason, 9 lottery choice and 5 lottery evaluation questions are addressed. Respondents choose a lottery between two alternative lotteries where one is more risky than the other but each has the same expected payoff for lottery choice questions. However; respondents write a minimum selling price that they are willing to receive rather than taking the risk of playing that lottery for lottery evaluation questions.

Percentages of risky choices of smokers and non-smokers are calculated for each lottery choice question with the help of choice indicator of risk (CIR) and for each lottery evaluation question with the help of pricing indicator of risk (PIR) likewise in Blondel et al. (2007).

$$\text{CIR} = \frac{1}{9}\left(\sum_{i=1}^{9} c_i\right) \text{where } c_i = \begin{cases} 1 \text{ if risky lottery is chosen} \\ 0 \text{ if safe lottery is chosen} \end{cases} \tag{1}$$

$$\text{PIR} = \frac{1}{5}\left(\sum_{i=1}^{5} \pi_i\right) \text{where } \pi_i = \begin{cases} 1 \text{ if written price is greater than expected value} \\ 0,5 \text{ if written price is equal to expected value} \\ 0 \text{ if written price is less than expected value} \end{cases} \tag{2}$$

These risk indicators of smokers and non-smokers are compared with the help of two sided student's t-test.

Third part of the questionnaire targets to examine the effects of gain-framed benefit, gain-framed avoidance and loss-framed messages on adults' smoking behaviors and to investigate the validity of prospect theory for cigarette smokers.

Three types of risks are presented through each type of framed messages: Generally accepted as tolerable risks of smoking on appearance like teeth spots, intolerable risks of smoking like heart attacks and perceived risks of quitting smoking like weight gain.

Effectiveness of each framed message for each type of risks in reducing smoking level and improving one's ability to quit is randomly asked with a 5-point Likert-type scale of likelihood. This part is mainly inspired from the method of study used in Goodall and Appiah (2008). Respondents' opinions are asked for anybody's ability to quit since people may think that the warnings will not affect themselves but the others which is called the third-person effect (Goodall & Appiah, 2008).

The most effective type of framed message among loss-framed, gain-framed avoidance and gain-framed benefit messages and validity of prospect theory are investigated with the help of analysis of variance (ANOVA) method by examining whether there are differences among the mean values of these types of framed messages.

If loss-framed messages are found to be more effective than gain-framed messages for associated risks, then prospect theory can said to be invalid for smokers. However, if gain-framed messages are found to be more effective than loss-framed messages for risks associated with teeth spots and heart attacks yet the reverse is true for the risk of weight gain for smokers, it can be inferred that smokers perceive quitting smoking more risky than continuing to smoke.

Results

Risk perceptions of cigarette smokers and non-smokers are compared in two phases: First, differences between percentages of risky choices in nine lottery choice questions selected by smokers and non-smokers and between average prices in five lottery evaluation questions written by smokers and non-smokers are examined with the help of two sided student's t-test (Tables 2 and 3). Second, differences between average values of CIR and PIR for smokers and non-smokers are analyzed again by two sided student's t-test (Table 4).

Table 2. Percentages of risky lottery choices selected by smokers and non-smokers

Question number	Percentages of risky choices		Two sided p-value between s and ns
	Smokers (s)	Non-smokers (ns)	
1	31,6	31,3	0,98
2	21,1	25,0	0,79
3	26,3	31,3	0,76
4	47,4	43,8	0,84
5	15,8	12,5	0,79
6	42,1	62,5	0,24
7	21,1	50,0	0,08*
8	15,8	43,8	0,07*
9	26,3	43,8	0,29
All	27,5	38,2	0,04

* Difference is significant at 10% significance level.

Percentages of risky choices of non-smokers for six out of nine lottery choice questions are greater than those of smokers in a surprising way. Yet, these differences are not significant at 5% significance level. Percentage of risky choices of non-smokers is significantly greater than that of smokers for the overall lottery choice questions. Therefore, it can be concluded that non-smokers are more risk seeking than smokers in terms of lottery choices.

Table 3. Average prices written by smokers and non-smokers for lottery evaluations

Question number	Average prices		Two sided p-value between s and ns
	Smokers (s)	Non-smokers (ns)	
10	85,0	119,1	0,30
11	122,5	67,2	0,32
12	78,4	65,3	0,64
13	136,6	115,9	0,65
14	83,9	87,2	0,90
All	101,3	90,9	0,55

Average prices written by smokers for three out of five lottery evaluation questions are greater than those of non-smokers. Yet, these differences are not significant at 5% significance level. Average price written by smokers is also greater than that of non-smokers for the overall lottery evaluation questions however; this difference is not significant. Therefore, it cannot be concluded that smokers are more risk seeking than non-smokers in terms of lottery evaluations.

Table 4. Average risk indicator values for smokers and non-smokers

	Average values of risk indicators		Two sided p-value between s and ns
	Smokers (s)	Non-smokers (ns)	
Choice indicator of risk	0,3	0,4	0,40
Pricing indicator of risk	0,4	0,5	0,34

Average values of risk indicators are greater for non-smokers than those of smokers yet these differences are not significant at 5% significance level. Thus, it cannot be stated that smokers are more risk seeking than non-smokers in terms of average values of risk indicators.

Then, the most effective type of framed message in reducing the general smoking level and increasing one's ability to quit is investigated. All of the respondents, both smokers and non-smokers, are asked to evaluate each framed message for each type of risk according to its effectiveness for the above mentioned purposes with a 5-point Likert-type scale of likelihood from 1 which is for extremely unlikely to 5 which is for extremely likely. Adults' mean and standart deviation responses to three different types of framed messages for the overall risks are compared by using one-way ANOVA method (Table 5).

Table 5. Adults' mean and standart deviation responses to different types of framed messages for the overall risks

	Loss-framed (LF)	Gain-framed avoidance (GFA)	Gain-framed benefit (GFB)	p-value of one-way ANOVA among LF, GFA and GFB
Reducing smoking level	3,6 (1,0)	3,3 (1,3)	3,4 (1,2)	0,03
Improving ability to quit	3,6 (1,1)	3,4 (1,2)	3,4 (1,1)	0,15

Values in cells are mean values and values in brackets are standart deviation values.

Loss-framed is significantly the most effective type of framed message, and then comes gain-framed benefit and then gain-framed avoidance at 5% significance level in terms of reducing smoking level.

However, differences between effectiveness of loss-framed, gain-framed avoidance and gain-framed benefit messages on improving one's ability to quit are not significant at 5% significance level. Therefore, it can be inferred that adults exposed to loss-framed messages perceive that those messages are more effective in reducing general smoking level than gain-framed messages. Yet, it cannot be accepted that adults exposed to loss-framed messages perceive that those messages are more effective in increasing one's ability to quit than gain-framed messages.

Validity of prospect theory for smokers is examined with the comparison of their mean and standart deviation responses by using the method of two-way ANOVA for different types of framed message within each risk: Teeth spots (Table 6), heart attacks (Table 7) and weight gain (Table 8). Moreover, smokers' and non-smokers' mean and standart deviation responses to three different types of framed messages for the overall risks are compared by using two-way ANOVA method in order to check whether the most effective type of framed message differs between smokers and non-smokers (Table 9).

Table 6. Smokers' and non-smokers' mean and standart deviation responses to different types of framed messages for teeth spots

	Loss-framed (LF)	Gain-framed avoidance (GFA)	Gain-framed benefit (GFB)	p-value of two-way ANOVA among LF, GFA and GFB
Smokers				
Reducing smoking level	3,2 (1,0)	2,5 (1,4)	3,0 (1,2)	0,21
Improving ability to quit	3,3 (1,0)	2,8 (1,2)	3,1 (0,9)	0,16
Non-smokers				
Reducing smoking level	3,6 (0,9)	3,4 (1,1)	3,7 (1,1)	0,81
Improving ability to quit	3,2 (1,2)	3,1 (1,5)	3,6 (1,2)	0,16

Values in cells are mean values and values in brackets are standart deviation values.

Mean responses for all types of framed messages for teeth spots display that the most effective framed message is loss-framed for smokers but gain-framed benefit for non-smokers. However, differences between mean responses among three types of framed messages are not significant for both smokers and non-smokers at 5% significance level.

Table 7. Smokers' and non-smokers' mean and standart deviation responses to different types of framed messages for heart attacks

	Loss-framed (LF)	Gain-framed avoidance (GFA)	Gain-framed benefit (GFB)	p-value of two-way ANOVA among LF, GFA and GFB
Smokers				
Reducing smoking level	3,8 (1,0)	3,4 (1,3)	3,5 (1,0)	0,03
Improving ability to quit	3,8 (0,9)	3,5 (1,0)	3,6 (0,8)	0,16
Non-smokers				
Reducing smoking level	4,3 (0,8)	4,3 (0,8)	4,1 (0,6)	0,38
Improving ability to quit	4,3 (0,8)	4,3 (0,7)	4,0 (0,8)	0,1*

Values in cells are mean values and values in brackets are standart deviation values.
* Difference is significant at 10% significance level.

Mean responses for all types of framed messages for heart attacks show that the most effective framed message is loss-framed for smokers but gain-framed avoidance and loss-framed are equally effective for non-smokers. Differences between mean responses among three types of framed messages are significant concerning only the decrease in smoking level for smokers yet they are not significant for non-smokers at 5% significance level.

Table 8. Smokers' and non-smokers' mean and standart deviation responses to different types of framed messages for weight gain

	Loss-framed (LF)	Gain-framed avoidance (GFA)	Gain-framed benefit (GFB)	p-value of two-way ANOVA among LF, GFA and GFB
Smokers				
Reducing smoking level	3,0 (1,2)	2,8 (1,2)	2,8 (1,2)	0,26
Improving ability to quit	3,2 (1,2)	3,0 (1,1)	2,9 (1,3)	0,35
Non-smokers				
Reducing smoking level	3,7 (0,9)	3,8 (1,0)	3,5 (1,4)	0,48
Improving ability to quit	3,8 (0,8)	3,8 (0,9)	3,6 (1,3)	0,48

Values in cells are mean values and values in brackets are standart deviation values.

Mean responses for all types of framed messages for weight gain display that the most effective framed message is loss-framed for smokers but gain-framed avoidance for non-smokers. However, differences between mean responses among three types of framed messages are not significant for both smokers and non-smokers at 5% significance level.

Table 9. Smokers' and non-smokers' mean and standart deviation responses to different types of framed messages for the overall risks

	Loss-framed (LF)	Gain-framed avoidance (GFA)	Gain-framed benefit (GFB)	p-value of two-way ANOVA among LF, GFA and GFB
Smokers				
Reducing smoking level	3,4 (1,1)	2,9 (1,4)	3,1 (1,1)	0,009
Improving ability to quit	3,4 (1,1)	3,1 (1,1)	3,2 (1,1)	0,046
Non-smokers				
Reducing smoking level	3,9 (0,9)	3,8 (1,0)	3,8 (1,1)	0,45
Improving ability to quit	3,8 (1,0)	3,8 (1,2)	3,7 (1,1)	0,89

Values in cells are mean values and values in brackets are standart deviation values.

Mean responses for all types of framed messages for the overall risks show that the most effective framed message is loss-framed for both smokers and non-smokers. However, differences between mean responses among three types of framed messages are significant for smokers yet they are not significant for non-smokers at 5% significance level. Therefore, it can be agreed upon that prospect theory is not valid for smokers.

Finally, risk perceptions of smokers for continuing smoking and quitting smoking are compared. In case that smokers perceive quitting smoking as a risk, according to prospect theory, loss-framed messages are required to be the most effective framed message for the associated risk with quitting smoking, weight gain. However, loss-framed messages are not found to be significantly the most effective framed message for smokers for weight gain. Moreover, gain-framed messages are not found to be more effective than loss-framed messages for risks associated with teeth spots and heart attacks for smokers. Therefore, it cannot be accepted that smokers perceive quitting smoking riskier than continuing smoking.

Conclusions

Total and per capita cigarette consumption data display that increases in real tobacco prices and smoking ban in public and enclosed areas are not permanent mechanisms to decrease cigarette consumption in Turkey (*Country Report – Tobacco in Turkey*, 2012). Therefore, finding effective ways of decreasing the prevalence of smoking protects its important place on the agenda of governments.

There are a huge number of methods for convincing smokers to decrease or quit smoking but the most widely used methods are public spots and framed messages on cigarette packages. However, shaping those framed messages requires the knowledge of smokers' risk perceptions toward continuing smoking and quitting smoking.

Therefore, this study aims to analyze whether cigarette smokers are more risk seeking than non-smokers. Moreover, this paper investigates the effects of gain-framed avoidance, gain-framed benefit and loss-framed messages on adults' perceptions of reducing general smoking level and increasing one's ability to quit smoking. By this way, validity of prospect theory for cigarette smokers is reviewed. Furthermore, risk perceptions of smokers for continuing smoking and quitting smoking are compared.

Similar samples of smokers and non-smokers are formed and mean responses of subjects to a specifically designed questionnaire are analyzed. Although Blondel et al. (2007) found that drug-addicts are more risk seeking than non-addicts, there is no enough evidence that cigarette smokers are more risk seeking than non-smokers in this study.

Moreover, adults, both smokers and non-smokers, exposed to loss-framed messages perceive that those messages are more effective in reducing general smoking level than gain-framed messages can be inferred. However, adults exposed to loss-framed messages perceive that those messages are more effective in increasing one's ability to quit than gain-framed messages cannot be accepted.

The most effective type of framed message for three different types of risks is also examined separately for smokers and non-smokers. The most effective framed message for smokers is found to be the loss-framed but this conclusion is not statistically meaningful in cases of teeth spots and weight gain. Yet, it is statistically significant in cases of heart attacks. Furthermore, the most effective type of framed message for the overall risks is significantly discovered to be the loss-framed for smokers. Therefore, it can be concluded that prospect theory is not valid for smokers and it is effective to have only loss-framed messages on cigarette packages nowadays in Turkey.

Furthermore, it cannot be concluded that cigarette smokers perceive quitting smoking riskier than continuing smoking since loss-framed messages are not found to be significantly the most effective framed message for weight gain and gain-framed messages are not found to be more effective than loss-framed messages for risks associated with teeth spots and heart attacks for smokers.

Conclusions of this study must be evaluated carefully since smokers and non-smokers samples are seperately small samples. Another restriction of this study is the small number of questions asked to respondents. Moreover, risk indicators other than choice indicator of risk and pricing indicator of risk can be employed to measure risk perceptions more accurately. Finally, another risk perceived from quitting smoking such as loss of attention and/or concentration, social ostracism, loss of enjoyment and craving for cigarettes can be exemplified.

As a future study, a more comprehensive questionnaire can be implemented to a higher number of adults by replacing the risk of weight gain with another example of quitting smoking risk which is perceived to be the highest risk of quitting smoking.

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A Review of the Legislative Framework for Addressing Carbon Dioxide Emissions in Trinidad and Tobago

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Abstract

The Caribbean Region has not maximized on the benefits of environmental management despite the region's critical dependence on the natural environment. Development paths in the past have not been crafted to reflect a deliberate movement towards Sustainable Development, but the global challenge of climate change mitigation provides an opportunity for the Region and similar small and island developing economies to maximise on the benefits of adapting their national policies to address their socio-economic challenges while managing the environment. This paper reviews the legislative approach to environmental management of carbon dioxide emissions in Trinidad and Tobago as a resource rich, hydrocarbon based economy. In the case of Trinidad and Tobago, while carbon dioxide emissions have been acknowledged globally as a greenhouse gas and commitments have been made to mitigate against climate change via greenhouse gas reductions, a review of existing legislative framework shows that there is a severe lack of enforcing instruments that targets specific environmental objectives, particularly that of carbon dioxide reduction. The recommendations based on this paper's review therefore suggest that economic instruments be crafted to target carbon dioxide emissions and are by extension incorporated in the existing legislative framework of the economy- an approach which can be explored by other Caribbean countries

Keywords: Environmental Management, Economic Instruments, Legislative Framework, Sustainable Development.

Introduction

Civilization seems to have set a bad precedent with regard to the environment. From the Sumerians to the Mayans, Romans and Greeks, ancient civilizations have developed an almost unchangeable precedent in compromising their environments whether it be through the over cultivation and over grazing of lands to feed large armies and labour forces or the removal of tropical forests to build elaborate ceremonial buildings. Modern man has not left off the tradition, and following the Neolithic Revolution of the past, the Industrial Revolution, the Scientific Revolution and what has now been coined the "Consumer Revolution", have now catalyzed the growth of populations' demands on the environment. As in each of our ancient civilization's fate, the current generation is faced with a tipping point of determining how economic needs are met without compromising the environment's ability to continue to support these needs and well as the needs of future generations.

The Revolutions of the past, have however, provided the impetus for growth and "development" of nations not all at the same time or in the same manner, and while those, particularly of the North (more industrially developed nations) have been able to maximize benefits from these periods, others (described as Developing Countries) have been left behind with issues of poverty and inequality looming over environmental challenges. Based on an exploration of the developed-developing dichotomy, it becomes evident that developing countries do not have the luxury of engaging the same approaches as the now developed. The Founex Report on Development and the Environment[85] for example, recognized that: *"The developing countries would clearly wish to avoid, as far as is feasible, the mistakes and distortions that have characterized the patterns of development of the industrialized societies."*

The environment has changed and now the declining regenerative capacity of the environment evident in diminishing non-renewable and renewable resources and the diminished absorptive capacity of the environment manifesting in Climate Change impacts, have presented a challenge to developing countries that are still grappling with issues of poverty and inequality. In light of this challenge however, the Sustainable Development agenda has emerged whereby an opportunity is now presented to break the tradition of past civilizations, through the emergence of newly crafted developmental paths that do not

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[85] M. Almeida (1972) as cited in Ramlogan (2011, pp 15). The Founex Report (1972) presented the "North-South" divide with regard to economic development and environmental degradation, highlighting the concerns of each region and the interrelationship between both.

compromise the environment while at the same time targeting economic and social objectives such as poverty reduction and equality.

The term sustainable development having gained its greatest popularity since the 1987 publication of the United Nations' World Commission on Environment and Development sponsored Brundtland Commission report, 'Our Common Future', defined the term as *"development which meets the needs of the present without compromising the ability of future generations to meet their own needs"* (WCED, 1987, pp 46). The key requirements of sustainable development according to the Brundtland Report) include:

- Meeting the basic needs of the poor;
- Ensuring environmental sustainability;
- Expanding the ability of the 'environment' to meet people's needs through the improvement of technology and social organization; and
- Ensuring intra-generational and inter-generational equity.

Several inclusions to the above definition were made in the Johannesburg conference in 200286 such as the need for good governance, social inclusion, and global cooperation.

In the case of Trinidad and Tobago, the question arises on the topic of the operationalization of Sustainable Development, as to whether or not increasing economic growth is necessarily a preclusive requirement for the attainment of development. A review of the Political Economy of Trinidad and Tobago suggests that economic growth and income generation, as in the case of Open Petroleum Economies and Rentier Economies, are not core issues. Rather, the distribution of income through which poverty is reduced becomes the cause of the persistent problematiques of resource rich countries. The tone for Sustainable Development can therefore be re-set for countries of this nature, requiring the determination of a "steady state" through which growth is sustained rather than pursued with greater emphasis on the development and implementation of policies towards income re-distribution, rather than income generation.

This paper presents the role of economic instruments as environmental management tools which can further facilitate the pursuit of Sustainable Development in the context of a resource rich economy. It explores the dynamics of the economy's Institutional and Legislative framework to determine the opportunities for and challenges against addressing Carbon Dioxide emissions as a greenhouse gas, acknowledging that legal, market, institutional and political considerations are also necessary in reflecting that macroeconomic stability and information flows, appropriate institutional structures and characteristics also affect the effectiveness of economic instruments (Kazoora et al, 2009), and all form part of a framework required for addressing such environmental issues.

The organization of the paper following this introduction is as follows: Section 2 presents literature that justifies the pursuit of Sustainable Development by the crafting of indigenous developmental paths; Section 3 considers the relevance of economic instruments in the Caribbean context; Section 4 discusses how environmental management is addressed through legislative instruments in Trinidad and Tobago and highlights the main gaps between the legislative framework in addressing carbon dioxide emissions;

Sustainable Development: Crafting the Right Tools

One set of tools through which environmental objectives of Sustainable Development are targeted are Economic Instruments which have the potential to capture and internalize externalities, while ensuring that economic gains in the form of revenues, and further based on the use of potential revenues, can also be directed towards social objectives thereby improving environmental quality, improving the quality of human life and raising public revenue (Kazoora et al, pp. vi, 2009). As cited in Kazoora et al (2009, pp 5) Principle 16 of the Rio Declaration highlights that *"National authorities should endeavour to promote the internalisation of environmental costs and the use of economic instruments, taking into account the approach that the polluter should, in principle, bear the cost of pollution with due regard to public interest and without distorting international trade and investment"* (United Nations, 1992).

The results from the application of economic instruments depend on several factors through which they effect the necessary alteration of economic decision making, such as the institutional structures, information asymmetries, and investment impacts of specific economies. Huber et al (1998, pp 47) identified for example, that the approaches to the development of market based instruments for the

Caribbean region should reflect "stylized facts" which includes the fact that *"[Caribbean] small-island vulnerabilities and institutional opportunities are conceptually different from those in larger riparian countries."* Furthermore, the crafting of indigenous policies for the region should reflect that unlike the past strategies of the now "developed" regions of the world, current development need not necessitate environmental degradation and particularly the increase in greenhouse gas emissions, but rather, based on the tenets of sustainable development, involve the creation of new and different developmental path or paths, suitable to the context of the region and the region's countries in light of climate change and other social and economic issues.

The Intergovernmental Panel on Climate Change (IPCC) Working Group 3's contribution to the Fourth Assessment Report (Sathaye et al, 2007) defined development paths as a complex array of technological, economic, social, institutional, cultural, and biophysical characteristics that determine the interactions between human and natural systems, including consumption and production patterns in all countries, over time at a particular scale. Mitigative capacity was defined as *"a country's ability to reduce anthropogenic greenhouse gases or enhance natural sinks"* (Winkler et al, 2006, as cited in Sathaye et al (2007) pp 696). It was recognized that there is growing emphasis in the literature on the two way relationship between climate change mitigation and sustainable development where in most instances, mitigation can have ancillary benefits or co-benefits that contribute to other sustainable development goals (climate first) while development that is sustainable in many other respects can create conditions in which mitigation can be effectively pursued (development first).

Sathaye et al (2007) stated that it is therefore apparent that climate change is influenced not only by the climate-specific policies but also by the mix of development choices and the resulting development trajectories. Ensuring that development is more sustainable by changing and crafting suitable development paths can thus make a significant contribution to climate change goals. The case for environmental tax reform is therefore based on the larger recognition that small island developing states such as Trinidad and Tobago can pursue sustainable development by crafting different developmental paths for themselves, cognizant of an overall need for climate change mitigation as well as adaptation and socio-economic needs such as poverty and inequality reduction. Such developmental paths present therefore, opportunities to explore options that now developed nations did not have the motivation to follow, and can also demonstrate to the rest of the world how the economy can flourish within the carrying capacity of the environment and ultimately lead to the economically, socially and ecologically desirable outcomes that are necessary to ensure intra and intergenerational equity.

Economic Instruments (EIs) and Environmental Management in the Caribbean

In the Caribbean region, there has been limited use of economic instruments, particularly market based instruments as environmental management tools, even in light of the region's critical dependence on the natural environment for its very sustenance and in light of the extreme vulnerability to economic and environmental hazards faced by the region. For the Caribbean region in particular, as small (and island) developing states in most instances, there are key interrelationships between economic and environmental vulnerabilities. The natural environment is the major influential factor of production of Caribbean output, ranging from agriculture to energy to tourism.

The Caribbean region's economic dependence on the environment has resulted in an almost wholesale removal of biomass and substantial environmental degradation (McElroy et al, 1990 and Bass, 1993 as cited in Sauer and Teelucksingh, n.d). Among the major environmental and by extension economic concerns of the region are coastal degradation, marine pollution and biodiversity loss. For small, highly open vulnerable economies, the question of externalities, and the treatment of how such externalities should be internalized is critical to their economic sustainability because of the impact of economic activities on the natural environment on which they depend.

With the crucial interface between the economy and the environment in the Caribbean given, the IMF (2013) describes the Caribbean region as being largely economically vulnerable due to high and rising debt to GDP ratios ranging as high as 143.3% of GDP as in the case of Jamaica to 144.9% in St. Kitts and Nevis. The precarious nature of the economically vulnerable, environmental-resource dependent Caribbean countries suggest that fiscal reform is necessary. The logic is that for these countries, integration of environmental concerns into economic decision making is an obligation and an opportunity, but not a matter of choice. The functioning of such economic systems requires economic policy instruments that are critically important for addressing externalities and incentivising the necessary behavioural responses for addressing environmental challenges by motivating sustainable decisions and discouraging unsustainable decisions at the same time.

Given the validity of economic instruments for environmental management in the region, several factors challenge the usefulness of such instruments. Kramer et al (2003) have identified for the [Latin American] and Caribbean region, impediments to the implementation of economic instruments includes: Institutional and administrative challenges; human resources constraints; financial challenges; lack of data and social challenges. Evidence of existing economic instruments suggests that there is greater priority on the benefit of economic activities which tend surpass the regenerative, absorptive and assimilative capacities of the natural environment in the absence of properly crafted and/or implemented mechanisms in place to guide and motivate sustainable economic behaviors. While environmental taxes for example, contribute to government revenues (which, dependent on earmarking may or may not be recycled back into the economy), there are few cases of direct impacts on negative externalities such as vehicular or industrial emissions.

Kazoora et al (2009, pp3) cited that *"[g]iven that EIs are implemented in a dynamic socio-cultural, economic and political environment, they "should be regularly reviewed and adapted to ensure that they continue to be effective"* (United Nations, 1992: p. 66). In the case of the Caribbean, economic instruments have been generally static with implementations either still at the initial stages in many cases or left unmonitored in terms of overall effectiveness in other cases of "older" instruments. As such environmental tax reform in the case of Trinidad and Tobago, can provide an impetus for initiating both an update of the existing inventory of economic instruments and also examine the existing and potential effectiveness and impacts of current and proposed economic instruments.

The Legislative Approach to Addressing Carbon Dioxide Emissions in Trinidad and Tobago

A Doha Statement on South-South Cooperation for Effective Oil and Gas Development held in 2007 (UNDP, 2009) identified that the following issues in effective oil and gas development:

- The challenge for both existing and new hydrocarbon-producing countries is to ensure that oil and gas revenues are used to improve the lives of their citizens and promote sustainable development.
- Oil and gas revenues alone are neither a necessary nor sufficient condition to achieve sustainable and equitable economic development.
- The oil and gas sector cannot be managed in isolation from the wider economy, and long-term success can only be achieved when all sectors are managed well.
- Serious environmental consequences, potentially irreversible, can arise during exploration for and the production, refining and transportation of oil and gas.

Particularly important to the sustainable development of Trinidad and Tobago as a resource rich country is the need for environmental protection and resource management. Environmental protection and resource management activities not only include those activities that are geared specifically at environmental protection, but also those that not necessarily carried out for environmental protection but nevertheless produces clear, measurable environmental benefits; environmental protection has been also defined as any activity to maintain or restore the quality of environmental media through preventing the emission of pollutants or reducing the presence of polluting substances in environmental media.

In Trinidad and Tobago, legislation that has facilitated the capture of rents includes Exploration and Production Licenses and Production contracts. In particular, the following are the key instruments through which the main revenues from the hydrocarbon sector are derived from the upstream petroleum sector:

- The Petroleum Act and Regulations, Chap 62:01
- The Petroleum Production Levy And Subsidy Act, Chap 62:02.
- The Income Tax Act, Chap 75:01
- The Petroleum Taxes Act, Chap 75:04
- The Petroleum Profits Tax
- The Supplemental Petroleum Tax (Part 11 of the PTA)
- The Income Tax (In Aid of Industry) Act Chap. 85:04
- The Unemployment Levy Act Chap 75:03
- The Green Fund Levy, established by Section 67(1) of the Miscellaneous Taxes Act Part XIV.

In terms of direct environmental management of the sector however, Certificates of Environmental Clearance, the Green Fund Levy and The Petroleum Tax Act contain perhaps the only environmentally motivated instruments that targets environmental objectives within the energy sector. One hundred and three (103) out of one hundred and fifty four (154) EIA applications submitted between the periods 2003

to 2012 were for Exploration and Production, and Petrochemical Activities. While taxes exist to capture rents, many of them are not environmentally motivated. In addition, while the green fund levy is environmentally motivated, it does not necessarily lend itself to being an effective environmental tax.

The foundation of Trinidad and Tobago's institutional framework with regard to environmental management is emphasized in the National Environmental Policy which is implemented through the Environmental Management Act (EMAct, 2000) with subsidiary legislation of Air Pollution Control Rules; Noise Pollution Control Rules, Water Pollution Rules; Environmentally Sensitive Areas (ESA) Rules; Environmentally Sensitive Species (ESS) Rules; and, Certificates of Environmental Clearance Rules (EMAct, No 3/2000). Apart from this cornerstone of environmental management, there are also standards made under the Standards Act such as TTS 547. 1998 (Specification for the effluent from industrial processes discharged into the environment) and TTS 558. 2001 (Motor vehicles- exhaust emissions- specifications) that have environmental implications. It should be noted however, that while these standards exist, they are, in the case of the two examples as they relate to air pollution, voluntary and are not legally binding. Several other pieces of legislation both old and new provide some form of treatment that guides and is intended to enforce environmental management such as, inter alia, the Pesticides and Toxic Chemical Act (Act No. 4/1986); Town and Country Planning Act (Chapter 35:01); Conservation of Wildlife Act (Chapter 67:01) and the Occupational Safety and Health at Work Act (Act No. 2/2006).

Policy commitments have also been made in the drafting and development of the Renewable Energy Policy; Climate Change Policy; Biodiversity Strategy and Action Plan; and a National Action Programme to Combat Land Degradation, all of which, in addition to others suggest that there is a strong intention to ensure that environmental management and by extension, Sustainable Development is accounted for, if at the very least on paper. Sandra Paul (2009, pp 3) stated on a similar note that: *"Based on this if the proper legislation is put into place, developing an integrated climate change policy for Trinidad and Tobago would be relatively easy...."* further iterating that: *"to create a successful integrated climate change policy, Trinidad and Tobago must face the twin challenges of updating its environmental legislation and effectively enforcing that legislation."* In its report, the Renewable Energy committee of Trinidad and Tobago (Ministry of Energy and Energy Affairs, 2011, pp 1) acknowledged that: *"Local energy production and consumption have grown significantly in the last few decades and so, despite the increase in the focus on natural gas, local emissions of GHGs such as carbon dioxide continue to grow, with the energy sector being the leading contributor followed by transportation and power-generation."*

According to the United Nation's Statistics division, and also cited in Boodlal et al (2008), there is a clear imbalance in Trinidad and Tobago's Carbon Dioxide emissions levels with respect to its population size and its Gross Domestic Product (GDP). While based on absolute emissions, Trinidad and Tobago is ranked 71st globally, the country is ranked 7th and 2nd in per capita and GDP intensity emissions respectively. Over the period 1971-2008, carbon dioxide emissions have increased from 6.1 million metric tonnes, to 39.2 million metric tonnes. The Climate Change Policy of Trinidad and Tobago asserts that Trinidad and Tobago accounts for 0.1% of greenhouse gases in the context of global absolute emissions but also acknowledges that its per capita emission is relatively high, with Trinidad and Tobago's 2008 carbon dioxide emissions level of 28.37 t/CO2/per capita being the highest in the region. Further, the Climate Change policy identified a 278% increase in Carbon dioxide emissions from the energy sector over the period 1990-2006.

The increase in carbon dioxide emissions over the period of 1971- 2008 suggests that there has been little response in terms of this area of environmental regulation, to the Petroleum Act (1982, Chapter 62.01) which under section 29 (1) states that:

"The President may make any such Regulations as he considers necessary or expedient for carrying out the purposes of this Act, and in particular-

(j) for the prevention of pollution of land, water or air and for compensation therefore."

and even further to the ratification of the United Nations Convention on Climate Change (UNFCCC) and the Kyoto protocol to the UNFCCC which recognizes carbon dioxide as one of the major air pollutants attributed to the cause of the enhanced greenhouse gas effect. Paul (2009, pp3) has also indicated that although *"Trinidad and Tobago has ratified international agreement and conventions regarding the environment, it has not yet incorporated many of these agreements and conventions into our national environmental policies and legislation."* The Draft Climate Change Policy however, acknowledges the commitments of Trinidad and Tobago as a ratified signatory to the UNFCCC and its Kyoto Protocol which includes inter alia:

Develop, periodically, update and publish national inventories of anthropogenic emissions by sources and removals by sinks of greenhouse gases;

and under the Kyoto Protocol to:

Formulate, where relevant and to the extent possible, cost effective national programmes to improve the quality of local emission factors, activity data and/or models which reflect the esocio-economic conditions for the preparation and periodic updating of national inventories of anthropogenic emissions by sources and removals by sinks of greenhouse gases

Formulate, implement, publish and regularly update national programmes containing measures to mitigate climate change and measures to facilitate adequate adaptation to climate change. Such programmes would, inter alia, concern energy, transport and industry sectors as well as agriculture, forestry and waste management.....

While air pollution therefore has been on the increase, evidenced by a 79% increase in Trinidad and Tobago's carbon footprint due to increases in both its GDP per capita and carbon intensity, the number of instruments (legal and economic) has also increased. Air pollution is addressed either directly or indirectly by the:

- Motor Vehicles and Road Traffic Regulations, made pursuant to the Motor Vehicles and Road Traffic Act (rev. 1980, regulation 38, rule 13- visible emissions);
- Motor Vehicles and Road Traffic (Amendment) Act, No. 25 of 1997, section 14- de-registration for causing an environmental hazard;
- Public Health Ordinance (1950) Sections 69 and 70- Nuisance;
- Public Health Ordinance (1950), Section 70 (l) (m)- prohibits black smoke from chimneys;
- Municipal Corporations Act (1990), Section 221 (I)- Nuisance;
- Standards Act No. 18 of 1997, Section 15 (I)- Power to make environmental standards;
- Consumer Protection and Safety Act (1985), Section 21 (I)- conduct detrimental to the health of consumers; and,
- Environmental Management Act (2000) Sections 49-51- Authorizes the EMA to develop a legal regime for management of air pollution;

Bearing in mind that Trinidad and Tobago's fuel is highly subsidized and that the economy boasts of one of the lowest energy costs in Latin America and the Caribbean, the Renewable Energy Policy targets carbon reduction through the expansion of the use of Compressed Natural Gas (CNG) as a transportation fuel; an exploration of opportunities for more efficient industrial/petrochemical processes and use of combined-cycle technology in electricity generation; and, an exploration of other options for reducing GHG emissions such as carbon capture and storage (CCS) (Ministry of Energy and Energy Affairs, 2011). The mechanisms through which these objectives are to be met- such as specific economic instruments- have not however been developed.

The National Environmental Policy of Trinidad and Tobago which forms the basis of the Environmental Management Act (2000) addressed air pollution and cites specifically carbon dioxide as a greenhouse gas and outlines a commitment to, inter alia:

- *Prevent avoidable emissions to the atmosphere and, where emissions to the atmosphere are un-avoidable, take all reasonable and practicable measures to minimize their impact on ambient air quality;*
- *Regulate the emission of atmospheric pollutants including odors, from industrial operations my managing activities to achieve an ongoing minimization of environmental harm through cost effective measures using pollution prevention techniques;*

  (e) Develop a list of activities which generate listed air pollutants above the maximum permissible levels;

  (f) Develop a registration for all listed activities that emit a list air pollutant so as to assess their contribution to air pollution; which will lead to the development of an air emissions inventory in Trinidad and Tobago;

  (g) Control air pollution through a system of permits based on the Polluter Pays Principle, for listed activities emitting specified air pollutants above the maximum permissible limit. The cost of pollution prevention or of minimizing environmental damage due to pollution will be borne by those responsible for pollution;

(l) Explore and develop strategies to "encourage" compliance with standards and maximum permissible limits of listed air pollutants including the following approaches to achieve compliance with emission controls:

command and control

economic instruments

Co-regulation

Self-regulation

(EMA 2006, pp 27-28).

On a separate note, greenhouse gases inclusive of carbon dioxide, are also treated with separately in the National Environmental Policy with the recognition that such gases alter the global climate and result in increasing sea levels in which Trinidad and Tobago, as a small and island developing state, is particularly vulnerable to the impacts on coastal developments, agriculture and health.[87] It is also recognized in the NEP that the hydrocarbon basis of the Trinidad and Tobago economy has, as a necessary by product, carbon dioxide. In recognizing further the obligations under the UNFCCC which was ratified in 1994, the National Environmental Policy indicates that the Government will, inter alia:

- *Conduct regular inventories of greenhouse gases;*
- *Cooperate with relevant local, regional and international agencies to implement technologies that will reduce, prevent or control man-made emissions of greenhouse gases including the energy, transport, industry, agriculture, forestry and waste management sectors;*

(EMA 2006, pp 29-31).

Boodlal (2012) has identified that the pattern of greenhouse gas emissions in Trinidad and Tobago is significantly different from most countries which implies that strategies directed towards reducing carbon dioxide emissions may also have to be reflective of the unique circumstances of the country. While the global average for the sectoral contribution of Petrochemical and Power generation sectors to Greenhouse gas emissions is 63%, in Trinidad and Tobago these sectors contributes 81% of the 53 million tonnes of GHG emissions in Trinidad and Tobago in 2010 (Boodlal, 2012). The ammonia and methanol synthesis and industrial power generation activities in Trinidad and Tobago are responsible for more than 80% of the petrochemical and power generation sectors' GHG emissions respectively (Boodlal, 2012).

The National Environmental Policy therefore incorporates an intentional motivation to manage carbon dioxide emissions while the draft national climate change policy addresses greenhouse gas emissions (which include carbon dioxide) and its role in climate change. The EMAct (2000) in addressing the management of Air and Noise Pollution under (Section 49) does not however, include carbon dioxide under the draft Air Pollution Rules (2000) proposed standards- First Schedule, nor does it include carbon dioxide under its Second Schedule- Stack Release Limits. The rules define "air pollutant" as "the substances mentioned in the First Schedule at or in excess of the maximum permissible levels prescribed therein..."

In the case of the Green Fund Levy, it is the only environmentally oriented instrument that aims to capture revenue for the purposes of funding programmes that target environmental preservation, protection and/or enhancement. The literature on economic instruments and environmental taxes however, suggest that the Green Fund Levy is not in fact an environmental tax by definition, although it does represent an environmentally motivated mechanism for environmental management. EUROSTAT (2001, pp. 9) defines an environmental tax as:

"A tax whose tax base is a physical unit (or proxy of it) of something that has a proven, specific negative impact in the environment"

A tax base is defined as *"...the measured or estimated amount of emissions of a polluting substance..."* (EUROSTAT 2001, pp 9).

Based on the recognition that carbon dioxide emissions are particularly significant in contributing to Climate Change, there is a clear requirement that provisions be made to address carbon dioxide specifically as a greenhouse gas. It is therefore necessary to introduce how environmental taxes can be

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[87] Other potential implications of climate change to which small islands like Trinidad and particularly Tobago are also susceptible is the increase in the frequency and intensity of hydro-meteorological events such as Hurricanes.

developed in order to meet the objectives of rent capture but also that of the capture and internalization of externalities associated with this sector particularly that of carbon dioxide. A review of emission trends for Trinidad and Tobago demonstrates that thus far existing legislative and economic instruments have not had a significant impact on reducing carbon dioxide emissions.

The following are some enabling factors that have led to the increased utilization of environmental taxes as economic instruments:

- Acceptance of the polluter pays principle;
- Increasing cost of enforcing environmental regulations for diffused and mobile sources of pollution;
- The lack of tax revenues required to meet the demands of environmental management. In the case of Trinidad and Tobago, the polluter pays principle and the precautionary principles are both enshrined within the National Environmental Policy AND the Draft Climate Change Policy.

The current legislative framework in Trinidad and Tobago also provides for the development of an Environmental Code (EMAct, 2000, Section 19, paragraphs 1 and 2) which specifically indicates that:

(2) When developing the draft Environmental Code, the Authority shall consider and where appropriate, seek to incorporate-

(a) the imposition of product charges where the product manufacturing process or usage is a significant source of pollution; and

(b) the adjustment of direct Government subsidies, or the establishment of tax differentiation or tax incentives, to encourage beneficial environmental activities or to ensure that pricing reflects environmental costs more adequately.

Chapter six (6) of the Trinidad and Tobago National Environmental Policy states that the "Government's aim is to broaden the range of financial instruments used in the implementation of the national environmental policy."The promotion of economic instruments and market instruments as discussed above, are identified in the National Environmental policy including:

- Deposit/refund taxes;
- A tax on energy consumption;
- A fuel tax on diesel;
- Revision of legal standard of liability so that polluters are held responsible for the financial consequences of their actions.

International trends can also substantiate the use of economic instruments such as environmental taxes. Recently, Carbon taxes have been receiving a great deal of attention in the international arena as a commonly relied upon instrument for controlling greenhouse gas emissions. According to the World Resources Institute (2008): "A carbon tax is a fee imposed on fossil fuels, and other primary products (e.g., refrigerants), based on the amount of greenhouse gases (GHG) they emit. A carbon tax places a fee on coal, for example, based on the amount of carbon dioxide (CO2) that is released when coal is burned. The tax creates a cost for emitting GHGs into the atmosphere (for example, $25/metric ton of CO2-equivalent) and in doing so provides a financial incentive for reducing GHG emissions. A carbon tax policy may also include tax credits for activities that remove GHGs from the atmosphere."

The Lithuanian Environmental Investment Fund and the Polish National Fund, like the Green fund of Trinidad and Tobago are earmarked for environmental protection projects BUT they are funded by pollution taxes (i.e taxes on emissions) as opposed to the green fund levy. In addition, earmarking is so specific that revenues must be returned to the industries from which they came or they must be used to reduce harm to the environmental medium that generated the revenue. An interesting OECD example where revenues must be returned to particular industries is the Nitrous Oxide (NOx) tax on approximately 360 large combustion plants in Sweden. The tax rate is set at a very high $5000 per ton, but all revenues from the tax are refunded back to polluters in proportion to their energy output per kilogram of NOx produced. Because all revenues are recycled back to the polluters, some industries benefit financially from the program (e.g. energy producers). Evidence from other developing countries suggest that revenues from pollution tax systems can also be substantial. Poland's system of environmental funds mentioned before recycles on the order of $400 to $500 million per year for environmental investments.

There is evidence of economic instruments being incorporated in legislative instruments that have been effective. The Malaysian Environmental Quality Act enacted in 1974 incorporated the use economic instruments, particularly fees and discharge standards which, following implementation in 1978 obtained dramatic results in reducing total biochemical oxygen demand (BOD) load released in public water bodies from 222 tonnes per day in 1978 to 5 tonnes per day in 1984, with, at the same time a 50% increase in the number of palm oil mills (the targeted industry for the effluent charge) and an increase in palm oil production (Panayotou, 1992 as cited in Kazoora et al, 2009)

Conclusion and Recommendations

The literature has identified overarching recommendations for Governments to maximize on the benefits of economic instruments in terms of environmental, poverty reduction and revenue benefits (Kazoora et al, 2009). In particular, it has been suggested by Kazoora et al (2009) that in the case of Uganda, Government needs to:

- *review the impact of current Economic Intruments (EIs) with a view to addressing any limitations;*
- *introduce new EIs to take advantage of emerging opportunities;*
- *challenge and support the business sector to finance environmental management; and*
- *build the capacities of ministries and institutions to supervise the implementation of EIs in their respective sectors.*

The above recommendations can be taken as generic, particularly for developing countries which if complemented with appropriate case specific studies can also inform indigenous policies that are appropriately crafted for meeting the overarching objectives of Sustainable development. For example, given that there is acknowledgement of the polluter pays principle, Trinidad and Tobago as a resource rich hydrocarbon economy, driven by the energy sector, has to be cognizant of the need to not only manage the sector to collect rents, but to also manage the sector in a sustainable manner. In the case of Trinidad and Tobago, it has been found that there is a legal basis, as well as economic incentives for the following recommendations:

1. Reformation of the Green Fund Levy to conform with Environmental Taxes;

2. Examine the potential of other Economic Instruments to create policy packages that will meet environmental objectives;

3. Enable the development of greenhouse gas inventories (for CO2 and Methane) e.g.: American Petroleum Institute (API) Compendium of Greenhouse Gas Emissions Estimation Methodologies for the Oil and Gas Industry; and

4. Craft policies to ensure that they reflect the peculiarities of the Trinidad and Tobago economy and maximize on the capture of hydrocarbon rents from environmental use.

In the context of operationalization of Sustainable Development and the enforcement of the existing legislative framework, carbon dioxide emissions can be addressed. Development of the existing legal regime is imperative in terms of outlining the requirements for measurement of emissions, inclusion of carbon dioxide as a pollutant in the Air Pollution Rules, determination of the necessary actions required to incentivize the mitigation of carbon dioxide emissions, and enforcement and monitoring of compliance. This under any circumstance does not significantly deviate from the existing provisions of environmental legislation. In light of the political will however such changes can only be driven by public demand that there is proper accountability by the Government for addressing environmental concerns. The institutional framework is not wanting insofar as provisions are in place but rather the co-ordination and necessary impetus for actively seeking Sustainable Development is required through the development of country specific economic instruments.

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Consumer Perceptions on Brand Obscuration: An Invitation to Sin?

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Abstract

The purpose of this paper is to describe the dimensions based on perception of consumers toward brand obscuration applications. A scale developed based on the literature, in-depth interviews were applied for this study to determine related dimensions. A total of 874 questionnaires measured viewers' brand obstruction perceptions. The questionnaire consisted of four parts was conducted on people living in a province of middle region of Turkey. Exploratory factor analysis (EFA) and regression analysis were applied. The results of analyses reveal five valid dimensions (TV watching pleasure, negative effect toward sponsorship, distract attention, ethics and commercial approach and brand acquaintance) and indicate significant relationship between brand obscuration dimensions and dependent variables.

Keywords: Brand, Perception, Brand obscuration, Brand perception, Brand prohibition.

Introduction and Literature Review

Brand obscuration can be defined as covering, closing, masking a brand by TV broadcasters. In Turkey, brand obscuration is a general application by Radio and Television Supreme Council (RTUK) (http://www.rtuk.org.tr/sayfalar/English.aspx). This council has arranged television and radio broadcastings and sometimes bans some brands or products (e.g. alcoholic products and smoke). For this reason television channels prevent brands and some products appear according to the council directive. While this practices in general, there is extremely limited information about consumer reaction towards brand obscuration.

High moral virtue of protecting individuals and most vulnerable groups of society, namely children, teenagers against the "evil of unwanted images and messages" has always been an argumentative issue in various circles. Should they be protected or not, this discussion can be left to the philosopher, but the reality is as clear as a sun. People get expose to many images of which to some these messages may have fallen under" must be banned" category.

Commercials alone, though differs from country to country, carry messages in wide span from alcoholic beverages or tobacco products, even to guns. Television channels can be zapped, even TV sets can be switched of, the "most vulnerable" groups of society can be protected and somehow distanced from being directly exposed to "unwanted commercial" messages. What if individuals face with such product in a TV series? Even worse, what if people go to the movie and in one scene they see a person smoking a cigarette? Eureka! We have found a magic formula to prevent all of this happening: We should obscure such "unwanted" products by simply placing an animated flavour, for instance, on it. Imagine a "bad man" smoking a cigarette in a TV series, just as his character portrayed to in a way its scripted, he should be setting a bad moral and behavioural example. He may stay as is, so long as we put an animated flavour onto that smoking "object". Brands sponsor TV programs by million Dollar budgets, yet their promotional efforts get blackout by obscuration. This study aims to unveil Turkish consumers' perceptions and attitudes toward such practice of obscuring unwanted objects and sponsoring brands in TV series.

Based on the above-mentioned discussions and focusing on the product placement in marketing literatures, this paper aims to understand the how to understand and define the brand obscuration successfully in terms of TV viewers.

Method

A questionnaire form developed for the study consists of four sections. The first section of the form consist statements reflects consumers' perceptions and attitudes towards brand obscuration phenomenon. The second section of the questionnaire contains 2 single statements related to non-brand obscured TV program watching behaviour. In terms of first and second sections of questionnaire, five point Likert Scale ("5" Strongly Agree, "1" Strongly Disagree) was used by respondents in responding to non-brand obscured TV program watching behaviour. To generate statements that consisted of the domain of opinions about non-brand obscured TV program watching behaviour, personal interviews were conducted with a judgmental sample on 28 people in Eskisehir, Turkey. Third section of the questionnaire aims to establish TV viewers' previous viewing experiences and behaviour. The last section of questionnaire is designed to collect demographic data on respondents.

The convenience sampling was employed in this study. The study was employed in homes of 874 people in Turkey. The data for this study were collected through a self-administrated questionnaire of TV viewers at homes. A self-administrated and research-aided questionnaire was distributed by surveyors. The people were intercepted by surveyors at homes. The surveyors first briefly explained the research purpose, and then gave the questionnaires to willing participants. The time to explain the study and complete the questionnaire was approximately 15 minutes. A total of 1000 questionnaires were distributed, and 874 were completed, resulting in a return rate of 87 percent.

Findings and Results

Characteristics of Sample

Table 1 indicates the demographic profile of the sample. The sample consisted of 874 Turkish people, of whom 47 percent were male and 53 percent were female. Regarding the age distribution of the respondents; 23.6% of the sample is in 15-19 age range, 25.4% in 20-25 age range, 19.7% in 26-30 age range, 18.2% in 31-40 age range, 11.2% in 41-50 age range and 1.9% in 51 ages and over range. The demographics on monthly income identify two dominant categories: less than 334 USD (56.9%) and 335-667 USD (28.1%). Approximately 9 % of the respondents have monthly income over 668 USD-1000 USD and 2% of the respondents have a monthly income over than 1.335 USD. Lastly, Education status of the respondents consisted of university degree (33.5%), secondary school (49.3%), primary school (13.4%), literacy (2.7%) and postgraduate (1.1%).

Table 1. Demographic Profile of Respondents

	Frequency	%		Frequency	%
Gender			*Income*		
Male	413	47.3	334 USD and <	497	56.9
Female	461	52.7	335 - 667 USD	246	28.1
			668 - 1000 USD	80	9.2
			1001 -1334 USD	30	3.4
Age			1335 USD and >	21	2.4
15-19	206	23.6			
20-25	222	25.4	*Education*		
26-30	172	19.7	Literacy	24	2.7
31-40	159	18.2	Primary school	117	13.4
41-50	98	11.2	Secondary school	430	49.3
51 and >	17	1.9	University	293	33.5
			Postgraduate	10	1.1
n=874					

Brand Obscuration Dimensions

Estimation procedures of exploratory factor analysis (CFA) assume normal distributions of the responses. Prior to exploratory factor analysis (EFA), both univariate and multivariate non-normality were examined. Univariate non-normality was tested using skewness and kurtosis. The extreme among all the variables was -1.18 for kurtosis and .97 for skewness for one variable, which was within the acceptable limits (Kline, 1998). After the normal distribution testing, an exploratory factor analysis

(EFA) was employed in order to ascertain the factor structure. Orthogonal rotation (varimax) was chosen for exploratory factor analysis. Orthogonal extraction, using varimax rotation suits the research purposes and the need to reduce a large number of variables to a small set of uncorrelated variables (Hair et al., 1995). Varimax rotation attempts to minimize the number of variables that have high loadings on a factor, enhancing the interpretability of the factors (Hopkinson and Pujari, 1999). Three items that did not load strongly (< 0.40) on the intended factors were dropped for subsequent analysis.

Table 2. Respondents' Attitudes towards Brand Obscuration

Factors	Factor Loadings (β)	Means	S.D.	Eigenvalues (% of variances)
Factor 1: Brand Acquaintance				
Although the brand is obscured I know the brand because of its color.	0.76	2.46	1.10	4.44 (26.16)
Although the brand is obscured I know the brand because of its logo.	0.74	2.41	1.09	
Although the brand is obscured I know the brand because of its shape or image.	0.73	2.28	1.07	
I know the familiar brand even if it is obscured.	0.70	2.24	1.06	
Factor 2: Ethics and Commercial Approach				
Brand obscure is an injustice application towards TV viewers.	0.72	2.55	1.18	1.87 (11.03)
I think brand obscure is not ethical application.	0.62	2.76	1.15	
I prefer to watch a TV program without brand obscure.	0.61	2.16	1.18	
Factor 3: Distract Attention				
If I like the TV programs I pay more attention to brands.	0.74	2.97	1.27	1.56 (9.18)
If brand completely obscure, I endeavor to know the brand in other scenes.	0.74	3.13	1.30	
If obscured brand is big on the TV screen I easily recognize it.	0.58	2.50	1.14	
My recognition is difficult if I don't know brand before.	0.45	2.41	1.13	
Factor 4: Negative Effect Toward Sponsorship				
Brand obscure harms sponsorship application.	0.86	2.70	1.17	1.23 (7.24)
Brand obscure reduces sponsorship application on TV.	0.83	2.68	1.15	
Brand obscure is unfair to companies requiring advertise their brands.	0.51	2.54	1.19	
Factor 5: TV Watching Pleasure				
Brand obscure negatively affect TV viewing pleasure.	0.74	2.28	1.18	1.00 (5.93)
Brand obscure application attracts my attention more than regular times.	0.70	2.19	1.17	
Brand obscure distracts my attention.	0.67	2.36	1.17	

Factor analysis was done with 20 statements and 3 of the statements were dropped after the reliability analysis. There was a total of 17 scale items that could influence or determine aspects related to the attitudes of Turkish TV viewers toward brand obscuration; thus principal component factor analysis was used to sort out and classify these variables as well as to convert them into main factors. In parallel to Kaiser's (1974) criteria, only factors with eigenvalues greater than 1 were retained; and only items with factor loadings and communalities of greater than 0.40 were included in the final factor structure. Cronbach's alpha values for each dimension were computed to confirm the factor's internal consistency.

To apply factor analysis on items underlying the attitudes of Turkish TV viewers toward brand obscuration, it is necessary to test the Kaiser-Meyer Olkin (KMO) measure of sampling adequacy (Zhang et al., 2003). For the attitude variables, Kaiser-Meyer Olkin (KMO) was 0,81, indicating that the sample was adequate for factor analysis (Kaiser 1974). The Bartlett Test for Sphericity (BTS) was 3598.49 (p <0.01), indicating that the hypothesis variance and covariance matrix of variables as an identity matrix were rejected; therefore, factor analysis was appropriate.

According to principal axis analysis, five factors had an eigenvalue equal to or greater than 1.0 (Kaiser, 1974), explaining a total of 59.56 percent of the variance. These factors were termed "Brand Acquaintance", "Ethics and Commercial Approach" , "Distract Attention", "Negative Effect toward Sponsorship", and "TV Watching Pleasure" respectively.

In the factor analysis, the percentage of the variance explained by each factor indicates the relative significance of the factors. Accordingly, the first factor, labelled Brand Acquaintance, explained a large

part (26.16%) of the total variance, having a greater significance than the other four factors. The second factor, labelled Ethics and Commercial Approach, explained 11.03 percent of the variance. This factor contained three items about brand obscuring to point of ethics and commercial of TV viewers'.

The third factor, labelled Distract Attention, explained 9.18 percent of the variance. It consisted of four items, related to viewer's attention towards observed brands when they watching TV. The fourth factor, labelled Negative Effect toward Sponsorship, explained 7.24 percent of the variance. This factor consisted of three items. This factor related to the effects on sponsorship of observed brands. Lastly, the fifth factor, labelled Watching TV Watching Pleasure, explained 5.93 percent of the total variance. This factor contained three items about TV watching pleasure of the observing brand. All five constructs met the criterion that a factor loading should be equal to or greater than 0.40. The Cronbach's alphas were greater than 0.57 and the total of scale reliability was 0.76. Typically, reliability coefficients of 0.70 or higher are considered adequate (Kim et al., 2003; Nunnally 1978). For all 17 items, the alpha was 0.76 and it can be evaluate as adequate level. However, one factor has 0.57 alpha value. Nunnally (1978) and Child (1970) further states that permissible alpha values can be slightly lower given that it is above 0.60 for newer scales.

The Pearson correlation coefficients among the variables are presented in Table 3. The bivariate relationships indicated that all of the variables significantly correlated (a range of 0.20–0.62). Aspects-based scales were generated by summating the relevant items. By running descriptive statistics, mean and standard deviation were found for each factor. According to descriptive statistics, the factor of Distract Attention had a higher score (mean 2.75) than other factors.

Table 3. Correlation Matrix and Descriptive (Mean, Std. Deviation)

	1	2	3	4	5
Brand Acquaintance	1,00				
Ethics and Commercial Approach	0.30**	1.00			
Distract Attention	0.41**	0.31**	1.00		
Negative Effect Toward Sponsorship	0.22**	0.62**	0.22**	1.00	
TV Watching Pleasure	0.32**	0.36**	0.34**	0.20**	1.00
Means	2.35	2.49	2.75	2.64	2.27
(S.D.)	(0.82)	(0.84)	(0.85)	(0.92)	(0.91)
*p < 0,05; **p < 0,01; (S.D.): Standard Deviation					

To identify the relationship between the attitudes of Turkish TV viewers toward brand obscuration and the non-brand obscuring TV viewing desire and positive emotions towards obscured brands of viewers, a multiple regression analysis was utilized.

The relationship between the attitudes of Turkish TV viewers toward brand obscuration and the non-brand obscuring TV viewing desire seen in Table 4. The results of the regression model indicated that the regression model was statistically significant (F = 154.50; p < 0.01), and 48 percent of the overall non-brand obscuring TV viewing desire was explained by the attitudes of Turkish TV viewers toward brand obscuration. The regression coefficients indicated that ethics and commercial approach (β = 0.61; p < 0.01) has the strongest effects among the other factors. As seen from table 4, distract attention (β = 0.13; p < 0.01), brand acquaintance (β = 0.13; p < 0.01) and negative effect toward sponsorship (β = 0.04; p < 0.01) indicated a statistically significant relationship with the non-brand obscuring TV viewing desire respectively. The results of regression analysis indicated that the TV watching pleasure (β = 0.25; p < 0.01) indicated no significant relationship (p > 0.05) with the non-brand obscuring TV viewing desire.

Table 4. Regression Results on Non-Brand Obscuring TV Viewing Desire

Factors	Dependent Variable					
	Non-Brand Obscuring TV Viewing Desire					
	Std. β	t	p	R^2	Adjusted R^2	F
Brand Acquaintance	0.13	5.43	0.01**			
Ethics and Commercial Approach	0.61	24.68	0.01**			
Distract Attention	0.13	5.27	0.01**	0.48	0.48	154.59 **
Negative Effect Toward Sponsorship	0.04	1.61	0.01**			
TV Watching Pleasure	0.25	10.18	0.10			
*p < 0,05; **p < 0,01						

The second multiple regression model was concerned with the relationship between the attitudes of Turkish TV viewers toward brand obscuration and the positive emotions towards obscured brands of viewers. The results of multiple regressions seen in table five. The results of the regression model indicated that the regression model was statistically significant ($F = 21.56$; $p < 0.01$), and 11 percent of the overall positive emotions towards obscured brands of viewers was explained by the attitudes of Turkish TV viewers toward brand obscuration. The regression coefficients indicated that the attitudes of brand effect ($\beta = 0.21$; $p < 0.01$), distract attention ($\beta = 0.20$; $p < 0.01$), ethics and commercial approach ($\beta = 0.11$; $p < 0.01$), and brand acquaintance ($\beta = 0.11$; $p < 0.01$) indicated statistically significant relationships with the positive emotions towards obscured brands respectively. The results of analysis indicated that the TV watching pleasure ($\beta = 0.02$; $p < 0.01$) indicated no significant relationship ($p > 0.05$) with the positive emotions towards obscured brands.

Table 5. Regression Results on Positive Emotions Towards Obscured Brands of Viewers

| Factors | Dependent Variable | | | | | |
| | Positive Emotions Towards Obscured Brands | | | | | |
	Std. β	t	p	R^2	Adjusted R^2	F
Brand Acquaintance	0.11	3.59	0.01**			
Ethics and Commercial Approach	0.11	3.51	0.01**			
Distract Attention	0.20	6.27	0.01**	0.11	0.11	21.56**
Negative Effect Toward Sponsorship	0.21	6.52	0.01**			
TV Watching Pleasure	-0.02	-0.78	0.43			
*p < 0.05; **p < 0.01						

Discussion and Conclusion

This paper has presented the findings of consumer perceptions on brand obscuration. The main finding and contribution of this study was to develop a new scale about brand obscuration. Literature of brand obscuration is very scarce, and not many scholars have been previously touched in this area. Thus, this study will be a significant contribution for the future researchers and will also ease their work in their quest for investigating other dimensions of the subject.

Factor analysis was revealed five latent constructs that titled as brand acquaintance, TV watching pleasure, distract attention, negative effect toward sponsorship, ethics and commercial approach. These factors are deemed to be the main denominators for the brand obscuration concept. The findings also underlies that consumers were not viewing the brand obscuration as a whole, but they rather evaluates the concept under different pillars.

Using a regression analysis, the derived beta coefficients could be used to explain the relative importance of the five dimensions in terms of theirs contributions to the variance in the non-brand obscuring TV viewing desire and positive emotions towards obscured brands of TV viewers. The empirical results have indicated that ethics and commercial approach carried the most weight in explaining ethics and commercial approach, and intention. The results of this study also indicate a significant effect of brand obscuration dimensions on dependent variables.

The findings of this study provide insight on brand obscuring and factors with respect to viewers' reactions to obscure of brand. However, the interpretation of findings related with brand obscuring need to be considered within the context of the limitation in this research. Hence, there are a number of limitations and suggestions for future research related to this current study. In terms of research methodology, one limitation of this study comes from the fact that this research was conducted only in one province (Eskisehir) in Turkey. The second limitation is related to the sampling methodology. Although descriptive research calls for probability sampling, non-probability sampling was used for this study. Therefore, no assessment of sampling error was possible. Consequently, the results may not adequately represent the total population in Turkey. Another limitation is related to comparison scope of the research. The research finding cannot compare with results of other countries. As a result, the results of this research should be interpreted in this manner.

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Examination of the Effectiveness of the Surveillance Cameras in Reducing Traffic Accidents: The Bursa Case

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Abstract

This research examines the impacts of surveillance cameras through the years 2011 and 2013 when they have begun to be used more frequently in Bursa. By examining this important case, it will be clarified whether the presence of surveillance cameras will deter the traffic violations in Bursa. Even though it is difficult to examine how efficient surveillance cameras are in Bursa, due to the vagueness set of variables of the matter, the study is going to find out whether using the surveillance cameras will drop the traffic accidents, and in this way reduce the fatalities, and injuries in the province, Bursa. In the study, the research strategy of a quantitative analysis will be used with the city-level traffic data. The data has been collected from the city police archives, the interviews, and the published reports. The study challenges the argument that surveillance cameras prevent traffic accidents, fatalities and traffic crimes. As a result of the research, the presence of the newly established traffic surveillance system in Bursa did not measurably affect injuries; however, it finds out that there is a significant difference between the number of fatalities in the accidents before and after the surveillance system has been installed.

Keywords: Cameras, Surveillance,Accidents, Fatalities.

Introduction

Traffic accidents are a big problem in terms of health and development. According to World Health Organization data, 1.2 million people die, and 20 to 50 million people are injured in the world every year. (www.who.int[April 29, 2014]). The same data concludes that until the year 2020, the effect of the above mentioned harm will increase. Additionally, as a result of traffic accidents, although there are limited data on the cost, it is clear that the economic damage to the given country is very large, as well. In the article, effectiveness of the surveillance cameras to control the accidents; (speed limit and red lights violations), before and after the traffic camera systems have been installed on the certain motorways of Bursa, will be investigated.

Before begining an analysis of traffic accidents in Bursa, it will be compared and contrasted with the knowledge of terrorism and traffic malice. For decades, Turkey has combated terrorism; lost more than 40.000 lives, and spent more than 450 billion dollars for it. However, she has lost more than 3000 lives a year due to the traffic accidents and spend billions of dollars a year. Turkey loses more than 30.000 lives due to the traffic accidents, only just for a decade; therefore, most of the effect to the loss of national income stems from losing of human lives. As a result, it is important to prevent people from being injured or killed becauseof the traffic accidents in developed and developing countries. Governments are taking certain measures by means of their organizations. To ensure the continuation of social functioning it is necessary to combat traffic violations and criminal activities. Likewise, crime of concrete risk also finds a location for itself in the criminal code (Turkish Criminal Code Article 179). The goal here is to deter people from crime; therefore, the research will look into the effectiveness of the surveillance cameras in reducing crime, and it will be discussed in the framework of the given theories. The reseach aims at examining the traffic monitoring system in Bursa to prevent fatalities, based on the statistical data.

Several studies have been conducted in this area. Some of them are done by Retting et al., (2008), Chang ve Paniati, (1990), Li, H et al., (2013) and Carnis, L. and Blais, E.(2013).

Theory

Almost in all societies, losing people's lives causes people to suffer from spiritual trauma, and it also causes property loss. To prevent people from losing their lives governments work hard. Social scientists also give much importance to the subject matter. It is obvious that breaches of traffic rules are crime as kidnapping and burglary; however, people tend not to understand it, since most of the people break traffic laws nearly every hour, in fact every minute. Most people take these rules for granted, since they do it each day.

Some scientists explain the reasons of crime by the internal forces, such as traditions, values etc., others argue that people tend to commit crime by the influence of social and economic forces(outer forces).

Historically, most reasearchers have given importance to the internal control (See Zimring ve Hawkins, 1973, 165). However, nowadays, some social scientists deal with the outer forces effect more than others (See Becker and Landes, www.nber.org[April 30,2014]). Beccaria's approach to deterrence which laid its foundation in 1764 has been one of the most studied areas of criminology. According to this approach, indiviaduals want to spend less cost to achieve the best, and this rule applies to criminal behavior, too. In order to prevent crime one should increase the price he or she will pay, ie increase the penalty (Shavel, 1992, 351). Beccaria believed that criminal behavior could be minimized using the basics of human nature. According to him, humans act rationally; therefore, governments should implement penalties swiftly, severely and precisely. The subject theory has been tested in many countries all over the world; however, it has been neglected in Bursa, Turkey. In this study, the behavior of the drivers in Bursa before and after the establishment of the cameras has been examined to be measured. First, the related theories will be discussed below, because it is believed that such theories explain why people break this type of rule.

Deterence Theory: In terms of deterrrence theory, the significant phenomenon is penalty. Penalty prevents people from committing crime; however, besides severity of the penalty the enforcement of the penalty is as important. In this case, traffic fines are easy to enforce due to the technological progress. The aim of the penalty is to prevent future crime. According to either earnings or loss of the criminal act, people are likely to take the risk of penalty or avoid of the criminal act. Where penalties are larger than what actor earns, then she or he generally avoid the act. Deterrence is divided into two parts such as general and specific deterrence. If the sanction one has received prevents other people from committing the similar crime, and then one can mention general deterrence. On the other hand, as a result of a person's receiving penalties, if the person will be deterred to commit the similar crime in the future, then you can mention specific deterrence(Paternoster and Piquero, 1995:255).

Deterrence to occur, governments should implement harsher penalties to, for example, speed limit breaches. Some researchers like Cook 1980 and Nagin 1998 found that precision of the sanction is the most significant feature of deterrence. If a person is low in the perception of the certainty of punishment, then perception of the severity and rapidity of the sanction does not mean much to him or her. According to several researches, a negative correlation was found between the perception of the certainty of the sanction and recidivism(Waldo ve Chiricos, 1972: 530; Horney and Marshall, 1992: 580).

As for the severity of penalties assosiated with drunk driving in the United States, the deterrent measures taken for he last 15 years have been effective. Especially in the North, the most deterrent sanctions to prevent drunk driving was to confiscate driving licences for a certain period of time(Nichols and Ross, 1990: 50). Another research concluded that However, the sanctions mentioned have been found not so effective for the ones who acquire the habit of drunk driving (Özcan, 2011:82).

Routine Activities Theory: According to this theory, people's behavior is shaped by the situation of crime. There should be three provisions for people to rationally choose to commit crime; they are a) wishful offender, b) appropriate target and c) absence of adequate protective factors. People can decide what is good or bad for themselves and they have to face the consequences; therefore, predict the outcome. In this case, drivers will choose to slow down they are being monitored, otherwise, they will speed up. If one of the three factors is missing, then the actor will not be able to violate the rule.

Osgood et al (1996: 636), conducted a survey on more than 1700 young people showing that absence of the authority enables youngsters to break the rules and finding that authority gap increases the opportunities for crime. As a result, when on e looks into crime-opportunity variables, one can easliy see that they are positively correlated; therefore, where there is authority or its aparatus in the vicinity, people will avoid violating the rules. In this case, with tecnological monitoring devices at relatively low cost value, governments will prevent people from being damaged or killed.

Economic Theory: According to economic theory, people commit crime if they think that they gain. In short, they make cost benefit calculation. On the other hand, governments take necessary precatoutions to prevent people from breaking the rules. In technologically very fast-paced life, as millions of people use millions of vehicles in the traffic state. Governments can not make people obey the rules with only personal measures; therefore, they resort to the technological devices. According to Becker(1968: 171), people who break the rules act rationally. People commit crime if they gain more than they lose. Today, nothing is free; however, people naturally tend to act freely without much regulation, yet human needs require regulation. In this era, it is mostly ensured by financial regulations. People accept regulation and

control only with reluctance after much consideration; therefore, people's demands for freedom and governments' supply for regulation establishes the balance in a given society (Ehrlich, 1996: 44-45).

Method and Findings

The surveillance system has been initiated and the records have been kept in Bursa province starting from the year 2011 and afterwars. Data of traffic penalties issued, number of dead and wounded people have been collected from the traffic department on a monthly basis. Within those years, whether or not there is a significance between number of penalties issued and the numbers of dead and wounded, has been subjected to an analysis with the Kruskal Wallis test. In addition, records of the pre-2011 (2008-2009-2010) data of the same kind have been analyzed for investigating the effectiveness of the surveillance system and whether there is a significant difference between the above mentioned data with Mann-Whitney U test for the effectiveness.

Table 1 Frequency distribution of surveillance data in Bursa

Months	Records of 2011				Records of 2012				Records of2013			
	number of penalties	quantitiy of penalties	fatalities	number of the wounded	number of penalties	quantity of penalties	fatalities	number of the wounded	quantitiy of penalties	quantitiy of penalties	fatalities	Number of the wounded
Jan	83	17085	0	0	416	84689	2	0	318	67125	1	4
Feb	22	5930	1	0	250	50875	2	1	479	100931	2	0
Mar	87	19080	2	2	1845	352110	1	0	574	128383	3	3
Apr	533	107170	0	0	2113	417967	2	5	**989**	**212849**	1	0
May	572	112930	0	0	2649	**525591**	1	0	368	79673	2	1
June	686	141190	2	2	2309	467478	1	4	97	20704	1	1
July	657	135780	0	0	**2971**	464541	3	1	-	-	0	0
Aug	667	136580	1	1	680	133430	0	0	-	-	3	3
Sep	742	143480	1	8	559	112321	0	0	-	-	0	0
Oct	900	177000	2	0	446	84854	3	1	286	57919	5	10
Nov	**958**	**186920**	0	0	403	82852	0	0	-	-	0	0
Nov	954	182010	0	0	453	91377	1	0	43	8200	2	2

The maximum number of traffic penalties issued for the year 2011 is 958, and it occurred in November.The maximum number of penalties issued in 2012 is 2971, and it occurred in July. In 2013, the maximum number of penalties is 989 pieces and it belongs to April. In terms of monetary amount, the maximum fine issued for the year 2011 is 186.920 Turkish Lira. In 2012, the amount of the maximum fine is 525.591 Turkish Lira, and it is 212.849 Turkish Lirain 2013. In the province of Bursa while nine people were killed in the accidents in the year 2011, 11 people were wounded. A total of 16 people lost their lives in the accidents occurred in the province of Bursa, and 12 people were injured in 2012. A total of 20 people were killed in the accidents occurred in Bursa, and 24 people were wounded in 2013.

Figure 1.1 Time path graphics of the number of the penalties
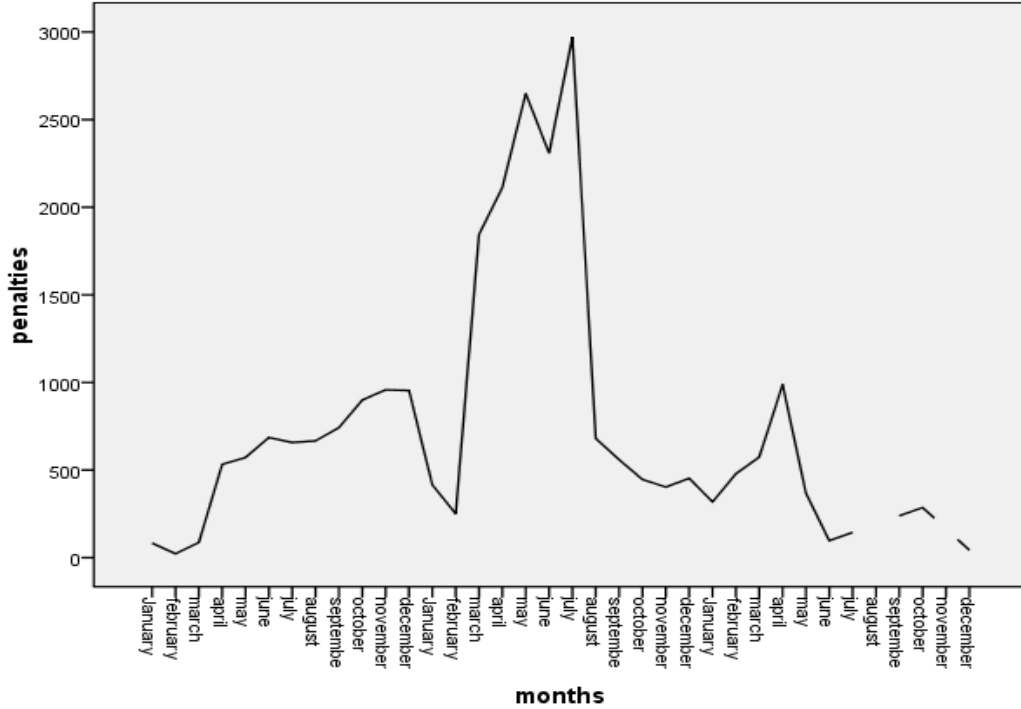
In the Figure 1.1., time path graphics of the number of penalties of the years 2011, 2012 and 2013, is given. The number of penalties issued in 2012, showed much higher increase than the one in the years of 2011 and 2013. Surveillance systems records of penalties comparing with the number of dead and injured bodies in the mentioned three years does not make significant difference when tested by Kruskal-Wallis test.

Tablo 1.2 Ranks table of the penalties

Year	N	Mean Rank
2011 yılına ait Number of penalties in 2011	12	16,58
2011 yılına ait Number of penalties in 2012	12	19,92
2011 yılına ait Number of penalties in 2012	8	11,25
Total	32	

In Table 1.2., three year-average number of penalties, when we look at the mean numbers; one can see that the maximum penalty is seen in 2012., and the number of minimum penalties can be seen in the year 2013. In Kruskal Wallis test, Chi-square statistic 4,098 p = 0,129 value was not statistically significant (p > 0.05).T here is no meaningful difference amnong the number of penalties among the three-year averages.

Table 1.3 Ranks table of the fatalities

Year	N	Mean Rank
Number of fatalities in 2011	12	14,38
Number of fatalities in 2011	12	19,79
Number of fatalities in 2011	12	21,33
Total	36	

In Table 1.3. three-year average number of dead people; when looked at the mean numbers; one can see that the maximum number of fatalities is seen in the year 2013, and the least number of fatalities can be seen in the year 2011.In Kruskal Wallis test, the value of the Chi-square statistics was not statistically significant: $p = 0.210$ 3,121 ($p > 0.05$). There is no meaningful difference among the number of fatality among the three-year averages.

Tablo 1.4 Ranks table of the wounded

Year	N	Mean Rank
Number of the wounded in 2011	12	16,54
Number of the wounded in 2012	12	17,54
Number of the wounded in 2013	12	21,42
Total	36	

In Table 1.4., the three-year average number of the wounded; the maximum number is in 2013 and the minimum number of wounded belongs to the year 2011. In Kruskal-Wallis test, Chi-square statistics is 1.741, $p = 0.419$ value is not statistically significant ($p > 0.05$). There is no significant difference among the number of wounded among the three-year averages. In Bursa, records of surveillance data was initiated to be kept on a monthly basis starting from the year 2011. The number of fatalities kept by the surveillance system of the last three years(2011-2012-2013) and the number of fatalities preceded three(2008-2009-2010) years have been subjected to Mann-Whitney U test to see whether there is a significant difference.

Tablo 1.5 Ranks table of the fatalities

Groups	N	Mean Rank	Sum of Ranks
Number of the fatalities preceding 2011	36	43,40	1562,50
Number of the wounded after 2011	36	29,60	1065,50
Total	72		

In Table 1.5. when one compares the records after the surveillance system was installed with the ones of the preceding three years average it can easily be seen that the number of the fatalities is maximum before the system was installed. In Mann-Whitney U test, the value of the test statistics was found statistically significant: $p = 0.004$ 399.($p < 0.05$). According to the system records compared with the numbers before and after the cameras were installed it has been seen taht there is a significant difference between the numbers of fatalities. A reduction in the number of fatalities has been caused due to the surveillance system.

Table1.6 Ranks table of the wounded

Groups	N	Mean Rank	Sum of Ranks
Number of the wounded preceding 2011	36	38,29	1378,50
Number of the wounded after 2011	36	34,71	1249,50
Total	72		

In Table 1.6 when one looks into the records after and beofre the surveillance systems were installed, it can be seen that the data of the wounded people are more than the ones after the surveillance system was installed. In Mann-Whitney U test, the test statistics is 583,5: $p = 0,433$ value is statistically meaningful($p > 0.05$). When one examines it carefully, it can be seen that the records of the wounded in the preceding three years in comparison to the ones of the former years are higher; however, there is not a significant diferrence. Bringing surveillance system into effect has not caused people to have a reduction in the number of the wounded people.

Conclusion

In this study, the data received from the Bursa Traffic Monitoring Department has been assessed through the above mentioned theories. Automatic speed cameras have been widely used for the purpose of the traffic regulation in many countries. As the theory mentions above, there is always a fatality risk during the speedy traffic, and it cost a lot to the society. To prevent people from having tragic events which result in deaths of lives there muct be a deterrent device. The device used fort his purpose should be economical. Today, nothing is free in terms of money. To deter people from harming themselves they must have something to lose. The fact that the technology progress almost every day give much pleasure to human beings, too; yet, it comes with the malicous sides. Fast cars and vehicles can easily have deadly crashes. For his reason, to stop people from this misery admissible precautions should be taken. One of

them is speed cameras. They are highly effective means of prevention of deadly speed. Such devices deployed properly and put in right places where speed limits are not generally obeyed have led to significant reduction in accidents. As a result, people and indirectly governments gain.

Beginning from 2011, Bursa traffic department has initiated a new surveillance system to reduce traffic accidents, injuries, and fatalities. In this case, this article has examined the effectiveness of the surveillance. In addition, the study has looked into the speed limit violations, and the date of fatalities and injuries. The data collected from only one boulevard has been evaluated. Accordingly, with the introduction of the surveillance system, after the year of 2011, only the number of fatalities has been reduced. For the years 2011, 2012 and 2013, the number of penalties collected on a monthly bais compared to the average number of the fatalities and the one of the wounded each year did not differ significantly. In the study it has been revealed that there is a significant difference between the number of fatalities in the accidents during the years 2011-2013 after the surveillance system was installed in comparison to the data when there was no surveillance system in 2008,2009 and 2010.

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An Exploratory Study to Examine the Different Attitudes toward Facility Improvement in a Private Country Club by Age and Gender

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Abstract

The purpose of the study is to investigate the priorities of the members' interest in specific facility investment. This study chose a private country club in southern Florida. This study utilized a web-based survey design, a self-administered questionnaire to examine members' different interest by gender and age The results will help the BOD to determine the priority of investment in the various club facilities, and consider new facilities to meet the future demand needs of the club. This study will provide information on the members' interest based upon different demographics. The nature of improvements for country clubs requires creating consensus among the members and is a critical component to a successful country club business.

Keywords: Country Club, Interest, Age, Gender, Capital Improvements

Introduction

The Dow Jones Industrial average is over 16,000 as of April of 2014, and the economic uptick has resulted in private country clubs starting to recover from the downturn of 2009. Many private country clubs reside within the gates of a residential community (Blakely & Snyder, 1997). Private country clubs are dependent upon selling memberships (Ferreira & Gustafson, 2006), and private residential golf communities are dependent upon selling homes (Nicholls & Crompton, 2007). The private country clubs serve as an amenity center for the real estate development and are a focal point of the community as members are more likely to join a club in close proximity to their home and place of business (Ferreira, 1998).

Membership sales are increasing in the southern part of the United States resulting in club revenues increases of 5% a year (McGladrey, 2013) as membership sales are correlated to macro-economic conditions (Ferreira & Gustafson, 2006). The economic recovery of the United States has decreased the nation's unemployment to fewer than 7% while it has created more disposable income for families (Bureau of Labor Statistics, 2014). This disposable income leads to increase in membership sales in private country clubs. In addition, the economic recovery in the United States has allowed the Baby Boomer generation to refocus on their retirement plans (PR Newswire, 2013).

The private country club serves the purpose of providing recreation facilities for the community members including golf courses, tennis courts, fitness centers, and restaurant services (Grant & Mittelsteadt, 2004). Nicholls and Crompton (2007) discuss the resulting increased economic impact of higher residential property values in communities with golf courses, in some cases as much as a 26% premium on property values compared to communities with courses. According to Stolle (2001), private country clubs support the social, psychological, and health structure of the residents that belong to the country club.

Most private country clubs are owned by the members through equity membership offerings (Barrows & Rideout, 2010). A member of a club buys into a private country club and becomes a part owner of the business with the privilege of utilizing the facilities as a consumer/owner. As a result of this consumer/owner dichotomy, each transaction takes on special meaning to the business as each transaction occurs with an owner of the company. This relationship is unique to the private club business and is not shared with the hotel or hospitality businesses in general. This relationship results in each service transaction having an ownership mentality that increases the service expectations (Jones, 1994).

Successful clubs meet the members' needs of providing appropriate facilities, corresponding to social and economical changes (Singerling, Woods, Ninemeier, & Perdue, 1997). The investment in the facilities enables the members to preserve and enhance the experiences in the private country club. Facility investment improvements are devised and developed through a vetting process. The private country club's Board of Directors (BOD) controls this process and reacts to environmental business

changes (Gustafson & Partlowe, 2002). Members usually vote on facility improvements based upon the BOD recommendations in order to approve assessments to pay for capital improvements. This research discusses the process of member interest in improving facilities and the impact this involvement has in the final decision of the BOD.

The capital budget in the country club business is funded through membership fees, capital dues, debt, and assessments. The capital budget is used to pay for repairing and maintaining the current facilities and equipment, and for purchasing any new facilities (Boardroom, 2014). Capital budgets can run from 3-5% of the operational gross revenues in a typical club. During economic downturns, capital budgets are one of the first areas to be trimmed, as these dollars are the easiest to cut without an immediate negative impact on the members or the business of the club. In a multiple golf course community with a 50,000 square foot clubhouse, the capital investment may be a multi-million dollar proposition (Bonita Bay, 2013). In a privately held private country club, the members must pay for the building of these facilities. Private clubs by nature are built to handle a small number of members in order to provide the highest level of service (Sandler & Tschirhart, 1997). The operating and building costs of facilities in a country club with a limited membership are high as this cost is only allocated to members. The decision to increase these costs as a result of new facilities is emotional because of the various viewpoints of the members.

The purpose of the study is to investigate the priorities of the members' interest in specific facility investment. This study chose a private country club in southern Florida to conduct a survey. The results will help the BOD to determine the priority of investment and improvement in the various club facilities, and consider new facilities to meet the future demand needs of the club. This research will allow other communities, businesses, and BOD to understand the interest of different demographic constituents in a private country club community.

Literature Review

Large capital investment in any business is important because of the permanent nature of the infrastructure of these investments. These capital decisions are critical for the future health of the private country clubs as they service both their existing members and future members who have not joined. The ability to service both of these groups is critical to the long-term success of any private country club (McMahon, 2014).

Community Planning

Community planning and development is critical in a private country club because the needs of the residents evolve in time. Forester (1994) discusses community planning, bridging interest, advocacy planning, and the challenges of deliberative democracy in regards to community welfare. Forester (1994) states, "…the importance of listening in both public and private practice, for the interests of a person, group, or class do not come all worked out once and for all (p. 154)." A residential private country club operates as a democracy in the decision of facility improvements. The current residents are responsible for the community socially, economically, and developmentally. A private country club community has multiple stakeholders including residential members, non-residential members, golf members and sport members. The different stakeholders view facility development through different perspectives.

The planning process is full of conflict as different constituents often have different views (Peattie, 1994). A private country club has different constituents that have different points of views including men and women, golf members and sport members, resident members and non-resident members, and young and old members. Forester (1987) describes the problems planners have in communicating with residents because it is hard to distinguish who really speak for certain constituents. A private country club setting has the same issues with the different constituents all with an equal vote.

Gender

The decision making family decision has changed in private country clubs as the result of the influence of women in the process. Davis and Rigaux (1974) focused on the decision-making within the household and described the various stages of the process. The study was duplicated in the late 1980's and the decision making shifted to joint decisions (Putnam & Davidson, 1987). Belch and Willis (2001) concluded that the presence of two income families and changing gender roles influenced most purchase decisions. Belch and Willis conclude that companies wishing to compete successfully must now target women appealing to specific needs and wants. Based on the previous studies, the following hypothesis was formulated:

H1: Women have a higher level of interest in different facilities than men. (Belch & Willis, 2001).

Age

Clubs are also changing because of age demographics and have a wide range of members aged from the 50's and into the 90's. A 50-year consumer or member views the amenity package of a community differently than the 90-year old in many cases. Hostetler (2011) describes these differences in fitness centers. A 50-year old has a different perception of satisfaction than does a 70-year old in many situations including a mall (Jackson, Stoel, & Brantley, 2011). The typical retirement age in the United States is 65 and as Knutson (2001) describes this break down in age is representative for research in the country club business.

Golf is the primary driver for membership in most private country club communities. Golf can be enjoyed by an eight-year old learning to play and by a 90-year old. The governing bodies of golf divide their championships by age such as the United States Golf Association Junior Amateur for those under 18, the United States Golf Association Open Championship, and the United States Senior Championship for those over 50.

Previous studies have found generational differences in the country club business. For example,

Harrington, Ottenbacher, and Way (2010) found that older participants were more concerned about the atmosphere, dietary considerations, and pricing than their younger counterparts in food and beverage operations at clubs. Casual dining has become more popular for younger members in clubs than formal dining which is popular with the older members (McMahon, 2010).

Generational differences also exist in the fitness centers. Clubs are building fitness centers into most club renovations either through expansion of their current facilities or new facilities (McMahon, 2010). The wellness level of the current older generation allows for a more active lifestyle than a generation ago. The results are generations enjoying amenities side-by-side with other demographic groups and conflicts can result based upon expectations. Therefore, this study develops the following hypothesis to investigate age difference on interest in specific facility improvement.

H2: Younger members are more interested in investing in facilities more than older members (Knutson, 2001).

Methodology

Instrument

The research aimed to measure the club members' interest in engaging in facility improvement in order to satisfy the current members and recruit new members. The survey instrument was developed based on an investigation of other clubs in the Florida market, a review of the operational survey of the club, and multiple staff interviews regarding the needs of the club. The BOD visited 10 other clubs in the Florida market to get an idea of the scope of work being done in a competitive situation.

The survey asked the members to express the level of interest in the possible facility and amenity expansion and improvements with 33 items in six categories. A five-point scale was used with 5 being very interested and 1 having no interest at all. The survey questionnaire included the demographic profile of the member such as gender, membership type, residency, and age.

Data Collection

This study conducted a survey to understand members' interest in facility investment as a quantitative method. A survey announcement with online survey link was sent out to the 868 active members of the club on October 1st, 2013. The members were given one month to fill out and return the survey through the club's website by October 31. The self-administered survey received 606 responses from the membership. However, 143 cases were determined to be missing data. Hence, a total of 463 cases were used to analyze data.

Data Analysis

Data analysis involved several procedures, including exploratory factor analysis, reliability, and multivariate analysis of variance (MANOVA) by using SPSS 19. An exploratory factor analysis (EFA) was conducted to identify the number of dimensions of facility and amenity package of the club. Two factor analysis extraction methods - Principal Axis Factoring (PAF) and Maximum Likelihood (ML)

along with two rotations - orthogonal (varimax) and oblique (direct oblimin) - were chosen to determine whether the solutions were stable across each method and whether there were sizable correlations between the extracted factors (Costello & Osborne, 2005). Item inclusion decisions were based on factor loadings with a cut-off value of 0.40, eigen-values greater than 1, Scree plot, and variance explained. The reliability of each dimension was assessed by Cronbach's Alpha coefficient to evaluate internal consistency. Generally, Cronbach's alpha of .70 and higher are considered acceptable values (Nunnally, 1978).

The extracted factors were used to examine group differences by employing MANOVA. The research consists of dependent variable of interest in improving the facilities and independent variables of age and gender. Univariate interactions were examined to determine significance between factors. Univariate interactions were examined between gender and age.

Results

Dimensions of Facilities

The results of the exploratory factor analysis and reliabilities are reported in Table 1. Comparisons among the orthogonal and oblique solutions on the scales of college choice indicated that 7 dimensions can be extracted, with the size of all 7 coefficients approximating .40 (delta = 0). In addition, the oblique rotation yielded more interpretable factors than the orthogonal rotation. Factor solutions from the ML and PAF procedures were very similar. This study reports the 7-factor ML solution with varimax rotation because these seven extracted factors correspond more closely with the factor structure that the particular private club operates.

Out of 39 items, 4 were deleted because some attributes were cross-loaded less than .40 and others did not include into any factor. The final results of the common factor analysis of the remaining 35 items passed both Bartlett's test of sphericity ($p < 0.0005$) and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy (0.909), indicating that using factor analysis on 35 attributes was highly appropriate.

The extracted factors explained 61.92% of the variance. All 35 items were retained in the analysis and each item loaded on one factor only. The high loadings indicated a good correlation between the items and component grouping to which they belonged. The components were averaged for factor scores and labeled as "Golf", "Fitness", "Tennis", "Patio", "Grill", "Amenity", and "Spa". The reliabilities ranged from 0.83 to 0.93, which indicates good internal consistency (Nunnally & Bernstein, 1994).

Table 1: Facility Factor Analysis – Rotated Factor Matrix Obtained from ML Solution

	Factor loadings	Eigen-value	% of Variance	Reliablity
Tennis		11.170	11.518	0.933
Adding to the TENNIS Facilities	.918			
Adding additional tennis courts	.861			
Expanding the Tennis Pro Shop	.845			
Adding terraced Seating	.748			
Adding a Courtside Cafe	.724			
Fitness		2.840	10.636	0.878
Adding a Floor Exercise Room	.848			
Adding Dedicated Group, Spinning and Pilate Room(s)	.774			
Enlarging the FITNESS Facilities	.664			
Adding Fitness Merchandise	.567			
Adding a Wellness Product Store	.564			
Adding a Health Food/Drink Cafe	.562			
Golf		2.151	9.280	0.829
Adding to the GOLF Facilities	.847			
Adding an additional Short Game Practice Area	.799			
Adding a Training/Learning Center/Fitting Facility	.616			
Improving the grass on the East Driving Range	.607			
Adding a Palm Halfway House	.449			
Expanding the Putting Course	.441			
Spa		1.141	9.136	0.858
Adding a Spa Hair Area	.868			
Adding a Spa Nails Area	.801			
Adding a Convenience Store	.543			

Adding a Spa Massage Area	.525			
Adding a Barber Shop	.514			
Amenity		1.629	7.768	0.838
Adding a Childrens Pool	.790			
Expanding the Playground	.692			
Adding a Lap Pool	.533			
Enhancing our current Pool Area	.498			
Adding a Business Center	.433			
Expanding the Bocce Court Area	.418			
Patio		1.635	7.752	0.858
Casual Indoor/Outdoor Dining at the Patio	.849			
Adding to the PATIO Facilities	.763			
An Indoor/Outdoor Bar Area at the Patio	.736			
A Pizza Oven/Service at the Patio	.453			
Grill		1.104	5.824	0.886
Adding to the Bar Area	.868			
Adding a soft seating Cocktail Area	.638			
Adding to the GRILL ROOM Facilities	.611			

Note. Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy = 0.909. Bartlett's test of sphericity = 9898.22 (595 df. $p < 0.0005$). Extraction Method: Maximum Likelihood, Rotation Method: Varimax with Kaiser Normalization, Rotation converged in 6 iterations.

Table 2 shows the summary of factors sorted by mean scores. Overall the members are highly interested in improving the facilities (M=4.07). Patio (M=3.20) was the highest interest dimension, followed by golf (M=2.94), grill (M=2.72), fitness (M=2.49), amenities(M=2.10), spa(M=2.05) , and tennis (M=2.04).

Table 2: Facility dimensions sorted by Mean Scores

	Mean	SD
Overall	4.07	0.97
Patio	3.20	1.10
Golf	2.94	0.94
Grill	2.72	1.04
Fitness	2.49	1.01
Amenities	2.10	0.89
Spa	2.05	1.02
Tennis	2.04	1.08

Differences in Factors among Groups

Based on the EFA, MANOVA analysis was followed to examine difference on the dimensions by gender and age group. Independent variables included gender and age groups. Dependent variables included the seven facility dimensions extracted from the EFA. The results of the MANOVA showed there was a significant difference on the combined dependent variables, $F (8, 452) = 5.128$, $p < .0005$ between gender and $F (8, 452) = 4.178$, $p < .0005$ between the age group.

Gender differences: Regarding gender differences, a follow-up univariate analysis of variance indicated that there were statistically significant differences in golf, fitness, tennis, and amenity, $F (1, 459) = 8.255$, $p = .004$, $F(1, 459) = 9.038$, $p =.003$, $F (1, 459) = 14.371$, $p < .0005$, $F (1, 459) = 4.457$, $p < .035$, respectively. In regard to golf, male (M=3.03) reported significantly higher interest than female (M=2.83). On the other hand, in fitness, tennis, and amenity, female (M=2.69, M=2.28, M=2.22, respectively) exhibited significantly higher interest than male (M=2.34, M=1.86, M=2.00, respectively). However, there was no difference on overall, patio, grill and spa between genders. Table 3 shows the results of the gender differences on the variables.

Table 3 Means and standard deviation on factors by gender

	Female		Male	
	N=197		N=266	
	Mean	SD	Mean	SD
Overall	4.06	0.99	4.08	0.95
Golf	2.83	0.99	3.03	0.89
Fitness	2.69	1.02	2.34	0.99
Tennis	2.28	1.17	1.87	0.99
Patio	3.34	1.12	3.10	1.08
Grill	2.82	1.08	2.64	1.00
Amenity	2.22	0.93	2.00	0.85
Spa	2.12	1.07	1.99	0.99

Age differences: Among various age grouping solutions, means of each group and homogeneous subsets in MANOVA showed that 2 group solution (under 65 and over 65) was the best in terms of mean differences and the sample size. The sample included 266 men and 197 women out of the 463 usable surveys. Females represent 42% of the survey responders and are a significant component to the club.

A follow-up univariate analysis of variance indicated that there were statistically significant differences in overall, golf, fitness, tennis, patio, grill, amenity, and spa, $F(1, 459) = 13.309$, $p < .00005$, $F(1, 459) = 18.604$, $p < .0005$, $F(1, 459) = 15.702$, $F(1, 459) = 21.010$, $p < .00005$, $F(1, 459) = 6.886$, $p=.009$, $F(1, 459) = 11.787$, $p=.001$ respectively. The younger group who is less than 65 years old rated higher on all facilities except for tennis than the older group. However, there was no difference on tennis between the age group. Table 4 shows the results of the age group differences on the variables. The result indicates that the younger group is in general more interested in improving the facilities.

Table 4 Means and standard deviation on factors by age group

	Young (Under 65)		Old (Over 65)	
	N=209		N=254	
	Mean	SD	Mean	SD
Overall	4.23	0.92	3.94	0.98
Golf	3.10	0.96	2.82	0.90
Fitness	2.73	1.03	2.29	0.95
Tennis	2.12	1.14	1.98	1.04
Patio	3.43	1.15	3.01	1.02
Grill	2.97	1.02	2.51	1.01
Amenity	2.23	0.95	1.98	0.83
Spa	2.24	1.07	1.89	0.96

Differences of combined groups by age and gender: This study further analyzed group differences among four subgroups: Young Female, Young Male, Old Female, and Old Male by categorizing members based on gender and age groups. The results of the MANOVA showed there was a significant difference on the combined dependent variables, $F(24, 1311.539) = 3.45$, $p < .0005$ among the four groups. As a follow-up univariate analysis of variance indicated that there were statistically significant differences in all dimensions, $F(1, 459) = 4.34~9.96$, $p < .005$. respectively.

Table 5 presents means and standard deviation of each group. First, young males ($M=4.33$) were significantly more interested in overall facility improvement than old males ($M=3.92$), $p=.004$. . Regarding golf improvement, young male ($M=3.21$) exhibited significantly higher interest than old female ($M=2.64$), $p<.0005$, and old male ($M=2.91$), $p <.05$. Also young female ($M =2.98$) showed significantly higher interest than old Female ($M =2.64$), $p <.05$. For fitness improvement, young female ($M=2.87$) reported significantly higher interest than old female ($M=2.47$), $p =.023$ and old male ($M =2.20$), $p <.0005$. In addition, young male ($M =2.54$) exhibited higher interest in fitness than old male ($M =2.20$), $p =.027$.

In regard to tennis facility, Both young and old female groups ($M =2.23$, $M =2.33$ respectively) showed significantly higher interest in tennis than old male ($M =1.78$), $p <.005$.That is, Old male is lowest interested and produced the lowest score in the survey. For patio, young female ($M =3.56$) is higher than old female ($M =3.08$), $p=.011$ and old male ($M =2.97$), $p <.0005$. That is, young female reported the

highest interest in patio amenity. In regard to grill, young female group (M =3.06) expressed significantly higher interest than old female (M =2.55), p=.003, and old male (M =2.49), p<.0005. Also, young male (M =2.86) showed higher interest than old male (M =2.49), p=.017. For both amenity and spa, young female (M =2.31, M = 2.26, respectively), exhibited higher interest than old male (M =1.91, M =1.86, respectively), p < .01. By summarizing the results, young and female group rated higher than the rest of the groups.

Table 5 Means and standard deviation of each group

	YoungFemale (N=106)		YoungMale (N=107)		OldFemale (N=91)		OldMale (N=159)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Overall	4.13	1.03	4.33	0.80	3.98	0.94	3.92	1.01
Golf	2.98	1.01	3.21	0.90	2.64	0.95	2.91	0.86
Fitness	2.87	1.03	2.55	1.02	2.47	0.97	2.20	0.94
Tennis	2.23	1.16	1.99	1.11	2.33	1.17	1.78	0.89
Patio	3.56	1.17	3.30	1.13	3.08	1.02	2.97	1.02
Grill	3.06	1.07	2.86	1.01	2.55	1.04	2.49	0.97
Amenity	2.31	1.00	2.14	0.88	2.11	0.85	1.91	0.82
Spa	2.26	1.08	2.19	1.06	1.96	1.04	1.86	0.92

Conclusion

This study was to investigate the priorities of the members' interest in specific facility investment. This study was able to extract seven significant dimensions of facility improvement. The results extend previous research to include more relevant factors of club facilities such as patio, spa, and fitness. The highest rated mean value was improving the overall facilities of the club. This is a clear signal to the club that the members are interested in improving the facilities. This result supports the notion that it is important for a country club to offer appropriate facilities by meeting members' needs and reacting to environmental changes in order to succeed in the business (Singerling, Woods, Ninemeier, & Perdue, 1997).

In addition, this study clearly indicates that various stakeholders have different interest levels in adding to facilities including patio, golf, grill, fitness, amenity, spa, and tennis in the private club environment. Particularly, the results revealed an interesting finding that patio was the highest interest than golf among members. In general, the golf would have been the number one amenity for interest in a golf centered private country club. But the finding indicates that members are more interested in food and beverage than golf, which is a new trend in the club business. McMahon group (2014) recently supports this finding that the interest in food and beverage as important to a private country club. The BOD must take into account these various levels of interest in order to decide on the investment into the club.

In terms of age, the young group of members, under 65, was more interested in investing in the facilities than the older members, over 65. The younger group is more interested in all facility investment except for tennis. Particularly, the young male is significantly higher than the old female and the old male group.

The study revealed that females were highly interested in facilities such as fitness, tennis, patio, and amenities than males while males rated higher on golf. This finding is unique because this study verifies that the club business has changed as females are more involved as members than historically before. Of interest, the younger females were significantly more interested in golf than the old female. The younger male is significantly higher interested than the old female and old male group.

Implications

Clubs are undergoing fundamental changes as females become primary users as compared to just men in the older, traditional private club industry. The days of the traditional, male only golf club is decreasing as the amenity offerings are becoming broader in the club business. McMahon (2014) indicates for the first time in the private country club business that casual dining, fitness, and kids programs are more important than the golf amenity. This is a fundamental shift in the business model of traditional clubs and creates tremendous pressure on the infrastructure of the business. Private country clubs that were built for men only playing golf are forced with significant investment decisions for facilities in order to

adjust to the new norm for private country clubs. The impact of the woman on the private country club creates opportunities for clubs to invest in health and wellness for the first time in many cases. The private country clubs as a result of this relatively new amenity have a national organization for fitness, the Club Spa and Fitness Association (CSFA), indicating the importance of the fitness operation to the community. Clubs must evolve with the changing demographics and provide facilities and amenities for all members, including women. For example, an example of a capital investment/amenity as the result of an increase in the number of women in a private country club is the increased interest in fitness. Another example is the spa amenity that is important if a significant part of your club is requiring these services. Additionally, women are the head of many households in terms of family social activities. Clubs that service women should provide amenities for the entire family including young children and grandchildren. The children element of having a kids pool, a playground, soccer fields, and a full schedule of children family events creates large challenges for private country clubs just entering into these elements of the business. These elements require capital investment in facilities other than the traditional golf courses.

The age demographics of the members also influences the capital investment of clubs because this study indicates younger members want to invest in facilities where older members do not (Knutson, 2001). The younger members generally wanted to have a higher level of interest in adding to the facilities than the older members. If the demographic breakdown between the young and old is approximately equal as in this study, the challenge for the BOD is to create consensus among the stakeholders to invest in facilities even though the particular demographic group is not interested in the facility.

This research will add to the body of literature for the hospitality because it is believed to be the first study of its kind in academia involving the number of facilities in the study. Private country clubs are composed of various stakeholders as clubs offer different membership types in order to create a membership that meets the needs of the consumer. The resulting membership diversity creates challenges in governance as the BOD must navigate its way through different viewpoints of the stakeholders. Private country clubs are an important part of the hospitality and little research has been done in the area.

Limitation

This study is limited because it is from one country club in the south. Even with this limitation, this study provides a diverse viewpoint from around the United States as the club is approximately 90% seasonal with the members coming from most states east of the Mississippi River. The study is also limited in the fact that the average age of membership is approximately 65, so the study may or may not be applicable to clubs with a younger membership profile. The club is also a residential property with highly valued real estate so the implication of a successful country club to the resident members is more significant than to the nonresidential members who own property away from the development that includes the country club.

It is also an important distinction in this study that the interest level was not described by any financial obligations. The ability to pay for the amenities is an important part of the decision making process for any private club.

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Vroom and Yetton's Decision Tree for the Selection of Leadership Style: An Implementation in Ataturk Airport

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Abstract

Delays, one of the essential problems of airline transportation, cause variations and high costs in the plans of companies within the airline service process. Whereas, effective decisions taken on the operation level and applications of them can prevent most of these delays. In order to prevent the delays, decisions must be taken in the limited time for the operational levels and these decisions must be applied effectively by the employees. For this reason, it is necessary for the decision makers in the operational level to lead the employees in the process. In this study, Vroom and Yetton's decision tree is applied to select the suitable leadership style for the performance of decisions taken in delays. This approach is intended to give the superiors a tool that permits them to choose an efficient leadership style in every decision situation. Ataturk Airport which has intensive passenger and cargo traffic is chosen for the survey of 432 workers and semi-structured interviews for 10 of the operational managers. Leadership styles are generally defined in the first part of the study. In the second part, airline delay concept is defined and the effect of airline delays to the economy, environment and society is described by literature review. Vroom and Yetto's decision tree is constructed according to survey and semi structured interviews in the third part. Finally, in the conclusion part, a leadership style that will help the companies to prevent the delays is suggested depending on the research findings.

Keywords: Operational decisions, Leadership, Vroom and Yetton's Decision Tree.

Introduction

Delay is defined as the deviation of more than 15 minutes from the scheduled departure and/or arrival time (EUROCONTROL, 2005, p. 19). Airline delays are resulted from the disruptions of the process of the airline service (Kohl, Larsen, Lasren, Ross, & Tiourine, 2004). The planning and managing of the flight operation service is very important for the sustainability of companies which have low cost-flexibility. Airline delays, which are one of the most important problems of the airline sector, cause fails both in tactical plans and strategic plans of all the airline service companies (airlines, airports, ground handlings and etc.). Airline delays at the tactical level causes many problems like flight cancels, flight arrival diversions, breakdown of the connections, disruption of the baggage process, interruptions of reservations, swapping of aircraft types, combination of flights. (Barnhart, Fearing, & Vaze, 2010). It is calculated that cost of the delays to the airline companies is about €81 per minute and approximately €7 billion annually in EU region (EUROCONTROL, 2011, p. 4). It is predicted that total cost of the delays to USA is $33 billion annually. (Ball, et al., 2010, p. 10). Airline delays damage not only economy, but also environment. It is forecasted that 4500 tons of CO^2 gases have been released to atmosphere every year in the EU region because of airline delays (Carlier, Lépinay, Hustache, & Jelinek, 2007). In order to avoid the delays or at least try to minimize the delay time, some course of actions can be taken according to the given decisions by the decision makers. That is why these decisions are very important for airline companies and the decision makers' type of leadership will definitely affect their way of thinking and decision making.

Leadership has been described as a process of social influence in which one person can enlist the aid and support of others in the accomplishment of a common task (Chemers, 1997). The risk-taking nature of the leader is affected from the leadership style that will be used to support the decision making process (MacCrimmon & Wehrnng, 1988). Extensive research has been undertaken on leadership style since the 1950s. The research are distributed into three areas: task-oriented, relation-oriented and participative leadership (Yukl, 2012). Despite significant differences, all the theoretical approaches take as a reference point the amount of employee participation in the leadership (Lumpe, 2008). The autocratic leadership style is characterized by a leader who leads the group tightly (Vugt, Jepson, Hart, & Cremer, 2004). In

this style leader clearly commands the employees' goals and actions; whereas the employees' do not know the governing goals of leader (Cremer, 2006). Democratic leadership, in contrast, is characterized by the fact that the leaders in due time give an overview of the goals to be reached. The role of democratic leader is much more that of an adviser than a commander.

Purpose and Method

The purpose of the study is to find the best leadership style in the operational level for airline delay prevention process. Vroom and Yetton (1973) specifically address the resolution of task-based decision among subordinates within a hierarchical group structure. The alternative autocratic or one-to-one methods risk leaving some subordinates with less than the necessary commitment to the final decision (Crouch & Yetton, 1987, p. 385). Vroom and Yetton's (1973) decision tree can be used for the selection of the leadership style in the operational level. The model of Vroom and Yetton gives the leaders a tool that permits them to choose efficient leadership style in different decision situations (Vroom & Yetton, 1973, p. 20). The model incorporates (Lumpe, 2008):

A number of leadership situation determinants: The seven situational variables proposed by Vroom and Yetton are listed below (the first three pertain to the problem for which a decision is sought and the other four to acceptance of the solution by subordinates), from which they proceed to map out their normative model in the form of a decision tree with yes or no questions (Eilon, 1978, s. 473).

- A: Is the decision quality important?
- B: Do you have sufficient information to take the decision on your own?
- C: Is the problem structured?
- D: Is the acceptance of the decision by the subordinates necessary for its effective implementation?
- E: Is acceptance assured if you take the decision on your own?
- F: Do subordinates share the organizational goals, to be attained in solving this problem?
- G: Are conflicts to be expected between the employees concerning the preferred way to proceed?

A number of leadership style alternatives: Vroom-Yetton theory identifies five distinct styles, ranging from the completely autocratic (AI) to group decision making (GII), where the manager acts as an unbiased chairman looking for a consensus. Whether five is the right number for such a classification is an open question, though perhaps not a crucial one: clearly, the more categories there are, the finer are the nuances between adjacent categories, and the more difficult it becomes to assign a single category to a given practical situation (Eilon, 1978, s. 472).

- AI: Autocratic decision
- AII: Autocratic decision after information of the employee
- CI: Consultative decision after consultation of each employee alone
- CII: Consultative decision after consultation of the employees on a group level
- GII: Problem solution and decision by the persons/group involved.

A number of decision rules: The assignment of the leadership styles to the different situations is performed by the use of seven decision rules. The decision rules indicate only what should not be done, eight of the 14 solutions permit more than one leadership style (Lumpe, 2008, p. 12). When the leadership styles are selected, the decision rules given above will be applied and the strict rules such as "Style A1 is not to be used" at "Information rule" will be accepted as it is.

- Information rule: If a high quality of the decision is necessary, and the superior does not possess sufficient information; style AI is not to be used.
- Trust rule: If the quality of the decision is to be high, but the employees have diverging goals from those of the organization, GII is not to be used.
- Unstructured problem rule: If the quality of the decision is to be high, and the superior is not in possession of enough information or knowledge to solve the problem, which is furthermore unstructured, AI, AII, and CI are not to be used.
- Acceptance rule: If acceptance of the decision by the employees is important for the implementation of the decided issue, but not assured with an autocratic decision, AI, and AII are not to be used.
- Conflict rule: If acceptance of the decision by the employees is important for the implementation of the decided issue, but not assured by an autocratic decision, and if, furthermore, diverging opinions within the group of employees are to be expected, AI, AII, and CI are not to be used.

- Fairness rule: If the quality of the decision is not important, but its acceptance by the employees is, and which, furthermore, is not assured by an autocratic decision, AI, AII, CI, and CII are not to be used.
- Acceptance-priority rule: If the acceptance of the decision by the employees is important, but not assured through an autocratic decision, and if it is probable that the goals of the employees and the organization are congruent, AI, AII, CI, and CII are not to be used.

Airline service implementation is the most important factor for the prevention of delays. In order to prevent the delays, decisions must be taken in the limited time for the operational levels and these decisions must be applied effectively by the operational staff. Term of the decisions are short and functions of these decisions are coordination and control of operational process. Decisions about the prevention of delay are taken under low risk environment with real time data (Fig.1). For this reason, in the case of delay, operational manager should lead the employees to prevent the airline delay.

Resource: Adapted from (Schermerhorn, 1993)

Fig. 1. Properties of Decisions to Prevent the Airline Delays

Atatürk Airport, which is the biggest airport in Turkey, is selected for the implementation. Population of the study is the employees who are working in the airline service companies in Atatürk Airport at operational level. There are two main methodologies used for the selection of the leadership style. Semi-structured interviews are conducted with 10 managers at the operational level for the determination of decision rules. Judicial sampling is used for the semi-structured interviews. Vroom and Yetton's decision tree is adapted to the survey which is polled with 432 airline service operation personal (Fig.2).
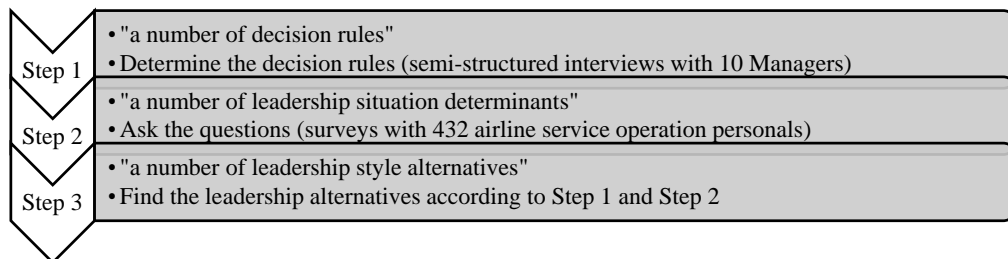
Fig. 2. The Application Steps of Vroom and Yetton's Decision Tree

Population of the survey is 9504 persons working in the Atatürk Airport. Stratified sampling method is used for the determination of the minimum size of sampling data according to the formula given below (Bartlett, Kotrlik, & Higgins, 2001, p. 47). People working as operation personnel in the companies are classified according to ground handling, airlines and airport companies.

$$n = \frac{N * t^2 * p * q}{(N - 1) * d^2 + t^2 * p * q}$$

t: Degree of the freedom alpha error level
p: Percentages of the interested events in the community,
q: Percentages of the interested events out of the community,
d: Deviation of the effect size from the previous research results,

$$n = \frac{9.504 * 1,96^2 * 0,5 * 0,5}{(9.504 - 1) * 0,05^2 + 1,96^2 * 0,5 * 0,5}$$
$$n = 369,27 \cong 369$$

Results and Analysis

As it is stated in Figure 2 Step 1, a semi-structured interview has been constructed about the decision rules that can be implemented in the case of delay by 10 operations managers. The interviews were conducted with the operation directors at the airline service companies who provide airport ground handling services, airport terminal operation and airlines flight operation. The directors with whom the interviews were conducted are between 31 and 55 ages. They have aviation sector experience between 3 and 35 years. When the interviews are assessed, it is seen that the most preferred decision rule among others is the "unstructured problem rule" (Table 1). The quality of the decision is to be high, and the superior is not in possession of enough information or knowledge to solve the problem in the "unstructured problem rule". In addition **AI, AII, and CI are not to be used**.

Table 1. Table of Semi-structured Interview

Decision Rules	Answers
Information rule	1
Trust rule	0
Unstructured problem rule	5
Acceptance rule	1
Conflict rule	0
Fairness rule	0
Acceptance-priority rule	3

An interview was constructed by workers in airline operations in order to determine the leadership situation determinants shown in Figure 2 Step 2. The interview questions about airline delays in Ataturk Airport associated with "leadership situation determinants" are asked to 432 operations workers. Because of some problems 427 interviewees data out of 432 is valid for the evaluation. 52 percent of the interviewees are in the age of 26-35, 23 percent in the age of 18-25, 21 percent in the age of 36-45 and 4 percent in the age of 46-55 (Figure 3).
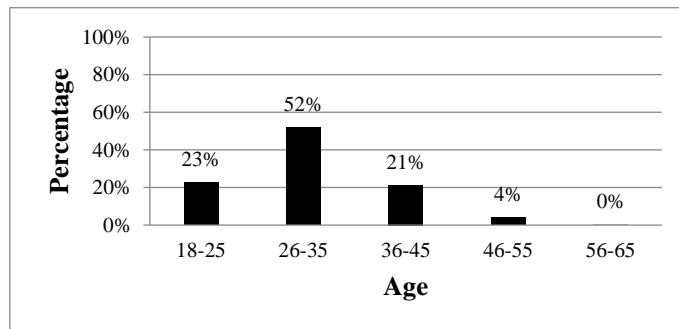
Fig. 3. Distribution of Age

14 percent of the interviewees have high school or lower education and 81 percent of the interviewees have associate or upper (bachelor) degree. This shows that the education level of the interviewees are high (Figure 4).
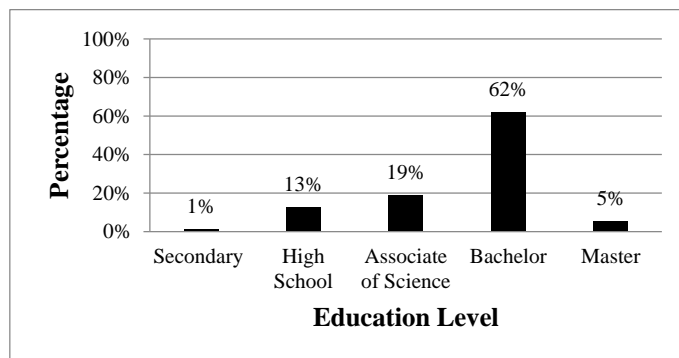
Fig. 4. Education Level

396 of the interviewees answer the question about their experiences. 38 percent of them have the experience of 0-3 years, 20 percent 4-6 years, 18 percent 7-9 years and 24 percent 10 and more years' experience (Figure 5).
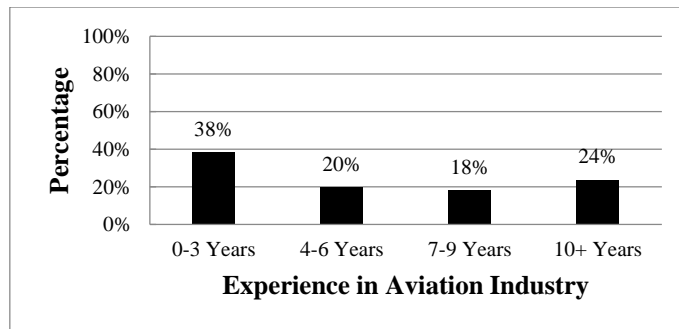
Fig. 5. Experience in Aviation Industry

When it is asked to interviewees who is/are responsible for decisions in the case of airline delays. It is stated that 58 percent (250 people) of them are responsible for these decisions and have leader role in the airline delays. After this, these 250 people will be used for the purpose of Vroom and Yetton's decision tree because only these people have act as a leader in the operational level.

Then, these 250 interviewees are required to answer the questions about delays according to leadership situation determinants of Vroom and Yetton's decision tree. 205 of the answers are accepted as valid. The distribution of the answers to these questions are shown in Figure 6. The answers of these questions are Yes (Y) or No (N). In Vroom and Yetton's decision tree, it is identified what question will be asked after each question. For example, if the answer to the question A "Is the decision quality important?" is N, then question B and C are skipped and pass to question D "Is the acceptance of the decision by the subordinates necessary for its effective implementation?".

The responds to the questions of Vroom and Yetton Model in Figure 6 determine the decision situation. There are 14 decision situations based on the responds and leadership styles are identified according to these 14 decision situations. For example, the number 9 at the left end of Figure 6 shows that leadership styles AI, AII, CI and GII can be selected as a leadership style.
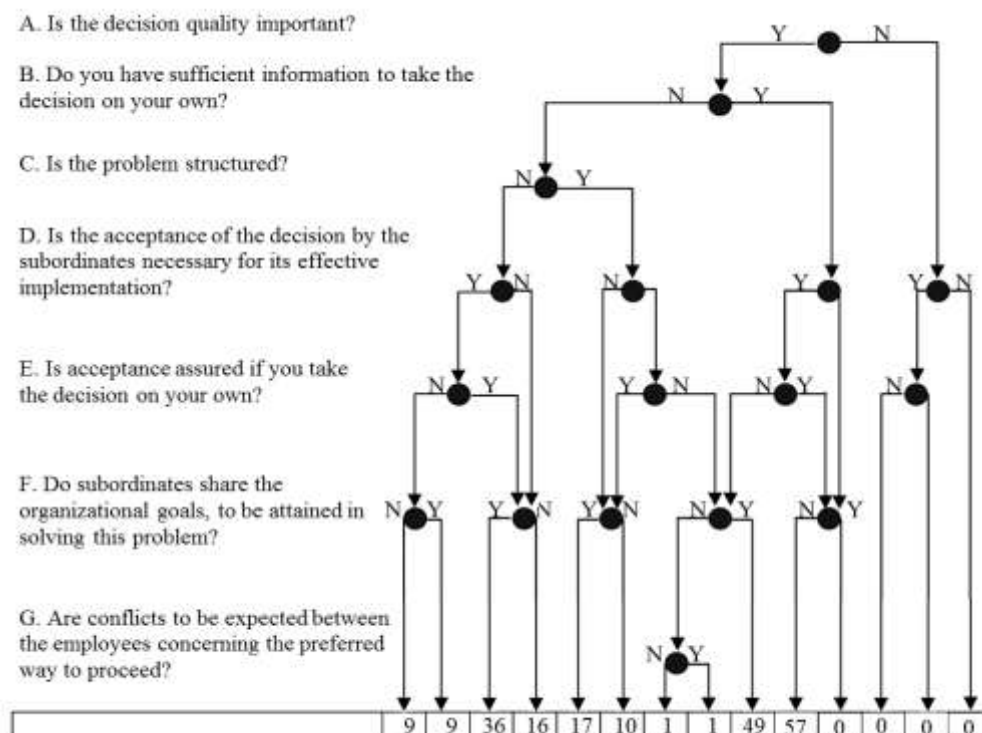
Fig. 6. Questions of Leadership Situation Determinants of Vroom and Yetton's Decision Tree

However, only GII leadership style can be selected and implemented according to 57 people's decision situation. The leadership styles that can be selected according to decision situations are summarized in Table 2. According to interview results, 3 decision situations are the most frequent ones. These are shown in Table 2 as the numbers 36, 49 and 57. The distribution of the answers to the questions of Leadership

Situation Determinants are given in Table 2. However, these responds are not sufficient to select the leadership style alone.

AI: Autocratic decision	9	9	36	16	17	10	1	1	49			0	
AII: Autocratic decision after information of the employee	9	9	36	16			1	1	49			0	
CI: Consultative decision after consultation of each employee alone	9	9	36	16				1	49			0	
CII: Consultative decision after consultation of the employees on a group level		9							49			0	
GII: Problem solution and decision by the persons/group involved.	9			16		10	1	1		57			

Table 2. Results of Leadership Situation Determinants of Vroom and Yetton's Decision Tree

As it is stated in Figure 2 Step 3, the data of Step1 (Table1) and Step 2 (Table 2) must be used together in order to select the best leadership style. When these two data in Table 1 and 2 are evaluated, it is seen that leadership styles CII and GII are the most valuable ones for the prevention of delays in airline operations with values 49 and 57 respectively. Decision maker is made decision after consulting the employees in the group level in CII leadership style. In GII leadership style, the decision maker has the model role of a leader as providing the involvement of all the employee/group in problem solution and decision making. These two leadership styles (CII and GII) have common features in the basement as involvement, consultation and consensus in decision making. It is understood from this study that if one of these two leadership styles is applied by a decision maker, the probability of preventing delays in the airline service operations will be high. Since involvement of group employees and coming to a consensus for a decision strengthens the application way and degree of success. Besides, more than 50 percent of the interviewees (57 + 49 =106, 106 / 205 =52 %) accept the power of consultative decision and consensus to have the right decision for the prevention of delays.

Conclusion

Airline delays are one of the important problems of airline service operations. Delays can be due to problems caused by people, equipment, material, measurement and environment. Employees are the most important factors in preventing delays in airline service operations. Personnel usually work in teams in the airline service process. The purpose of each team is to perform its job on time. Although these teams face with problems while doing their job, these problems do not always cause delays in the airline service operations. Since some of the operations can be done concurrently, some delays will not cause any delay for airplane departure. Therefore, tactical and operational level decisions are important in the management of disruptions and prevention of delays.

While everything is very clear and defined for routine jobs, in case of disruptions it is not clear and defined what type of actions can be taken. There is no absolute true for the type of decisions taken and the results can never be known. In some cases, the decisions taken solve the problem but sometimes causes some other problems. For this reason, "unstructured decision rule " is accepted as the decision rule for the study. Decision maker needs information to give decisions rationally based on this decision rule. The decision maker is responsible to give the most convenient decision in the point view of corporate policies, government laws and regulations. The decision maker's decisions directly affect the disruption solutions.

Many airline service operations are performed during the arrival and departure of airplanes. Approximately 35 people and 7 different teams work for the airline service operations. The decisions taken to prevent the disruptions should be understood and accepted by the subordinates in order to implement them effectively. When the decisions are taken in coordination and in consensus in a team, it will be easy to implement it.

According to this study, two types of leadership style can be used for the decisions taken in the prevention of delays according to decision rule and decision situation. In CII leadership style, the decision maker gives decisions by consulting the members on the group level. In this situation the teams work and operate in real time by transceiver channel. The leader coordinates the teams and transmits the information about the team having disruptions. The leader gives decisions to prevent the delay by consulting the team leaders. Therefore, CII leadership style is applied effectively.

In GII leadership style, it is essential to involve person/group in decisions and problem solution. In this situation, the team that can prevent the delay, the team having disruption and the decision maker must communicate effectively. The decision maker share the information about the reason of disruptions by the members of other teams. The decision about the prevention of delay is given by the involvement of the employees. The employees who know the reason of delay and decision related to it implement the decision.

At the end of the study, two leadership styles are selected as able to be used for the decisions preventing the delays through Vroom and Yetton's decision tree. Although they seem different, the logic behind these two leadership style are the same. Both of them require group involvement and consultation to group members in a way. However, it is not possible to say generally these two leadership styles are the only ones that must be applied. In order to make such a statement, the survey and the semi-structured interview must be applied to the employees of different airports. Since airline services are given in a limited time, the teams working in the airline service process must communicate and interact effectively. Besides, some studies need to be done about how to communicate to each other, efficiently and effectively for the airline service process.

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An Empirical Research of the European Foundation for Quality Management (EFQM) Excellence Model: A Practice in Kindergarten in the City of Adiyaman /Turkey

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Abstract

Total quality management, briefly TQM, is a management model which includes both social and technical dimensions to purpose excellent results. It needs to be put into practice through a specific workspace (Bou-Llusar et.all, 2008). In addition, "EFQM model, also known as the EFQM Excellence Model, is a framework for organisational management systems, promoted by the European Foundation for Quality Management" (Allur, 2010:974). The purpose of this paper is to understand the EFQM model as a framework for TQM, and to present an overview of the excellence model, criterias and structure of EFQM with empirical research into the area of kindergarten to see how these criterias work in the real world. This paper will demonstrate that in today's world, the excellence model provides a framework which helps to encourage collaboration, cooperation and innovation to reach an excellent organizational culture.

Keywords: Total Quality Management, Quality, EFQM Excellence Model.

Introduction

Total Quality Management and European Foundation for Quality Management

Total Quality Management is a balanced way for all stakeholders (customers, employees, shareholders, suppliers, and community) to meet the expectations of continuous improvement of all activities in the organization.

TQM can be defined by some key elements or principles which are common to all of them, for instance; customer satisfaction, continuous improvement, commitment and leadership on the part of top management, involvement and support on the part of employees, teamwork, and measurement via indicators and feedback (Sousa and Voss, 2002; Claver-Cortes et al., 2008; Teh et al., 2009).

EFQM is a model that is based on nine main criteria to include leadership, strategies, process, sources, human resource management, customers, social responsibility, performance, and satisfaction applied upon employees and employers in the system In this case, system was a school named Halide Edip Anaokulu in Turkish, and results were discussed to be considered excellent in comparison among competitors.

Five of these criterias are named as "input" and four of them are named as "result". Inputs include the activities of an organization. On the other hand, result criterias show what the organization carried out. Results are originated by inputs.

The model is predicated on the fact that many approaches can be used to achieve sustainable excellence in all dimensions of performance is based on the following expression: excellent results which are reflected to the performance, customers, employees and the society can be provided with an appropriate understanding of policy and strategy, employees, processes, resources and leadership processes.

The EFQM Model is formed in 3 steps, being Enablers, Results, and Innovation & Learning. Leadership, Processes, and Key Performance Results are the main points and includes some criterias such as; people, policy&strategy, partnership&resources, people results, customer results, and society results. The target group of this research is managers in a kindergarten in Adiyaman, Turkey. Its aim was to be an excellent learning organization which targets the continuous development of the original concept of the learning approaches.

At that point, researches and practices will continue with this model. EFQM model has 3 degrees, which are determination in excellence, perfection in excellence, and quality award. We are at the bottom of the ladder; the first degree in excellence was completed successfully and positive results were obtained. Other degrees will be in progress with practices in that school. The results based on our research will be disscussed below.

Criterias of an Excellence Model

As mentioned above, EFQM is a model that is based on nine main criterias which are as follows:

Leadership and Constancy of Purpose: Excellent leaders develop the mission and vision of an organization and make the process easy to implement purposes of the system. The behavior of the leaders of an organization's clarity of purpose in the organization provide union for the employees of the organization as well as create an environment in which perfection is accessible. Leadership as one of the nine main criterias of EFQM have 5 subcriterias such as;

- Leaders create the mission, vision, and values of the organizations and be the first to set others in motion.
- Leaders play an important role to create the organization's management system, to implement and enhance this system.
- Leaders are the representatives for an organization in customer relationships.
- Leaders reinforce the excellent culture of the organization.
- Leaders determine and lead the needs for institutional change.

"The enablers represent the way the organization operates, and the results concentrate on achievements relating to organizational stakeholders" (Shirshams and Ashoub, 2012:2131).

Politics and Strategies: Excellent organizations, took a place in the market and the sector's mission and vision by developing strategies which took into consideration stakeholder-oriented life styles. Policies and strategies are created, revised and updated for each organization.

Results Orientation: In an excellence model; all stakeholders such as; employees, customers, suppliers work to provide a balance between the requirements and the needs of the system.

Customer Focus: The customer is a person who has the final say about the quality of products and services by focusing on the needs. Customer expectations are pretrial beliefs about a product or a service (Olson and Dover, 1979).

Processes and Data Management: Excellent organizations will be fully satisfied on their policies and strategies to support their customers and other stakeholders, and they will increase the value added for the process to design, manage and improve the quality.

Employee Development and Participation: Excellent organizations manage employees' full potential and knowledge at the individual level and team level throughout the organization and provide to benefit all developments. By the way, excellent organizations follow an equally and fairly way in the process for all employees.

Continuous Learning, Innovation and Improvement: The organization's performance, knowledge, continuous learning, innovation and improvement, and managed in the culture should be shared to be an excellent among all competitors.

Development Cooperation: The EFQM Excellence Model provides a framework that encourages cooperation, collaboration and innovation (http://www.efqm.org).

Corporate Social Responsibility: Corporate Social Responsibility, briefly CSR, is a self initiative by organizations to serve the society (Kumar and Balakrishnan, 2011). It also is an ethical approach to the protection of the interests of the organization and the adoption of long-term employees, and existing regulations to exceed the expectations of society in general.

As a result, each criterion is seperated into several subcriteria and each sub-criterion is illustrated with various points in the organization in order to develop the main criteria. In the European context, the EFQM Excellence Model is considered to constitute a valid representation of QUALITY (Westlund, 2001).

Fig. 1: Perceived Service Quality
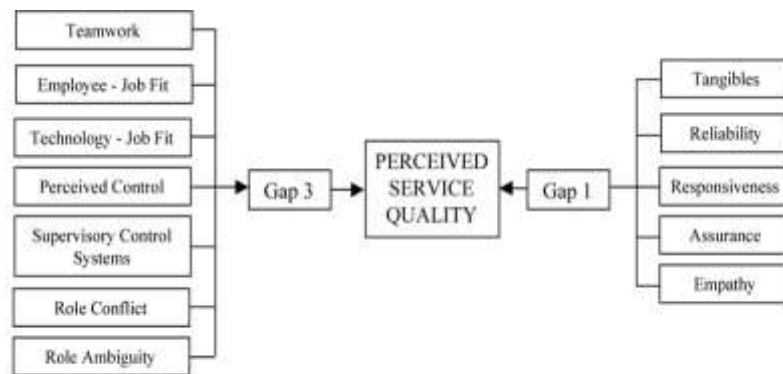
Source: Adapted from Zeithaml *et al.* (1990)

Perceived service quality occurs between Gap 1 and Gap 3. The construct of service quality is mostly conceptualized in the context of literatüre of service marketing (Lee, Lee and Yoo 2000). Therefore, it deals with the concept of perceived service quality. According to Zeithaml, Parasuraman and Berry (1990), perceived service quality is the extent to which a firm successfully serves the purpose of customers.

Fig. 2: The Gap Model
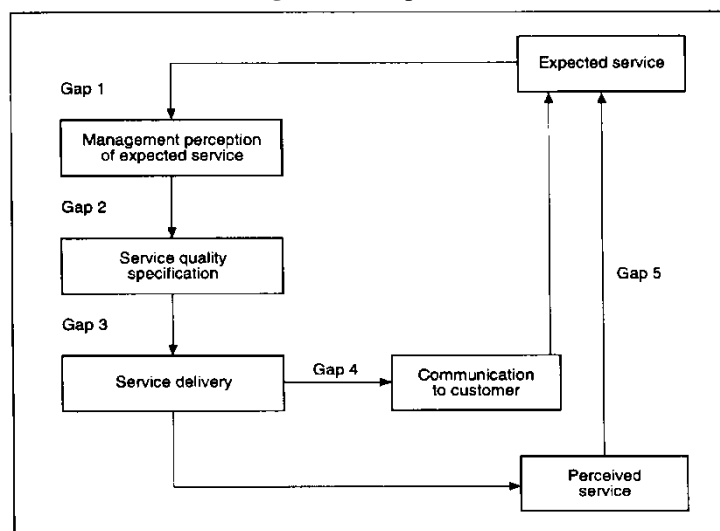
The five gaps that organizations should measure, manage and minimize are shown on the table above which was referenced from Zeithaml et al., (1990):

Gap 1 represents the distance between what customers expect and what managers think customers expect For example; customers want to drink hot tea but how managers interpret the term "hot" is relative.

Gap 2 which is shown above demonstrates the distance between management perception and the actual specification of the customer experience. For that reason; managers need to be sure that the organization is defining the level of service they believe is needed. We know that the consumer is king for an organization.

Gap 3 is aimed to highlight the importance of perceptions from the experience specification to the service delivery of the experience. Presenting the requirements of consumers on time is significant. Managers need to audit the customer experience that their organization currently delivers in order to make sure it lives up to the specifications

Gap 4 is the gap between the delivery of the customer experience and what is communicated to customers. It should be known what will be provided to customers, or discuss the best case rather than the most likely case, raising customer expectations. Communication has an important role here.

Finally, the fifth gap focuses on the customer's perception and experience. **Gap 5** occurs between a customer's perception of the experience and the customer's expectation of the service. All four gaps

mentioned before collaborate to create the fifth one. Customers' expectations have been shaped by word of mouth, their personal needs and their own past experiences. This gap also is customer oriented.

Methods

EFQM Model studies took one year (March 2012 - March 2013) in Halide Edip Preschool. An intensive process of working was carried out for one year. TQM system has been applied at the school. Every weekend, meetings were held. EFQM Model was introduced to employees. Basic information about TQM was given and experiences were shared. Presentations were made. The group work activities and the feeling of being a part of the organization was supported by training the staff and by the total participation principle. First of all, quality policy was formulated. Vision, Mission, Strategic Plan were determined and old ones were revised. Within this framework, the school's;

Old Mission

For the future of Turkey; giving education in an effective and efficient manner by approaching people with love, sharing, being at peace with environment and himself, affecting the age with its individual wealth, being tied to Atatürk's principles and revolutions, taking into account environmental factors while preparing education program.

New Mission

Reintroducing individuals, who are self-confident, able to take decisions on his own, have desire to learn, creative, curious, active and cheerful, grown with respect and love ,have the spirit of tolerance, friendship, peace and brotherhood, to the society.

Old Vision

Being the address for persistence of quality and the best in all conditions by meeting at the dreams of our children.

New Vision

By a sophisticated education, full equipped children, whom we consider as baliee, will be provided to the society.

Trainings and briefings about the main concepts were done. After the end of the 6.month, the EFQM report was written. Turkey Ministry of National Education (MONE), organizes some competitions to improve the academic and administrative quality with KALDER.

In this context, we were involved in the process of quality improvement of Halide Edip Preschool. Academic and administrative staff began preparations. On the basis of criterias the report was written and sent for the evaluation. Halide Edip Preschool became the first among the other preschools in the district. The report then auditioned and became the first in province of Adiyaman. Now the results of Turkey elimination is expected. If it passes the pre-selection, field inspections will be carried out. The scope of this report involves the audits of information given in paper by controlling it whether the given info is implemented in practice or not. After the final grading of schools remaining three schools will be awarded throughout Turkey.

Based on this information, the school mentioned above took nine EFQM criteria into consideration. The following processes were fallowed:

1st Criteria: Leadership

Under the leadership of the leaders, the school's mission, vision, principles and values were established. They reflect the school's principles and values to behavior and considered as leaders and samples for the quality culture. Leaders support improvement, innovation and creativity, and provide support for learning and working together. The tasks of all leaders at all levels at school were identified and their support to the management was provided (board and committee activities, events, and identification of key processes, etc.).

Leaders manages the relationship between the school employees, the people who are given service and with whom they are in cooperation (demands and expectations of these groups, listening, responding and making suggestions, successes, recognition, appreciation, etc.). The school leaders measure, evaluate and

improve their leadership activities. School leaders provide personal development. School leaders support the fulfillment of social responsibilities.

2nd Criteria: (Strategy) - School Plan

Analysis of the current situation of the school was made. (SWOT, PEST). When preparing the school's strategic planning, the existing institutional performance (self-assessment), research and analysis activities, the ministry plans in the near environment, economic and demographic indicators, recent developments in education and science were taken into account. The school strategic planning, stakeholder expectations / needs were identified and plans were reflected. Determination of the future expectations about the strategic plan inputs are done. The school's mission, vision, principles and values, strategic goals, objectives, activities and / or projects are specified. How does the school identify performance indicators and evaluate them. The school's strategic plan and action plans / development plans are associated with the processes. The school prepares the action plans / development plans, costing and budgeting (According to the law No. 5018 - performance-based budgeting). The school announces the strategic plan, the spread of the plan is done by the key processes, through the plan is reviewed and revised regularly.

3rd Criteria: Human Resources Management

The knowledge and competencies of employees are analyzed and taken into consideration for the school / in-house assignments. The evaluation of employee performance, appreciation and rewarding is done. The improvement of knowledge and qualifications of the employees are supported. The formation and operation of teams are provided. Employee participation in management is assured.

Identifying and meeting the needs of communication of the employees is essential. Distribution of tasks and job descriptions within the school to the school board and the formation of committees, councils of workers and the duties, powers and responsibilities are performed. Innovative and creative ideas from employees and project proposals are evaluated. Social, cultural and sporting activities are supported. The use of wages and non-wage resources in a fair way is provided.

4th Criteria: Property Management Resources Knowledge and Cooperation

School uses its financial resources as stated in the strategic plan and action plan / development plan. The school manages its co-operation and knowledge. School buildings, equipment and materials are used effectively and efficiently. All kinds of building, equipment and materials, maintenance, repair, cleaning, and security is provided. Technological developments are monitored and gained to school. Technology and knowledge advantages are used at the maximum extent. The school budget is managed effectively and efficiently. The school shares information with stakeholders.

5th Criteria: Process Management

The school / organization processes are analyzed and defined. The school determines the critical and key processes. The school / organization processes, performance is measured and managed. School processes are reviewed and improved.

6th Criteria: Customer (Parent / Student) Satisfaction Results (6A.1 and 6A.2) Student / Parent Satisfaction Regarding the Results

• Availability and Contact
• Wishes, Suggestions and Complaints
• Reliability
• Security
• Codetermination
• Student Affairs
• Education and Training
• The Physical Environment of School
• The school canteen, dining hall and dormitories
• Social, Cultural and Sporting Events
• Evaluation, Award, Thanks and Appreciation Certificates
• Gaining Positive Behavior and Training
• Impact and Contribution to Community Detection

7th Criteria: Results of Employees (7A). Sensing Measurements Motivation

1. Career Development
2. Communication
3. Empowerment
4. Equal Opportunity
5. Codetermination
6. Government Satisfaction (Leadership)
7. Appreciation / Recognition System
8. Performance Evaluation System
9. The school's Vision, Mission and Values Perceptions regarding
10. Training and Development

Satisfaction

1. Managing Authority
2. Conditions of Employment and Employee Facilities and Services
3. Health and Safety Policies
4. Job Opportunities and Salary / Wage Payments to Non-
5. Working Partner Relations
6. Managing Change
7. Organization's Environmental Policy and Environmental Impact
8. The Role of the Local Authority and the General Society
9. Employee Administrative Matters Accuracy and Sensitivity
10. Replies requests Speed

(7B). Performance Indicators Achievements - Motivation and Participation

1. Joined Improvement Teams
2. Suggestion System Registration:
3. Levels of Training and Development:
4. Study Team Measurable Benefits:

Satisfaction

1. Rates of absenteeism and illness
2. Business
3. Level of accidents
4. Complaints
5. Trends in Recruitment
6. Employee Turnover Rates
7. Strikes
8. Non-wage enjoyment of the rights
9. Enjoy the benefits of the institution

Services Provided by the Company to Employees

1. Employee Administrative Matters Accuracy and Sensitivity
2. Communication Effectiveness:
3. Replies requests Speed
4. Training Evaluation

8th Criteria: Community-Related Social Responsibility Performance Results

• The results about the sharing of knowledge and experience of the school / organization with other schools / institutions, their relation to the environment.
• The results of environmental sensitivity the protection of the natural environment
• The results of the protection of natural resources
• The results about the existence of the school / institution in the media
• The results about the improvement of the social environment in all kinds of business activities
• The results about the people in need of special education and the support provided for the socially disadvantaged individuals

• The number of the titles and awards gained about the Community satisfaction
• The number of the voluntary activities that were done by the school / institution for public health, social, cultural, sports and so on.

• The chart for the impact and contribution to the society.

9th. Criteria: Basic Performance Criteria (9A). Financial Results

• The results of the income and expenditure
• The year income / expense amount for a student during an academic term
• The coherence of expenditures of school / institution with the strategic plan and action plans
• The rate of reaching the objectives of the budget
• The results of efficiency and savings

(9B). Other Results

• Occupancy rate of the school according to the capacity
• The student teacher ratio
• The schools in the school district's share of
• Classes according to their areas of development achievements
• Development areas by the inability to start or
• Due to the success of the school to take part in local and national media status.
• National and local competition results in
• The scope of compulsory education starting in primary school the number of students
• The results of Processes
• The results of the new process design
• The results of the state of realization of the objectives of the strategic plan
• Building hardware tools and materials, economic and effective use of the results of
• The results of collaborations with universities and education institutions
• Inspection scores, school show successful results for other applications
• The results of student disciplinary incidents
• Self-assessment results to improve in line with
• Accidents at school

Results and Discussions

In light of the above the following results were obtained:

Table 1. Wishes, suggestions and complaints

6a1.2. Dilek, öneri ve şikâyetler (dinleme, dikkate alınma, yanıtlama)

	2010 / 2011	2010 / 2011	2011 / 2012	2012 / 2013
Halide Edip Anaokulu	48,1	80,3	83,7	
Ş.B.T. C. T. Anaokulu	95,0	98,0		
İl Ortalaması	69,6			
HEDEF	48,0	50,0	52,0	54,0

Table 2. Reliability

6a1.3. Güvenilirlik,

	2010 / 2011	2010 / 2011	2011 / 2012	2012 / 2013
Halide Edip Anaokulu	53,7	90,0	92,4	
Ş.B.T. C. T. Anaokulu	99,0	96,0		
İl Ortalaması	79,1			
HEDEF	50,0	52,0	54,0	56,0
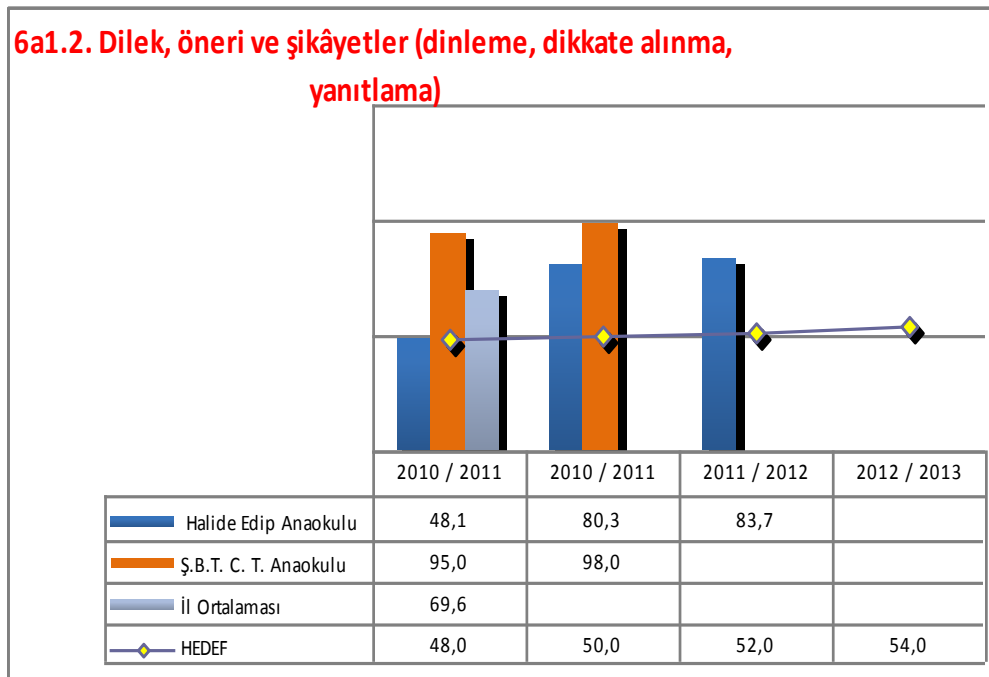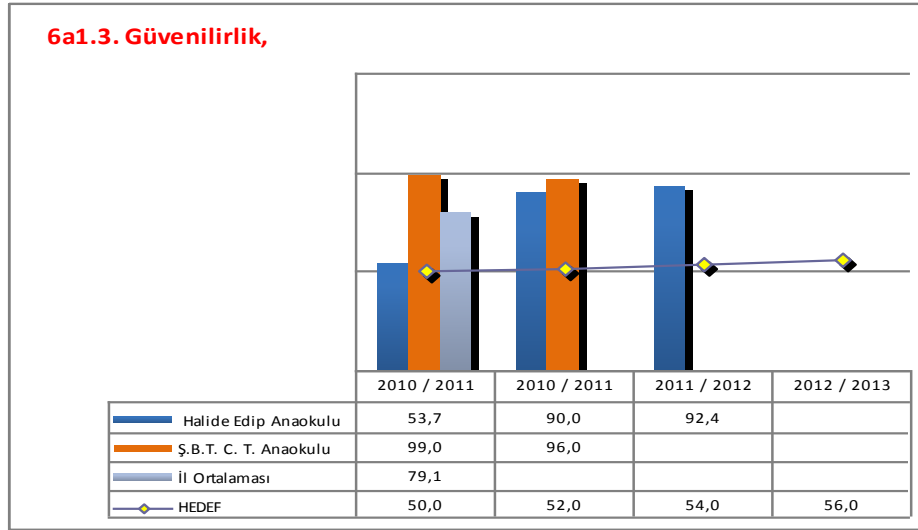
Table 3. Performance evaluation system

7a.9. Performans değerlendirme sistemi,

	2009 / 2010	2010 / 2011	2011 / 2012	2012 / 2013
Halide Edip Anaokulu	43,7	76,1	84,0	
Ş.B.T. C. T. Anaokulu	84,0	95,0		
İl Ortalaması	67,5			
HEDEF	40,0	42,0	44,0	46,0
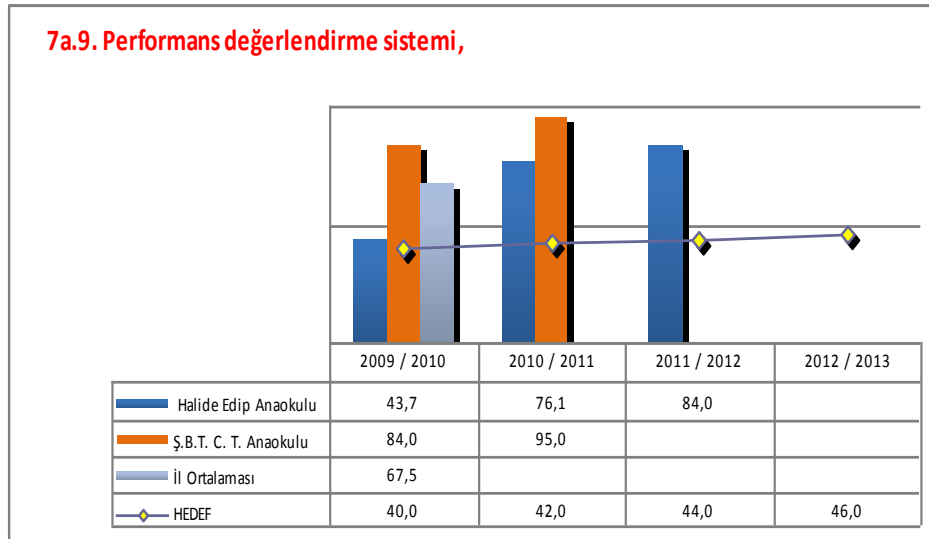
Table 4. Participation rates of satisfaction surveys

7b.9.Memnuniyet anketlerine katılım oranları,

	2009 / 2010	2010 / 2011	2011 / 2012	2012 / 2013
Halide Edip Anaokulu	100,0	100,0	100,0	
Ş.B.T. C. T. Anaokulu	100,0	100,0	100,0	
İl Ortalaması				
HEDEF	90,0	92,0	94,0	94,0
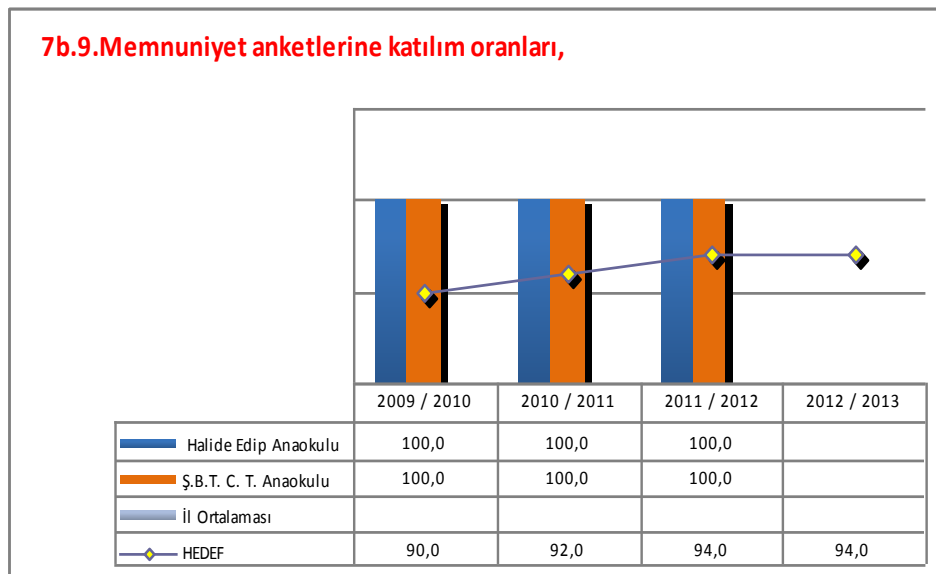
Table 5. Overall satisfaction

TMA.5. GENEL MEMNUNİYET	2009 / 2010	2010 / 2011	2011 / 2012	2012 / 2013
Halide Edip Anaokulu	72,0	84,3	92,3	
Ş.B.T. C. T. Anaokulu	92,0	96,0		
İl Ortalaması				
HEDEF	70,0	72,0	74,0	76,0
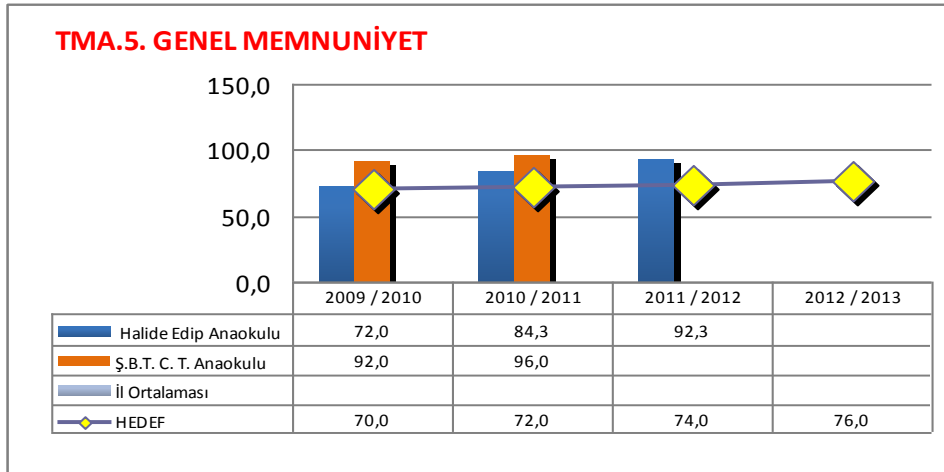
Table 6. The results of the processes

9b.11.Süreçlere ilişkin sonuçlar,	2009 / 2010	2010 / 2011	2011 / 2012	2012 / 2013
Halide Edip Anaokulu	6,0	6,0	6,0	
Ş.B.T. C. T. Anaokulu				
İl Ortalaması				
HEDEF	3,0	4,0	5,0	5,0
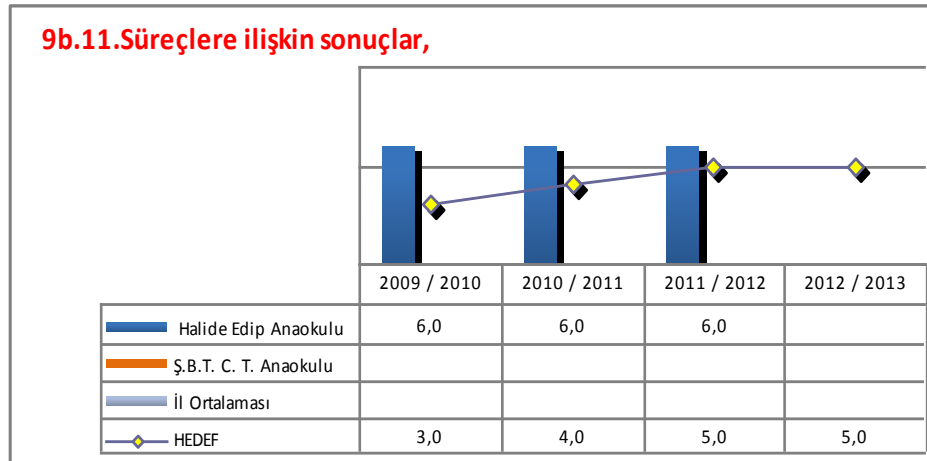
Gaps in the Service are:

In our example as the students, who use the service, are so young, the family satisfaction is considered with the help of the both their and their families' transfers about child feeding (hand skills) and having the skills to express themselves and so on.

Children are accompanied by experienced and cumulative educators and children / parents expectations are perceived (In parent-teacher meetings, targets put by the parents and the school were reached and exceeded. Moreover, when comparisons are made with a school in Turkey who won award last year it is confirmed by the data that the school approached the award-winning school in a rate of 85% .

Details of expectations, a number of gaps have emerged as a result of the clash of personal characteristics.

• **Example 1:** The family wants the staff to feed the child, but the child can be trichiniasis or can be choosy in eating

• **Example 2:** The child can be addicted to the family.

• **Example 3:** The child can be introverted.

In this process, there were some prejudices of the staff. They did not believe the process. They showed their willingness during their participation to the process or they did not attend the process. This process required intense dedication and effort (such as coming work at the weekends) This kind of situations didn't welcome by their families and a number of gaps were occurred. Therefore, at this point, familial problems began. However, inviting the spouses to the school, explaining the benefits of the process and talking about the positive results that would be seen after the process, helped to overcome these gaps.

On the other hand, staff was considering themselves as already doing the right job; they thought that there was no need (the process of the EFQM Model). Generally a more individual understanding was

dominant. Over time, the process was continued by creating awareness training for team play, and this was reflected in the quality of service in all processes of formation.

Conflict about the roles created another gap between the employees. As the school is a public institution, administration has no chance to choose the employees. Conflicts between employees can be felt by all at the school. However, over time these gaps were overcome by training and by the team work spirit.

Academic and administrative staff had a great stress because of the conflict between their families and the feeling of finishing the work that they had start. This psychology sometimes affected the quality of the service / service delivery and the performance of their tasks,

After all, the emerging situations caused because of the poor quality reflected to the service quality and the school management resulted the quality in the ideal level.

As a result, this study took its part in upper levels when compared with the schools in the province and across the country, which have the same condition and position, with employees experiencing the same problems.

• This study is also the first EFQM activity conducted in a public Preschool.

• In many public schools this kind of studies are considered as unnecessary but our school took the first step and without waiting any profit they believed and applied

• Under the leadership of PTA (some parents and teachers), the importance of this study was emphasized. The need for the qualified service and life stressed and this belief was exhibited.

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Human Resource Management and Labour Relations in Multinational Companies: A Case Study in a Multinational Hypermarket in Turkey

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Abstract

As the consumption habits of societies are closing up to each other because of growing globalization process, retail sector is increasingly being dominated by multinational hypermarkets. While their low prices are putting pressure on traditional retailers and increasing competition against to these companies, multinational hypermarkets also provide employment opportunities improve skills and terms of conditions by introducing new labour standards to the labour relations. Multinational hypermarkets are developing their business models in their home countries. The national institutional environment has an impact on the development of the business model, including its employment relations and human resource politics. This impact is called "home country effect". When a company internationalizes a retail format, it attempts to transfer this business model and the specific competencies linked to this, including employment relations which have been developed in its home country, to other countries. At the same time, companies are always forced to make adaptations to the local environment and the specific national institutional system of the host country. The empirical research of this paper focuses on the analysis of the labour relations and human resource politics in home and host countries of a company which is one of the world's multinational retailers operating in Turkey. For the research, the results of the interviews which were conducted with managers, employees and shopstewards will be analyzed. Both managers, shop stewards and workers of the company were interviewed with semi-structured in-depth interview technique.

Keywords: Multinational Hypermarkets, Human Resource Management, Labour Relations, Globalization, Retail Sector.

Introduction

During the last few decades, companies have been confronted with an increasingly competitive environment. Forces facilitating globalisation, such as the liberalisation of international trade, the international integration of production, research and marketing by major MNCs (multinational companies) have enabled companies to invest overseas to gain or maintain competitive advantage. Globalization represents the internationalization of capital and is characterised by the fact that the most powerful companies –the MNCs- think of the whole planet as their sphere of operation. Multinational companies operate in countries where national labour legislation either doesn't apply or is ignored by employers and the authorities. They are able to shape national and global politics and policies to suit that end by making offers to many countries that governments cannot refuse and by their lobbying (Waghorne, 2004).

Global trade and investment patterns are having a dramatic impact on employment relations and work arrangements around the world. But there is no single meaning of economic globalization for the global workforce. Globalization directly affects workers in both developed and developing countries. While most global trade and investment is between the developed countries, globalization has increased dramatically in a number of developing countries. The impact can be both negative and positive and differs by context, by industry and trade, and by employment status (Carr, Chen, 2001).

MNCs emphasize the positive aspects of their activities, whether this is providing foreign direct investment and employment opportunities, improved national infrastructures, better terms of conditions of employment than their national competitors and improved skills (Dicken, 2007). However, the improved efficiencies and benefits claimed by global capital are often questionable and may come at the expense of employees (Pollert, 1999; Sklair, 1995; Stiglitz, 2002; Watt, 2008). The exploitation of

workers and the difficulty of union organizing are particularly marked in low-skill service sector such as the food-retail supermarket chains and the supply chains of these firms. Working in the food retail is often typified by low pay, hourly-paid part-time contracts (only 5-10 percent usually have salaried contracts), high labour turnover (although varying between firms and countries) and sometimes unstable and limited hours, in which the paying of overtime is normally avoided by employers (Royle, Kağnıcıoğlu, Uçkan, 2010).

In the light of ongoing internationalisation and globalisation, it is important to look closely at what kind of human resource management techniques MNCs are implementing in their host countries to transfer its business model and the specific competencies linked to this, including employment relations which have been developed in its home country. This paper examines the cross-border human resources practices of European-owned supermarket MNC in Turkey and helps to understand of the reality of MNC cross-border labour relations and employment practices.

Human Resource Management in Multinational Companies

In a competitive environment, HRM policies and practices are becoming crucial because they can act as mechanisms for co-ordination and control of international operations (Barlett, Ghoshal, 1991).Values and HR systems help to shape organizational culture and the people who operate within and influence that culture; and MNCs there for attempt to transfer their HRM practices abroad (Myloni, Harzing, Mirza, 2004).

There is a broad literature on HRM practices in MNCs. As HRM can be seen as part of the overall strategy of the firm, Perlmutter (1969) states that a MNC has three strategic choices: ethnocentric, polycentric and global. However, external factors, such as the host country environment, limit the MNC's freedom to choose one of these strategies. As a result MNCs prefer to use hybrid strategy that fits best with each subsidiary's local conditions by adapting an ethnocentric strategy for some of them and a polycentric one for others (Tayeb, 1998). Studies by Almond et al. (2005) and Ferner (1997) show that MNCs develop their preferred mode of operation in their home country, where they are highly influenced by the institutional environment. When internationalizing, they are then inclined to transfer this model to their host countries: a home-country effect. Yet where the host-country institutional environment is very different, this may force foreign subsidiaries to adopt localized management and HRM practices: a host-country effect (Geppert, et al., 2014).

Host-country institutions such as the educational, financial and industrial relations systems and labour market regulations may operate as 'constraints' and 'barriers' to the transfer of home-country models. Empirical research has shown how MNCs often have to adapt their production models (Djelic, 2001), HRM practices, work organization and work systems (Geppert et al., 2003) and employment practices to local institutions. The strength of this host-country effect varies between countries: those with dense employment and industrial relations frameworks can provide 'robust tools kits' for local managers and employee representatives to promote local interests (Williams and Geppert, 2011). On the other hand, studies in LMEs, where institutional environments are much more permissive, have found that MNCs have scope for strategic choice, especially when transferring industrial relations practices (Dörrenbächer, 2004).

MNCs are under pressure to maximise the benefits of global coordination, while maintaining responsiveness to differences at local, national or regional level. As a result, MNCs are faced with a 'think global', 'act local' paradox (Dowling, et al., 1999). The question is the extent to which their various foreign subsidiaries act and behave as local firms (local adaptation) versus the extent to which their practices resemble those of the parent firm (global integration). Evidence suggests that MNCs remain primarily rooted to their country-of-origin national business system (Stanton, et al., 2009).

Industrial Relations and Human Resources Management Climate of Turkey

Turkey is one of the key emerging markets characterized by its high economic growth and a rapidly growing population. The MNC's choice of entry mode into a foreign market is also related to host country's industrial relations climate. Cheap labour and weak trade unionism make Turkish market attractive for multinational companies. Moreover, MNCs which is unionized in its home country and other foreign countries; prefer to struggle with unions for remaining unionized when they come into Turkish market.

In Turkey the state plays a central role in industrial relations. There is highly restrictive legislation, which sets a high threshold for union certification (Uçkan, 2007). A union must not only organize at least 3

percent of all employees in a sector, but also at least 50 percent in a company in order to gain recognition. Although employers are informed about workers' union membership and trade unionists are not protected against harassment or dismissal, organizing campaigns by Turkish unions have in many cases met this high threshold, especially in larger establishments, including hypermarkets (Geppert, et al., 2014). Depending on the required circumstances, the collective agreement may be concluded at the enterprise (company) level. Since labour laws are weak in the Turkey, employees rely on union-employer collective agreements to provide them with decent pay rates and a living wage, pensions, job security and protection against unfair dismissal. Without such collective agreements employees can be fired at an employer's whim, regardless of their length of service.

There is quite poor and weak employee representation practices in Turkey. Apart from collective bargaining, the social partners have some consulting obligations at the establishment level. These concern topics such as the election of union representatives and the exchange of information as well as consultation in relation to collective redundancies and short-time work (Valk and Süral, 2006). There are no works councils governed or required by legislation in Turkey. However there are some other formal platforms at the establishment level that employees are represented, such as occupational health and safety boards, paid annual leave boards. But the most effective mechanism in employee representation is the shop-stewards in Turkey.

The increasing participation of employees in the workforce and the changing values and expectations of a young and well-educated workforce are two trends that are essential for market in Turkey. As the number of the personnel working in the organizations, the practices of the HR also increase and the organizations give much more importance to the HR departments. Some of the issues which are the responsibilities of HR department develop as the organizations grow; but the issues such as recruiting and employing, career planning and developing and pay do not change with the size of the organizations. However, as the company gets bigger, the issues such as performance evaluation and training become the responsibilities of the HR department (Bakan, Ersahan, Buyukbese, 2013; Demirkaya, 2006).

When the impact of socio-cultural environment on work culture and HRM practices in Turkey was examined, Turkey was found to be highly paternalistic, moderately collectivistic and hierarchical, and non-fatalistic. With respect to internal work culture, managers held favourable assumptions and beliefs regarding employee malleability, responsibility seeking and participation. On the other hand, it was a common belief that employees were not proactive. In HRM practices, Turkey scored high on job enrichment and empowering supervision, but low on performance-reward contingency. Aycan (2001) concluded that Turkish societal and organizational culture is a blend of ``Western'' and ``Eastern'' values. Some organizations follow the newest trends in HRM practices (e.g. job enrichment and empowering supervision), but they experience difficulties due to some of the ``emic'' characteristics of both the societal and organizational cultures.

Features of Retail Sector

In recent decades, the retail sector has undergone significant transformation. Due to deregulation of foreign investment, competition/monopoly policy, and land use policy, alongside broader neoliberal reforms affecting consumer markets and trade, large retailers have managed to consolidate their power and expand globally. While small retailers still dominate in many parts of the world, transnational corporations are taking over larger shares of the market. As large companies seek to increase profits, they have reduced the risks of investment by subcontracting and franchising. These trends have impacted smaller firms, as well as suppliers, consumers and employees.

The changes in the retail sector have developed alongside larger labour market trends, where employers are attempting to shift the risks of employment onto workers by adopting "flexible" work practices. This includes decreasing the number of full-time jobs, and increasing part-time, temporary, and on-call work. More retail workers have become "precarious workers" with little job security, low wages and not enough hours of work (Luce, 2013).

The industry is highly globalized, with large retailers operating in almost every country. The top 250 retailers are based in all regions (though dominated by European and U.S. firms). While the industry has seen the largest growth in the least developed economies, the bulk of goods are still sold in Europe and North America. According to the ILO, 60 percent of goods are sold in these two regions although they account for only one-fifth of the global population. While small stores are still prominent in some regions, the industry is increasingly concentrated, as large corporations have bought smaller companies and retail chains have replaced small independent stores (ILO, 2001).

Table 1 shows that the Top 10 retailers alone account for 29 percent of total retail revenue. Walmart continues to dominate the industry, with 2011 revenue almost four times greater than the second largest firm, Carrefour. Industry analysts state that the industry will continue to experience growth and concentration. Mergers and acquisitions continue to be an important trend, particularly in Latin America, and the largest firms are increasingly offering multiple formats (hypermarkets, supercenters and smaller stores) (Luce, 2013).

Table 1. The Top 10 Largest Retailers (2011)

Company	Country of Origin	Retail revenue (US$mil)	Retail revenue growth	Net profit margin	#of countries of operation
Wal-Mart	U.S.	446,950	6.0%	3.7%	28
Carrefour	France	113,197	-9.80%	0.50%	33
Tesco	U.K.	101,574	5.80%	5.50%	13
Metro	Germany	92,905	-0.80%	2.20%	33
Kroger	U.S.	90,374	10.00%	2.50%	1
Costco	U.S.	88,915	14.10%	5.80%	9
Schwarz	Germany	87,841	5.80%	n/a	26
Aldi	Germany	73,375	3.70%	n/a	17
Walgreen	U.S.	72,184	7.10%	9.90%	2
The Home Depot	U.S.	70,395	3.50%	9.60%	5
Top 10		1,237,710	4.40%	6.20%	16.7
Top 250		4,271,171	5.10%	5.90%	9.0
Top 10 share of Top 250		29.0%			

Resource: Luce, 2013.

Alongside global expansion and firm concentration, there are at least two key industry trends impacting the retail industry: declining union density, and the adoption of the U.S. "low road" employment model. Declining power of unions is a major trend in global retail. In most – though not all - countries, unions have seen a steady decline in members over the past few decades. Another key trend in the industry is the growing dominance of the "low road" employment model. "Low road" employers tend to pay low wages provide few or no benefits, and treat employees as a cost rather than an asset. Low –road employers tend to deskill work and operate with high labor turnover (Luce, 2013).

Methods

The research of this paper focuses on the analysis of the labour relations and human resource politics in home and host countries of a company which is one of the world's multinational retailers operating in Turkey. The research is qualitative, based on semi-structured face to face in depth interviews conducted jointly by the authors. The interviews for the data in this paper were carried out between 2011 and 2013. The interviews include a number of interviews conducted with managers, employees and shopstewards at the company. On the manager's side, one former human resources (HR) manager (Interviewee No.1) and a current HR executive (Interviewee No.2); on the workers' side 6 workers, who are working at a store in the Aegean region, were interviewed.

British owned supermarket chain Tesco began its operation in Turkey in 2003 with the acquisition of Kipa and opened its first store in 2005 in Bodrum. Since then, it has expanded to more than 190 stores in 20 Turkish cities. While the company employs over 500,000 employees around the world, it employs almost 10,000 employees in Turkey (Kipa Corporate Responsibility Report, 2013). Tesco-Kipa stores are classified according to size. Each 1.000 square meter is considered as 1 K Stores could expand up to 15 K Interviewed workers are working at a 5 K store.

When entering the Turkish market in 2003, Tesco mainly preferred Kipa due to its Aegean Region based regional retailer characteristic instead of being a nationwide retailer. Thus, Tesco had the chance of reorganizing Kipa ideally in terms of investment and HR policies while entering the Turkish market. Interviewee No.1 points out that at the onset of their operations in the Turkish market, Tesco had implemented an HR-oriented growth approach rather than an aggressive growth path. As a result, Tesco waited till 2005 to open its first new store in Bodrum. Tesco spent two years to establish the critical managerial processes and technological infrastructure, and to realize cultural transformation, as Interviewee No.1 mentions while setting priority on development and improvement efforts instead of commercial concerns. Besides, Interviewee No.1 also indicates that when Tesco-Kipa entered the Turkish market in 2003, they heavily invested on HR policies in the annual work plans, particularly in

2003-2004 period policies for wages, training and promotion were prioritized and strong HR processes were set into action.

Results

Organisational Structure

The Board of Directors of Tesco-Kipa, headed by the CEO, consists of 10 members. Six of them are executive members, i.e. CEO, Director of Operations, Director of Human Resources, Director of Real Estates, Director of Finance and Director of Commerce, and the remaining four are non-executive members. Below them, there are three regional directors who report directly to the Board of Directors. In addition, there is regional HR managers and store HR executives who report to the Headquarters HR director. Headquarter HR department carries on tasks like recruitment, performance evaluation, organizational development, pay management and training.

As Interviewee No.1 mentions at the establishment period of Tesco-Kipa all members of the board of directors, except CEO and Director of Operations, were Turkish nationals. The company selected the best and the most experienced manager for each department, and consequently with the help of these managers the transition was accomplished without any trouble. However, as he also states, currently the board of directors is not composed of Turkish nationals; besides all the directors, except the director of human resources, and the CEO are expatriates. Interviewee No.1 comments on the issue as;

"There occurs insecurity, a lack of confidence when there is an expatriate at the top; it causes problems in terms of the commitment and permanence of the person. When there is alienation among the top managers and lower level managers, lower level managers do not want to take responsibility."

Work Organisation

Both store managers and workers usually work with indefinite period contracts. Stores that are located in touristic destinations employ temporary workers for a definite period of employment especially in summer time. Part-time workers mostly employed as cashiers. According to Turkish Labour Act, the requests of part-time workers who want to be converted into full-time workers should be taken into consideration by the employer. However, interviewed workers state that the company generally recruits new full-time workers outside instead of turning part-time workers into full-time workers.

According to the clauses of the contract between Tesco-Kipa and its employees, by signing the contract the workers are assumed to agree working over-time on their weekly working hours whenever the employer demands. By working over-time, the employees earn the right to be paid for their over-time work. However, interviewed workers state that in recent years the management prefers equalizing instead of paying over-time, and consequently they are not paid for over-time work. Interviewed workers also mention that there are not any clear job definitions at the store, that everybody can do any kind of job. For example, a fresh food section worker might easily sort out shelves, or in another instance bakery cooks are forced to clean the dishes.

Training and Career Patterns

Tesco-Kipa provides various training programs for all employees at each level, starting from orientation training at recruitment. These training programs, at the same time, constitute an important part of the company's career system. Tesco-Kipa mostly prefers internal recruitment for vacant positions, so that the company employs already trained personnel. In 2012 the company provided over 350,000 hours training to its staff at hypermarkets.

Interviewee No.2 mentions the in-store training system called PPI schedule which specifies at the beginning of each year the types of trainings, to whom these are going to be provided, and their periods. For instance, store's own HR department plans for trainings, which all the employees should attend, their respective participants and periods on topics like vocational risks, job safety and health. These trainings are provided by store's own instructors, who are selected amongst store employees, as Interviewee No.2 underlines, and they are specially trained for this purpose at the Head Office.

Tesco-Kipa focuses on internal recruitment in recent years. In line with this approach the company started the "Optional Manager Training Program" in 2004, in which qualified employees are trained to become managers to any eligible position. The program is open to all employees who wants advance in his/her career and who has the potential of developing into a manager. With this optional program, employees take the opportunity to advance their careers, and as a result Kipa gets the chance of generating resources

for any level of management. The company supported nearly 850 colleagues who are currently on "Optional Manager Training Program" to develop for their next job ((Kipa Corporate Responsibility Report, 2013).

The program, which is an adaptation of the original one in the UK, is being continuously improved, and provides training for management positions such as Regional Director, Store Manager, Regional Human Resources Manager, Group Manager, all positions at the Head Office, Express Stores Regional Manager, and Store Executive. The participants of the training program are selected via interviews held at pre-set election centres. Upon completion of the training program the trained personnel is evaluated by a decision panel, and if the panel approves of the success of the candidate, he/she is assigned to the appropriate position. Optional Manager Training Program paves the way for eager and improvement-oriented workers to become managers (http://tesco.kipa.com.tr/pages/kurumsal_yonetim.asp-20.04.2011).

The current HR director of Tesco-Kipa evaluates the program as;
(http://www.kobipostasi.net/2010/11/18/tesco-kipa-kendi-yoneticisini-kendisi-yetistiriyor/-20.04.2011
):

"Today most of the managers of our large-format stores are the ones who successfully completed the program. We also incorporate managers with a retail experience into our organization in order to meet the requirements of rapid growth. Almost all of the store managers' management teams, which basically consist of Department Chiefs and Group Managers, are attained through this program. Our program creates opportunities for inspiring success stories. We have managers right now who started as a section worker and had been promoted to Department Chief, and then to Group Manager and finally to Store Manager level."

Employment Structure

Most of the cashiers are part-time working females. Other employees of the stores are mostly males. For instance, store managers are typically males. However there are female employees working at the administrative departments of the stores, i.e human resources managers of the stores are usually females. Store employees are below the 40 on average, yet cashiers are younger than the average. Tesco-Kipa started a project called Women Leadership Network in 2011 in order to increase the number of female managers (beginning from chiefs and group managers). In this project the company organizes meetings to draw together female managers and female manager candidates, promotes optional training programs to female workers and conducts leadership courses for females.

Management Styles and Work Climate

According to Interviewee No.1, human resources policies of Tesco-Kipa are formed by listening to employees and making use of their feedbacks. The principle of Tesco-Kipa is described as "Everything is Human in Retailing" by Interviewee No.1 and he continues with explaining the HR procedures of Tesco-Kipa as;

"The participatory management system of Tesco-Kipa reflects the British democracy. This example shows that central HR systems of multinationals work well when applied appropriately."

Tesco-Kipa utilizes various procedures that aim to create trust, respect, mutual support, and team spirit among employees, to generate opportunities for the progress of employees, and to make employees' jobs more appealing. Interviewee No.1 and No.2 emphasize the participatory, flexible and consultative management approach of Tesco-Kipa, and give examples of some procedures. Employee forums are the most significant example of these procedures. In the forum system regional and national employee forums are held periodically at stores, the head office or distribution centres with the participation of employees and managers. Employees determine the agenda of the forums where action plans are developed on debated issues and pursued afterwards. One representative is selected for each store in these forums, and these representatives discuss problems of store employees at the regionally and nationally held forums (http://tesco.kipa.com.tr/pages/kurumsal_yonetim.asp-20.04.2011). Interviewee No.1 states that the system had also avoided unionization for quite a long time.

Tesco-Kipa management applies various human resources policies at the stores which aim to build team spirit and demonstrate that they care about employees. These policies could be reviewed as follows:

(i). Employee satisfaction survey and manager evaluation system: Interviewees talk about an employee satisfaction survey called "viewpoint" which is conducted every year by the Head Office HR Department. According to interviewees, this survey seeks to identify the non-problematic areas for employees and the

prospective improvement areas with active participation and support of employees themselves. Interviewee No.2 states that questionnaires of the survey are sent off by the Head Office, upon their completion the questionnaires are put into boxes, then they are assessed and reported by an independent company and finally the results of the survey are delivered to the Head Office; if there are any unfavourable evaluations for any manager, he/she is seriously warned by the Head Office. Survey results are categorized as green (fine), yellow (moderate) and red (poor) as interviewed workers state, and they also point out that if the result is red for any manager then he/she is warned and his/her attitude changes totally after the survey.

(ii). Single team magazine: Tesco-Kipa publishes a company magazine called "Single Team" once in every two months with the aim of developing corporate culture, enhancing interorganizational communication and informing all employees about community and social responsibility projects. At the same time the name of the magazine has become a motto among Tesco-Kipa employees, such as that, various forums have been formed under this motto in the social media like Facebook. This fact shows that the motto has been adopted and accepted by the employees

(iii). Employee hotline: Interviewees mention that a system established for employees' right to complain through an exclusive phone line, which is directly connected to the HR executive. All employees could directly convey any kind of complaint to management via this phone line, as the interviewees explained the system, and this system develops trust towards the company by generating the impression that employees are considered. Interviewee No.2 emphasizes that this phone line is typically connected to one HR executive at the one of the stores in İzmir whose identity is kept secret, and also indicates that the executive, who received the complaint, reports the situation to relevant departments and initiates the process of finding a solution. However, interviewed worker No.3 believes that the line is rarely used by workers and is not reliable, and puts it as;

"I am sorry but about whom you would complain to who with this line? People refrain, fear using this. They cannot complain about management to management itself."

(iv). Buddy application: Interviewees also point out the buddy application which is utilized for facilitating the adaptation of new recruits. Other than the one-day in-store orientation training, buddies are assigned to new recruits from the department they work, and the buddy application continues until the new employees learn how to work, as Interviewee No.2 explains, and he also indicates that some of the employees are trained to be buddies at the stores and then these employees are assigned buddies of new recruits at their departments.

(v). Absenteeism management approach (on-the-job update meetings): Interviewee No.1 and No.2 state that Tesco-Kipa holds on-the-job update meetings in line with quickwin method in order to minimize absenteeism which is one of the most important and costly problems of retailing sector. According to the Labour Act, if, without the employer's permission or a good reason, the worker is absent from work for two consecutive days, or twice in one month on the working day following a rest or on three working days in a month, the employer may break the employment contract (Art.25/II-g). For this reason, the worker, who is absent from work, choose to get a fake medical report from hospitals even though he/she is not sick. The interviewees tell that absent workers with medical reports are interviewed personally in order to inquire their reasons for absenteeism and offered support as the HR department. The interviewees suggest that this way of management decreases rate of absenteeism and especially prevents medical report aided absenteeism of workers, as Interviewee No.1 underlines absenteeism rate fell to approximately 2,5-3% from 25% and comments on the issue as;

"There is such a fine approach to workers about absenteeism, I mean, they ask to the worker 'why don't you come to work?'. They search and try to solve the problem, and the absenteeism curve bam goes down. It is such a nice system that they enquire 'do you need anything' or they approach like this; they say ' you are a team on your shift, either 3 people or 5 people, now if you don't come to work, your co-workers' workload increases. You are a team'. We bravely implemented this system."

Interviewee No.1 also emphasizes that the approach makes the employees to think they are taken into consideration and monitored carefully by managers about absenteeism at the same time.

Industrial Relations

In Tesco Human Rights Policy, it is stated that "Employees are free to join unions in the countries in which we operate." (http://www.tescoreports.com/crreview08/people-progress4.html). Tesco has been unionised in UK since 1969; but Tesco's approach in host countries is to remain union-free. For example, Tesco demonstrated an unwillingness to engage with the union in USA when the company entered the

country in 2007. The employment practices of Tesco in the United States are contrast with Tesco's stated policies on human rights, and its approach in the UK, where Tesco has been unionised. Indeed, while Tesco refuses even to meet the United Food and Commercial Workerd' Union (UFCW) in the USA, it actively encourages its employees to join the Usdaw retail union in the UK, with which the company has a much-praised partnership agreement. Not only does the company refuse to meet with the retail workers union, but it is pro-actively and aggressively fighting the efforts of its employees to join the UFCW. (UNI, 2009).

Tesco's approach in Turkey was also deliberately anti-union when the company entered the Turkish market from the beginning. The management has engaged in overt and aggressive forms of anti-union behaviour, including discrimination and illegal dismissals of pro-union activists. Tez Koop-İş labour union started organization and unionization activities at Kipa stores a short while before Kipa was purchased by Tesco in November 2003.

Tesco was the only multinational retailer operating hypermarkets in Turkey that had not yet signed a collective agreement until the collective agreement was signed in February 2013. The union securing membership of nearly 60 % of all employees in July 2012 finally gained the recognition and concluded the struggle for unionization at Tesco-Kipa that has been continuing since 2003. The organizing process in Tesco   was acclaimed and supported by both national and international labour unions. Global Union, of which Tez Koop-İş is a member, tried to develop an agenda on the issue at international level. Representatives of UNI encouraged workers by frequently visiting Tez Koop-İş and Tesco-Kipa stores.

Conclusion

HR professionals in multinational companies have to ensure that HR policies and practices provide balance between consistency and coordination versus recognition of cultural and other differences. At the same time HR professionals have to make employees creative and innovative through continuous learning and development. Additionally, in organizations that internationalize through mergers or joint ventures, HR managers have to use their skills to combine different work processes and cultures (Aghazadeh, 2003). Successful application of a particular HR system requires a process of ``adaptation''. It means that multinational companies should modify the system to fit the cultural realities and employment relations in host countries.

Host country's legal regulations and institutions represent a strong environmental pressure on MNC subsidiaries and constrain the transfer of HRM practices from its home country. Host-country institutions such as industrial relations systems and labour market regulations may constitute barriers' to the transfer of home-country models. One of the strongest influences by local institutions comes from labour unions. If a union represents subsidiary employees, subsidiary HRM practices can be very close to those of local firms. In unionised firms, even if parent HRM practice would be beneficial they may be unable to implement them because of potential conflict with union rules or employee attitudes (Beechler and Yang, 1994; Myloni, Harzing, Mirza, 2004).

Comparative studies of international retailing have frequently indicated that work and employment relations are sector-specific and differ significantly from those in manufacturing firms. Retailing generally involves a (relatively) high share of female employment and of part-time work and low wages, even though there are some differences across countries (Geppert, 2014). Traditionally, Tesco was identified with a 'pile'em high, sell'em cheap' philosophy, which was also reflected in the company's employee relations (e.g. low wages and high labour turnover, or what is sometimes called a 'high sacrifice' HR strategy) in Europe. As Tesco sought to compete more effectively in the European food retailing, by improving quality and customer service while retaining a competitive pricing strategy, the company has systematically improved pay and conditions and tried to involve employees more closely in their work and the business of the company. Accordingly, Tesco had introduced a range of 'parent-friendly' HR policies (Blyton and Turnbull, 2004), which they pursue in Turkey as well. Parallel to these steps, the interviewees remarked on the participatory and flexible management approach of Tesco-Kipa.

Due to lack of work councils and worker representation systems in Turkey, trade unions play a critical role in representing and defencing interest of workers. Tesco-Kipa management applies various human resources policies at the stores which aim to build team spirit and demonstrate that they care about employees. Though it is not legally required, Tesco Kipa has formed "Employee Forums" which is a type of worker representation upon its own preferences. However, the interviews with the workers showed that there was a strong solidarity and feeling of unity among workers apart from these human resources policies. The crucial element that creates this unity was the enduring unionization struggle

despite the employer's opposition. Interviewees indicate that Tesco-Kipa's central reason for applying these human resources policies was to prevent unionization among workers.

As a unionised company, it is not possible to state that Tesco is a low–road employers. By paying higher wages and providing long term employment because of collective agreement, the company can be defined as a "high road" employers. However, its HRM policies including underemployment and involuntary part-time work, low wages, and "flexibility" practices such as "on call" work and automated scheduling reflect some typical futures of retail industry. As a result the best strategy to reversing the trend toward precarious work is to increase union density in the retail industry, including full-time retail employees of various occupations, as well as part-time, seasonal, and temporary employees.

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Information Asymmetry, Accounting Conservatism, and Stock Return

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Abstract

This study aimed at examining the effect of information asymmetry on stock return in the presence of accounting conservatism. The study assumed a positive relationship between information asymmetry and stock return, and this relationship is vanished in the presence of accounting conservatism. This study was implemented on a sample of (26) industrial firms listed in Amman Stock Exchange. Daily trading data was used through the period 2006-2012. It used a methodology depending on examining the effect of a group of factors that already examined in previous studies, these factors are: stock return for the previous day, risk, and trading volume. The results showed a significant relationship between stock return for the previous day, risk ratio, and daily trading volume, with stock return. When adding information asymmetry to the former factors, the adjusted R^2 increased, which means an existing effect for information asymmetry on daily stock return. When adding accounting conservatism to the former model, the effect of information asymmetry was vanished, which supports the hypotheses of the research.

Keywords: Information Asymmetry, Accounting Conservatism, Stock Return

The Harmonization Requirement of the Turkish Insurance Industry by the EU: From the Perspective of Turkey' s Full Membership

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Abstract

In this study, the EU insurance system and Turkish insurance sector have been analyzed comparatively in light of the Solvency II regulation. In addition to topics such as foundation, certification, restructuring, divestment reinsurance relations, supervision and disclosure of insurance companies have been evaluated, in order to determine the integration capacity of Turkish insurance industry by the EU. Regulations aim to constitute risk-based capital adequacy model by establishing a relation between the risk of insurance companies and their financial resources. This requires the adjustment and application of company's risk management rules and principles. Also, an example on standard method is presented to show capital adequacy ratios of Turkish insurance companies from the harmonization perspective by the EU Single Insurance Market.

Keywords: Insurance Regulation, EU Insurance Market Integration, Solvency Requierement, Risk-Based Capital, Insurance Harmonisation.

Introduction

As Turkey continues on its path towards full membership and integration to the European Union(EU), the country has made significant reforms in the regulation and management of its insurance industry to comply with the the EU standards. For example, there have been significant improvements in the protection of policy holders' rights. Also, the responsibility, accountability, transparency, and reporting standards of the EU insurance system are largely adopted by Turkish insurance companies.

The goal of this study is to discuss the key features of Turkish insurance industry in light of recent regulations and reforms. The dynamics of the EU insurance market and potential benefits—to various related Turkish parties--of integrating the Turkish insurance industry to this market will also be discussed. Finally, common issues in insurance arrangements applications and integration capacity of Turkey will be evaluated

Regulations for EU Single Insurance Market

The building blocks of the Single Financial Market can be specified as the national control and supervision of the member states and the mutual recognition of the control and supervision of the member states. Standardization of financial reporting as well as comparable, transparent, reliable financial data are the primary conditions ofefficient and integrated capital markets. The reasons for regulation of EU Single Market can be summerized as;

- -Increasing market liquidity,

- -Efficient allocation of resources,

- -Reducing cost of capital and thereby the price of insurance product and services, and

- -Increasing economic growth, employment, and welfare of the European society.

The EU-Solvency II regulation targets a common regulatory framework in the member states, in order to avoid conflicting instructions in various member states regarding regulatory requirements. Existing regulations provide an insurance company that is established in amember state the authority to provide services by opening branches or agencies in other member states of the Union. The companies can sell their products freely in a single insurance market with a single insurance system. Other standard subjects such as drawing up a 'European single insurance agreement' are still in progress.

There are approximately 5.300 insurance companies in Europe. These companies generate an aggregate annual premium income of more than €1,100 billion, employ approximately one million people, and invest €8,400 billion in the European economy (see Insurance Eorope, 2014).In recent years, there has been a decline in the number of insurance companies. possible explanations for this trend is consolidation in the industry—to take advantage of economies of scale, deregulation, and increased competition in insurance underwriting.

Bank assurance is the most effective form of marketing for life insurance products in terms of the distribution channels in the European market--including Turkey. The agencies or brokers are ranked secondin life insurance. Conversely, in non-life insurance, agencies and brokers are the most effective sales channels. Moreover, England, Germany, France and Italy constitute the 75 percent of premium production in life insurance in Europe.

Although financial integration proceeds rapidly in Europe, a corresponding integrated financial stability framework is behind schedule. While steps to build the EU framework are underway, diverse economic conditions and incentives of member states have not (yet) allowed full integration. Global insurance companies (i.e.insurance companies that operate in Europe although their headquarters are outside Europe) have also adjusted to the same regulations, which may enable convergence of international insurance implementations and reduce claim and indemnity payments.

Screening and Negotiation Process for Membership

Screening is the examination of the EU acquits together with the Authorities of the European Commission and the comparison process of the candidate country legislation with acquits communitarian. This process is carried out separetely for each chapter. In this framework, the legal norms that comply with acquits are required to be amended or formed.

During the negotiation period, the candidate country presents to the EU its negotiation position for each chapter and the EU member states ask questions to the candidate country or request clarifications. Subsequently, the candidate country is invited to a negotiation for an acquits chapter. Insurance services is in the chapter on free movement of services. This chapter is presumably not one of the first chapters to be opened

In the EU integration process, during the negotiations, the difference between Turkish and EU insurance is important in terms of consumer information system. For instance, in EU arrangements, an open procedure is provided on the complaints and informing policyholders definitely by the agency prior to sale. That is, a prior arrangement of the regulatory authority is required for the consumers to express their complaints.

The *Ratification*: Once all the negotiations are completed and it is determined that candidate country has fulfilled all of the official responsibilities arising from the EU membership, a Draft Accession Agreement is issued. The agreement must be undersigned both by the Council of Ministers of the EU and the European Parliament. After the agreement is signed, in order to come into force, it must be accepted by all the member states (in accordance with the decision to be taken by the national parliaments) and Turkey (with the decision of Grand National Assembly of Turkey).

Capital Adequacy Regulation against Financial Failure

The main risks of insurance companies are credit risk, market risk, and operational risk. The amount of regulatory capital that insurance companies must hold against these risksis calculated according to either the standard method or the internal method. The capital adequacy ratio is calculated as the sum ofTier 1 and Tier 2 capital divided by risk-weighted assets. Tier 1 capital refers to capital that is easy to liquidate, such as common stock. The main components of Tier 1 capital are ordinary shareholder's equity; retained earnings; perpetual non-cumulative preferred stock; reserves created by appropriations of retained earnings, share premiums and other surpluses; and minority interests. Tier 2 capital refers to capital that is difficult to liquidate or complicated to calculate. The main components of Tier 2 capital are perpetual deferrable subordinated debt (including debt convertible into equity); revaluation reserves from fixed assets and fixed asset investments; and general provisions. Risk-weighted assets are the outstanding liabilities of the insurance company.

- Credit risk constitutes the main focus of risk managers at financial institutions as well as regulatory authorities. From a historical perspective, credit risk gained importance with bank failures. The regulations here were mostly intended to eliminate the commercial losses of the financial institutions. Apart from this, the developed credit risk models can be applied in risk management of the other finance

institutions, as well. Regulatory authorities suggest the financial institutions to develop and apply the models appropriate for their own institutional structure. The capital charges for credit spread risk were seen by some undertakings as too low for AA and AAA corporate bonds, but too high for lower rated bonds and for structured bonds, and especially for unrated bonds.

- The quantitative results indicated that market risk represented one of the most significant modules for the standard method. The mutual and multiple variables between the covariance and correlations used in the determination for the market risk are studied; classified and analysed the technical assumptions of the Delta Value at Risk (VaR) are applied to the analytical structure. The covariance and correlation coefficient is the junction point of rows and columns in relative variable pairs. As the covariance and correlation is not based on frequency of both variables, they are symmetric around the diagonal matrix. When a specific risk is the case, the portfolio volatility, risk error volatilities and general risks are required to be added. Some insurance companies considered the interest rate shock to be too high, while others thought it too low. In some countries, both undertakings and supervisors considered the shock for currencies linked to the Euro to be too high, especially for pegged currencies.

- Suggested method for measuring operational risk is three pillars approach, that is applied in banking sector and known as Basel II adopted to the insurance sector. This approach consists of solvency requirement, supervision and market discipline. However, as the insurance risks are different from the banking risks, the contents of the pillars should be determined, considering the characteristics of the insurance sector.

The general provisions in the standard approach against the credit risk can be included in the 2nd generation capital up to 12.5 % (1/8) of the risk weighted assets. In the internal rating approach, instead of including the general provisions into 2nd generation capital, the "expected loss" calculations are excluded from the capital of company in certain conditions. Accordingly, total risk weighted assets are measured by multiplying the capital amount required for the market risk and operational risk with 12.5% and total of the *risk weighted assets* calculated for credit risk is added to this amount.

i. Pillar One covers all of the quantitative requirements, such as technical provisions, investments and management of financial assets on financial resources of the insurance companies as well as the conditions on the capital that the companies are required to reserve in order to meet their liabilities. This pillar aims to ensure firms are adequately capitalized with *risk-based capital*. Companies may use either the standard formula approach or an internal model approach.

ii. Pillar Two includes the arrangements of developing procedures on risk management and risk controls of the supervisory authorities, it includes the Own Risk and Solvency Assessment (ORSA). The European Commission grounds the subjects dealt in the Pillar two upon so called Sharma Report named after the chairperson of the working group of European Insurance Supervision Agencies (EISA) conference.

iii. Pillar Three deals with auxiliary factors such as the general tendency towards making the market discipline and financial markets, rating agencies and accounting rules more harmonized and transparent. Yet, the harmonization of the European Union disclosure rules is compulsory in terms of looking out the interests of the other relevant parties such as financial markets and rating agencies. This ensures that a firm's overall financial position is better represented and includes more up-to-date information. Solvency II is expected to become effective from 1 Jan 2016 and the EU Commission is working on Pillar 1, Pillar 2 and Pillar 3.

Contrary to the EU, in the U.S, Canada and Australia, the solvency margins of insurance companies are calculated using *risk-based capital method*. These countries also determine the failure or default of insurance companies using claim method—also used by rating agencies.

Solvency Capital Requirement

The integration of the legislations and supervisions in the financial services sector aim convergence of the supervision models in the finamcial markets. The efficiency of the insurance indusry depend on the regulation of the standard applications in the European Union member countries.

The calculation of Solvency Capital Requirement (SCR): The SCR also defined as target capital is the capital amount that provide guarantee to policyholders and meet the unexpected losses of an insurance company. SCR is higher of the two levels (SCR and MCR) determined for capital requirement calculation in Solvency II. SCR is the standard formula discussed in detail by the European Commission or the internal model determined by the company and approved by the regulatory authority. Reliable risk

mitigation techniques are applied in calculation of the SCR. It must be equal to the VaR, adjusted according to the 99,5% level of confidence within 1 year period of time.

Minimum Capital Requirement (MCR), represents the capital amount that requires the final intervention of the supervisory authorities when it gets lower than this amount. The companies have to hold eligible basic own fund to the extent allowed in order to meet the MCR. MCR is calculated with a method, of which general frame was indicated in the Directive and will be determined later by the European Commission. MCR should be calculated in a clear, simple and auditable way. When the capital has fallen under the MCR, in case the insurance or reinsurance companies continue their activities, it should be equal to the amount that will be faced with an acceptable risk level by the policyholders. Examples to final intervention of the supervisory authorities are the measures such as the prevention of the company to write new policies, to close out the current portfolio or the transfer of the portfolio to the third parties.

The risk based capital (RBC= Adjusted capital/Calculated capital) model used for the life and non life insurance companies. The risks are analysed in four categories: the property risks, insurance risks, interest rate risk and enterprise risk. The investment grade bonds, mortgages, stock certificates, real estate, and reinsurance and off balance-sheet items.

In Standard & Poor's European insurer's capital adequacy model, the base level capital and total adjusted capital provide the company to sustain its ongoing activities at BBB rating. The provision risk depends on the probability of the real burning cost to exceed the policy provisions reserved for these operations.

Solvency Regulation for Reinsurance Management

The reassurance contracts may be carried out as voluntary or treaty agreements. Therefore, the regulatory authorities rely on the reassurance programmes for the insurance companies in risk surveillance. *International Association of Insurance Supervisors (* IAIS) also gives special importance to the role of the reassurance and the reduction of the hazards through alternative risk transfer ways. So, they encourage the reinsurance companies as a creditor to develop the proportional and non-proportional reassurance in terms of determining the efficiency and solvency margin of the companies' capital requirement in EU. The triangulation method[88] is most widely applied in EU. The companies can compare the results by applying more than one of the methods as below. The statistical methods applied in the selected EU countries are summarized below.

Germany: The majority of insurance companies apply the loss rate method suggested by the insurance supervisory authority. However, in recent years, the interest in the other methods is ever increasing. Insurance companies that prepare and present their financial reports according to the US GAAP and IAS apply diverse methods and compare their results.

Denmark: Actuarial methods are the most widespread methods used in determination of the incurred but not yet reported outstanding indemnities. Big scale insurance companies apply different techniques and compare the results with the expected amounts. Small insurance companies use relatively less complicated techniques.

The most widespread method in France is the Barnhuetler-Ferguson method as well as the triangulation technique. The triangulation based indemnity method is the most widely used in UK and Italy. Netherlands Actuarial methods are used most in the determination of the *incurred but not yet reported* outstanding indemnities. Big insurance companies apply a great number of techniques and compare the results with the expected amounts. Small insurance companies here also prefer relatively less complicated techniques.

The triangulation method is applied on the paid indemnities basis in Portugal and Spain. But companies apply the loss rate as a separate method. The small insurance companies, with variable business volume, apply the loss rate and average indemnity method.

Sweden: The triangulation method is widely used on paid indemnity basis. Small insurance companies with fluctuating business structure apply the loss rate and average indemnity method.

The sensitivity of the assets and liabilities is calculated for each scenario. Then, the results are multiplied with the variance and covariance matrix in order to calculate the combined value volatilities of the all

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[88] Triangulation is the basic information required for claims reserving over time. This information format provides the basis for actuarial reserve calculations. Triangulation report format enabling an insurance company to quickly define all claim measurements such as paid claims, incurred claims, number of claims reported, and average claim. The data in triangulated form can be viewed, printed and exported to excel for further analysis.

market risk combinations. This result is combined with the additional scenario and the required capital is calculated for all the risks at the appropriate confidence interval.

The Liability Rules of Insurance Groups

Liability is legal responsibility of insurance companies to pay for indemnity due to an accident or loss. Liability insurance coverage for all branches of insurance is the insurance coverage that is required in all member states. The insurance companies belonging to an insurance group that consist of more than one companies are not audited according to complementary supervision (solo-plus approach).The adjusted solvency of the audit should be calculated and the transactions between groups must be reported.

Supervision of cross-border groups remains primarily the liability of the home country supervisors. To achieve a global view of the insurance groups activities, and make optimal decisions when a restructuring is required, supervisors must collaborate effectively with the supervisors of countries where the group operates.

The aim of calculating the adjusted solvency is to get information about the equity of the group. The calculation rules of the margin and assessment of the relevant assets are the same with the methods offered to individual companies. In order to prevent the double gearing or multiple gearing of the capital and derivation of the capital among the group companies, the consolidation is applied.

Financial Reporting in Solvency Control

Regulations concerning financial reporting of insurance companies are intended to create strong, consistent and workable and transparent and comparable financial statements under IFRS. The integration of the account and records of the insurance companies that have been founded in EU countries but are operating outside the country, the location of their company center, have a special importance. A harmonization that covers all the insurance and reinsurance companies are operational in all branches, has been foreseen in the EU.

As a result of the 2007 financial crisis, regulatory requirements increased significantly over the last years. They are confronting financial service provider with new challenges within the disclosure requirements. Consequences can be seen in extensive and detailed reporting requirements for insurance companies.

Reporting financial statements comparable, clear and understandable, cross-border activities are facilitated. This allows insurance companies to find further financial resources outside their home member states. Basically, most member states have already adopted an option into their national legislation that exempts small groups from preparing consolidated financial statements (Kpmg, 2011). The insurance enterprises have to show the total commissions of all the insurance transactions taken for the operating period. In addition, the enterprises have to disclose all kinds of commissions and especially production, supplementary, collection and portfolio retention commissions.

Reporting the Risk Measurement Models

The standard formula is suitable for the calculation of risk, in particular by smaller firms. The Insurance Companies applying internal rating method has approved by regulatory authorities, that the rating and risk prediction models give meaningful results.

The stress test or scenario analysis include significant factors that may cause extraordinary incomes/losses in the purchase/sales of the financial institutions or make the risk management difficult. These factors contain the events that have low possibility to happen but the size of loss may be high, influencing all the main risks including market risk, credit risk and operational risk (Mittnik, 2011). The stress test results should be reported to the senior management regularly and the executive board in certain periods. VaR application is quite successful in explaining the changes except three-four extreme events that may emerge within the year.

In case of an extreme event, scenario is built in VaR measurement methodology and modelling is done in order to determine the risk better. Three basic approaches in scenario building are historical scenarios, hypothetical scenarios, portfolio specific worst-case scenarios may be used in risk measurement. In order to determine the success and challenges in the direction of integration, Quantitative Impact Studies (QIS) are applied to insurance companies in parallel with the EU practices in Turkey and the capital adequacy ratio is calculated. However, the companies generally apply the standard method. Although the application of the advanced internal models is more complicated and requires additional cost, the increasing interest on the sector and real growth in recent years may be reflected on companies operating

results. As the value of liabilities increase more rapidly than the value of fixed income investments, it should be stated that the decrease is not advantageous for the institution and contrary to this, the increase in interest rates is beneficial for the insurance company.

The economic capital, is a buffer against expected shocks in market values. It is a function of market risk, credit risk, and operational risk, and is often calculated by VaR. Insurance companies and regulatory authority should then aim to hold risk capital amount at least equal to economic capital. Correcting the revenues by the anticipated losses on the transaction, and by replacing the allocated capital by the ECm marginal economic capital of the transaction. Risk Adjusted Return On Risk Adjusted Capital (RARORAC) is calculated (expected return/economic capital). {RARORAC = (Revenues –EL)/ ECm}. The target performance has to be larger to the cost of doing business and in particular to the return that the shareholders of the insurance company are expecting. For each transaction, the RARORAC ratio should be at least more than the cost of capital. There is a direct relationship between the risk and capital requirement. If the returns are adjusted according to the risk, a chance to make a comparison on a common platform will be obtained.

Thanks to the adjustment of the economic capital according to the performance, a common comparable base is obtained. Performance can be measured with the VaR method or a different version of this method. The value at risk fundamentally shows the highest loss that may arise in a certain level of confidence at a certain time. Basel Committee and European Union regulations require the financial institutions to apply internal VaR models and to determine the required capital amount in order to provide the certain criteria in measuring the market risks.

As the calculation based on market prices, these models constitute the basic purpose. VaR models and insurance portfolio are considered as integral, but the calculation of the risk of certain assets and liabilities is possible in this way.

The international reporting standards approved by the Accounting Standards Board are wiespread used by most of the multinational insurance companies. The rating of insurance company provides an indication for policyholders, agencies and brokers, investors and insurance company itself on the subject of soundness and credibility of the financial structure (Laster, 2003). The rating for the company and sometimes for the securities: the rating of financial structure is indicator of the fact that the insurance companies can pay the claims and other liabilities completely and in time (Roger, 1997, p. 84). Debt rating determines the credibility of the company to repay the principal and interests completely and in time concerning only the interest bearing securities usually when the debt securities are issued.

The early warning indicators can be quantitative and qualitative, periodical reports or extraordinary reports give some early warning signals. Especially, it is easy to observe the changes in customer account structure related to property and liability insurances through financial reports. The insurance companies should develop right strategies and protect the financial structure of the company in order to determine the marketing policies when entering into a new branch. Establishing the cost-benefit requires to determine the market segments. The protective measures are taken in order to protect the cconsumer and shareholder against the insurance failure (disclosure requirements).

Integration Process of the Turkish Isurance Companies by the EU

A newly introduced arbitration system in Turkey aimes to resolve potential disputes arising from the insurance contract between the policyholder or the beneficiary of the insurance contract and the party undertaking the risk. The ombudsman system that is based on international practices has been constituted according to the structure and basic principles of the arbitration system found in Code of Civil Procedure in the EU regulation.

A survey carried out in 2010 draws attention to the important points, critical success factors, and difficulties in the way to Solvency II integration. A total of 115 insurance and reinsurance companies in life and non-life branches participated in this survey. There were 7 participants from Turkey. Survey of the perceived risks in insurance 2011 study is important as Turkey participated for the first time. Turkey has taken the second place in terms of number of participants. The risk perception on the investment performance, in terms of capital management and regulations. Turkey has performed better than the averages in recent years.

The Solvency study that has been on-going for over 10 years in EU has been followed up closely. In 2009, when the EU regulation on this subject was publicized, the studies in Turkey accelerated, as well. The expertise commission constituted within this framework finished QIS 4 study in 2010. With these studies, the preparation to the solvency II and awareness of the insurance companies increased in Turkey.

According to a declaration publicized by the CEIOPS on 16 December 2010, the participation rate to the QIS 5 increased compared to QIS 4 and rose to 70% from 33%. So, an important step has been taken in Turkish insurance industry in the way to Solvency II integration (CEIOPS, 2010).

The participants cite the support of the executive board, the sufficiency and qualification of the internal resources, and the management of intra-company data as the most important success factors. The support of the Executive Board appears to be the most critical success factor for the companies participating in the survey from Turkey.

A solvency Application in Turkey

Solvency regulation requires insurance companies to establish internal control and risk management units under the supervision of general manager or CEO. Therefore, besides the rules, the insurance companies carry out activities by taking legal policies and principles as a basis. The most important point introduced with the directive is that insurance companies with good corporate governance practices are allowed to hold less capital. The required equity capital according to the method is calculated separately for non-life, life and pension branches.

a. The required equity capital on the *premium basis*: It is the amount computed if the rate of total amount get after terminations and cancellations are deducted (except tax and charges) from premiums underwritten within the last one year period of time, up to the TL95 million. Remaining amount is multiplied by 18% and the rest amount is multiplied with 16%. According to the rate of net damage principle if gross damages of the company in last year the amount is less than 50% it is multiplied by 50% and if it is more than 50% it is multiplied by the rate computed.

b. The required equity capital on the *claim basis*: It is the amount computed if the rate of total amounts get after the deduction of 1/3 and 1/7 from outstanding indemnity, including *incurred but not reported reserved* three years ago except the current year and the damages compensations collected through recourse after the outstanding indemnities reserve of the last one year is added to the gross paid damages in the last three years, is reserved according to the risk group determined as there and seven years above and multiplied by 25% up to first TL70 million and the remaining amount is multiplied by 23%, for getting the last year rate of net damages amount of the company, the gross damage amount is less than 50% multiplied by 50% and if it is more than 50% it is multiplied by the rate computed.

Risk based capital include, asset risk, reinsurance risk, off-balance sheet risk, excessive premium increase risk, and underwriting risk. In the required capital calculation via the second method, asset risk, reinsurance risk, excessive premium increase risk, outstanding claim provision risk, underwriting risk as well as interest rate and currency risk are considered. To calculate asset risk, asset items are multiplied by their risk weights. For example cash and T- bills (including Eurobond) are multiplied by 0.000, Banks by 0.010 and shares pertaining to own capital group by 0.250. Premium or damage, the higher result is determined as required capital.

The statement of the capital adequacy

Calculation of the capital adequacy of an insurance company (TL 000)	Year: 2012
Date the table loaded onto the system(portal by the Supervisory Authority)	"22.11.2012"
Deadline for the companies to load the table onto the system (portal)	"05.02.2012"
Frequency	S1
1-According to premium basis (HDY1) (000 TL)	145.544
2- According to claim basis (HDY2)	41.159
I. EQUITY REQUIRED FOR NON-LIFE BRANCH	
1- Result concerning liability (HY1)	0
2- Result concerning risk (HY2)	0
II. EQUITY REQUIRED FOR LIFE BRANCH (HY1 + HY2)	0
III. THE EQUITY REQUIRED FOR PENSION BRANCH (EY)	0
REQUIRED EQUITY ACCORDING TO THE SECOND METHOD = HDY + HY +	145.544
1-ASSET RISK	121.570
2- REINSURANCE RISK	6.750
3- EXCESSIVE PREMIUM INCREASE RISK	29.775
4- OUTSTANDING INDEMNITY RISK	2.738
5- UNDERWRITING RISK	98.004
6- EXCHANGE RISK	155
REQUIRED EQUITY ACCORDING TO THE SECOND METHOD =	
THE REQUIRED EQUITY FOR THE COMPANY	258.992
EQUITY (TL)	
Paid in capital = PIC (500 + 501)	400.000
Positive distinction from share capital integration= E (502)	5.200
Negative distinction from share capital integration= E (503)	
profit reserves = PR (540+541+542+543+545+549)	220.186
capital reserves = CR (520+521+524+525+529)	14.868
total of period income after the taxation reserve and previous year's profits=	
equalization provision (259.011 + 459.011) = EP	
30% of subordinated debts= SD	
Total of period loss and previous year's losses = PL (580 + 591)	-2.288
EQUITY= PIC + PR + CR + EP + SD + PL	637.966
The amount obtained after multiplying the total amounts of paid capital of companies	
Result of capital adequacy	**378.974**

As the calculated value premium is lower than the value based on claim (145.544 > 41.159), the solvency capital required for the company is the premium based amount (145.544). The risk capital calculated according to the second method for the asset (active) risk is 258.992.This amount is subtracted from the equity of the company (loss of the prior period are deducted); accordingly capital adequacy is 378.974 (637.966-258.992=378.974). Since the capital is positive and considerably greater than zero, the company is unlikely to have an insolvency capital problem under normal market conditions.

If the calculated value is negative, the supervisory authority instructs the insurance company to increase the equity capital above the minimum regulatory threshold within a given time frame. If the capital requirement is not satisfied, the supervisory authority may takeover the control of firm management, impose restrictions on the firm's operating activities, and as a last resort terminate the firm's licenseas in the EU.

Conclusions

Integration with the European insurance market contributes to both insurance companies and consumers. Insurance companies benefit from improved regional diversification of insured risks, the realization of economies of scale, and a wider area for capital investment. Consumers benefit from higher competition among insurance companies and better pricing for insurance products. By promoting cost-awarnes, the Single Market regulation, provides insurance managers an opportunity not only to apply a more rational pricing policy, but also to innovate new products and methods.

Solvency rules stipulate the minimum amounts of financial resources that insurers and reinsurers must have in order to cover the risks they are exposed to. As a result of effective supervision in the Solvency system, insurance companies improve disclosure and transparency and focus on protecting the interests of their stakeholders. Also, through early warning signals put in place, the companies may be protected from default or insolvency. By complying with the institution management principles and evaluating

intra-company factors, risks that insurance companies encounter can be confined. Thus, a harmonization between prudential regulatory supervisory authorities' and companies can be established also in respect to the protection of insurance stakeholder's benefits.

Full harmonization to the EU regulation in some troubled fields may be the result of a open-ended transition period or with some temporary exemptions. The Turkish insurance legislation is largely harmonized with the EU insurance acquis. Moreover, Turkish insurance companies have long been working in harmony with European insurance and reinsurance companies. Nevertheless, more effective regulation and supervision of insurance companies and requiring them to prepare financial statements in accordance with the EU Legislation will certainly facilitate the harmonization process.

Managers of Turkish insurance companies generally believe that membership of Turkey to the EU would be beneficial for the Turkish insurance market. One of the significant issues in the Turkish insurance sector is insufficient insurance awareness among potential customers. Thus, there is substantial an unused capacity. Lack of awarness is not the only issue however, since even some of the well-educated consumers are not interested in health, life, or house insurance.

Adopting a *risk-based capital* system or *internal risk models* is costly for Turkish insurance companies. During the transition period, profitability of the insurance sector is likely to fall. However, in the medium- and long-run, these new models will pay off and efficiency of the industry will improve. Overall, in Turkey insurance is one of the industries that may integrate to the EU relatively easier than other sectors.

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Impact Assessment of Job Tenure, Gender Status, and Nature of Job Contract upon the Income Prospects of Private University Faculty: Findings of a Cross Sectional Study

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Abstract

This paper explores the impact of job tenure, gender status and nature of the employment contract on the salaries of the faculty of private universities in Pakistan. The paper is based on a cross-sectional data collected by using questionnaires. Some of the sections of questionnaire pertained the information about the educational background, work experience, and personal background. To achieve the highest level of quality and reliability, most of the questions required the respondent's self-input; while others were based on a scale of 1 to 5. Quantile regression technique was used for the purpose of model estimation. Quantile regression was given preference over other methods because it could examine the effect of variables at each quantile in the distribution including median, as opposed to the effects at mean. The findings of the model suggest that the job tenure at the current university affects the salary of the faculty positively and the relationship was found to be significant. Moreover, the incidence of gender pay gap was also found significant, indicating the fact that the female faculty tends to earn less as compared to the male faculty when other factors have been accounted for. In addition to this, the model suggested that the visiting faculty tends to earn more because of the terms of contract and the salary negotiating power.

Keywords: Gender Pay Gap, Job Contract, University Faculty, Quantile Regression

Introduction

The gender pay gap[89] studies have always been of importance due to the fact that the earnings of an individual determine his or her social status and the growth in a society. It has been seen that the phenomenon of gender gap is worldwide and many explanations for its existence have been given. One justification for the existence of gender gap is discrimination, and the other justification for its existence is the difference in the qualifications and experience.

Furthermore, the terms of employment contract have been different for a permanent and a part-time employee. There has been a difference of opinion on the issue that whether permanent or part-time employees earn more. The basic explanation to this can be given that it varies from sector to sector and establishment to establishment. Furthermore, it is also dependent on other factors like the level of education, skills, and background.

The gender gap studies have been done all around the world but in the case of Pakistan, one finds a very limited number of studies. Also, these studies are more focused on the macro-level wage gaps and the researcher did not come across studies which discussed this issue at micro-level. It is an age of technology, innovation and development, that all emerge at the doorsteps of educational institutions. The highest level of educational institutions are the universities which train the minds of people so that they could play their part in a more complex world ahead of them. These universities would be barren without the faculty they hire. Hence, it was of great importance that the issues pertaining to the university teachers be discussed.

Furthermore, everyone is an asset if he or she is productive regardless of his or her gender. Pakistani society has some conservative minds and the females sometimes do not get their fair share. It was required that their voices be raised and hence the emphasis has been given to the gender.

The labor market of Pakistan is facing the issue of gender gap which is huge in nature. So much so that Pakistan ranked 135 out of 136 countries that were surveyed by the World Economic Forum with only

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[89] Relative differences in the average hourly earnings of males and females within a particular sector or an economy as a whole (European Commission).

ahead of Yemen. In addition to this, Pakistan's rank has been deteriorating for the past many years indicating the fact that the gender gap in Pakistan has been increasing day by day.

Though there is existence of gender gap in many areas, the researcher is primarily focused on the issue of economic participation. Pakistan ranks 113 out of 136 countries in the section of "wage equality for similar work". Pakistani women earn average annual income of $1005 [adjusted for Purchasing Power Parity (PPP)] whereas, Pakistani men earn average annual income of $4676 (adjusted for PPP). The female to male ratio in the Pakistani labor market is just 0.21. The unemployment rate for females is 9% of the female labor force and the unemployment rate for males is 4% of the male labor force (World Economic Forum, 2013).

According to Raza & Murad (2010), there exist gender gaps in sectors including but not limited to health, education and political empowerment in the Pakistani sector. In another study conducted by Hyder & Reilly (2005), the evidence of gender gap can be found in private as well as public sectors of Pakistan. However, the incidence of gender pay gap was found to negligible in the public sector when compared with the private sector.

Profile of University Education: Educational Inputs and Outcomes

The education system of Pakistan is divided into three main categories; primary education, secondary education and tertiary education. The first two are not our concern but the third one is. University education comes under the heading of tertiary education. Universities produce the human capital which is needed in the economy whether it is the field of science, business, or arts. According to Pakistan Economic Survey (2012-2013), there are 139 public and private universities currently operating in Pakistan in which 1602500 students are enrolled. Moreover, a total of 70100 teachers are employed in these universities.[90]

Higher Education Commission (HEC) came into existence in the year 2002 with the aim of regulating universities in Pakistan and providing the monetary assistance to students. HEC also helps students in securing scholarships in order to study abroad. HEC launched a Medium Term Development Framework (MTDF) for the year 2010 to 2015 in order to achieve targets in the areas of management of finances, assurance of quality, development of faculty, and innovation & research (HEC, 2010-2015).

In the area of human development, HEC granted more than 9000 scholarships of which some were need based and other were on merit. Furthermore, a total of 842 faculty members and management staff was trained for providing quality education in the institutions.

In the year 2010 alone, a total of 5243 research papers were produced by the scholars in universities all across Pakistan. Moreover, in the year 2012, a total of 700 Doctors of Philosophy (PhD) were produced by the Pakistani universities. [91] The highest number of PhDs were produced in the year 2010 which was 954.

The Nature of the Job Market for University Faculty: Impact of Deregulation and Fiscal Decentralization Processes

Most of the universities in Pakistan hire people with a Masters degree or a PhD degree in order to provide the best possible education to students. On the other hand, some university graduates with Bachelors degree are also hired. With the increasing number of universities and the enrollment of students, the number of faculty has been increasing in the universities.

There were many deregulation and decentralization policies implemented over the course of last few years namely devolution plan of 2000, education policy 1998-2010 and Education Sector Reforms of 2001. However, under the devolution plan, the federal powers were never transferred to the provinces. The devolution and decentralization policies were mainly concerned with the schools and colleges at the provincial and district level. The universities, remained in control of either federal government or the provincial government (Khan & Mirza, 2011).

Public and private universities in each province are regulated by the provincial education ministries whereas, the universities in FATA and Islamabad are in control of the federal ministries. The governor

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[90] Pakistan Economic Survey 2012-2013 used the data from Ministry of Professional & Technical Training, Islamabad.

[91] The data was obtained from the Higher Education Commission (HEC) website.

of each province acts as the chancellor for universities in their province whereas, the president acts as the chancellor for the federal universities.

Income Prospects, Job Satisfaction and Organizational Commitment

According to Ch. (2013), job satisfaction generally decreases as the cadre of the faculty increase. However, most of the faculty at university shows high level of satisfaction. As far as the permanent faculty and the visiting faculty is concerned, the permanent faculty showed less satisfaction as compared to the visiting faculty or the faculty on contractual basis.

Moreover, Bushra (2012) also found out that the faculty in the public universities is more satisfied with the factors like location of the university, performance appraisal, better working conditions, and flexible working hours. On the other hand, the satisfaction level of the faculty diminishes when the faculty is not authorized to develop their own curriculum.

The organizational commitment of the faculty strengthens if they are satisfied with their salaries, nature of work, opportunities of growth, and their coworkers & colleagues (Malik, Nawab, Naeem, & Danish, 2010).

HR Practices in Public and Private Universities

Faculty in the public universities is usually hired through an advertisement in the newspaper. The faculty hiring process is usually followed by a test and interview. The faculty is usually permanent and awarded a scale according to their position. A scale of 17 or 18 is given to the lecturer, and higher scales are given to the assistant professors and professors. Salary of the faculty in public universities is fixed in accordance with their scale, along with additional medical and retirement benefits.

On the other hand, the private universities' hiring process is a bit different. Either they hire by posting an advertisement or the candidate can directly approach the university. In contrast to the public universities, no scale is given to the faculty, however, the faculty is designated as lecturer, assistant professor, associate professor and professor according to their qualification and experience. The medical and retirement benefits vary from university to university.

Concerns Pertaining to Research

This study is focused on a compact and important issue. Universities teach equality and are seen as a breeding ground for educated personnel, yet the teachers of private universities are facing the issues of income disparity and gender pay gap. The gender pay gap has become a dilemma that has serious policy implications. It might result in the hopelessness and discouragement for a very productive, yet underpaid segment of Pakistani society. Therefore, this issue needs immediate and full attention by the policy makers which should restructure the institutions and make laws as to prevent the loss which might be incurred as a society.

Study Objectives

This study is based on a cross-sectional data collected through questionnaires with the basic aim of finding the gender pay gay among the faculty of private university teachers in Pakistan. Moreover, the impact of the job tenure and the type of job contact (permanent or visiting faculty) on the salaries will be discussed.

Theory

This section is devoted to the theoretical and empirical evidence from past, related to the problems on hand. The review of literature will give insights into the determinants of gender gap and different theories explaining the existence of this phenomenon. Furthermore, the impact of tenure and the type of employment/job contract[92] on the salary will be explored from different angles. The section will give a more broad view at first and then it will be proceeded to the specifics.

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[92] The agreement between the employer and the employee specifying the duties and obligations of an employee in exchange for the agreed upon salary.

Gender Parity and Wage Differentials by Gender

Many studies have been conducted to find the gender pay gap in a society as whole[93] or in a particular industry. Some of the studies focused on a gender based comparison, some on sector wise comparison, and yet others on the cross-country analysis.[94]

The early studies were keen to find the wage differential at mean[95] but the more recent studies are concentrated on finding the pay gap across the distribution, especially at the median.[96] The analysis at the mean did not show the full picture and in this way concealed some information but the analyses at the different points of distribution presented a very clear picture. Hence, it provided with the opportunity to see if the wage gap existed at the higher level of wages or at the lower level of wages. This enabled the researchers to see if there existed a glass ceiling effect[97] or a sticky floor effect.[98]

According to previous studies, the wage gaps could be analyzed by race or by the gender. However, the newer studies have used improved modelling techniques to find out the wage gaps between groups by endless factors.

The Human Capital Theory. It is an early theory which talks about the returns to men and women to the investment done on themselves. Since women invest less on the education and take more breaks from their employment[99], the employers show hesitation in employing them; as they anticipate lesser returns on the investment they make on them.[100]

The human capital theory suggested that women will start to invest more on their education if their participation in the labor market increases. As a result, the earnings of women will increase relatively.

The Occupational Segregation Theory. This theory suggests, wage gap exists because of the segregation of genders in the occupation they are. The basic explanation for it is that the women are not encouraged to work in men dominated jobs. Even if they do get employed in the men dominated jobs, they are underpaid.[101] There are certain occupations in which the women are encouraged to work (e.g. nursing) and in these occupations the men are underpaid. So, the segregation effect works both ways.

According to Blau and Kahn (2000), women tend to get lesser wage because they are mostly employed in the "part-time" jobs for which the female labor supply is high and the demand for labor is low.

The Sectoral Segregation Theory. This theory is similar to the occupational segregation theory but according to this theory, the gender pay gap exists because of the segregation of genders according to the sectors.[102] Women are generally seen in the medical and education sectors whereas, men are generally seen in the transport and manufacturing sectors.[103]

The Theory of Discrimination. Some employers tend to favor a person against another person based entirely upon his or her group membership. Blacks, females and elders are less likely to be hired or paid less based on certain stereotypes. Oaxaca and Blinder (1973) believed that the gender pay gaps existed because of the discrimination. To check for the effect of discrimination, they developed a technique which is known as the Oaxaca-Blinder decomposition.

Does gender determine salary? Messinis (2013) found that the females tend to earn less wages in the labor force as compared to the males. The relationship he found was negative and significant at each quantile in the distribution.

Similarly, the study conducted by Pham & Reilly (2007) found the gender gap among the males and females to be significant at each quantile. The relationship of being female with the wages was found to

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[93]Oaxaca (1973) conducted a research on the male and female wage difference in the United States (US).

[94]Albrecht et al. (2003) conducted a cross-country analysis to find out the the diffence in glass ceiling effect between Sweden and US.

[95] Oaxaca and Blinder (1973) were the very first to estimate the gender pay gap at mean.

[96]Machado & Mata (2005) used the quantile regression technique for finding the gender wage gap.

[97] Glass ceiling effect is a barrier to advancement for females once a specific level in the labor market is achieved.

[98] Sticky floor effect means that the females face very difficult working conditions on their initial entrance to the labor market.

[99]Becker (1971) explains this effect of investment on human capital on the earnings of the labour force in his book in great detail.

[100]Blau & Kahn (2000) were the proponents of the human capital theory.

[101]Albelda (1986) and Gunderson (1989) tried to explain the gender pay gaps according to occupational segregation.

[102]Fan & Lui (2003) gave the sector wise distribution of male and female participation in labour force and explained the effect of sectoral segregation.

[103] Evidence collected from the Labour Force Survey 2012-2013 (Pakistan Bureau of Statistics).

be negative. This study also found that the wage gap was more at later quantiles in the distribution, implying the presence of a glass ceiling effect.

According to Barbezat (1987), the university faculty was faced with the problem of gender gap and the female faculty earned less as compared to their male counter-parts. According to this research, the gender gap was partially explainable because of the labor market characteristics but the unexplainable part was attributed to discrimination.

Warman, Woolley, & Worswick (2010) believed that the female faculty earned less salary as compared to males because the female faculty was employed in the male-dominated disciplines. Because of this, the females got a wage penalty. Contrary to this, if the women were employed in the female dominated disciplines, they earned a wage premium.

Experience, Job Tenure & Income Prospects

Magnani & Zhu (2012) found that the tenure was positively related with the wages, both for men and women. Under the OLS, the relationship was not found to be significant for men but it was highly significant for women. However, under the quantile regression[104], it was significant for men at the 10th quantile and for women at the 90th quantile.

According to Messinis (2013), the job tenure had a significant and positive effect on the wage of the person. According to his analysis of the quantile, the relationship was found significant at each quantile except at the 90th quantile which suggested the fact that at the higher salaries in the distribution, the job tenure had no significant impact on the wages.

According to a research conducted on twins, Maczulskij (2013) found that the tenure was positively related with the wages for both men and women. Furthermore, this relationship was found to be highly significant.

The salaries of the university faculty were a determinant of the tenure and tenure squared as found by McNabb & Wass (1997). The tenure of a faculty member at a particular university was found to be positively related with the salary and the relationship was found to the significant. Moreover, the relationship of tenure squared was found to be negative.

Nature of the Job Contract & Prospects of Income

Christofides, Polycarpou, & Vrachimis (2013) found that the gender gap was higher for the full time (permanent) employees as compared to the employees on a contract in 19 countries including Belgium, France, Greece and Portugal. Their findings were based on the results obtained from the study they conducted on 26 countries across Europe.

According to the research done by Barbezat D. A. (1987), contractual employment was found to have a positive relationship with the salaries of university faculty. This was true for males and females alike.

Other Determinants of Faculty's Income. Chzhen & Mumford (2011) found that the marital status of a person determines his or her wage. According to them, married males tend to earn higher wage as compared to the married females. For married females, the marriage was positively related with the wage for the initial quantiles but in the later quantiles, the effect was negative.

Cho, Cho, & Song (2010) found a positive and moderately significant relationship between marriage and wages in the private sector. On the other hand, Mitra (2003) found an insignificant but positive relationship.

Cumulative Grade Point Average (CGPA) is an important factor in determining the quality of education gained. Several researchers used different methods for quantifying the ability of the people and some of these measures were the score on the mathematics, A-Level score and verbal and non-verbal scores. A similar research conducted by McGuinness & Bennett (2007) found that the A-Level score was significant and positive both for males and females in determining the salary of the person.

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[104] Conditional quantile functions are found by the method of quantile regression (Koenker & Hallock, 2001).

Procedures

After properly consulting the literature, a model has been proposed. The dependent variable is taken as the natural log of monthly salaries of private university faculty[105]. The independent variables are the tenure of the faculty member at the current university, quadratic form of tenure, gender dummy, a dummy for visiting faculty, cumulative grade point average, and a dummy for marriage. The expected signs of tenure, visiting faculty, cumulative grade point average and marriage are positive and the expected signs for quadratic form of tenure and gender are negative as explained in the literature.

Statement of Research Hypotheses

The model in its mathematical form can be written as:
$$\ln salary = \beta_0 + \beta_1 tenure + \beta_2 tenure^2 + \beta_3 female + \beta_4 visitingfaculty + \beta_5 cgpa + \beta_6 married + \varepsilon_i$$

From the model, following hypotheses can be derived:

Hypothesis 1:

H_0: There is no significant relationship between salary and job tenure

H_1: There is a significant positive relationship between salary and job tenure

Hypothesis 2:

H_0: There is no significant relationship between salary and female gender

H_1: There is a significant negative relationship between salary and female gender

Hypothesis 3:

H_0: There is no significant relationship between salary and contractual employment

H_1: There is a significant positive relationship between salary and contractual employment

Elements of Research Design

The study was intended to see the micro-level impact of factors affecting the salaries of university faculty. For this purpose, the questionnaire was conducted which was aimed at finding the real-time primary data pertaining to the issue.

The quantification of the key variables was the main issue at hand during the formation of the questionnaire and hence proper quantification techniques were seen and used during the process. Moreover, most of the data was collected in the form of highest possible measure to ensure the reliability and the quality of data.

Data Collection Preferences and Procedures

For this study, a total of forty four respondents filled in their response. Audience of the research was the faculty of private universities all across Pakistan. Most of the responses were taken in the form of self-conducted interviews. A few of the questionnaires were filled over telephone to incorporate the problem of physical reach and to ensure the representation of proper cross-section of the sample data.

Statement of Analytical Approach and Methodology

Most of the studies which focus on the gender issues with respect to the wages, used the technique of Oaxaca-Blinder decomposition. Yet other studies used the technique given by Machado and Mata. The former technique emphasized on finding the incidence of discrimination which might exist in the labor force between men and women. But, this technique was only able to find the gender gap at the mean. On the other hand, the later technique solved this problem and proposed a solution to find the gender gap along various points in the distribution e.g. at median.

For this particular study, the technique of quantile regression has been used which was proposed by Koenker and Bassett. This is a very simple, yet very powerful technique to measure the effect of a

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[105] "Tenurable and non-tenurable employees who have responsibility for instruction and curriculum development in a non-state owned university" (Shamos, 2002).

regressor on regressant along its distribution. Furthermore, this technique could also be beneficial in comparing the results of same variable at different quantiles or comparing two different groups, altogether.

Suppose, $\ln w_i$ is the explained variable and x_i is a vector of explanatory variables.

$$\ln w_i = x_i\beta_\emptyset + u_{\emptyset i} \qquad \text{with} \qquad Quant_\emptyset(\ln w_i|x_i) = x_i\beta_\emptyset$$

$Quant_\emptyset(\ln w_i|x_i)$ is the $\emptyset$th conditional quantile of w given x. $0 < \emptyset < 1$ solves the following equation:

$$\min \beta\varepsilon R^k \times \left(\sum_{i:y_i \geq x_i\beta} \emptyset|\ln w_i - x_i\beta_\emptyset + \sum_{i:y_i < x_i\beta} (1-\emptyset)|\ln w_i - x_i\beta_\emptyset| \right)$$

This can be minimized to

$$\min \beta\varepsilon R^k \sum_i \rho_\emptyset (\ln w_i - x_i\beta_\emptyset)$$

And,

$$\rho_{\Phi(e)} \text{ is the function } \rho_{\Phi(e)} = \phi e \text{ when } \varepsilon \geq 0 \text{ or } \rho_{\Phi(e)} = (\emptyset - 1)e \text{ when } \varepsilon < 0$$

Results

Estimates of Quantile Regression

Table 1. Conditional Gender Pay Gap

Independent Variables (Quantification)	Coefficient (t-value)
Job tenure (Respondent's number of years of teaching at current university)	0.1951577** (2.70)
Job tenure squared	-0.0133776** (-2.06)
Gender status (Dummy for gender where female=1 and male=0)	-0.2649548** (-2.04)
Nature of job contract (Dummy for nature of job contract where visiting faculty=1 and permanent faculty=0)	0.3334026*** (1.92)
Cumulative grade point average (Respondent's graduating cgpa out of 4)	0.6652922* (2.86)
Marital status (Dummy for marital status where married=1 and single=0)	0.3911785** (2.66)
Constant	8.264716* (9.70)

*Significant at 1%, **Significant at 5%, ***Significant at 10%

The conditional pay gap model assumed that the market returns are same for both males and females but in reality this does not hold true. To test this, Chow Test was performed which checked if the coefficients of the two regressions (female dummy=1 and female dummy=0) are equal.

The female dummy was interacted with every other variable in the regression and the results were obtained by Chow test. The test confirms that the coefficients for both regressions are not equal. So, we see the effect of each characteristic first in the pooled regression, then in the regression for the females only and at last in the regression with the males only. The characteristics are like the marginal returns to the salary.

The conditional gender pay gap was found by running a simple OLS regression by incorporating different characteristics which might explain the difference in the market outcomes for men and women in terms of salaries. In this way, the model is controlled by other variables which may also affect the salaries and hence the female dummy captures the effect of these characteristics. This model assumes that the returns for different factors are equal for both genders.

Analysis of Findings

Impact of Gender Status upon Monthly Income. The findings of the model suggest that there is existence of gender gap among the private university faculty which is consistent with the study conducted by Warman, Woolley, & Worswick (2010).

Table 2. Conditional Gender Pay Gap (Quantile Regression)

Quantile	1	2	3	4	5	6	7	8	9	OLS
Female	-0.212	-0.236	-0.276*	-0.243	-0.233	-0.098	-0.13	-0.016	-0.107	0.264
T-Statistic	-1.50	-1.22	-2.03	-1.52	-1.26	-0.53	-0.76	-0.07	-0.59	.129

* $p<0.05$, ** $p<0.01$, *** $p<0.001$

Wage differential is only significant at the 30th percentile. The highest gap is also found at the 30th percentile (-0.276) and the lowest gap is found at the 80th percentile (-0.0163). The gap first increases from 10th percentile to the 30th percentile and then it fluctuates till the 80th percentile. The gap at the 50th percentile when compared with the OLS estimate is lower by .0319 log points.

Impact of Job Tenure upon Monthly Income. According to the conditional gender pay gap model estimated above, it could be seen that the impact of tenure is significantly positive on the salaries of the private university faculty. One more year of tenure at the current university shows an increase in the 19.5% salary keeping all other variables constant. Moreover, the impact of tenure squared was found to negative indicating that a dual relationship of tenure exists with the salary. These findings are consistent with the study conducted by McNabb & Wass (1997).

The returns to tenure for females was statistically significant at the 10th, 30th, 50th, 60th, and 70th percentiles. The highest return was seen at the 10th percentile which means that the women who have recently entered into the work force are more likely to have a higher return to their tenure as compared to the women who have spent a number of years in the job.

The returns to tenure for males is not statistically significant at any of the percentile. Moreover, the return to tenure is negative at the 10th, 20th and the 30th percentile indicating the fact that the salaries do not increase with the same proportion as the increase in the tenure. The highest return for males was seen at the 90th percentile.

Impact of the Contractual Employment upon Monthly Income. The model suggests that the visiting faculty tend to earn higher salary as compared to the permanent faculty. The results obtained by the model show a significant relationship. The visiting faculty earns about 33.3% higher salary than the permanent faculty keeping all other factors constant. The findings of the model are consistent with the study conducted by Barbezat D. A. (1987).

Impact of Other Factors upon Monthly Income. The impact of marriage on the salaries was found to be positive indicating the fact that, the married people tend to earn more salary as compared to the singles. Married people get on average 39% more salary as compared to the singles. The results were significant and were consistent with the findings of the Chzhen & Mumford (2011).

Moreover, the impact of cgpa on the salaries was also found to be significant and positive. One grade point increase in the cgpa tends to increase the salaries by 66%.

Conclusions

This study was aimed at finding the impact of tenure and the contractual employment upon the income prospects of the private university faculty in Pakistan. Moreover, the incidence of gender pay gap among the faculty was also the main concern.

The study was based on the cross-sectional data obtained by self-conducted survey. The study relied on the technique of quantile regression as to see the changes in salary distribution at each quantile by each variable.

The results of the study show that a significant pay differential exists between the male and female faculty. The salaries were positively affected by the tenure of the faculty at his or her current university of employment. In addition to this, it was found that the visiting faculty tend to earn more salary as compared to the permanent faculty due to the presence of the salary negotiating power resting with the visiting faculty.

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Factors Affecting Foreign Direct Investment in the Accommodation Sector

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Abstract

Despite the many theories that suggest an explanation for international trade and why certain countries attract Foreign Direct Investment (FDI) more than others, researchers are unanimous in affirming that FDI *is influenced by pull factors (specific characteristics of the host country) and by push factors (specific characteristics of companies and of their home country).* This study aims to identify the key factors influencing FDI in the Portuguese tourism sector. With this purpose, a theoretical model was developed which was validated through semi-structured exploratory interviews and questionnaire surveys applied to foreign investors exploiting accommodation units in mainland Portugal. Fifty three questionnaires were considered valid, representing 63.9% of the universe of foreign investors in Portugal (accommodation sector). The results obtained indicate that Portugal's geographical location, its image/brand as a tourist destination and the Portuguese tourism offer are considered the key factors influencing FDI. This study also identifies that the main barriers to FDI are bureaucracy, tax burden and Portugal's current economic situation.

Keywords: Foreign Direct Investment, Attractiveness Factors, Competitiveness

Introduction

Surprisingly, even though the number of studies addressing FDI is large, a very limited number of them are applied to the tourism industry. Furthermore, none of them examines FDI in the Portuguese tourism industry.

However, as important as identifying and analyzing the reasons for travelling and the reasons that influence tourists visiting Portugal, is to identify the pull factors and push factors that influence foreign investors to choose the Portuguese tourism sector. Although much has been written to date on the attractiveness of Portugal as a tourist destination, there were no studies on the attractiveness of Portugal in attracting foreign investment to the tourism sector.

The current study intends to fill this gap by identifying the key factors influencing FDI in the Portuguese tourism sector. The search for the answer to this initial question resulted in a vast literature review on FDI. The methodology used to validate the model and the research hypotheses was based, in a first stage, on semi-structured exploratory interviews conducted at the AICEP Portugal Global – Trade & Investment Agency and at Turismo de Portugal, I.P. (national tourism authority). This was followed by questionnaires sent to foreign investors exploring accommodation units in mainland Portugal.

This paper begins with a brief summary of international trade theories and their connection with FDI, followed by the identification of the key factors in the attraction of FDI process. After that the connection between FDI and the Tourism sector is analyzed, and subsequently the internalization of the accommodation sector in Portugal is studied.

The second part of the paper presents the research methodology and the analysis and discussion of the results. Lastly, some contributions and recommendations for future research are suggested.

Literature Review

Throughout the centuries, literature has witnessed a number of attempts to explain international trade. Successive research in this area has led to a group of theories proposed by various authors who have been crucial to understanding the internationalization phenomenon and FDI.

Foreign Direct Investment: from Classical Theories to the Present Day

Adam Smith's theory of absolute advantage and David Ricardo's theory of comparative advantage are the two most noteworthy classical trade theories. Contributions from the neoclassical theories include Heckscher, Ohline and Samuelson with the factor proportions theory and Hymer and Kindlegerger with the industrial organization theory. These theories allow us to conclude that the existence of market imperfections help feed FDI.

The most important new theories of international trade include the product-life cycle theory (Vernon and Wells), Michael Porter's competitive advantage theory and the internationalization theory based on Coase's transaction cost theory and expanded on by Horst, McManus, Buckley and Casson and Rugman. Dunning's eclectic or OLI paradigm theory merges the existing theories explaining that in order for FDI to occur three sets of factors have to be combined: *Ownership advantages, Locational advantages* and *Internationalization advantages*.

With the Uppsala internationalization model, international trade studies crossed the boundaries of economic theory to further include the organizational behaviour theory. Psychic distance, environmental factors, cultural affinities and social ties are FDI determinants (Johanson & Wiedersheim-Paul). Schumpeter was the first to emphasize the importance of innovation, followed by the contributions of Simmonds and Smith, Bilkey and Tesar and Cavusgil that corroborated the internationalization model based on innovation. Mintzberg, Ahlstrand and Lampel's resource-based view theory focuses more on intrinsic aspects of company. Johanson and Mattsson and Johanson and Vahlne identify the importance of network relationships in foreign markets (network theory). According to this theory, human capital as entrepreneurship is the driving force of the internationalization process. The current theory of international new ventures or born globals emerged with Oviatt and McDougall.

The previously mentioned theories provide some insight into the complexity of FDI flows; however, an integrated theory that combines these elements in an analytical manner has yet to be developed. Although these theories appear in an isolated manner, they should be understood as complementary and not dissociated or regarded as alternatives.

Key Factors Influencing Foreign Direct Investment

The International Monetary Fund (2003) provides the most widely shared and accepted definition of FDI. It defines it as a category of international investment that reflects the objective of a resident in one economy (the direct investor) obtaining a lasting interest in a company resident in another economy (the direct investment company). The lasting interest implies the existence of a long-term relationship between the direct investor and the direct investment company, and a significant degree of influence by the investor on the management of the company. A direct investment relationship is established when the direct investor has acquired 10 percent or more of the ordinary shares or voting power of a company abroad. Direct investment comprises not only the initial transaction establishing the FDI relationship between the direct investor and the direct investment company but also all the subsequent capital transactions between them and among affiliated companies resident in different economies.

Therefore, FDI is the investment made by an entity in a foreign country that can take the form of Greenfield Investment or Mergers and Acquisitions (the level of ownership can be sole-venture or joint-venture).

A literature review shows that FDI is influenced by push factors: characteristics of the company and the home country and by pull factors: characteristics of host country: surrounding environment (common to all companies) and the transactional environment (specific to each sector).

Table 1 summarizes the determinants considered by many authors as key to attracting FDI. Despite the importance of all determinants, it is obvious that these are not all relevant at the same time. The research also clearly states that the relevance of each determinant depends on the home and host countries, the characteristics of the companies and the type of FDI that is being analysed.

Foreign Direct Investment in the Tourism Sector

Although FDI is a way in which countries may expand Tourism, the dynamics and implications of FDI in this sector have been neglected and have attracted less attention in the literature than what was expected (UNCTAD, 2008). Buckley and Geyikdagi (1996) pointed out that FDI in Tourism has received little attention due in large part to difficulties in obtaining information and data.

According to Endo (2006), the determinants of FDI in Tourism are not very different from other sectors: geographical, cultural and historical proximity; political, economic and social stability of the host country, level of economic development, incentives, availability and quality of infrastructures and specific characteristics of the company (size of the company, ability to obtain economies of scale, international experience).

For Snyman and Saayman (2009) there is a correlation between the countries that invest more and the origin of tourists that visit South Africa more. Buckley and Geyikdagi (1996) also reached the same conclusion in their study about Turkey. The same is true in China, according to Tang, Selvanathan and Selvanathan (2007). The work of Snyman and Saayman (2009) also shows that investors from different home countries were willing to invest in different tourism products.

Regarding the incentives proposed by the Government several authors have highlighted its importance for attracting FDI (e.g. Sadi & Henderson, 2001; Buckley & Papadopoulos, 1988). Some authors have also explored the link between FDI in tourism and the existence of GATS (e.g. Lee et al, 2002; Te Velde & Nair, 2006).

The size, growth, state and development of the tourism market, tourist facilities, the number and type of attractions, availability of skilled workers, labor costs, natural and cultural resources are considered important factors for attracting FDI.

The impacts that this type of investment causes may be more or less visible depending on the characteristics of the countries and the degree of development of the tourism sector. However, it seems to be unanimous among the authors that FDI is a vehicle for tourism sector development, creating employment, developing infrastructure, transferring technology, management knowledge and skills (UNCTAD, 2008). This investment can also be a means to finance the acquisition of new structures and equipment, and result in spillovers to the local economy through the connections that are made with the local suppliers, competitors, benchmark and training. It integrates the domestic economy in international chains that may offer a reduction of input costs, promote economies of scale and increase exports.

Table 1. Summary of key factors influencing FDI and main authors

Key factors influencing FDI	Main authors
Psychic and cultural proximity between the *host country* and *home country*.	Culpan & Akcaoglu (2003)
Geographical proximity between the *host country* and *home country*.	Culpan & Akcaoglu (2003)
Sociopolitical variables of the *host country*: political stability, country risk, corruption and political freedom.	Fatehi-Sedeh & Safizadeh (1988)
Human capital of the *host country*: educational level and workforce skills.	Borensztein, Gregorio & Lee (1998); Michie (2001); Noorbakhsh, Paloni & Youssef (2006); Resmini (2000); Tsai (1994)
Macroeconomic and microeconomic factors of the *host country*: economic stability, GDP, exchange rates, economy openness, infrastructures, exports, interest rates, inflation rates, market size and growth, costs and availability of labor, tariff and trade barriers, competition, the product life cycle.	Fatehi-Sedeh & Safizadeh (1988)
Incentives in the *host country*: governmental policies, government support, tax incentives.	Borensztein et al. (1998); Cleeve (2008); Dunning & McQueen (1982)
Existence of General Agreement on Trade in Services (GATS) in the *host country*.	Hoad (2003); Lee, Fayed & Fletcher (2002); Te Velde & Nair (2006)
Accession of the *host country* to international organizations: European Union, World Trade Organization.	Aw & Tang (2010); Jarvis & Kallas (2008)
Specific characteristics of the company: international experience, size, ability to obtain economies of scale, preference of potential competitors, availability of skilled labour and new suppliers networks, presence of a subsidiary and transfer of know-how and technology.	Dunning & McQueen (1982)
Characteristics of the *home country*: market size and growth, incentives for internationalization.	Dunning & McQueen (1982)

Source: own elaboration

Foreign Direct Investment in Portugal

Being FDI one of the most significant phenomena of market economies, Portugal is no exception. Existing research shows that the dominant motivation for FDI seems to be the access to the local market as well as the size and growth of the same (e.g. Matos, 1973; Carrière & Reix, 1989). Low labor costs and the privilege to access some of the most developed markets in Europe also emerge as determinants (e.g. Carrière & Reix, 1989; Saraiva, 1993). Other reasons are: political, economic and social stability, geographical and cultural proximity, friendly environment (Matos, 1973), creating incentives, human capital, among others.

With reference to the Portuguese Tourism sector there are some studies that evaluated Portuguese investment abroad, but there are no empirical studies about foreign investment in Portuguese Tourism, however the presence of international hotel companies in the country is notorious. The internationalization happens through FDI (greenfield investment, mergers, acquisitions, joint venture or sole venture) or through franchise, management contracts, consortia, fusion and licenses.

An analysis of the 300 international hotel companies ranking (Hotels Magazine, 2012), makes it possible to conclude that 22 are present in Portugal, exploring a total of 91 hotels, 2 hotel apartments and 2 resorts (26,157 beds). To these hotel chains 20 international hotel companies of foreign capital can be added, which are not present in the rank 300. These operate 29 hotels, 3 resorts and 6 hotel apartments (10,467 beds). Owned by foreign investors are also 29 rural tourism and manor houses (464 beds) and 14 units of local accommodation (215 beds). Table 2 shows that in terms of accommodation capacity (beds), the hotels operated by foreign groups represent 22% of total existing beds in Portugal.

Table 2. Accommodation: Number and Capacity in 2012: Total Portugal *versus* Total of Foreign Groups

Typologies	Total Portugal			Total Foreign Groups			% Foreign/Total
	No.	Rooms	Beds	No.	Rooms	Beds	Rooms
Hotels	885	68,501	143,552	120	16,694	31,579	22,0
Hotel Apartments	112	12,025	35,056	8	892	1,997	5,6
Pousadas (1)	34	1,142	3,218	0	0	0	0
Resorts	46	7,104	17,881	5	n.d.a	3,048	17,0
Touristic Apartments	175	12,777	35,503	0	0	0	0
Manor Houses and Rural Tourism	1,016	n.d.a.	12,074	29	206	464	3,8
Total	2,268	101,549	247,284	162	17,792	37,088	15,0

Source: own elaboration

(1) Pousadas are a chain of 37 locations for tourism and culture that enjoy the rich diversity of traditions of the region where they are located.

n.d.a. = no data available

In figure 1 it can be seen that American groups are responsible for holding the largest number of beds (8,641). The French come in second place with 7,086 beds and in the third place 2 Angolan groups can be found (4,197 beds).

Fig. 1. Number of beds operated by foreign investors in Portugal by Nationality, 2012
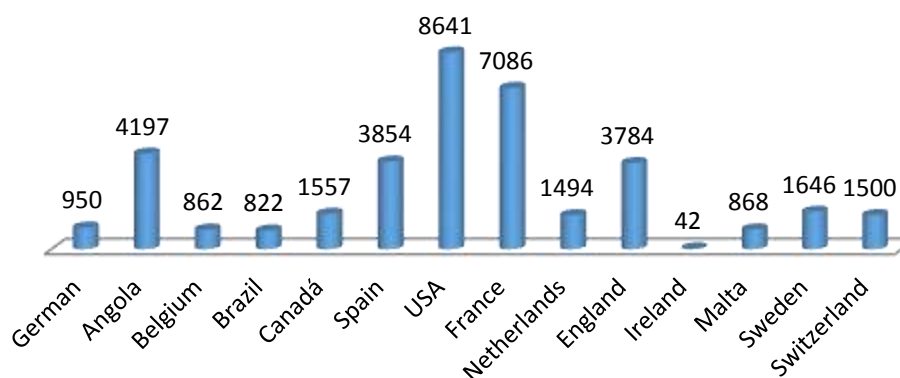
Source: own elaboration

Research Methodology

The theoretical model built in this study (Figure 2) aims to identify which factors influence the attraction of FDI to the Portuguese Tourism sector (accommodation). Based on the theoretical framework described, 15 factors were selected to integrate the model. Considered as pull factors (characteristics of host country):

- *6 Specific Factors of the Surrounding Environment (SFSE)*: Country risk; Level of development; Regulation; Integration in international organization; Cultural and historical affinities; Geographical location.
- *5 Specific Factors of the Tourism Sector (SFTS)*: Competitiveness of the sector; Government policies for the sector; Image/brand of the sector; Tourism offer; Tourism demand.

Push factors are considered:

- *2 Specific Factors of the Home Country (SFHC)*: establish a link between tourism offer and tourism demand.
- *1 Specific Factor of the Company (SFC)*: company size.

This model also seeks to discover if the main barriers to FDI in Portugal are related to the SFSE or the SFTS. All factors were worked in the construction of logical relations that underpin the enunciation of the hypothesis.

H1. The risk level of Portugal is a factor of attractiveness for FDI.

Political, economic and social stability of the host country is seen as an attraction factor for FDI (e.g. Dunning & McQueen, 1982; Endo, 2006; Go, Pyo, Uysal, & Mihalik, 1990). However, Fatehi-Sedeh and Safizadeh (1988) showed that the generalization of the association between socio-political stability and FDI is not always valid.

H2. The development level of Portugal is a factor of attractiveness for FDI.

The development level of a country is related to the size of the market, the prospects for economic growth and expansion of this market and competitive operating costs. Several authors consider the market size as a determinant in attracting FDI (e.g. Buckley & Geyikdagi, 1996; Dunning & McQueen, 1982; Go et al., 1990). For Endo (2006) major economies attract more FDI and small countries typically attract small amounts, unless they operate as international offices.

H3. The Portuguese legislation is a factor of attractiveness for FDI.

Steiner (2010) concludes that FDI in Tourism is strongly influenced by the regulatory framework imposed by the Government. The regulation covering tax and legal system, labor laws, bureaucracy, among others.

H4. Portugal's integration in international organizations is a factor of attractiveness for FDI.

Some authors consider EU membership as a factor to consider (e.g. Carrière & Reix, 1989; Jarvis & Kallas, 2008; Matos, 1973; Saraiva, 1993). Also, the existence of GATS can attract FDI (e.g. Hoad, 2003; Lee et al., 2002; Te Velde & Nair, 2006). Aw e Tang (2010) identified that FDI in Malaysia has been affected by China's accession to WTO. According to Matos (1973) privileged access to the EFTA increased the attractiveness of Portugal.

H5. Cultural and historical affinities are a factor of attractiveness for FDI.

Studies show that there is a tendency to start the FDI by countries with which there are historical / cultural affinities. Similarities in language, culture and history between the home country and the host country, tend to facilitate the FDI process (e.g. Go et al., 1990; Johnson & Vanetti, 2005; UNCTAD, 2008).

H6. The geographical location of Portugal is a factor of attractiveness for FDI.

Geographical proximity may also influence the process (e.g. Endo, 2006; Go et al., 1990). Theory also suggests that small countries typically attract investment from its rich neighbors.

H7. The competitiveness of the Portuguese tourism sector is a factor of attractiveness for FDI.

The *Global Competitiveness Report* and the *Travel & Tourism Competitiveness Report* of the *World Economic Forum* considered as variable: quality of infra-structures, availability, cost and quality of labor, suppliers costs and low construction costs.

H8. The policies implemented by the Portuguese Government in the tourism sector contribute to attract FDI.

The FDI can be influenced by various incentives offered by the government to attract multinationals (tax incentives, financial incentives, preferential loans, grants, subsidies for fairs and promotional events). In the opinion of Cleeve (2008) incentives and tax exemptions arise as the most popular form to attract FDI.

Figure 2. Conceptual Model
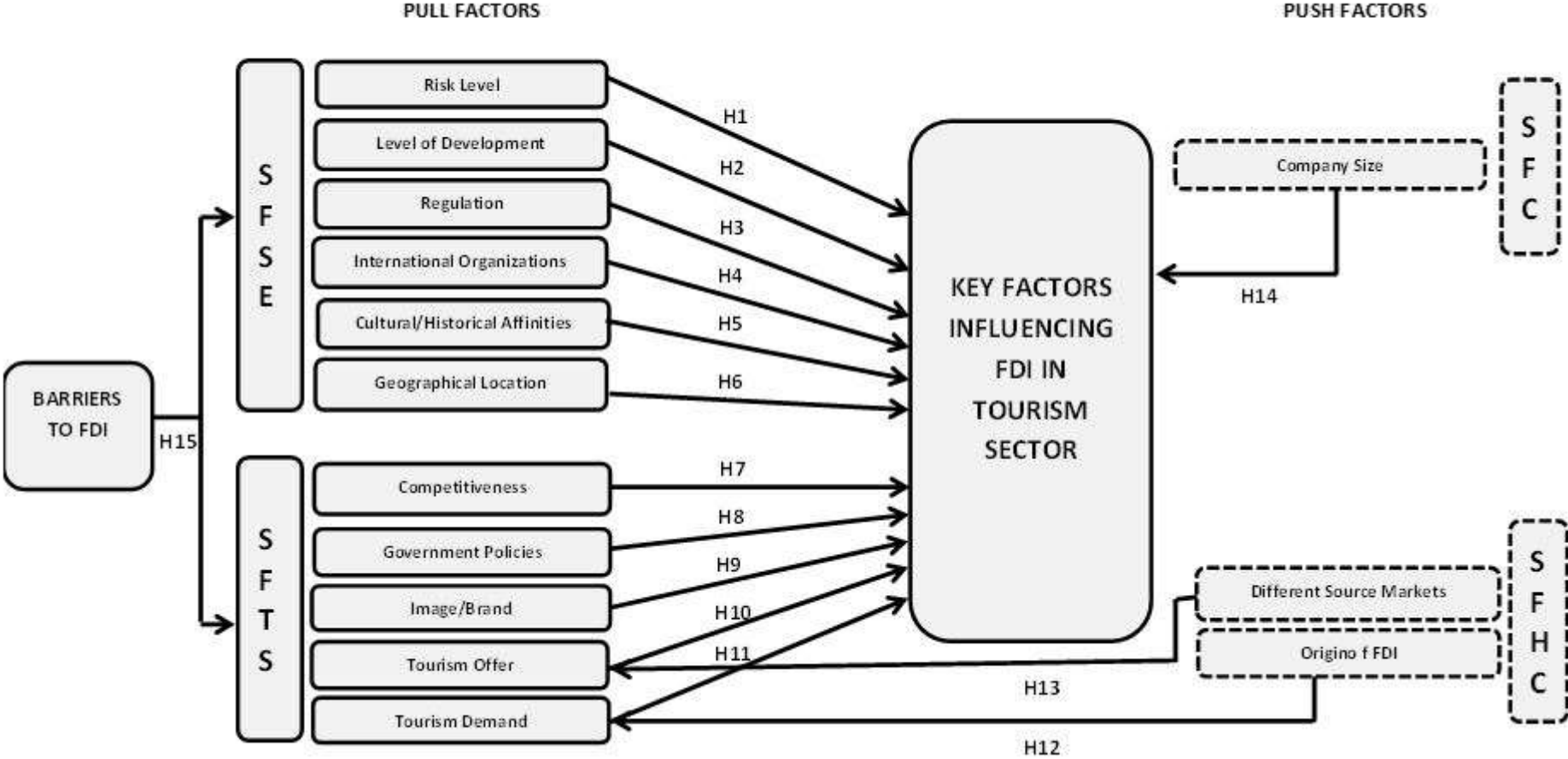
Source: own elaboration

H9. The image/brand of Portugal as a tourist destination is a factor in attracting FDI.

H10. The Portuguese tourism offer is a factor of attractiveness for FDI.

Great importance is given to specific variables such as climate, traditions, hospitality, natural and cultural tourism resources (e.g. Go et al., 1990; Johnson & Vanetti, 2005; UNCTAD, 2008). According to Buckley and Geyidagi (1996) the increasing popularity of Turkish tourism was highlighted as the primary motivation for investing in Turkey.

H11. Tourism demand in Portugal is a factor of attractiveness for FDI.

The size and growth of tourism demand and tourism revenues are crucial to attract FDI. This type of investment leads to the development of new tourist spaces, which attract more tourists, which in turn attract more FDI (Tang et al., 2007).

H12. The countries that most invest in the Portuguese tourism sector are also the main source countries of tourists to Portugal.

Snyman and Saayman (2009) found that there is a correlation between the origin of tourists visiting South Africa and the countries that invest more in this country. The same conclusion is drawn by Tang et al. (2007) who concluded that the major emitters of tourists to China are those that invest more in the country. Also Buckley and Geyikdagi (1996) in their study about Turkey reached the same conclusion.

H13. Investors from different home countries invest in different regions of Portugal.

Snyman and Saayman (2009) identified that investors from different home countries are looking for investing in different tourism products. It is important to realize if the same also occurs in Portugal.

H14. Larger companies invest more in Portugal.

Companies can be measured by several indicators: number of rooms, number of employees, sales volume, international experience and degree of internationalization (e.g. Buckley & Geyikdagi, 1996; Dunning & McQueen, 1982; Endo, 2006; Johnson & Vanetti, 2005). This study will take into account the number of rooms managed.

H15. The main barriers to FDI in Portugal are more related with SFSE than with SFTS.

There are several factors that may drawback potential investors. Insufficient public incentives to foreign investors, insufficient government support, low-skilled workforce and bureaucracy (Snyman & Saayman, 2009). Also for Go et al. (1990) and Te Velde and Nair (2006) bureaucracy can be a major obstacle. It is important to understand which variables foreign investors' value most: barriers related with the country in general terms or variables related to the tourism sector.

The collection of data that allowed us to confirm or discard the hypotheses made, was done through literature review, semi-structured exploratory interviews conducted at the AICEP Portugal Global – Trade & Investment Agency and at Turismo de Portugal, I.P. (national tourism authority) and through the application of questionnaire surveys to the CEO or owners of all companies with foreign investment in the accommodation sector in mainland Portugal.

Analysis and Discussion of the Results

The content analysis of the exploratory interviews was crucial for improving the questionnaire applied to foreign investors. Fifty three questionnaires were considered valid, representing 63.9% of the universe of foreign investors in Portugal (accommodation sector). From these, 35 are small companies (investors exploiting rural tourism, manor houses and units of local accommodation) and 18 medium/large companies (investors exploiting hotels, hotel apartments, touristic apartments and resorts).
An analysis of the nationality of the surveyed companies suggests that 19 are Dutch, 6 German, 6 English, 5 French, 4 Belgian, 3 Angolan, 3 Spanish, 2 Americans, 2 Swiss, 1 Irish, 1 Swedish and 1 based in Malta. In terms of geographical dispersion, respondents' investors operate a total of 100 projects (20,999 beds), representing 56.3% of total beds in Portugal exploited by foreign investors and 52.8% of total beds 5 star hotels exist in Portugal. Respondents use the visits to the country and personal contacts as the main sources to obtain prior information about the Portuguese market.

Statistical analysis of SFSE determined that although the factor level of risk has been chosen by 26 investors, there was no statistical evidence (pvalue> 0.05) to suggest that *the risk level of Portugal is a factor of attractive to FDI (H1).* The variable most valued in this factor was safety (mean = 5.12).

The development level of Portugal was valued as an important factor by 30 investors, however, there was no statistical evidence (pvalue> 0.05) to suggest that t*he development level of Portugal is a factor of attractiveness for FDI (H2)*. The variable Portuguese market size (mean = 1.85) was less valued than growing market (mean = 2.78) and competitive operational costs (mean = 3.12).

Regarding the Portuguese regulation, this is not considered a factor of attractiveness for FDI, presenting an average <1 (0.09) and pvalue <0.0001. It was chosen by 5 investors and they all attributed the rating of least important of the three factors considered in the decision to invest in Portugal. Thus, there was obtained the opposite results to *H3. The Portuguese legislation is a factor of attractiveness for FDI*. The tax burden (mean = 6.40) and bureaucracy (mean = 6.20) were identified as major problems.

Portugal's integration in international organizations was chosen by 14 investors, with an average <1 (0.49) and pvalue <0.0001, shows that this is not a factor of attractiveness for FDI. It was concluded that the result somewhat contradicts *H4. Portugal's integration in international organizations is a factor of attractiveness for FDI*. All investors who have chosen this factor, considered the variable European Union member more important (mean = 7.00) than any other. The least valued variable was the existence of GATS (mean = 1.93).

Despite the fact that cultural and historical affinities factor has been chosen by 31 investors, at first analysis, there was no statistical evidence to suggest that *cultural and historical affinities are a factor of attractiveness for FDI (H5)*. However, isolating the small-size investors, the average is >1 (1.37) and pvalue =0.025 (one-tailed test), which indicates that they value more these affinities than large and medium-size investors. The variable language is valued less than any of the others (mean = 1.69).

It can also be concluded that the *geographical location of Portugal is a factor of attractiveness for FDI (H6)*, since it was chosen by 49 investors, with an average >1 (2.34) and pvalue <0.0001. The opportunity to explore neighboring markets (mean = 2.93) and the strategic location of Portugal: access to markets, intersection of sea and air routes linking Africa to Europe and Americas (mean = 2.68) are the most valued variables by foreign investors.

The analysis of the SFTS that may affect FDI, determined that despite the factor competitiveness of the Portuguese tourism sector has been chosen by 27 investors, there was no statistical evidence to suggest that *the competitiveness of the Portuguese tourism sector is a factor of attractiveness for FDI (H7)*, with a pvalue >0.05. The attractive tourist market variable had the highest average (7.70).

The factor Government policies for the tourism sector was not considered a factor of attractiveness for investment in the sector. It was valued by 12 investors and had an average <1 (0.32) and pvalue <0.0001. It was concluded that the result somewhat contradicts *H8. The policies implemented by the Portuguese Government in the tourism sector contribute to attracting FDI*. Variable maintenance of international sites that promote the country has the lowest value (1.89) and the variable tax incentives the highest (3.54).

The factor image/brand of the Portuguese tourism sector was chosen by 38 investors and has a mean >1 (1.58) and pvalue = 0.001, allowing us to conclude that *the image/brand of Portugal as a tourist destination is a factor in attracting FDI (H9)*. Through qualitative content analysis of this question, the most valued tourism products by foreign investors have been identified: Cultural Tourism, Sea and Sun, Food and Wine and Nature Tourism.

Regarding the factor tourism offer was chosen by 44 investors, with an average >1 (2.06) and pvalue <0.0001. This allows concluding that *the Portuguese tourism offer is a factor of attractiveness for FDI (H10)*. The pleasant climate had the highest mean (7.61), followed by the hospitality of the Portuguese people (7.16).

Finally, despite the tourism demand factor which has been chosen by 38 investors, on a first analysis there was no statistical evidence to suggest whether this is an attraction factor. However, isolating large and medium-size investors, the average is >1 (1.56) and pvalue = 0.028 (one-tailed test). Thus, the Wilcoxon Mann Whitney test showed that *tourism demand in Portugal is a factor of attractiveness for FDI (H11)* to large and medium-size investors.

This study also checks whether the countries that most invest in Portugal are also the countries that emit more tourists to Portugal. Data analysis of the number of foreign investors in Portugal, number of beds operated by foreign, income revenue, guests and overnight stays, showed that this relationship exists. *The countries that most invest in the Portuguese tourism sector are also the mains source countries of tourists to Portugal (H12).*

Regarding the origin of FDI, the Dutch investors demonstrate a clear demand for the Center of Portugal. The Angolan investors, Brazilian, Dutch, Irish and Maltese have no investment in the Algarve, while the Germans, Belgians and Americans prefer this region. These results suggest that investors from different home countries invest in different regions of Portugal (H13).

Finally, taking into account that FDI can be affected by SFC, this study sought to assess the relationship between company size (number of rooms managed across the world) and investment in Portugal (number of rooms managed in Portugal). Data analysis helped to confirm that larger companies are not those that exploit more rooms in Portugal. This conclusion is contrary to *H14. Larger companies invest more in Portugal*.

If the aim of this study was to identify the main factors of attractiveness for FDI in the Portuguese tourism sector, it was also considered interesting to identify the factors that hinder this investment. The statistical analysis concluded that the factors that hinder the attraction of FDI to Portugal are related to the specific characteristics of surrounding environment (average of sums = 9.8). The specific characteristics of the Tourism sector have an average of sums = 5.4. Using the Wilcoxon test concluded that *the main barriers to FDI in Portugal are more related with SFSE than with SFTS (H15)*, with a pvalue <0.0001. The bureaucracy was the main constraint identified by 86.8% of respondents, followed by tax burden (49.1%) and the economic situation in Portugal (45.3%).

Concluding Remarks and Future Research

The results obtained indicate that Portugal's geographical location, its image/brand as a tourist destination and the Portuguese tourism offer are considered the key factors influencing FDI. Cultural and historical affinities were found to be factors influencing small foreign investors, while tourism demand attracts medium and large investors.

Portugal's integration in international organizations, the Portuguese legislation and the government policy for the Tourism sector are not considered key factors influencing FDI.

This study clearly identifies that the main barriers to FDI are bureaucracy, tax burden and Portugal's current economic situation. Moreover, it concludes that the countries that most invest in the Portuguese tourism industry are also the main tourist generators to Portugal and that investors from different countries of origin invest in different regions of Portugal.

As far as the level of risk, development level of Portugal and competitiveness of the Portuguese tourism sector, there is no statistical evidence to support the conclusion that these are or are not attractive to FDI.

The main contribution of this study is to provide accurate information on the research and development efforts that have been endeavored in the field of FDI in Tourism. Second, it is the first time that this research has been carried out in Portugal. Third, the results can be used to assist government policies on FDI, as well as to assist the public authority responsible for promotion.

A major limitation of this study is the difficulty in obtaining statistical data on FDI in Tourism. Existing data is very general and lacks sector and geographical categorization and sometimes it's impossible distinguish between foreign investors of domestic investors.

This study examines FDI in Portuguese accommodation, however it would be stimulating a larger study that took into account foreign investment in other areas of the tourism sector (travel agencies, tour operators, residential tourism).

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An Assessment on the Effect of Service Quality on Customer Satisfaction: The Case of Tourist Standard Hotels of Gondar Town

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Abstract

Services are increasingly becoming a larger portion of many organizations' regionally, nationally, and globally and are considered as a tool for profit streams of firms and main source of revenue for nations. Service quality is the major consideration in today's dynamic service industry especially in the Hotel service business that has a great need for growth and profitability with a stiff competition in the sector; hence it is not the issue thrive rather a question of survival of companies operating in the competitive Hotel industry, satisfying customers is a core business challenge which has attracted considerable research attention. The major objectives of the research were to examine the relationship between quality of service provision and customer satisfaction on the tourist fit Hotel of Gondar town. This research examined the effect as well as relationship between service quality and customer satisfaction on the Hotels with a particular emphasis on the SERVQUAL dimensions that are Tangibility, reliability, responsiveness, assurance and empathy. Descriptive study was conducted through both qualitative and quantitative methods. Structured questionnaires of the SERVQUAL with a five point Likert scale have been employed. The findings of this research were drawn from 374 samples selected with accidental sampling from the customers of tourist fit Hotels of Gondar town. Percentage, frequency distribution and graphical presentation, phi-chart, reliability test, Pearson correlation and binary logistic regression were used. The result of this study revealed that, tangibility responsiveness and empathy has a significant effect on the overall customer satisfaction and reliability and assurance are found to be least important to affect customer satisfaction. The finding also showed that all the five dimensions of; tangibility, reliability, responsiveness, assurance and empathy have a strong association with customer satisfaction therefore Service quality has been viewed as a determinant of customer satisfaction and assured here in this research findings. The Hotels understudy should take in to account the relative importance of service quality dimensions and design their offering in accordance their recitative effect on customer satisfaction and emphasis should be given to empathy, tangibility and responsiveness.

Keywords: SERVQUAL, Service, Service Quality, Customer, Customer Satisfaction

Exploring the Value of Behavioural Characteristics of an Umbrella Brand in the German Hospitality Industry: a Top Management Perspective

Kaouther Kooli, Len Tiu Wright, and Cornelia Beer

Abstract

The research explores senior management's perceptions and expectations of umbrella branding in the case of the German hospitality industry and the importance of contributing attributes and improvements in communications towards best practice in applying umbrella branding for the internalization of services. An inductive approach using case study method was adopted. "Ringhotels e.V." serves as an exemplary hotel association within the German hotel market. Findings show that the cost benefits of the association appear to be less important than service benefits to all the stakeholders. The association was found to serve not only as a pool of knowledge with expertise provided to the Ringhoteliers within the departments of sales, marketing, public relations, business development, quality care, finance and distribution, but also as a contact point and consulting platform for any issues occurring within the Ringhotels Association. Moreover, association perceptions of philosophy, values and processes are found to be an important determinant of service benefits. Association attributes are based on the understanding and perception of the philosophy and values of the association by each individual member, i.e. hoteliers. Top managers of German hotels must develop authenticity, voluntary collaboration and information exchange, commitment to personal care of their guests thus building brand quality.

Keywords: Umbrella Brand, Behavioural Characteristics, Hospitality Industry, Association Attribute, Communication Behaviour, Association Perception.

Introduction

The growth of tourism as witnessed by online provisions in addition to traditional offline outlets for customers to access tourist markets all over the world means that while opportunities exist in the tourism market, there is also competition for customers from large chains to a plethora of small players, such as bed and breakfast independents. However, as in Germany, small players are privately owned or family run businesses that have been built from generation to generation (Hotelier 2012). They often do not have the skills and business knowledge to compete aggressively with large hotel chains that have larger resources to build alliances e.g. within the travel industry when customers are booking combinations of flights and hotels with airlines.

Marketing a hospitality business is costly, challenging and demands time and effort (Ottenbacher 2009). Differentiation for smaller SMEs is difficult to achieve in the hospitality industry, where intangibility, perishability, inseparability and variability (Jobber and Fahy, 2006) make the marketing of services progressively challenging. Technological developments to facilitate communications and payments between suppliers and customers have led to a rapid and fast-developing services environment. So the scope of activities that needs attention to be drawn to rises constantly (Sigala 2007). The way to book a travel experience is not, as it was years ago, to make an appointment at the travel agency in a physical retail outlet. Nowadays the Internet and search engines offer the possibility to not only book an entire holiday online, but also to compare prices with hundreds of other providers and to look into the travellers' reviews of hotels visited.

The German hotel market is highly dynamic and the tax reduction in 2011 (Bundestag 2012) saw the German government trying to fuel the tourism economy and to maintain its sustainability. Due to the savings in VAT, the hoteliers are increasingly finding chances to join associations and to subscribe to their umbrella brand philosophies (DZT 2012).

In Germany, there are several hotel associations that are already acting as umbrella brands in order to market and distribute a number of hotels commonly. The combination of several family-owned or privately run hotel businesses, that often have a long history of individual existence, is challenging. The hotels wish to keep their own traditions, mentalities and philosophies but still would like to be part of the umbrella brand association. Thus, it is important to create a balance between umbrella branding several hotels under one philosophy and at the same time allowing enough independence to each hotel to maintain its individuality. Such umbrella branding is different from other types of large hotel brands built up into international hotel chains e.g. Hilton Hotels, La Quinta Inn and Swissôtel brands. For example, La Quinta Properties Inc, a real estate investment trust in the USA has over 700 budget-type limited

service hotels under different brand names in the United States, Canada and Mexico. FRHI Holdings Limited in Canada has 101 hotels and resorts worldwide under the Raffles, Fairmont and Swissôtel brands (Market Wired, 2012).

Academic research have not followed suit in exploring such a particular type of alliance within a registered association, i.e. the umbrella brand. As perceived by the German Ringhoteliers the implementation of an umbrella brand in the German hospitality business starts from the top management level in shaping the entire business e.g. image, reputation and employee ethos. Since little academic research towards associations in the German hospitality market exists, attention can be drawn from the better-investigated topic of alliances. Strategic alliances are a popular form of establishing and benefitting from synergies and economies of scales amongst businesses. Vanpoucke and Vereecke (2010) claimed that several behavioural characteristics consisting of alliance attributes, such as: trust, coordination and interdependence, communication behaviour and information quality, participation and information sharing; and alliance management in leadership and performance measurement, would lead to cost and service benefits.

Moreover, the phenomenon of umbrella branding can be found in the literature for consumer goods, but far less for the services industry. Furthermore, a deficiency of applicable umbrella models for branding in the hospitality industry, in the global internet age, still exists. The purpose of this is to explore managerial perceptions of association attributes, communication behaviour and association management to bring insights into managerial expectations of the umbrella brand and whether these were fulfilled.

Literature Review

Umbrella Branding

Umbrella brands are brand names that carry a range of different but related products with the same name of the brand to build rapport with customers. Aaker (1991) explains that brands are extended beyond their original categories to reduce the cost and risk of entering a new product category. Reducing costs is a primary management imperative in a competitive environment that encourages growth through brand leverage (Tauber, 1988).

The success of the brand extension depends highly on the transfer of the parent brand awareness and association of the potential extension. Aaker and Keller (1990) investigated the "fit" between the original brand and the extension as the crucial factor of success. The authors suggested that success only can be noted if the parent brand evaluation is also transferred on the perceived quality of the extension.

Several researchers have confirmed these in experimental settings (Bousch and Loken 1991; Reddy et al. 1994). Wernerfelt (1988) called the transfer of the quality perceptions between the brands the key of umbrella branding and the same brand name can be successfully used for several products. In addition, extension of brands is trusted and the already established reputation of the parent brand is reflected in all of them (Montogomery and Wernerfelt, 1992). Moorthy (2010) investigated the correlation between the parent and the new brand and stated that success is only achieved once the correlation of quality between the original and new is large enough. Erdem (1998) lists the advantages of companies that own one brand which they can extend and hence use the reputation of the original product for the new one. The effectiveness of marketing programmes can be raised and consumer quality perception across product categories and the impact on choice can be benefitted from (Erdem, 1998). Often, if a brand offers a wide range of products, the expectations of customers are increased for one product because they have already made a good experience with a cross-brand product (Erdem, 1998). This phenomenon of cross branding is very common and only possible if brands are offered and marketed adequately.

Umbrella brands are known to reduce consumer uncertainty and perceived risk and can add value to companies' marketing mixes (Wernerfelt, 1988). However, if one product does not come up to customers' expectations, then customers could automatically associate the entire brand name with poor quality (Hakenes and Peitz 2008). Moreover, umbrella branding might not turn out to be the right choice if relations between the different product players do not lead to an increase in profits (Amrouche and Zaccour 2009). Cabral (2008) shows the example in private label branding when the retailer and manufacturer do not have the necessary strategic interactions and are thus limited in establishing umbrella brands. Therefore, the building of brand equity is a complex process and needs to be considered carefully concerning what is offered to customers. With more products involved, a certain multiplication effect occurs and every set of categories of the brand equity has to be multiplied with the number of products involved.

Umbrella Branding in the Hospitality Industry

In the services marketing industry i.e. the combination of tourism and hospitality businesses, it is difficult to compare 'the product' when people's senses, experiences and feelings in the tangible and intangible aspects cannot be compared, experienced, evaluated, felt, touched, smelt in exact same ways (Bowie and Buttle 2013). Before the actual purchase commitment, the customer may find it hard to make a properly evaluated buying decision. The consumer cannot use the five senses or much rationale information to make a final conclusion about the quality of a product. How can it be decided in advance whether a holiday is relaxing and as promised to deliver all the benefits, as described by the travel agent or not? On the other hand, it is also very complex for the marketing manager to make the best effort possible to show the product, give as much information about its availability and to increase its credibility and loyalty. However, as Lovelock et al. (2009) pointed out, the differentiation of products and the retention of customers are important concerns in an age of both globally growing competition and market saturation.

The published hits on search engine websites suggest that more people check comments on popular internet platforms to see what other customers identify with or have commented about of any given service or hotel (Chaffey, Ellis-Chadwick, Mayer and Johnston, 2009). This user-generated content on the web 2.0 platforms makes it even more difficult to market a hotel adequately. As a matter of fact, if one person makes a bad experience, he or she might be more tempted to spread this information than a satisfied customer. With all those factors named, getting visibility with customers in a crowded marketplace and to stand out with standards and reputation (Sigala,2007) is a complex marketing process. Therefore many hotels tend to establish brands to carry their slogans and impressions of quality. Apart from several global hotel chains, which already place high value on their brand equity, many individual, privately owned hotels join hotel associations in order to belong to and operate under an umbrella brand (Olsen et al. 1994). In this paper, the challenges occurring when implementing an umbrella brand in the hospitality industry are investigated. If umbrella brands are used in hospitality marketing, success of extensions can only be benefited from if there is a fit between the original product and the extended one (Rotemberg, 2010; Volckner, et al., 2008). Therefore every new joining hotel has to comply with the umbrella brand or association's philosophy.

Associations and Alliances as Umbrella Brands

Vanpoucke and Vereecke (2010) made the attempt of establishing a model for alliances that showed how different behavioural characteristics, such as alliance attributes, communication behaviour and alliance management could contribute to cost or services benefits. Alliances are, due to their nature, very similar to umbrella brands or associations. Yoshinoe and Rangan (1995) argue that strategic alliances should consist of and require the following circumstances to fulfil the requirements of a strategic alliance i.e. independence of parties, shared benefits among the parties and on-going participation in one or more key strategic areas, such as technology, products, markets; which are used and can be deployed in a way that each company could not have achieved independently. Furthermore, "alliances create value through the pooling of resources to provide alliance partners with competitive advantages over rivals" (McCarter et al., 2011, p: 621). Wang and Zajac (2007) state that alliances or acquisitions are important organisational activities to gain access to external resources or synergies, which each company individually could not achieve. Strategic alliances are mostly voluntary agreements between at least two member organisations. The alliances include even further "the exchange, sharing or the co-development of products, technologies, or services" (Gulati, 1998, p:293). Hence, the difference between an alliance and an association mostly lies in the structure. An alliance often is the typical co-sharing and every member is very active. For some alliances, not even one headquarters is needed due to the fact that merely the exchange of resources or knowledge creates synergies and competitive advantages. An association is more driven by the members of the Board and the Headquarters and although the exchange between members is encouraged, the Headquarters conducts the major creation of value, i.e. by joint marketing.

Research Methodology

An inductive approach using in-depth interviews is adopted. Qualitative research is suitable since there are no agreed regulations or specific standards available on how to implement an umbrella brand into any sort of market. Furthermore, the inductive nature of inquiry is appropriate where a single case study will be used to draw a general assumption on a metaphase level (Stanford Encyclopedia of Philosophy, 2012). Firstly, the general environment in the hospitality industry and umbrella brands, as well as the marketing structures and business organisations were investigated. Secondly, the German hotel industry, in which this study takes place, was analysed. The effects of the tax reduction (Bundestag 2012) and the general structure of a majority of privately owned hotels were taken into account in exploring their need

for alliances and the guidance of *Headquarters* for *Association* employees or staff that could support the hoteliers with required expertise. Thirdly, the special structure and features of associations were researched through a literature review.

The legal form of alliances in Germany is unique in German law and cannot be changed by individual entities. Ringhotels e.V. was chosen as it is Germany's biggest hotel association with about 130 members since 1973. The main philosophy is to establish an umbrella brand following the theme: "Personal. Private. Because we care for you". This philosophy is very general and comprises all the privately or family owned hotels with a personal touch and atmosphere to care for their customers. Customer satisfaction and the vicinity to the guests, their well-being and comfort in the hotels constitute the major aim and inner core of Ringhotel's philosophy.

To become a member, a hotel business has to fulfil certain criteria. It should be family-owned or at least privately managed. It means that the personal touch and attitude of the owner or the family lies within the hotel. The hotel's character and its philosophy is embodied by the owners and reflected in the way they treat their customers. Most of the Ringhotels provide a long history of existence and have been managed from generation to generation within the same family. Hence, the son or daughter could watch how the parents managed the hotel. On the one hand, this is a major asset and includes a lot of experience. On the other hand, often it implies resistance to change with activities and processes in how the hotel is managed, being rooted in obsolete methods, hardened over time. Often a lot of persuasion has to be done in order to convince the Ringhotel manager of a new implication, especially when it comes to modern IT tools or social media. The ambience in a Ringhotel has to reflect the personal atmosphere of being friendly and very familial. Ringhotels are classified with at least 3-DEHOGA (GErman HOtel and GAstronomy association) stars (of 5) and need to fulfil such Ringhotels' internal quality criteria. Triangulation of data (Wright, 2008) was ensured through the use of different sources of data i.e. in-depth interviews, observation and desk research, conducted at different times and with different key decision makers working in the organisation.

14 decision maker employees were interviewed in August to September 2012, in the association's headquarters. These individuals are selected on their knowledgeability of the brand 'Ringhotels' and the hoteliers' activity. All respondents take part in decision making and are able to provide a rich perspective of top management level. The interviews lasted between 45 minutes to an hour each.

Interview themes were developed based on the literature review to cover 1) association attributes (trust, coordination and interdependence), 2) communication behaviour (information quality, information sharing and information participation) and 3) alliance management (performance measurement and leadership). The interviews were conducted by the same interviewer to reduce bias. The interviews were transcribed and returned to respondents to check accuracy of transcription and to invite respondents to add anything they think is missing. To ensure accuracy of the translation, the verbatim was then translated to English and translated back to German by two experts. The resulting textual data were coded. The coding was checked by two experts with 90% conformity to original coding, which is acceptable according to Thietard (1999). Themes emerged from the identification of phrases and group of phrases. Recurrent themes occurring to at least 75 of each interview were identified. In addition, the in-depth interviews were complemented with observation carried out from 1st October 2011 to end of March 2012. Enough time was spent in all the departments: marketing and public relations, reservation, sales department, distribution department and the Chief Executive Officer (CEO) to ensure a complete approach to all activities in the company.

Results and Discussion

Association Attributes

Trust. Trust, as described by Vanpoucke and Vereecke (2010), is a basic element of either an association or an alliance. They build on Sako (1992) to emphasise goodwill trust as necessary for long-term relationships. Within Ringhotels e.V. goodwill trust should be in existence and traceable back to the attitude and understanding of each individual member and the association's headquarters. Due to the very specific legal form of an association in the federal republic of Germany, especially when it comes to the exchange of confidential information, goodwill trust and honesty should exist to guarantee long-term collaboration. Hence, trust, in an association is even more important than in an alliance due to stronger dependencies and interdependencies between the stakeholders amidst standardisation and legal requirements.

Coordination. Coordination within an association appears to be more complex than within an alliance. For Ringhotels many stakeholders are involved and each department needs to supervise the coordination

properly. With an association providing the headquarters that is responsible for not only the coordination within the departments but also working amongst the joining hotels, the structure is more complex. An alliance is based on all their businesses, each working and operating for themselves, but benefitting from synergies, economies of scales etc. So the association executes different tasks on a top management level, which are required in order to make the individual hotels as well as the top management work. Hence, if the Marketing department coordinates wrongly, the entire association will suffer from the consequences. As a conclusion, it can be remarked that coordination might be more complex in an association but is an essential element of both, association and alliance.

Interdependence. As for an alliance, interdependence does exist to the extent that synergies could not be exploited, as much without the partner and economies of scales etc. could not be benefitted from. However, the partners can function and operate entirely independently, as stated by Yoshinoe and Rangan (1995). This would not be implementable for the association investigated. If there is no collaboration or interdependence and the information flow is not given, Ringhotels e.V. would not be able to operate at all. The members are an essential part of every operational process and need to be involved and to deliver. Hence, interdependence is more essential for an association than for an alliance.

Communication Behaviour

Information Participation. For an alliance as well as for an association, the participation of the members within the information exchanges is essential. However, as pointed out under the subtheme "Interdependence"; within an alliance each individual member, even on a long-term, might be able to survive without, whereas within Ringhotels e.V. where smaller businesses are depending on being marketed, distributed and promoted commonly, the survival of each business on the long-term could not be guaranteed. Hence, special actions and encouragement within an association need to be taken to maintain the participation of each member. A registered association, according to legal requirements in Germany, can be founded with a minimum of seven members, where participation can be managed easily. As a matter of fact, there is no maximum and the more members participating in the association the more difficult the information participation is created.

Information Sharing. It can be speculated, that bigger alliances would have formal meetings and standardised formats. E.g. rules on how to exchange information and present the share profit and loss accounts or balance sheets in order to keep track on financial performances and investigate about possible lack of improvement. As it was pointed out within the interviews, the Ringhoteliers are encouraged to share the information within the association and the other joining hotels and hence, benefit as much as possible from the pool of expertise provided, be it from the headquarters or the other colleagues within the association. However, this is based on the understanding of the values and philosophy of the association, because in comparison to major alliances, no standards to share information are required.

Information Quality. Same conditions as for the information sharing apply to information quality. In order to guarantee high quality of information, standards should be introduced. Those do not exist within an association and for Ringhotels, it depends entirely on the hoteliers on if, how and when information is handed in. Many departments state that they can guarantee the quality of information by personal interaction with the Ringhotels. Within an alliance such might be easier due to standards introduced when founding the alliance. Especially for the German registered association where no standards are required at all, the assurance of quality is very difficult and hardly manageable unless the employees of the Headquarters are in personal contact with the hoteliers and ensure such.

Association Management

Performance Measurement. Most of the alliances in Germany would be registered as a company of limited liability and publicly listed. This means, that certain information about financial performance such as balance sheets, profit and loss accounts, cash flow statements etc. need to be published or at least shared with authorities. For the German registered association, no guidelines and regulations are given, due to data security for and independence of each individual member. This means that no performance can be measured and no controlling can be conducted. This is a major barrier to ensuring long-term success or stable financial performance. However, the association's headquarters can monitor its own activities and can trace where the membership fees have been invested in, as well as prove to the hotels which bookings have been achieved by the association or sales activities that were created. Another obstacle for monitoring performance is the lack of knowledge from the side of the Ringhoteliers, i.e. the members of the association themselves. Controlling might only be conducted to a minimum, as stated by the CEO, and long-term success cannot be controlled or forecasted at any stage. This is why workshops and further education need to be introduced within the association investigated. Again, performance measurement is conducted on a voluntary basis from the side of the hoteliers.

Leadership. Leadership is a complex topic in the alliance and the association. According to Mc Carter et al. (2011), the purpose of an alliance is to create value through the pooling of resources to provide the alliance partners with competitive advantages that distinguish them over rivals. However, according to Yoshinoe and Rangan (1995) one of the key criteria is the independence of the parties. Hence, a leadership style is not and does not need to be commonly managed as signified by the question mark in one of the boxes, but implemented by each of the members, i.e. parties or partners individually. The level of independence within an alliance, as mentioned previously, is higher than within an association. This is due to the fact, that headquarters within the association play a more crucial and guiding part for the association's members. As pointed out by the CEO of the association investigated, in her business, it is the key aspect that is embodied in the leadership style and the personality she would wish the Ringhoteliers to implement. However, it cannot be forced upon the members and as for the remaining themes, within the structure of the association, the understanding and taking in of the philosophy is the condition for the right attitude towards leadership. The style implemented can be chosen by each individual leader, i.e. Ringhotelier, with what is best for the followers, i.e. employees of each individual hotel. The tasks that need to be executed to make collaboration with headquarters are one of the key success factors to measure whether the right style has been implemented.

Association Perception

Figure 1 is an adaptation of Vanpoucke and Vereecke's model (2010) according to the results of this case study to show the importance of 'service benefits' in contrast to 'cost benefits'. The cost benefits for Ringhotel are depicted in a smaller bubble due to the fact that the major focus of the association lies within the service benefits to all the stakeholders, i.e. the Ringhoteliers and the guests.

The services benefits play the crucial role and are hence illustrated in the bigger bubble. The association serves not only as a pool of knowledge with expertise provided to the Ringhoteliers within the departments of Sales, Marketing, PR, Business Development, Quality Care, Finance and Distribution, but also as a contact point and consulting platform for any issues occurring within the Ringhotels.

When it comes to passing on the actual meaning of the philosophy and what the actual association stands for, it is more important to focus on how the association is perceived and what the stakeholders understand of such. So the intangible attribute association perception has to be added to the model. The values, processes and the philosophy need to be understood. Within an association such an Ringhotels that is spread across Germany and values have to be perceived in the correct way in order to reflect on all the other members of an association, so top down from the Head Office to the employees of the Head Office, to the Hoteliers and their employees and to the guests as well. Therefore the model of the production industry needs to be extended to the intangible dimension of the services industry and the 3 Ps people, processes and physical evidence (who understand the values and the philosophy of it), need to be made aware of the association perception.

Fig. 1. Value of Behavioural Characteristics of an Umbrella Brand in the German Hospitality Industry
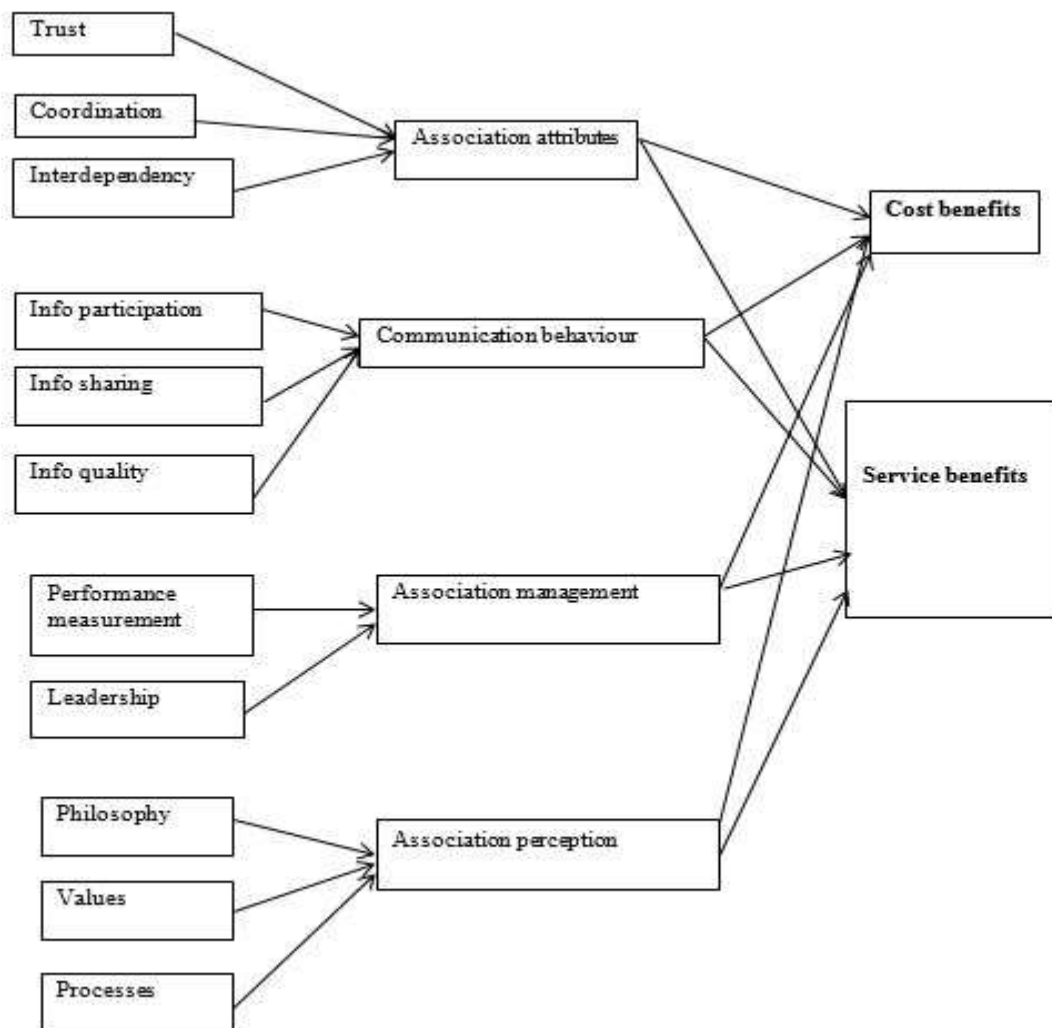
Managerial Implications and Extension of the Model for the Internationalization of Services

Vanpoucke and Vereecke (2010) developed the model for alliances of the production industry of consumer goods. They claimed that the theme 1) alliance attributes with its subthemes – trust, coordination, interdependence; the theme 2) communication behaviour with its subthemes – information quality, information sharing and information participation; and the theme 3) association management with its subthemes – performance measurement and leadership; would be the key aspects that determine the predicted value of cost and service benefits. Taking these further in an in-depth investigation, the level of influence of each theme and subtheme was proven and tested by the authors. However, through the analysis of the hospitality industry, the structure and legal form of a registered association in Germany in general and the structure of Ringhotels e.V. in particular, it was clear that all the themes mentioned are of importance and influence mainly on the service benefits. However, on the cost benefits only limited proof can be provided. The association headquarters could only trace back cost benefits on a limited basis for what they invested the membership fees in and how many bookings could be generated for the individual activities. It cannot be measured how many guests booked Ringhotels due to the fact that they recognise the brand, by word-of-mouth or when collecting brochures and visiting trade fairs, i.e. not stating this when booking. Hence, cost benefits can merely be measured on a very limited scope. In extrapolating the results to the wider field, such issues in collaborative relationships in associations and alliances are fundamental areas for the hospitality industry in general.

For the service benefits, the very multifaceted aspects of the hospitality industry consisting of intangible, perishable, variable and inseparable attributes (Jobber and Fahy 2006) need to be taken into account. Success and efficiency in the services industry, in contrast to the hoteliers' production industry investigated by the authors cannot be traced back merely to success within the supply chain.

As it was made obvious in the analysis of each of the individual themes and subthemes, the major condition of the entire model, i.e. each individual attribute, is based on the understanding and perception of the philosophy and values of the association 'Ringhotels e.V.' by each individual member, i.e. Ringhotelier. if the top management of Ringhoteliers appropriately understand the value and the philosophy, they can in turn, project these to the employees of the Ringhotel and the guests. Authenticity is the most important value of the association i.e. to benefit from the membership and collaboration with the headquarters to make the contractual relationship work with success. Voluntary collaboration and information exchange, commitment to the personal, private and caring slogan of Ringhotels e.V. can support the model of Vanpoucke and Vereecke (2010) to be implemented for an association of the hospitality industry and considered for other countries.

The implications are that association attributes, such as trust and the willingness to establish trust are only provided once the commitment towards the association exists. Coordination and the involvement of not only the different stages within the Ringhotel, but also the headquarters and an open mind towards criticism and changes are other factors. Interdependence and the acceptance of mutual dependencies from the side of the association headquarters, as well as the Ringhoteliers and the willingness to collaborate are crucial. These results throw further light on how hoteliers in associative relationships in other countries could look to develop such a shared culture.

Finally, this research focuses on the top management subjective views and perspectives. Although Ringhotels e.V. is an important hotels association in Germany, other associations in the hospitality industry should be investigated. The remaining layers of stakeholders, i.e. the Ringhoteliers and the guests need to be investigated. Thus, the perception and statements of the top management employees could be confirmed.

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Tourism's Potential for Learning: Understanding Local Cultural Perspectives on Environment

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Abstract

This paper examines the multiple threats facing the preservation of the Cultural Landscape of Honghe Hani Rice Terraces, and proposes that a consideration of the various meanings and applications of the term culture may be useful in creating an environment in which better informed conservation decisions can be made. This paper examines how different stakeholders within the rice terrace posses varying understandings of culture, and argues that these distinct views of culture also show the relatively unique ways our participants understand the environment. The paper then goes on to argue understanding these different interpretations of culture may be the key to finding effective solutions to the environmental problems facing the rice terraces. Finally, the paper considers how understanding these different perspectives, ought to represents a challenge not only for academics and industry, but also for visitors themselves, and one that speaks to the historical foundations of touristic experience as a form of education.

Keywords: Tourism, Environment, Education, Culture, World Heritage

Introduction

On the 22 June 2013, the Cultural Landscape of Honghe Hani/Akha[106] Rice Terraces, often simply referred to as the Yuanyang Rice Terraces in the south Yunnan province were granted world heritage status by UNESCO (UNESCO, 2013). This development obviously represents a key moment in the history of this unique site. More than anything else, it marks the time when the site garners a high level of attention both inside China and worldwide, and it is also likely to be a pivotal turning point in the ongoing development and transformation of the area. However, in addition to this being a celebratory occasion, the moment also provides a key junction at which to reflect on the history of the site, the problems and challenges facing the area today, and to consider what direction the site may take in the future.

In order to achieve this, a team from Minzu University of China, comprising of Chinese and international scholars undertook an intensive 10-day fieldwork in the Yuanyang rice terraces, where we met a wide variety of stakeholders in the site. These included representatives from state-owned The Yunnan World Expo Yuanyang Hani Terrace Culture Development Company, owners and employees of a wide range of tourist accommodation in the scenic area, ranging from large state-owned enterprise backed hotel operations to small locally-run guesthouses. We also met residents and community-leaders from a number of villages, government officials from village, town and county level.

Our attention for this project was specifically focussed upon the mixing of cultures and the environmental challenges facing the Yuanyang rice terraces. And we conducted a large number of in-depth interviews, including 25 recorded interviews totalling around 20 hours in length and many other informal discussions. We collected both qualitative and quantitative data, and perhaps most significantly, were able to observe first-hand the settings, behaviours and interactions of all of the above parties as they went about their daily life in the rice terraces. Other forthcoming articles from this project will aim to discuss more concretely the specific issues that became clear to our research team with relation to the environment, and will attempt to outline likely outcomes and suggest possible measures that may help to address some of the challenges that the environment is facing.

This article, however, will attempt to achieve something different to the rest of the output of the project.

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106 Akha is an ethnic group inclusive of Hani widely distributed in South East Asia and has been widely researched

Here we aim to tackle more conceptual issues, and want to think more broadly about the way we approach and frame research on sites like the Yuanyang rice terraces. This article will suggest that in order to address the very real on-the-ground issues and challenges facing the fragile environment of the Yuanyang Rice Terraces we first need to consider the way in which we think about *what culture actually is*, and as such, what we expect the experience of tourism to provide us with. The aim of this paper is not, therefore, to make a set of concrete recommendations and proposals for implementation. As we will shortly outline, there are already plenty of stakeholders involved in the rice terraces, each with their own view of what course the development of the area should best take. Having spent only a very limited amount of time at the site, and coming from backgrounds of anthropology and management studies, we must acknowledge that we are hardly best-placed to offer such advice. Instead, our aim in this essay is to try to provide an 'intellectual space' that may be better suited to imagine what the future could be like and how that may result from the encounters that take place in the exhilarating environment of the Yuanyang rice terraces.

This paper is comprised of three parts. In the first section we will outline some of the key challenges that are facing the Yuanyang rice terraces, and how these are combining to create a unique threat to the environment of the terraces, which, in turn, places the entire future of the site in an uncertain position. The second section then moves to an examination of how different people use the concept of culture in quite different ways in the Rice Terraces, and as such these all give rise to quite specific viewpoints on and relationships to the environment. Using this insight on the variety of views on the nature of culture, and how it relates to the environment, in the third and final section we return to the Yuanyang rice terraces in order to fully consider the possibilities of tourism. We wish to suggest that instead of asking how Yuanyang may need to be changed, we also ought to ask how Yuanyang may be able to change *us*? The aim is to stress the educational roots of tourism, in order to emphasise the ability of tourism to affect change upon people in the hope that they will become better informed about the situation of the rice terraces so that they, themselves, can be in a better position to contribute to making decisions that will help to protect the environment in the future.

The Threats Facing the Rice Terraces

The Yuanyang rice terraces face a unique set of challenges that place them in an especially precarious position. This partially owes to the fact that the physical nature of the rice terraces differs from many other sites (i.e. places of architectural interest, ancient cities) that have been afforded World Heritage status. The rice terraces are particularly fragile and require an incredibly high level of constant maintenance. The rice terraces are part of a unique ecosystem. The terraces themselves lie high in a selection of mountain valleys, mostly at an altitude of between 1,000 and 2,000 metres above sea level. Owing to the humid, tropical climate of the area, water from the valleys at the base of the mountain evaporates and travels upwards, where it condenses and then rains. A large amount of forest plantations above 2,000 metres sea level help to catch the rainfall while preventing erosion and landslide. The rainwater is collected into deep man-made drainage channels and eventually fed into the rice terrace field system. The rice terraces themselves constructed out of compacted earth, which is moulded into mounds creating long, thin basin like fields into which rice is planted. There is an overflow point somewhere in the rice terrace, and the water will flow down to the lower fields.

Declining Numbers of People Engaged In Rice Terrace Farming

Despite being breathtakingly beautiful, these rice terraces are also incredibly fragile. Unlike the majority of other World Heritage sites, which tend to be buildings or sites of archaeological significance, the rice terraces distinguish themselves in that their main attraction lies in the agricultural landscape. Furthermore the landscape is a particularly fragile one and requires constant maintenance. The compacted earth mounds that form the walls of the stepped rice fields act as barriers to hold the water in place in order to provide submerged fields in which the rice may grow. However, this water also happens to erode the same walls of the rice terraces, meaning that they require constant maintenance and rebuilding. The arduous nature of rice cultivation, combined with the relatively low earnings has meant that in recent years numbers of local people choosing not to engage in rice terrace farming has been growing quite significantly. This has partly been caused by the migration of young people to the outside area, and partly by local people moving out of agriculture into other more profitable local industries, chiefly tourism related sectors.

The declining number of individuals involved in rice terrace farming has left the remaining agriculturalists stretched to farm the land. Most importantly, they are left with far less time to carry out maintenance and construction of the rice terrace walls. Local farmers explained to us the significant issues relating to the walls being thinner and more unstable in recent years. As the rice terraces are the

main attraction for tourists, and also the primary reason that UNESCO bestowed the World Heritage status, the fragility of their current state is, of course, an issue of particular concern.

Migration away from the Local Area

The problems related to agriculture partly stem from the external migration of many young people away from the Yuanyang area already mentioned. Many of the young people that we spoke to in the scenic area who were thinking of leaving or had previously left tended to site the main reason for migration to outside areas is in order to find employment. In fact, local community leaders place the figure of young people leaving the area at around 80%. However we should nonetheless remember that the external migration of youth away from Yuanyang may also fit in with national trends that expect young people to migrate to county towns and beyond for the purposes of education and employment (Kipnis, 2011), and that in many cases migration, and particularly for young people can also be as much about the transformative effects of upon the self than it is about employment, with migration offering opportunities for new experiences, access and consumption of new goods, romantic relationships and freedom from parents that are not available in the local area (Jacka, 2005).

The migration of individuals to outside is a cause for concern precisely because of the challenges that arise with regards to the transmission of Hani 'culture'. Particularly with regard to agriculture, as was mentioned before, the reluctance of young people to remain in the local area has meant that fewer young people possess the skills and knowledge required to maintain the rice terraces. External migration also makes the transmission of other elements of Hani culture more difficult, this includes aspects of language, ritual life, music, dance and societal organisation. Many of these elements perhaps make most sense in the context of society, so when individuals choose to move away from Yuanyang, this is bound to impact upon the transmission of these aspects of life. However, to today some young people still return to Yuanyang during festival and planting seasons, which suggests the effects of these ruptures ofcultural transmission may not necessarily be fully felt until the next generation. For example, we met an elderly Hani community leader, who was particularly worried about the flow of youth to the outside. He remarked to us that 'Young [Hani] people do not understand Hani Culture'.

We ought to remember that some external migration is perhaps somewhat inevitable, and can, at times, be extremely beneficial to both migrants and the region they migrate from. For example, there exists much evidence to suggest that in China much migration happens to be circular migration, with migrants eventually returning to their place of origin, bringing with them new skills and ideas from outside (Connelly et al., 2010:4; Zhang, 1999). However, it is nonetheless important to note that more local employment opportunities, training and entertainment for young people may also help to stem the flow of persons away from the area.

Increasing Visitor Numbers

A further threat to the Yuanyang rice terraces comes in the form of increasing visitor numbers and increasing touristic exploitation of the rice terraces. First of all, it is worth mentioning that the there is nothing intrinsically wrong with tourism *per se*, and indeed tourism has been instrumental in the increasing financial wealth of the area. Nonetheless, the increase in visitor numbers is bringing with it a number of specific challenges.

The numbers of tourists visiting the rice terraces has increased markedly in recent years, and is expected to do so even more in the future, both with the rapid development and 'opening up' of the west of China, improving transport infrastructure, including a new access road to the site. Nonetheless, it is difficult to ascertain the precise numbers of tourists to the site owing to the fact that there are two main access roads into the site, and the rice terraces themselves can be accessed through innumerable locations. Currently there is no use of automated vehicular or pedestrian traffic counting devices which may be helpful to monitor traffic flow throughout the area. Whatever uncertainty there is regarding the precise numbers of visitors it was anecdotally reported that the number of visitors has been increasing in recent years. The nearest figures for official 'recorded visitrs rose from 32,000 in 2009 to 150,000 in 2012. The Yunnan World Expo Yuanyang Hani Terrace Culture Development Company also reported a significant increase in ticket sales to the scenic area over recent years with income from ticket sales rising from 750,000 RMB in 2009 to 5,300,000 RMB in 2012. The company projected 12% increase in visits and ticket sales in 2013.

The increased visitor numbers have bought a set of significant environmental challenges. These include an increase in the amount of waste and litter left behind by visitors, including both that which is correctly disposed of, but also that which is discarded by the roadside and in the scenic area. The increased number

of visitors in the settlements in the scenic area also place unique demands on the infrastructure that supports tourism. This includes increased demands for tap water (currently fed by untreated spring water within most villages) and electricity, and problems with dealing with sewage and wastewater in a site where there does not exist a properly integrated sewage processing system.

Increased tourism numbers also bring issues regarding transport. There has been a significant rise in the number of visitors to the scenic area who are choosing to drive their own cars. Driving one's own vehicle offers greater independence, privacy and a freedom to follow one's own schedule as opposed to following tour-groups. However, on the narrow, and sometimes poorly surfaced winding mountain roads the presence of increasingly large numbers of vehicles is causing problems of congestion and also noise and air pollution. Furthermore, driving through the scenic area in one's car also may naturally somewhat limit the opportunities tourists may have for interacting with local populations.

Aside from cars, tourism has also bought with it specific sets of touristic material culture familiar from other parts of China. Xinjie, the town that lies in the centre of the scenic area, now features multiple large, luxury hotels, shops, restaurants and karaoke bars. This is clearly a mixed blessing. On the one hand, all these institutions create jobs for local people to serve the tourists and bring a large amount of money into the local economy. On the other hand, the increase in the tourist trade also tends to take more people away from agriculture, further underlining the precarious nature of the rice terraces. The architecture and styles of these developments can sometime jar considerably when placed against the local landscape, although there have been limited efforts to create new styles of hotels and guesthouses that fit more sympathetically into the local environment, such as by limiting the use of concrete for building, and reintroducing thatched roofs into the rural landscape, these remain the exception rather than the rule

If all the threats to the Hani rice terraces listed above sound bleak, the intention here is not to be overly critical of Yuanyang's development to date. Indeed, as mentioned already, the opening-up and increase of tourism, and the increased migration to the outside have both helped improve the local economy and quality of life immeasurably over recent years. However, the point of listing these challenges is to emphasise that all of them carry the very real possibility that they may directly bring into question the integrity and continuation of the rice terraces themselves. As one Han manager of the The Yunnan World Expo Yuanyang Hani Terrace Culture Development Company told us "if there is no rice terraces, there will be no Hani culture" (*ruguo meiyou titian, jiu meiyou hani wenhua*). It is this very threat to the Hani culture that we wish to turn my attention to in the next section of this paper. We wish to assert that the way in which this might be mitigated is if we were able to rethink precisely what culture is, and what we expect from tourism in terms of it. Rethinking what culture is and what we might want from tourism will hopefully give rise to a situation in which people are more able to exchange and receive the view of others in the scenic area without the authors having to didactically providing an endless list of measures to be implemented.

Different Cultures and the Environment in Yuanyang

We think a discussion of culture is important here because, as we shall see, different people in the rice terrace area tend to have different views on it. We will attempt to list some of these views, before suggesting a more anthropological viewpoint on the nature of culture, and saying how this may contribute to the discussion.

"Young Hani people don't know Hani culture" - this quote came from a local Hani community leader, a man who had set himself up as a proponent and safeguarder of the Hani culture. He had written a number of books on Hani culture, including recording parts of the language. He had been actively consulted by the tourism company on the content for the exhibition centre and his books were on display there. Much of his own activities were, in fact, slightly reminiscent of 'salvage ethnography', where ethnography concerned itself with the worry that a particular culture was 'dying out', and therefore concentrated on the recording and presentation of those parts of a culture that were seen to be particularly at risk of 'disappearing forever' (Gruber, 1970). Despite this man's his active hand in the preservation of the Hani culture, he seemed to remain pessimistic with regards to its future continuation, particularly amongst young people.

One of the Han managers of the Shiboyuan Tourism Development company told us "if there is no rice terraces, there will be no Hani culture". Here the manager identified culture as being dependent upon rice cultivation. This is an especially significant claim as it could be said to correspond to a wider pan-Chinese understanding that Chinese society is, at its heart, a fundamentally agricultural society (Fei, 1992). This form of 'cosmological positioning', whereby culture is reconciled as being wholly dependent

upon the land and resources, is significant in terms of the fact that it obviously tends to enormously privileges the environment. But furthermore, such an approach to the environment also recognises that the environment is worth preserving, because it will, in turn, preserve culture (however, what is less clear is whether this works the other way around, i.e. whether it is also necessary to think about culture as being necessary for protecting the rice terraces).

We also frequently encountered occasions when 'culture' was marked out, made overt and commoditised. On multiple occasions when we were at meals and restaurants, particularly at those hosted by government bodies or state-owned enterprises in the area, the hosts of the dinner would instruct their sub-hosts to sing Hani songs. These songs are typically powerful, a cappella songs that centre on themes of marriage, romance, friendship and drinking, and are sung in either the Hani language or in *putonghua*. At these occasions, culture was made explicit performed with music coming to resemble an essentialised part of Hani culture. The similar may also be said to occur for dancing. There exists quite a large body of evidence showing that this form of essentialising, authenticating and commoditising ethnic minority culture in song and dance happens in many places in China (Gladney, 1994; Feifan, 2003; Wall and Xie, 2005; Xie and Wall, 2002; Hillman, 2003)

Then there is also culture being used to describe difference. On interviewing the Han owner of a guesthouse that had been running in the Rice Terraces for many years, we spoke about the environmental challenges of keeping livestock in Hani and Yi villages in the scenic area. He accounted the different livestock rearing practices in different villages as being linked to 'culture'. The reason that the villages had different practices for raising livestock was because their 'culture was different' (*wenhua bu yiyang*), he explained that in Hani villages, pigs tended to be kept on the ground floor of villager's houses, or in the alleyways between the houses, causing significant problems with regard to the effluent produced by the animals. By contrast the Yi villages tended to keep all of the villager's pigs together in a centralised location, which makes the management of effluent easier, and is more likely to prevent the contamination of watercourses, and generally tends to make the village cleaner and more pleasant. Here, it is the way livestock are reared, but also the habits of the various ethnic groups, which are defined as being culture.

We have above given four quite distinct examples of how culture can be understood and applied in a social context within the scenic area of the rice fields. We cannot, however, claim that the examples given above necessarily represent a fixed worldview of the people who gave them, or that they represent the view of any particular ethnic or social group within the rice terraces. It may well be that people hold more than one view of culture, or certain views of culture at certain times. And of course, talking about culture may in fact be different to experiencing it, or applying cultural concepts within one's own life. What is clear, however, is that all of these quite distinct views of culture also imply a distinct way of understanding at the environment. This included the Hani community leader who said the lack of cultural understanding by Hani people meant that they did not know how to look after the rice terraces; the state-owned enterprise tourism development manager who placed Hani culture as dependent on the rice terraces; as something to be performed and watched, essentialised culture catering for visitors to the terrace; and, as a way of explaining differences in animal rearing practices (and the attendant pollution caused by them) between two ethnic groups.

It is not that any of these opinions are necessarily right or wrong, however, it is the case that talking about culture seems to be able to provide us a window onto which we can become more aware of the specific environmental issues facing Yuanyang's rice terraces. And if we are to find any feasible solutions to these environmental problems we perhaps need to think about how to best understand these orientations towards culture.

Tourism and Education: What We Can Learn From Culture

This is where anthropology is relevant, and is the part of the essay where we are more qualified to make statements. Anthropology has, for a long time made the study of culture one of its central concerns. This was pioneered by Bronislaw Malinowski who, in 1914 travelled to Papua New Guinea in order to undertake extensive research into economic exchange on e that was to eventually become the basis of the ethnography *Argonauts of the Western Pacific*. What defined this research was Maliowski's methodology. He lived in Papua New Guinea for two years amongst the people, and pioneered 'participant observation' a research method that privileges everyday contact with the people that one is trying to study. The chief goal of the anthropologist, according to Malinowski, was "to grasp the native's point of view, his relation to life, to realize his vision of his world" (Malinowski, 1961:25).

Although Malinowki's work concentrated mainly on the society of the people that he studied, it was later Frans Boas who was responsible for the birth of cultural anthropology, widening the lens out a little further by claiming culture was fluid and dynamic, with constantly dynamic borders and moving traits.

I am not trying to claim in anyway that the research we conducted in the rice paddies is extremely ethnographic in nature. But in the 10 days that we spent there we did try to spend as much time as possible talking to and being with people who lived or worked with the rice terraces. It seems obvious that had we been able to spend and extended period of time in the rice terraces we would have ended up with an even better understanding of the intricacies of their daily lives and how this was impacted upon specific problems related to the environment.

However, even despite this, there were moments when we as researchers were profoundly influenced by the encounters that we had with our respondents in the rice terraces. This was perhaps seen most explicitly in the case of a young man, Hani man, in his 20s who owned a guesthouse in the town. The guesthouse owner was incredibly good-natured and friendly. He told use about his life story: that he had not done well in school but that, by working in another guesthouse in the town he had gradually accumulated enough experience to run his own, and had invested money through a government loan in order to be able to build the guest house.

However, what endeared us most to him was that he seemed to have a completely different notion of property to everyone else we met during our time there. He explained to us that he refused to put locks on the doors to the guest rooms in his guesthouse, and that no property of any of the guests had ever been stolen. There were no televisions in any of the rooms, and when some guests complained about this to him, he told us that he would wittily retort to them 'have you come here to see the television, or have you come here to see the rice terraces?' Most remarkably of all, he also never took any room deposit from any of his guests when they moved in to the hotel, and insisted not take any payment from his guests until they finished their stay at the guesthouse. There had even been a couple of occasions when guests took advantage of his benevolence, and left without paying, but he insisted that he didn't want to take any money from people before providing services for them.

We went away from our conversation with this guesthouse owner feeling truly moved. We wondered, what if the world that we *actually* lived in could be more like the one that he was creating in his guesthouse? One where there was less worries about property, or about profit? The guesthouse owner did not want to make a 'quick buck', and his attitude and friendliness that he showed his customers meant that many of them came back year after year, he told us.

The purpose of giving the example of the guesthouse owner above is not to say that his culture may necessarily represent that of the Hani people. Instead, the example is given because it shows the impact that such a case can have upon people and suggests that if we are looking for ways to protect the environment in Yuanyang, then the answer may very well come from listening closely to the cultures that already exist there, rather than imposing our own strategies and solutions from the outside. If we are to do this, then the way that we think about the culture of others is incredibly important.

And when we talk about 'we', I am not referring solely to us as researchers, or to the tourism industry. Instead, we are talking about questioning the entire experience of tourism itself. We want to propose that tourism should also be thought of in terms of cultural experience, and it can fundamentally be about achieving a change within one's self. There is a historical precedent for this which goes right back to the roots of the practices of tourism itself.

Arguably the origins of modern tourism stem from The Grand Tour, which referred to a trip of Europe often lasting between months and years, and one mostly embarked upon by young upper-class North European men, but especially the British (Chaney, 1998). The custom took place from the mid-17th to mid 19th century. The grand tour was mostly associated with the British upper-class and nobility and wealthy landed gentry, although other European nations soon also started to join in.

But this touristic experience was not about fun, or pleasure. Rather, its primary purpose was conceived as being *educational*. The Grand Tour's chief aim was to expose both these travellers to the opportunity to view the culture, art, and music of the Renaissance and to be able to have exchanges and friendships with the European continental aristocracy. It was normal for those embarking on the tour to have a tutor or a guide.

Clearly this combination of education with tourism is something already familiar to people in China, and the use of guides and introduction signs at tourist sites nationwide is commonplace. However, I want to close by again calling for us to deeply consider what sort of cultural interactions we want to have in the Yuanyang rice terraces, and not just how these interactions might be able to protect the environment of the rice terraces, but also help us to understand more deeply how this environment is viewed by all those involved. If we can achieve this, then perhaps subsequent interventions will be better thought-out, more efficient, easily implementable and agreeable to the numerous stakeholders.

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Tourism Economic Impacts of Administrative Boundary Adjustment: A case study in Shanghai

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Abstract

In recent years, there were many adjustments of the administrative division in different provinces. It brought all kinds of the economic effects for city's economic development and urban tourism with the spatial adjustment. It is an important research issue for local government to cope with under the background of internationalization tourism strategy. This paper selected Huangpu District in China as the research example, to analyze the regional economic impacts with administrative division adjustment in urban tourism resource development, and to remodel tourism destination image and tourism cultural transmission by these adjustments. Through the empirical analysis, it wanted to reveal the functions and roles of local government on restructuring the development strategy of urban tourism.

Keywords: Administrative Division, Boundary Adjustment, Economic Impact, Urban Tourism

Introduction

Nowadays, the governance model based on the units of administrative divisions has great impacts on the economic and cultural development of the society. The organization of administrative divisions can lead a rapid regional economy development with regional resources, but it may also hinder the coordinated development because of economic interests competing by industrial isomorphism and protectionism. As a comprehensive industry which involves other industries and departments, tourism industry has some characters of crossing various fields, different regions and many areas. But meanwhile, it is also faced with many problems, such as the administration of scenic region, the consumption environment, the source market, and the rational competition, which are caused by the adjustment of administrative division. In recent years, China government took many steps to make adjustments on the administrative divisions. In 2009, Tianjin canceled the district of Tanggu, Hangu, and Dagang, and set up the Tianjin Binhai New Area. In 2010, Dongcheng District, Chongwen District, Xicheng District, and Xuanwu District in Beijing, were adjusted into two new districts: the new Dongcheng District and new Xicheng District. In the same year, Shenzhen and Xiamen both respectively expanded their scales of administrative division. Chongqing also established Liangjiang New District, which covers three previous administrative districts (Jiangbei District, Yubei District, Beibei District) and several previous functional economic zones (Chongqing's northern New District, Lianglu-Cuntan free trade port zone, and Liangjiang Industrial Zone). In addition, many national-level New Districts, such as Zhoushan Archipelago New District in Zhejiang Province, Lanzhou New District in Gansu Province, Nansha New District in Guangzhou City, and Zhengdong New District in Zhengzhou City, were also founded. In 2009, the administrative district of Nanhui was integrated into Pudong New Area. In 2000, Nanshi District and Huangpu District were integrated into the new Huangpu District. And Luwan District was also merged into the new Huangpu District in 2010. The two adjustments on the administrative division of the central area in Shanghai within ten years reflect the government's exploration on the urban economic spatial development.

Does the adjustment of administrative boundary have a positive impact to improve the urban spatial administrative structure, and the function of central area? How should local governments cope with the new opportunities and challenges caused by the adjustments, and how should they make full use of such adjustments to develop the tourism economy? These are main questions discussed in this paper.

Literature Review of Relevant Research

Chinese researchers discussed many aspects of administrative division adjustments. Firstly, there are different understandings about the definition of administrative division. From the perspective of law, the administrative division is a portion of the hierarchical management system with national government function. From the perspective of politics, administrative division is the national territory which is formed for the purpose of strengthening resident governance. From the perspective of geography, considering the geographical conditions, regional history traditions, economic relation and ethnic distribution, it is the division of management area.The adjustment of administrative division mainly includes: changes of organizational system (such as adding, dissolving and resetting); changes of administrative region boundary; changes of administrative government location; changes of subordinate relations; changes of administrative level; and changes of administrative designation.

Regional economy development always expands within a specific geographical space. Administrative districts and economic zones are both carriers of the regional economic development. There are connections and differences between them. Administrative district is a complex political and economic body, and depends on the horizontal economic network. Its major participants are corporate enterprises.(Zhou,1999) Economic zone is a production complex on the basis of regional economic differences and labor division of labor, with emphasis on external collaboration and resources optimal allocation. Compared with it, administrative district depends on the jurisdiction of the authority and is characterized by geographical restrictions on economic policies. To some extent, the local protectionism will result in market fragmentation and block of resource flow. Meanwhile, administrative district and economic zone have mutual impact on each other. An administrative district with outstanding economic development may have a radiation effect on the surrounding areas, and contribute to the formation of a broader economic zone.

Secondly, some researches focused on the phenomena of "administrative district economy". It is a special regional economic phenomenon which appears in the process of China's transformation from the planned economy to the market economy, and the process of regional economy from vertical mode to horizontal cooperation. It results from the rigid constraints of administrative division on regional economy.(Liu,1996) "Administrative district economy" is also a special type of regional economy. It shows: competition of enterprises and flow of production factors are greatly affected by economic behaviors of local government; administrative center and economic center are highly consistent, with high degree of economic centralization and exhaustion of boundary economy.(Shu,2003) In order to eliminate the "administrative district economy" phenomenon, the government should improve the legal protection, promote the diversification of the administrative subject, and ensure the smooth coordination of economic operation (Meng,2006). "Administrative district economy" leads to the block of factors flow and stagnation of economic development. To solve this problem, the government should establish and improve the resource sharing mechanism, encourage regional cooperation and coordinated development. (Xiong,2007) Through integration, it can promote the integration of economic zone and administrative district, and avoid vicious competition of industry layout and resources allocation.(Gao,2010)

Thirdly, about tourism economic effects of administrative division adjustment. The current researches are mainly conducted from the perspectives of economic development and planning layout. Case studies mainly focus on the division adjustment of traditional tourism cities, the impacts of administrative boundary adjustment, and the centralized management of tourism resources and tourism image, etc. The adjustment of administrative division has positive impacts on regional tourism development. But tourism cities should conduct risk assessment: whether the adjustment is beneficial to preserve the integrity of the tourism culture and resources; whether it is in favor of the protection of the environment of scenic spot and urban landscape; whether it is conducive to the sustainable development of regional tourism industry; whether it does good to coordinate the relationship between the local residents' interests and economic development; whether it is helpful to improve the tourism management level.(Yu et al,2006) Administrative boundary adjustment is a means to make the superstructure adapt to the economic base, reconstruct tourism resources, and coordinate the interest structure. It can weaken the limitation of market barriers, release the development space, and improve the efficiency of tourism management. However, in practice, the government should fully consider the potential positive and negative effects of the administrative boundary adjustment.(Yin,2009) It has the positive meaning of the division adjustment of tourism city, and some existing problems.(Wang et al,2007) Adjustment of administrative division is a policy instrument to promote the regional coordination. Although it can promote the innovative development of tourism city, it should be applied prudently.(Wang,2009)

Finally, on the government behaviors in regional tourism development. From macrocosmic point of view, the role of government in the tourism industry development lies in law perfecting, guidance policy, tourism planning, infrastructure construction and tourism environment creation.(Zhang,2002) Government should pay attention to formulating tourism development strategy, cultivating sound market system, implementing favorable industrial policies and improving the supporting facilities, fostering tourism enterprises which have more potential and viability.(Deng,2000) Government should play a leading role in making tourism regulations, strengthening the protection of tourism resources, providing public goods, gathering and delivering tourism market information, and promoting tourism image, etc.(Li at el,2000) In the beginning of the tourism development in China, the government should act as a pioneer; while as the tourism industry prospers, the government should act as a policy regulator, image propagandist and interest coordinator.(Hao,2001) From the micro point of view, the development of regional tourism products should not be a government action. The government monopoly of the investment in public tourism product should be broken up, and non-state economic investment should be promoted, and thus speed up the reform of tourism management system.(Liang et al,2002)

The studies of foreign scholars mainly focus on the role played by government in tourism development. IUOTO is the first to research the government's role in the tourism industry. It pointed out that government should play as the interest coordinator, whose connotation would deepen with the rapid development of tourism and increased changes of the complexity.(IUOTO,1974) Government should also act as planner, legislator and administrator, and development driver, etc.(Mill&Morrion,1997) Government should play the role of social tourism providers and interest protector.(Hall,1994) Enterprises' mistrust on government, as well as government's ineffective management of tourism are two main factors that hinder the sustainable development of regional tourism industry.(Berry&Ladkin,1997) Through a case study, Antonio & Oliveira (2003) investigated the role of government in tourism investment management from the perspective of environment management.

Tourism Economic Impacts with Administrative Boundary Adjustment

This paper chose Huangpu District in Shanghai as the research example, and used the panel data of other eight central districts in Shanghai as reference. Combined the results of linear regression, it wants to analyze the impacts of regional economy and tourism development under the administrative boundary adjustment in Huangpu District in 2010. In this context, increment of economy aggregate(X11), increment of tertiary industry(X22), fiscal revenue(X33), local fiscal revenue(X44), total retail sales of consumer goods(X55), travel agency reception of tourists(X66), operating revenue of travel agency(X77), hotel reception of visitors(X88), number of hotel rooms(X99), occupancy rate of hotel rooms(X100), and operating revenue of hotel(X110) were selected as the variables for statistical analysis. The data resources are form "*Huangpu Statistical Yearbook*", "*Shanghai Tourism Yearbook*", "*Shanghai Almanac*", and "*Counties statistical bulletin*".

After analyzing the linear regression about travel agency reception of tourists(X66) and increment of economy aggregate(X11), increment of tertiary industry(X22) and local fiscal revenue(X44), we found there is a corresponding relation among these variables. In 2010, when the administrative division in Huangpu District was adjusted, the association relationship between X44 and X66 has shown a significant fluctuation.
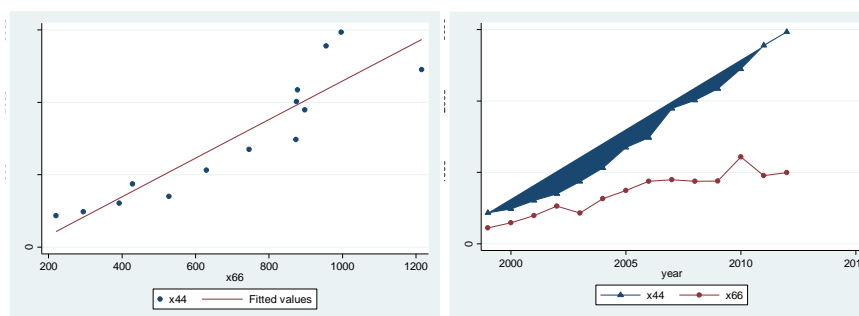
Fig.1. The scatter diagram and data trend of associated variables

By testing the structure and characteristics of data set, it can determine that these data are in accordance with the requirements of the panel data: n=14, T=10, n is bigger than T, therefore the data set can be seen as panel data. In the development process, the data from travel agency are direct sign to reflect the development of tourism industry. Thus, we first select travel agency reception of tourists (X66) as the

explained variable to show its relevance with tourism development. Considering the co-linear relation between the explanatory variables, the function model is specified as:

$$X66_{it}=X_0+X_1X11_{it}+X_2X33it+X_3X77_{it}+X_4X100_{it}+\S \qquad （1）$$

Where X66it denotes the travel agency reception of tourists of district i in year t, X11it denotes increment of economy aggregate of district i in year t, X33it denotes local fiscal revenue of district i in year t, X77it denotes operating revenue of travel agency of district i in year t, and X100it denotes occupancy rate of hotel rooms of district i in year t.

Firstly, it needs to deal with data correction by discounting price factors. Secondly, according to the multicollinearity estimating method of variance inflation factor, VIF=1/(1-Rk2) shows that the maximum of VIF is 3.06, which is below 10, that means there is no multicollinearity. Finally, based on Hausman Test, we need select a appropriate regression model to analysis with the panel data. The value of P is 0.0077, which means that the fixed effect (FE) model is suitable for the analysis.

In order to analyze the impact of the administrative boundary adjustment in Huangpu District in 2010 on the urban tourism development, we chose the method of piecewise regression, conducting the FE analysis with the data from 1999 to 2010 and from 2011 to 2012 respectively. The results of regression are as the following:

Table1. Analysis of Data from 1999 to 2010（Base on X66）

X66	Coef.	Std. Err.	t	P>|t|	[95% conf. Internal]	
X11	.0015102	.0338464	0.04	0.965	-.0657021	.0687225
X77	1.417274	.4776762	2.97	0.004	.4687035	2.365844
X33	-.2651008	.2069081	-1.28	0.209	-.6759793	.1457777
X100	-.0501805	.4892727	-0.10	0.919	-1.021779	.9214181
_cons	68.45674	31.69654	2.16	0.033	5.513686	131.3998
sigma_u Sigma_e rho	30.719513 41.747385 .35126634					

Table2. Analysis of data from 2011 to 2012（Base on X66）

X66	Coef.	Std. Err.	t	P>|t|	[95% conf. Internal]	
X11	-.0210167	.0435884	-0.48	0.640	-.1181377	.0761043
X77	1.70436	.7506507	2.27	0.047	.0318057	3.376913
X33	.0509967	.1668191	0.31	0.766	-.3206995	.4226928
X100	.4581598	.5867255	0.78	0.453	-.8491462	1.765466
_cons	37.50753	24.33402	1.54	0.154	-16.71205	91.7271
sigma_u Sigma_e rho	3.3390142 45.652813 .00532089					

After analyzing the regression, we found that before the integration of Huangpu District, when X11 increases by 1 percent, X66 will increase 0.0015102 percent, demonstrating a positive correlation. After the integration of the administrative division, the changing tendency of X11 shows a negative correlation with X66. Besides, the analysis of data from 2011 also indicates that X33 and X100 are both positive correlated with X66, which can explain the fact that under the background of urban tourism development, tourism industry is experiencing a change from traditional sight-seeing mode to self-service travel mode.

At the same time, in order to verify the impact of the administrative boundary adjustment on the development of service industries, which are closely related with tourism industry, we selected the X22 as the explained variable. We divided the panel data into three sections: the complete period from 1999 to 2012, the sub-period from 1999 to 2010, and the sub-period from 2011 to 2012. Considering the co-linear relation between the explanatory variables, the function model is specified as:

$$X22_{it}=X_0+X_1X11_{it}+X_2X44_{it}+X_3X55_{it}+X_4X66_{it}+X_5X88_{it}+X_6X100_{it}+\S \qquad (2)$$

Where X22it represents increment of tertiary industry of district i in year t, X11it represents the increment of economy aggregate of district i in year t, X44it represents local fiscal revenue of district i in year t, X55it represents total retail sales of consumer goods of district i in year t, X66it represents travel agency reception of tourists of district i in year t, X88it represents hotel reception of visitors of district i in year t, X100it represents occupancy rate of hotel rooms of district i in year t.

From the results of the data analysis, we can see that after integration of administrative division, there is a significant positive correlation between the X22 and X44. Every 1 percent of increase in local fiscal revenue will lead to 3.68267 percent of increase in the increment of tertiary industry. The X100 is also positively correlated with X22. As for X55, X66, and X88, the explained variable X22 demonstrates a more strong positive correlation with above three variables. As the results of the data analysis, the spatial adjustment of administrative division has economic effects on the tourism development, local fiscal revenue and the service industries.

Conclusion

The administrative boundary adjustment of Huangpu District brought about a series of economic and policy regulatory impacts, including the re-organization effect of the urban tourism resources of the new Huangpu District, the integration effect of tourism image, the dissemination function of tourism culture, and the policy effect of the urban tourism development in Huangpu District. These effects as a whole put forward higher regulatory demand for government behaviors under the background of internationalization tourism strategy.

Based on the economic statistic from 1999 to 2012, the paper selected and analyzed the following variables: the increment of economy aggregate, the increment of tertiary industry, fiscal revenue, local fiscal revenue, total retail sales of consumer goods, travel agency reception of tourists, operating revenue of travel agency, hotel reception of visitors, number of hotel rooms, occupancy rate of hotel rooms, and operating revenue of hotel, with the corresponding codes of X11, X22, X33, X44, X55, X66, X77, X88, X99, X100, X110. Through the results of the linear regression analysis among them, we concluded that these variables shown a fluctuation at the point when Huangpu District is on the administrative boundary adjustment.

After analyzing data before and after the adjustment in 2010, we found that before the integration of Huangpu District, there is a positive correlation between increment of economy aggregate and travel agency reception of tourists. After the integration of the administrative division, the changing tendency of them shows a negative correlation. Besides, the data also indicates that local fiscal revenue and the occupancy rate of hotel rooms are both positively correlated with travel agency reception of tourists. The increment of the tertiary industry is associated with the following variables (total retail sales of consumer goods, travel agency reception of tourists, hotel reception of visitors, and occupancy rate of hotel rooms) by further extent impacts.

The adjustment of administrative division in central urban area, especially for Huangpu District, which experienced the integration adjustment in 2010, the reconstruction of regional tourism planning policy, is a complex mechanism. It is a process of continuous adjustment along with the overall development framework of Shanghai urban tourism, economic social development progress, and the people's tourism consumption concept. As a core factor of the regional tourism, the urban tourism resources are greatly promoted by the administrative boundary adjustment. If local government wants to make full use of the economic impact after integration, the scattered resources should be re-organized under the overall framework of regional economic development.

Regarding the background of internationalization, local government of central urban area should pay attention to the supporting factors of the urban tourism development: improving the infrastructure of urban tourism, strengthening the industry supervision, and encouraging the innovation of tourism enterprises. Local government should also lay more emphasis on the protection of local tourism culture and eco-system, promoting the image of urban tourism and brand marketing strategies, and transmit local tourism culture through events and promotion activities.

Due to the internal institutional and spatial boundary changes of administrative division, the adjustments might meet with some problems, such as reversed policies, low efficiency and negative work attitude, which may cause a comprehensive impact on regional tourism economy. These problems will make a higher request for the governing capacity of local government.

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The Effect of TQM, Market Orientation, and Learning Orientation on Hotel Performance in Kingdom of Saudi Arabia: A Conceptual Framework

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Abstract

TQM has been studied across industry and country, but there is still lack of TQM studies in hotel industry that explore the effect of market orientation and learning orientation on hotel performance. Numerous academics have studied that market orientation and learning orientation plays important role in enhancing firm performance, relatively little research has examined how TQM component, market orientation and learning orientation contributes to the hotel performance. In this study, the theoretical framework is based on the TQM dimensions, such as training, information and communication technologies and information systems (ICT/IS), and environmental management. The rational for using this framework is that it has been used and widely recognized as one of the benchmarks of TQM in hotel industry. Market orientation and learning orientation are considered as a competitive advantage and long run hotel strategy for survival in the hospitality industry. Five prepositions will be established to examine the relationship between TQM, market orientation and learning orientation on hotel performance. Hotels showing good commitment to TQM, market orientation and learning orientation will lead to enhance hotel performance.

Keywords: TQM, Market Orientation, Learning Orientation, and Hotel Performance

Introduction

Over three decades, TQM has been studied across industry and country by academicians and industry practitioners. It has been equally applied to manufacturing and service firms, which means that they both can adopt it successfully (Claver-Cortes et al., 2008; Huq and Stolen, 1998; Brah et al., 2000; Prajogo, 2005), although there have been unsuccessful efforts to at implementing it (Kaynak, 2003). Research has shown that strategic benefit of TQM will result in improved employee involvement, improved communication, increased productivity, improved quality and less reworks, improved customer satisfaction, reduced costs of poor quality, improved competitive advantage (Antony et al., 2002; Samat et al., 2006), improvement in strategic performance (Zhang, 2000), and organizational performance (Talib, 2011).

A key component in the success of organizations is the extent of their learning orientation. For example, Irani et al. (2004) and Lam, Lee, Ooi, & Lin (2011) concluded that TQM acts as a stimulator for learning to occur in an organization, and when both are integrated together, they can help an organization achieve excellence. In this context, it will involve the whole organization in creation and utilization of knowledge (Lam, Lee, Ooi, & Lin, 2011; Slater & Narver, 1994). Learning promotes innovation activities, and quality is the principal determinant of success in competitive environments (Deming, 1986). Although TQM and learning orientation has been widely recognized as an important quality system approach, and have been empirically tested to increase the business performance (Hung et al., 2011; Martinez-Costa & Jimenez-Jimenez, 2008), however, relatively little research has incorporated market orientation dimension as a determinant of business performance, especially in hotel industry context. The majority of research studies have focused on TQM implementation, leadership and performance relationship (Demirbag et al., 2006; Kaynak, 2003; Prajogo and Sohal, 2006; Wang et al., 2012). Therefore, this study is to investigate the effect of TQM, market orientation and learning orientation on hotel performance in Saudi Arabia context.

Literature Review and Conceptual Framework

Total Quality Management

Researchers have defined the TQM concept in different ways. For example, Evans and Lindsay (2011) define the TQM as a management technique that focuses on quality and aims to improve organizational effectiveness and flexibility. Meanwhile, Easton and Jarrell (1998) suggested that TQM generates high-

quality products, reduces costs, increases customer and employee satisfaction, and improves financial performance. Although TQM has a variety of definitions, Hung et al. (2011) explained that TQM is a management approach for improving organizational performance that encompasses a variety of both technical and behavioral aspects.

In hotel industry, TQM is defined as a comprehensive package management approach that focus on continuous improvement within organizations to provide superior customer value and meet customer needs (Wang et al., 2012). In this context, customer satisfaction is considered to be the main purpose of TQM, and continuous improvement is essentially the main factor ensuring that customer expectations are met and eventually exceeded (Daghfous and Barkhi, 2009). Furthermore, Daghfous and Barkhi (2009) highlighted that the key components of TQM are customer focus, continuous improvement, process and services, statistical measurement, benchmarking and employee empowerment (Hung et al., 2011).

Market Orientation

Pelham and Wilson (1996) define market orientation as the business culture that enables a firm to achieve excellent performance through its commitment to create superior value of products and services to customers. Meanwhile, Hult et al. (2004) as well as Kohli and Jaworski (1993) define market orientation as a set of on-going behaviors and activities related to generation, dissemination, and responsiveness to market intelligence.

Several scales exist for measuring market orientation. For example, Kohli et al. (1993) developed a valid measure that includes intelligence generation, dissemination and responsiveness. Wang et al. (2012) suggested that market orientation consists of four dimensions: information generation, information dissemination, shared interpretation, and organization responsiveness. Meanwhile, Langerak (2003), Li et al. (2008) and Merlo & Auh (2009) suggested that market orientation has three dimensions namely competitor orientation, customer orientation and inter-functional orientation. Day and Wensley (1988) define competitor orientation as the ability for a seller to understand the short term strengths and weaknesses and also the long term capabilities and strategies for both current customers and key potential customers. Deshpande et al. (1992) describe customer orientation as a mind-set that puts clients' interests ahead of the interests of other stakeholders including the owners, managers and employees. Narver & Slater (1990) define inter-functional orientation as the coordinated utilization of company resources in creating superior value for target customers.

Learning Orientation

Learning orientation is conceptualized as a basic attitude towards learning, i.e. the organizational and managerial characteristics that facilitate the organizational learning process (Chiva and Alegre, 2009; Real et al., 2012). In this context, learning orientation is viewed as a firm's values which influence the firm's tendency to create and use knowledge (Wang, 2008; Wang and Wei, 2005), and management's commitment to support a culture that fosters learning orientation as one of its main values (Baker and Sinkula, 1999; Real et al., 2012). Similarly, Hurley and Hult (1998) viewed that learning orientation as a precursor to build a culture that is receptive to innovation. In this sense, Dodgson (1993) explained that learning orientation can facilitate the firm to respond effectively to external changes, such as customer preferences, and technology products. As a firm becomes larger, commitment to learning plays an important role in developing its assets and capabilities concerning its key activities (Wang, 2008). If a small firm is less learning-oriented than its competitors, it may have substantial difficulties in survival (Rhee et al., 2010) and less innovativeness (Pesamaa et al., 2013; Zhou et al., 2005).

Hotel Performance

Hotel performance is an overall concept used to display the final result of the operation activities of an organization and it is also an index for evaluating the level of project achievement (Duqrette and Stowe, 1993; Wu and Lu, 2012). Researchers have found a high diversity of performance indicators (Wu and Lu, 2012). For example, Venkataraman & Ramanujam (1986) proposed three perspectives for performance assessment namely financial performance, enterprise performance, and organizational performance. Reuch et al. (2009) suggested two types to measure performance; namely financial and non-financial aspect.

In hotel industry, Haber and Reichel (2005) proposed that two types of hotel performance; namely objective and perceptual. Objective performance is measured by occupancy rate per room, gross operating profit, and gross operating profit per available room per day. Perceptual performance contains

competitive performance and stakeholder satisfaction. Therefore, this paper adopts the measures of hotels performance developed by Moorman and Rust (1999) and Narver and Slater (1990); that include financial and customer-based performance (Wang et al., 2012).

Conceptual Framework

TQM, Market Orientation, Learning Orientation and Hotel Performance

Previous studies have found that TQM has significant relationship on market orientation, learning orientation, and business performance across industry (Demirbag et al., 2006; Lam et al., 2011; Rhee et al., 2010; Samat et al., 2006; Wang et al. 2012), but limited research have been investigated in hotel industry context. Thus:

P1:   *There is a significant relationship between TQM and market orientation*

P2:   *There is a significant relationship between TQM and learning orientation*

P3:   *There is a significant relationship between TQM and hotel performance*

Market Orientation and Hotel Performance

Market orientation has been studied as a determinant of business performance (Cheng and Krumwiede, 2012; Sittimalakorn and Hart, 2004; Wand and Wei, 2005). For example, Wang et al. (2012) concluded that market orientation will increase hotel performance. In this context, a hotel with a high degree of market orientation constantly looks for alternative sources of competitive advantage in order to determine how it can effectively create greater value for its present and future potential customers (Li, Liu, and Zhao 2006). Although the implication of market orientation has been established in market-based economies in which majority of theories are developed and tested, empirical evidence in hotel industries are limited to draw definitive conclusion. Therefore, the following preposition is presented

P4:   *There is a significant relationship between market orientation and hotel performance*

Learning Orientation and Hotel Performance

Previous studies have found that learning orientation has a significant impact on hotel performance (Baker and Sinkula, 1999; Real et al., 2012; Wang, 2008). For example, Maes and Sels (2014) consider that learning is a principal component of any effort to improve competitive advantage, and organizations performance. Thus:

P5:   *There is a significant relationship between learning orientation and hotel performance*

Conclusions

The objective of this study is to investigate the effect of TQM on market orientation, learning orientation, and hotel performance in Saudi Arabia hotel industry. The expected results of this study will be that the relationship of TQM with market orientation, learning orientation, and hotel performance is significant. The results of this study will show that the characteristics of TQM, market orientation, and learning orientation being practiced by hoteliers in Saudi Arabia will significantly affect the hotel performance. The higher the TQM implementation in a hotel, the higher is the willingness of hoteliers to implement market orientation and learning orientation. In this sense, hoteliers need to understand the concept of market orientation that can provide performance benefits to the organizations. Hoteliers need to put priority on the strategic planning. External environmental assessment in the strategic planning can help hoteliers in identifying the competitor orientation of the respective industry. Thus, it would be easier for the hoteliers to utilize existing capabilities and opportunities in order to respond to the threat of competing hotels.

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Using Social Media in Hotel Risk Management: The Case of Bed Bugs

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Abstract

To date, the rise in new media channels has helped bridge the communication gap between the customers and hotels. Particularly, social media has provided a platform for crisis and risk communication both from the consumer as well as the supplier of the product (Sigala, 2012; Veil, Buehner, & Palechar, 2011). Bed bug infestation is a growing health crisis and has obtained increasing attention on social media sites. Tourists are using social media to share their bed bug experiences and to express concerns over the crisis. Various hospitality establishments have proved their vulnerability to the bed bug infestation. Unfortunately, hotel properties may experience economic losses and reputational damages as a result of negative comments, complaints, lawsuits, as well as lack of attention to cure and manage the bed bug problem. To better manage this crisis, this study expands the classical 4R crisis management framework to incorporate social media and applies the management framework to hotels facing a bed bug crisis. This framework discusses the use of social media at different phases of managing a bed bug crisis, which include risk reduction, readiness, response and recovery. Recommendations are also outlined for hotel managers to combat crises that are fought out on social media.

Keywords: Risk Management, Social Media, Bed Bug Crisis, Tourism Crisis Management

Tourism Competitiveness Enhancement: A Case Study of Samed Island, Thailand

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Abstract

Samed Island is one of the most famous tourist's attractions in Rayong province, Eastern part of Thailand. It is so popular among the tourists that it is named "Paradise Island." But, the PTT Global Chemical PLC's oil leakage on 27 July 2013, which is an external factor, negatively affects both Thai and foreign tourists' reliability. It largely decreases the number of tourists visiting the island in August 2013 as high as 129.01% compared to that of August 2012. This reveals the difficulty in dealing with the change caused by external factor of both governmental and private sectors such as the Tourism Authority of Thailand (Rayong Provincial Office), Rayong Provincial Office of Tourism and Sports, Rayong Tourist Association, and Samed Island Restaurant and Resort Club. As a result, it is important to examine the context and to find guidelines for enhancing the competitiveness of tourism in Samed Island. Based on Ritche and Crouch's Conceptual Model of Destination Competitiveness (2006), this mixed method research examines the tourism competitiveness of Samed Island. The quantitative data is collected using 400 sets of questionnaire distributed to tourists, entrepreneurs, and local people. The qualitative data is collected through 1) in-depth interviews conducted to 58 samples consisting of entrepreneurs, tourists, representatives of local people, and representatives of executives of the tourism controlling organizations, and 2) 3 focus group discussions. Related literature is also reviewed to verify the data. The findings indicate that although Samed Island is attractive with a number of qualifying and amplifying determinants, the problems are mostly at destination policy, planning, and development. Due to overlapped responsibility and haggle of the tourism controlling organizations in the area, there is no particular working group. Specific and clear development direction has not been determined nor have the plans been brought to practice. These cause inefficient use of supporting factors and resources including quality of water, quality of service of governmental tourism-related organizations in the area. In addition, there is no integration and cooperation between the governmental and private organizations and, even to their work, there is no fair and obvious evaluation. Moreover, there is not effective communication among related organizations which leads to the lack of mutual trust. In conclusion, to enhance the tourism competitiveness of Samed Island, an appointed working group is needed. With integrated cooperation and participation and effective leadership of the leader, it is responsible for determining policy and planning which require cooperation from governmental and private sectors, representatives of local people and other related parties. For building mutual trust, communication among related organizations must be heightened. Finally, fair and obvious evaluation must be done to the function of the working group which provides feedback for the group to work more effectively and, then, enhances the tourism competitiveness of Samed Island within environmental and social context.

Keyword: Competitiveness Enhancement**,** Tourism Competitiveness, Samed Island

The Potential Impact of Miscommunication ın the Hospitality Industry in Multicultural Societies

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Abstract

Different Cultures May Have A Variety Of 'Cultural Service Personalities' That Can Help Researchers To Explain The Richness Of Culture And The Impact On Consumer Service Expectation. This Can Be Done By Using Different Components Of Culture Such As; Value And Belief Systems According To Hofstede's Dimensions, Communication Systems Of Hall's Framework And Using The Craig And Douglas' (2006) Recommendation Of Combining All Three Components Of Culture (Zhang *Et Al.,* 2008; Cited By Tabari And Ingram, 2013). However, The Growth Of Globalisation And Acculturation And The Complexity Of Local And Global Consumer Culture Also Impacts Upon Consumer Behaviour. The Examination Of Changes In Consumer Values, Using National Culture As The Cultural Unit To Analyse Customer Reaction Towards Service May Not Be A Suitable Framework For The Hospitality Industry. Similarly, Hariri And Tabari (2013) Suggest That Using National Culture As The Cultural Unit Of Analysis For Market Segmentation Is Increasingly Ill-Advised. Moreover, Some Researchers Point Out That English Language (Spoken And/Or Written) Serves As A Fundamental Form Of Communication, And Is An Indispensable Component Of All Costumes (For Example, Cleveland And Laroche 2007). English Language As A Consolidated Form Of Communication In Multinational Businesses, Tourism, Hospitality And Aviation Has Become As The Primary Language Of International Business, Both Modern And International To Many Consumers (Walker 1996). However, It Is Suggested By Fromkin And Rodman (1983) That Over 90 Percent Of The Communicative Process Is Conducted Non-Verbally. Some Of These Elements Could Convey Communication Misunderstanding Or Miscommunication, For Instance A Lack Of Eye Contact Could Be Interpreted As Disinterest Or Impoliteness Rather Than Embarrassment Or Distraction, Or Vice Versa, But In Different Beliefs And Values This May Have Different Meanings. The Other Example Can Be Mentioned As Smiling In Most Cultural Studies Has Been Interpreted As Happiness (Keating *Et Al.,* 1981), But On The Other Hand, A Smile Has Been Used To Cover Emotional Expressions 'Display Rules'. For Instance The Japanese Display Rule Is To Cover The Negative Emotions And Using Smile As 'Mask' (Ramsey, 1984).

Keywords: Communication, Miscommunication, Culture, Hospitality, Multicultural societies

Managing Costa Vicentina as a Tourism Destination for Foreign Surf Practitioners

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Abstract

Being a country with such remarkable conditions for tourism activity and a strong contribution of this sector to the national GDP, Portugal, has also been growing fast in the attraction of Surf practitioners and beginners from all over the world, due to its amazing conditions for all surf levels and to its large extent of shore. Costa Vicentina, a region in the southwest of the country (Algarve), is an example of how surf can be an attraction to visitants. This project analyses three key questions: Where are we now? (situation assessment), Where do we want to be? (vision and goals) and How can we go from where we are to where we want to be? (strategic actions). For the situation assessment, a deep study was developed on (1) trends and changes affecting surf tourism at Costa Vicentina, (2) Demand: Current and potential foreign tourists at Costa Vicentina, (3) Supply: Network of stakeholders in Costa Vicentina tourism industry and (4) Brief overview on Competition. All this is then put together and assessed in a SWOT analysis, which is the basis for the construction of the Vision, Goals and Strategic Actions. These ones intend to fulfill any possible gap and take existing opportunities in Costa Vicentina tourism regarding this specific target. In this project this region is analyzed, as well as the segment "foreign surf beginners and practitioners", and some conclusions are made on how can Costa Vicentina be improved in terms of tourism destination management, regarding this specific target.

Keywords: Surf, Costa Vicentina, Foreign, Tourism.

The Impact of Exchange Rate on Tourism Industry: The Case of Turkey

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Abstract

Although tourism industry has important dimentions as historical, social and cultural, it is a social activity which is the most considered important from economic aspect. From the economic perspective, tourism industrys' foreign exchance earnings, encouraging foreign capital, employment, economic growth and development effects makes it is one of the most important industry. Especially in Developing Countries, tourism income is vitally important for the economy. Tourism is important industry for countries which have consistently current account deficit, like Turkey. There are many factors affecting tourism industry. It is clear that tourism industry can affected by changing of macroeconomics variables, as the other industries. In this context, it can be possible that foreign exchange rate and changing of the foreign exchange rate can affect the tourism industry especially from tourism demand perspective. This study focused on identify relation between exchange rate and tourism demand by using Johansen cointegration test and Granger causality test.

Keywords: Tourism, Exchange Rate, Turkey, Johansen Cointegration Test, Granger Causility Test

Introduction

The development of international tourism for Developing Countries has some advantages to other sectors in terms of needed foreign currency (foreign exchange) in terms of increasing revenues. Tourism is a constantly growing industry and tourism market is relatively less protected unlike manufacturing and other basic commodities market. In addition, the tourism market is a market that consumers have to go production place to consume tourist products. Therefore, it is more effective import substitution. Finally, tourism means both diversification of the economy and reduction of dependence on tradional exports in terms of many countries (Samırkaş and Bahar, 2013).

The tourism sector , especially after the 1980s, showed a rapid development in Turkey. One of the most important factor is " Tourism Incentive Law No. 2634 " which came into force in 1982 (Tosun, 1999). The investments made in the sector has been increased with this law and taken an important step for the development of tourism in Turkey. For example, in 1980 a total of 778 facilities that certified tourism business and investment, with 42,011 rooms and 82,332 beds; by the year 2012, have respectively become 3,830 facilities, 463,039 rooms and 979,896 beds. It has experienced increases in the number of tourists and tourism revenues over the years due to these developments. As only 754 thousand tourists came to Turkey in 1970, these figures rose to 1,288 in 1980 and 35 million tourists came to Turkey in 2013. Likewise, tourism revenues with 51.6 million dollars in 1970 has reached 326.7 million dollars, approximately 6.5-fold increase in 10 years, by the 1980 and become 32 billion dollars in 2013 (Ministry of Tourism, 2013). These figures are an evidence that the tourism sector has showed a great development after 1980.

Especially in our country where constantly deficit of the foreign trade balance, tourism revenue assumes a very important role to close the deficit in foreign trade in other words ensuring the current account balances. As seen in Table 1, the deficit in Turkey's balance of international payments has been showed itself as a problem for many years. At the beginning of planned development period, Turkey has aimed to reduce the deficit in the country's balance of payments by tourism revenues and covered the plan of tourism development.

Table 1. Foreign Trade Deficit of Turkey's Tourism Revenue Share in Closure

Years	Balance of Foreign Trade (Million $)	Tourism Balance (Million $)	Foreign Trade Deficit Share of Tourism in Closure (%)
1985	-2,976	770	25.9
1990	-9,448	2,705	28.6
1995	-13,152	4,046	30.8
2000	-21,959	5,925	27.0
2001	-4,543	8,328	183.3
2002	-7,283	10,021	137.5
2003	-14,010	11,090	79.2
2004	-23,878	13,364	56.0
2005	-33,530	15,83	46.0
2006	-40,941	14,109	34.4
2007	-46,661	15,227	33.0
2008	-63,429	18,405	29.0
2009	-38,730	17,103	44.1
2010	-71,661	16,083	22.4
2011	-105,934	18,044	17.0
2012	-84,066	24,414	29.0
2013	-99,843	27,078	27.1

Source: It is arranged by the authors by using data of turizm.gov.tr the tuik.gov.tr and DPT

Factors affecting the number of tourists coming to the country can be generally sorted as tourism facilities in the country, global economic developments, tourist product prices and changes in exchange rates. In particular, exchanges have a separate significance due to represent the tourist product price for foreign tourists visiting the country (Uğuz and Topbaş, 2011). Any improvement in the exchange rates to be effective in the tourism industry depends on the position of that country to compete in world tourism. For example, in response to any fall in exchange rates, getting increase in the demand for tourism in Turkey and the increase in foreigners entering the country is high, Turkey tourism shows that the services offered in certain standarts corresponding to these demands. In addition, Turkey's tourism to be competitive, comes from the fact of having a number of characteristics with less substitutable compared to other countries. Turkey's tourism is superior to many other countries's tourism as nature, history, culture, life and geography. Due to these features provide a competitive advantage compared to many countries (Demirel et al., 2008).

In this study, it has been studied changes in real exchange rates impact on the number of tourists. The study consists of five sections. The second part following the introduction is given information about literature. In the third section, data set, model used in the study have been introduced and analyses have been done. In the forth chapter, results of the study are summarized and evaluations were made.

Literature

Principal studies that examine the relationship between exchange rate and the tourism and utilized in this study at the literature of tourism economy, can be summarized briefly as follows. First, Crouch (1994) which is a revealed the study that exchange rate affect tourism, is considered that the exchange rate is a mostly determining factor in the estimation of tourism demand. Sinclair ve Stabler (1997) argue for tourists take into account the exchange rate and the low exchange rate regime could promote tourism despite having limited information about the relative prices.

Eugenio-Martin and Morales (2004), between 1985 and 1998 in Latin America, have attempted to explain the relationship between economic growth and tourism revenues with Panel Data Analysis. However, in study, it has been stated to be a weak correlation between tourism revenues with foreign exchange rates and purchasing power parity.

Gallego et al. (2007) 's, "Exchange Rates Impact On Tourism" in his work, has examined the exchange rate arrangements in other words systems's effects on international tourism. Covering the period 1995-2004 and considered as an important tourism destinations in a total of 60 countries that 30 of which are OECD countries , have been attempted to estimate weighted conventional (gravity) model by using tourism and exchange data. As a result, less flexible exchange rates to stimulate tourism mobility and fixed exchange regime are determined to create a positive impact on tourism.

Demirel, Bozdağ and İnci (2008) 's study, were analyzed fluctuations in exchange rates 's the impact on the number of tourists among the countries sending most tourists to Turkey from USA, Germany, France, and England. According to the results, A delay value of the number of tourists coming to the impact of the number of tourists coming is quite a high level. When analyzing the impact of change in the real exchange rate, the rate for only the U.S. A has two significant delay value. For Germany, exchange rate changes have any effect on the number of tourists coming. As for Britain and France, current rate effect has arisen. Real exchange rate changes has created negatively impact on the number of tourists coming. When analyzed in terms of uncertainties of the real exchange rate, the uncertainties of the real exchange rate, except for France, have been identified no effect on the number of tourists coming.

In Uğuz and Topbaş (2011)'s study, the relations with exchange rate and the tourism demand for Turkey is discussed by using the data of monthly tourist arrivals and exchange rates for the period 1990-2010. In this study, the monthly exchange rate volatility was identified for the period concerned by the help of the EGARCH model and exchange rate volatility and tourism demand is studied within the framework of Johansen cointegration analysis . According to the findings, tourism demand has emerged in a statistically significant relationship in the long term with exchange rate and the exchange rate volatility.

In Yap (2012) study, exchange rate volatility was exemined the effect on the number of tourists coming to the country within the scope of the multivariate conditional volatility regression model. In this study covering the January 1991 and January 2011, was selected China, India, Japan, Malaysia, New Zealand, Singapore, South Korea, England, and the United States. According to the findings, Malaysia and New Zealand against fluctuations in exchange rates are more sensitive than others. However, appreciation of the dollar in Austria does not adversely affect Austria tourism in the long term.

Material, Method And Analysis

It can be seen that from the many studies tourism revenues are support to economic development for Turkey (Bahar 2006, Çetintaş and Bektaş 2008, Alper 2008). That's why this sector is very important for developing countries like Turkey. Many countries implement various tourism policy for increasing tourism income by increasing tourism demand. Undoubtedly there are many factors affecting tourism demand. The primary factors can include countries' tourism potential, tourist tastes and preferences. Also it can be possible that foreign exchange rate and changing of the foreign exchange rate can affect the tourism demand. It can be possible assumption that most tourists are more aware of exchange rates and therefore, they may make travel decisions based on the movement of currencies. Because of this assumption, exchange rates have become one of the determinants used for international tourism demand (Yap, 2012: 116). In this study, we try to determine significant relationship between tourism demand and exchange rate or not.

It is used time series data for definding relationship between exchange rate and tourism demand. Many macroeconomic time series contain unit roots dominated by stochastic trends as developed by Nelson and Plosser (1982). Unit roots are important in examining the stationarity of a time series because a non-stationary regressor invalidates many standard empirical results (Dritsakis, 2008: 2011-2012). If standard regression techniques are applied to non-stationary data, the end result could be a regression that looks good under standard measures (significant coeffecent estimates and high R^2), but which is really valueless. Such a model would be termed a"suprious regression"(Brooks,2008:320). The presence of a stochastic trend is determined by testing the presence of unit roots in time series data. In this study Augmented Dickey-Fuller (ADF) and Phillips-Perron unit root test are used for testing to the series' stationarity. According to the unit root tests results, we tried to find cointegration relations for the non-stationary series groups which are stationary after first difference.

The notion of cointegration was first introduced by Granger (1981) and Granger and Weiss (1983). It was further extended and formalised by Engle and Granger (1987). Cointegration describes the existence of an equilibrium or stationary relationship among two or more time-series, each of which is individually non-stationary. The advantage of the co-integration approach is that it allows integration of the long-run and short-run relationships between variables within a unified framework (Narayan,2003:371). If the time series (variables) are non-stationary in their levels, they can be integrated with integration of order 1, when their first differences are stationary. These variables can be cointegrated as well, if there are one or more linear combinations among the variables that are stationary. If these variables are being cointegrated, then there is a constant long-run linear relationship among them (Dritsakis, 2008:2011-2012). We use Johansen's maximum eigenvalue and trace tests to defining cointegration relation between foreign exchange and torursim demand for the integrated order one (I(1)) series. Johansen's procedure builds cointegrated variables directly on maximum likelihood estimation instead of relying on OLS

estimation. This procedure relies heavily on the relationship between the rank of a matrix and its characteristic roots. Johansen derived the maximum likelihood estimation using sequential tests for determining the number of cointegrating vectors. We use this procedure to test for the existence of cointegrating relationships between series group.

Cointegration analysis gives an account of whether there is a long-run relationship or not; however, it does not explain the direction of the relationship. Granger causality developed by Engle and Granger (1987), based on error correction model, enables us to explain the direction of the relationship. We used the Granger causility test for explaning the direct retaioship between foreign exchange rate and toruism demand.

We search relationship tourism and foreign exchange rate on two stage. Firstly we define relationship between tourists' expenditure and exchange rate relation. So, we chose the average tourism revenue per tourist(PERT) and real effective exchange rate index[107](REX) as datas for the 2003Q1-2013Q4 period. The data in exchange rates was obtained from Central Bank of the Republic of Turkey and average tourism revenue per tourist was obtained from Turkish Statistical Institute. The second stage we tried to find relationship between foreign exchange rate and tourism demand. We have created three basic groups according to major currency for the January 2002-December 2013 period. So, we chose United States Dolar and tourist arrivals from USA, Euro (EURO) and tourist arrivals from Germany, Britsh Pound (GBP) and tourist arrivals from United Kingdom as data. Tourist numbers was obtained from Turkish Statistical Institute. Exchange rates data obtained from Central Bank of the Republic of Turkey and OECD data set. Series are seasonally adjusted. All rates are expressed in real terms using the equition 1.

$$REX = NEX.(\frac{CPI_f}{CPI_d}) \tag{1}$$

REX express real exchange rate, CPI_f is foreign country's consumer price index; CPI_d is Turkey's consumer price index, NEX is nominal exchange rate.

Foreign Exchance Rate (REX) and Tourism Revenue per Tourist Relation(PERT)

First of all, it has been investigated the REX and PERT series stationary or not. ADF unit root test is used for testing series' stationarity. The findings of the unit root tests can be found from Table 2. The series in Table 1 are checked based on intercept, intercept and trend, and the results vary according to the implications of these characteristics for the choice of intercept and intercept and trend in the unit root test regression. Both series is not stationary at level, but for the model of the first difference, the series is stationary.

Table 2. Unit Root Tests Results

| Variables | Level/First Difference | Augmented Dickey-Fuller (ADF) Test Statistic | | | | Result |
		Intercept	Prob	Trend and Intercept	Prob	
REX	Level	-2.935557	0.0497**	-2.607801	0.2790	**I(1)**
	First Difference	-6.743114	0.0000*	-5.803222	0.0002*	I(0)
PERT	Level	-2.016610	0.2788	-1.975042	0.5958	**I(1)**
	First Difference	0.0136	0.0136**	-3.626205	0.0407**	I(0)

*Significant at the 5% level. **Significant at the 10% level.

If the time series are nonstationary in their levels, they can be integrated with integration of order one (I(1)), when their first differences are stationary. These variables can be cointegrated and there can be long-run linear relationship among them. Since it has been determined that the variables under examination are integrated of order one (I(1)), then the cointegration test is performed. The testing hypothesis is the null of non-cointegration against the alternative that is the existence of cointegration. Johansen cointegration test is used for testing series' cointegration relation.

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[107] Real effective exchange rate index have calculated by considering 36 countiries', which have trade relation with Turkey, exchange rate and CPI, by Central Bank of the Republic of Turkey

Table 3. Johansen Cointegration Results

Null Hypothesis	Trace Test	Prob.	Result	Null Hypothesis	Maximal Eigenvalue Test	Prob.	Result
$r \leq 0$	20.11119	0.0094	Reject H_0	$r = 0$	14.78320	0.0414	Reject H_0
$r \leq 1$	5.327981	0.0210	Reject H_0	$r = 1$	5.327981	0.0210	Reject H_0

Note: r is the number of the cointegrating vectors. * Indicates that at 5% level of significance, the null hypothesis, saying that there is no cointegration relationship between variables is not accepted. Critical values vary based on trend, intercept. A lag of r=1 for VAR was selected before Johansen cointegration test.

The finding of the cointegration test is cointegration exists among real exchange rate and tourism revenue per tourist. It means that there is significant long-run relation between this two variables. For explain the direction of this relation, we used the Granger causility test.

Table 4: Granger Causility Test Results

		F-Sta.	Prob.	Result
H_0 Hypothesis	PERT does not Granger Cause REX.	5.08211	0.0299	Rejected
Alternative Hypothesis	PERT does Granger Cause REX.			Accepted
H_0 Hypothesis	REX does not Granger Cause PERT.	0.49733	0.4849	Accepted
Alternative Hypothesis	REX does Granger Cause PERT.			Rejected

* A lag of r=1 for VAR was selected before Granger Causility Test.

According to Granger causility test results, although real exchange rate not cause of tourism revenue per tourist, tourism revenue per tourist is effect real exchange rate of Turkey.

Foreign Exchange Rate and Tourism Demand Relation

We Tried To Find Relationship Between Foreign Exchange Rate And Tourism Demand By Johansen Cointegration Test And Granger Causility Test . We Have Created Three Basic Groups According To Major Currency For The January 2002-December 2013 Period. So, We Chose United States Dolar And Tourist Arrivals From USA, Euro (EURO) And Tourist Arrivals From Germany, British Pound (GBP) And Tourist Arrivals From United Kingdom As Data.

	Variable	**Description**
Group 1	GERMANY	Tourist number arrive from Germany to Turkey
	EURO	Real Exchange rate of Euro (Turkish Lira/Euro)
Group 2	UK	Tourist number arrive from UK to Turkey
	GBP	Real Exchange rate of British Pound (Turkish Lira/GBP)
Group 3	USA	Tourist number arrive from UK to Turkey
	USD	Real Exchange rate of USD (Turkish Lira/USD)

It has been investigated all groups's series stationary or not. ADF unit root test is used for testing series' stationarity. The findings of the unit root tests can be found from Table 5.

Table 5. ADF Unit Root Tests Results

Variables	Level/First Difference	Augmented Dickey-Fuller (ADF) test statistic				Result
		Intercept	Prob	Trend and Intercept	Prob	
GERMANY	Level	-4.070329	0.0015*	-4.053770	0.0091*	I(0)
	First Difference	-	-	-	-	-
EURO	Level	-2.376140	0.1503	-2.322787	0.4186	**I(1)**
	First Difference	-10.68180	0.0000*	-10.67837	0.0000*	I(0)
UK	Level	-1.637715	0.4607	-1.545223	0.8092	**I(1)**
	First Difference	-13.27932	0.0000*	-13.34425	0.0000*	I(0)
GBP	Level	-2.138640	0.2301	-2.810538	0.1961	**I(1)**
	First Difference	-8.924613	0.0000*	-8.932037	0.0000*	I(0)
USA	Level	-1.285234	0.6354	-4.182122	0.0061*	**I(1)**
	First Difference	-10.52484	0.0000*	-10.51703	0.0000*	I(0)
USD	Level	-3.502667	0.0093*	-3.532581	0.0397**	I(0)
	First Difference	-	-	-	-	-

*Significant at the 5% level. **Significant at the 10% level.

The series in Table 5 are checked based on intercept, intercept and trend, and the results vary according to the implications of these characteristics for the choice of intercept and intercept and trend in the unit root test regression. The unit root test result shows, GERMANY and USD series are stationary at level and the other series are not stationary at level, but for the model of the first difference, the series is stationary. For cointegration using Johansen methods, all the series have to be integrated of the same order like I(1). That's why we search cointegration relation only for Group 2 (UK and GBP) which both series integrated order one. The results of the Group 2's Johansen cointegration test result summarized in Table 6.

Table 6: Johansen Cointegration Results for UK and GBP

Null Hypothesis	Trace Test	Prob.	Result	Null Hypothesis	Maximal Eigenvalue Test	Prob.	Result
$r \leq 0$	17.96695	0.0208	Reject H_0	$r = 0$	15.23468	0.0350	Reject H_0
$r \leq 1$	0.0208	0.0983	Not Reject H_0	$r = 1$	2.732266	0.0983	Not Reject H_0

Note: r is the number of the cointegrating vectors. * Indicates that at 5% level of significance, the null hypothesis, saying that there is no cointegration relationship between variables is not accepted. Critical values vary based on trend, intercept. A lag of r=2 for VAR was selected before Johansen cointegration test.

According to Trace and Max-eigenvalue test indicates one cointegrating vector at the %5 level of significance. The finding of the cointegration test is cointegration exists among GBP rate and tourist arrive from UK. It means that there is significant long-run relation between this two variables. For explain the direction of this relation, we used the Granger causility

Table 7: Granger Causility Test Results for UK and GBP

		F-Sta.	Prob.	Result
H_0 Hypothesis	UK does not Granger Cause GBP	3.77391	0.0254	Rejected
Alternative Hypothesis	UK does Granger Cause GBP			Accepted
H_0 Hypothesis	GBP does not Granger Cause UK	0.96608	0.3831	Accepted
Alternative Hypothesis	GBP does Granger Cause UK			Rejected

* Lag length chosen using an SC information criterion as 2 before Granger Causility Test.

According to Granger causility test results, exchange rate of TL/GBP is not cause(affect) of tourist number who arrive from UK to Turkey. But the tourist number who arrive from UK is affect the exchange rate of TL/GBP.

We also use Granger causility test for the other groups, which are not integrated the same level, after make them stationary. And results test results summarized in Table 8.

Table 8: Granger Causility Test Results for Grop 1 (GERMANY and EURO) and Group 3(USA and USD)

			F-Sta.	Prob.	Result
Group 1	H_0 Hypothesis	GERMANY does not Granger Cause EURO	0.73062	0.5355	Accepted
	Alternative Hypothesis	GERMANY does Granger Cause EURO			Rejected
	H_0 Hypothesis	EURO does not Granger Cause GERMANY	0.24046	0.8680	Accepted
	Alternative Hypothesis	EURO does Granger Cause GERMANY			Rejected
Group 3	H_0 Hypothesis	USA does not Granger Cause USD	0.00382	0.9508	Accepted
	Alternative Hypothesis	USA does Granger Cause USD			Rejected
	H_0 Hypothesis	USD does not Granger Cause USA	0.18661	0.6664	Accepted
	Alternative Hypothesis	USD does Granger Cause USA			Rejected

* Lag lenght 3 for group 1, 1 for group 2. Chosen by using an SC and HQ information criterions.

The Garenger Cauisility test's H_0 Hypotesises are accepted for Group 1 and Group 3. It means there is no causal relation between exchange rate of Euro and tourist number who arrive from Germany and no causal relation between exchange rate of USD and tourist number who arrive from USA.

Conclusion

According to previous studies, it is assumed that "tourism revenues are support to economic development for Turkey" (Bahar 2006, Çetintaş and Bektaş 2008, Alper 2008). Many countries implement various tourism policy for increasing tourism income by increasing tourism demand due to this influence. Undoubtedly there are many factors affecting tourism demand. The primary factors can include countries' tourism potential, tourist tastes and preferences. Also it can be possible that foreign exchange rate and changing of the foreign exchange rate can affect the tourism demand. This study focus on real exchange rate and tourist number which represent tourism demand. Firstly it is tried to answer there is any relation real exchance rate and tourism revenue per tourist by using Johansen Cointegration test and Granger causility test. According the test result tourism reveue per tourist and real exchange rate has significant cointagrate relation for long-run. And they have causal relation, the real exchange rate have affected by tourism revenue per tourist who arriving Turkey. The test's result show that tourism revenue per person can be one of the determinants of exchange rate policy for Turkey. On the other hand, in this study the question of whether or not the real exchange rates have an impact on the number of tourists, arriving in Turkey from USA, Germany and the UK was discussed. According to analysis there is no significant relation between exchange rate of Euro and number of tourist arriving from Germany and exchange rate of USD and number of tourist arriving from USA. But there is significant cointagrate relation, between exchange rate of GBP and number of tourist arriving from UK. And they have causal relation, the exchange rate of GBP have affected by number of tourist who arriving from UK to Turkey.

Consequently, in this study there is no significant relation between the tourists, who arriving from Germany and USA, and real exchange rate. There may many other determinants as quality of the services and customer satisfaction, affect the choice of the tourists to Turkey from these area coming to Turkey. This situation is also acceptable for British tourists, but different from the others, British tourist number can affected real exchange rate of GBP. Test results show the real exchange rate affeceted from tourism revenue per tourist and British tourist number. It means that Birtish tourist number and tourism revenue per tourist can two determinants of exchange rate policy for Turkey. And this result should encourage policies to increase the tourism demand.

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A Strategic Performance Management Framework for Tourism Companies

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Abstract

Literature shows that the performance management of businesses has gained great significance for almost every industry intensely for two decades. It has evolved from traditional financial based measurement to strategic performance management. The frameworks and models are, on the other hand, developed especially for the manufacturing industry with some exceptions which claims to be used for service industries as well, i.e. balanced scorecard. However, the performance measurement issue is still immature area for the tourism industry. Tourism industry with its unique and different characteristics requires new or adopted performance management models and frameworks for better managed tourism companies. The aim of this paper, therefore, is to develop a strategic performance management framework that could help the tourism professionals when they configure such a system in their businesses. It is also aimed to contribute to the literature of strategic performance measurement and management in tourism industry. The framework suggested in this paper includes the relationships between strategic management, operation management and performance measurement systems while taking the unique characteristics of the tourism product into consideration.

Keywords: Strategic Management, Performance Measurement, Tourism, Efficiency, Effectiveness

Introduction

Tourism companies seek to reach superior performance either proactive or reactive strategies according to the chosen strategic orientation. External and internal environment analysis play great role to develop planned strategy and the strategic objectives. On the other hand, managers of these establishments know that they are in a very dynamic industry which requires monitoring the changes in customer needs and wants, and the reaction of rivals to these changes. To be competitive in the market and to be successful for short and long term basis, they are supposed to build comprehensive and integrated management systems. The characteristics of tourism industry push the companies to be more dynamic in their operations. The main characteristic of tourism companies is having seasonality problem, i.e. the demand curve is highly skewed. This make, for instance, the resource planning and demand forecasts hard issues to handle. Another characteristic is the perishable nature of the tourism product that affects both operation and marketing. The differences of the tourism products from manufacturing product obligate to develope new or adopted management models and frameworks for better managed tourism companies.

The holistic models or frameworks are needed to show the whole picture to the tourism companies which integrates strategic management, operation management and performance measurement together constitutes the strategic performance management approach. As the literature examined, it is not seen such an comprehensive and holistic model or framework for the tourism industry. Thus, this paper aims to develop a framework for tourism companies which includes the relationships between strategic management, operation management and performance measurement systems while taking the unique characteristics of the tourism product into consideration.

Literature

Tourism companies operate their businesses in very dynamic and competitive conditions which make them to think strategically, to operate innovatively and to monitor and evaluate their performance simultaneously to be effective and efficient.

To survive in rapidly changing business environmennt, organizations should have a clear strategy (Pechlaner & Sauerwein, 2002; Avcı, Madanoğlu ve Okumuş, 2011). Strategic management literature for tourism industry handles the subject in terms of the strategic orientation (Avcı, Madanoğlu ve Okumuş, 2011; Okumuş,2001) and its impact on performance (Segev, 1987).

Dwyer and Edwards (2009) pointed out that external environment has great impacts on managerial decision taking and they believe that to understand the key trends affecting the demand and supply

reduces the uncertainty. Teare, Costa and Eccles (1998) also support and extend this view to the need of alignment between the external environment, organization's strategy and the structure. They also highlighted that hotel firms search for ways to monitor and balance the internal forces.

Differences between strategic management and operational management has been analysed by many researchers (Teare, Costa and Eccles, 1998; Johnson and Scholes, 1993) from the view of complexity/routine, organization wide/operation specific, significant change/small-scale change.

According to Gomes and Yasin (2007) the performance of tourism companies can be evaluated by two approaches; specific measurement approach and organization wide approach. Specific measurement approach deals with a specific area, e.g.service quality (Stank et.al, 1999) or human resource (Tsaur and Lin, 2004, Cho, et.al.,2006) whereas organization wide approach to measurement can include the models like Balanced Scorecard (Harris and Mongielo, 2001). The authors also indicate that organization wide performance measurement should be viewed as a complete organization system and they should incorporate the relationship among efficiency-specific and effectiveness-oriented organization measures. Authors underline the necessity of having both specific and organization wide performance system. Similar distinction was made by Venkatraman and Ramanjam (1986) who define performance areas as financial performance, business performance and the organization effectiveness.

In addition to the above mentioned literature, unique characteristics of tourism industry, i.e. it can not be stored for future sale (Yılmaz and Bititci, 2006) and production and consumption are inseparable (Baker and Crompton, 2000), requires interacting with customer through different channels (Foggia and Lazzarotti, 2014) and carefully designed marketing structure that affect the strategic management, operation management and performance measurement systems.

Strategic Performance Management Framework for Tourism Companies

According to the above discussion, the need for strategic performance management frameworks for tourism companies arises that links the strategic management, operation management and performance measurement to each other. The framework is depicted in Figure 1 and can be interpreted as follows:

A tourism company should evaluate its external environment and internal environment properly to provide the basis for its strategic objectives and goals and the strategies. External environment analysis consists of customer analysis, market analysis, technological environment analysis and other analysis that take part in strategic management discipline. External environment affects directly or indirectly to the tourism companies. On the other hand, tourism companies can have more control on the internal environment elements which are basically human, financial, physical, and skills & capabilities related. These have direct impacts on core competences which are treated as the main drivers of the competitiveness. After analyzing the external and internal environment, a tourism company defines its corporate, business and functional strategies together with the strategic objectives and goals..

In spite of the inconveniences seen at the strategic management approach for small sized and individually managed tourism companies, professionally managed chain hotels and flagship airlines can be regarded examples in the tourism industry that strategic management issues are practiced very well. May be the main problem occurs while deploying the strategy to the operational level.

Operation system is mainly responsible for planning the demand analysis and forecasting, resource planning and scheduling, and production plan. The demand analysis is one of the main tasks of planning which will affect the resource planning, e.g. human resource and equipments & material planning for hotel firm, aircraft planning for an airline company. These are also affected by the external environment elements, i.e. market trends, and affect the formation of internal elements.

There are processes, technology and distribution systems at the production and delivery function of operation system. The outputs of the operation system consist of customer, financial, social and environmental related results. The inputs of the operation system are the strategies and performance measures and targets beside the related external environment data.

Performance Measurement System (PMS) is where performance measurement module functions and produces the performance evaluation reports. Performance measurement module is to be multi-dimensional (Balanced Scorecard, Performance Prism, EFQM Excellence Model or similar model can be used or developed according to the needs of the tourism company), stakeholder oriented (customers, investors, society, staff etc.) and strategy focused. The performance evaluation should include the efficiency and effectiveness measures which are regarded as the main determinants of performance of any organization. Efficiency is mainly related to the operational system, i.e. resource utilization, whereas

the effectiveness is mainly about doing the right things, i.e. increase in market share. The inputs of PMS are the strategic objectives and goals from the Strategic Management System (SMS) and performance data from the Operation System (OS). The outputs of the PMS are the performance measure & targets, and the operational efficiency report for the OS and organizational effectiveness report for the SMS. Performance feedbacks to SMS and OS behave as check up for these systems for evaluating and taking the corrective actions.
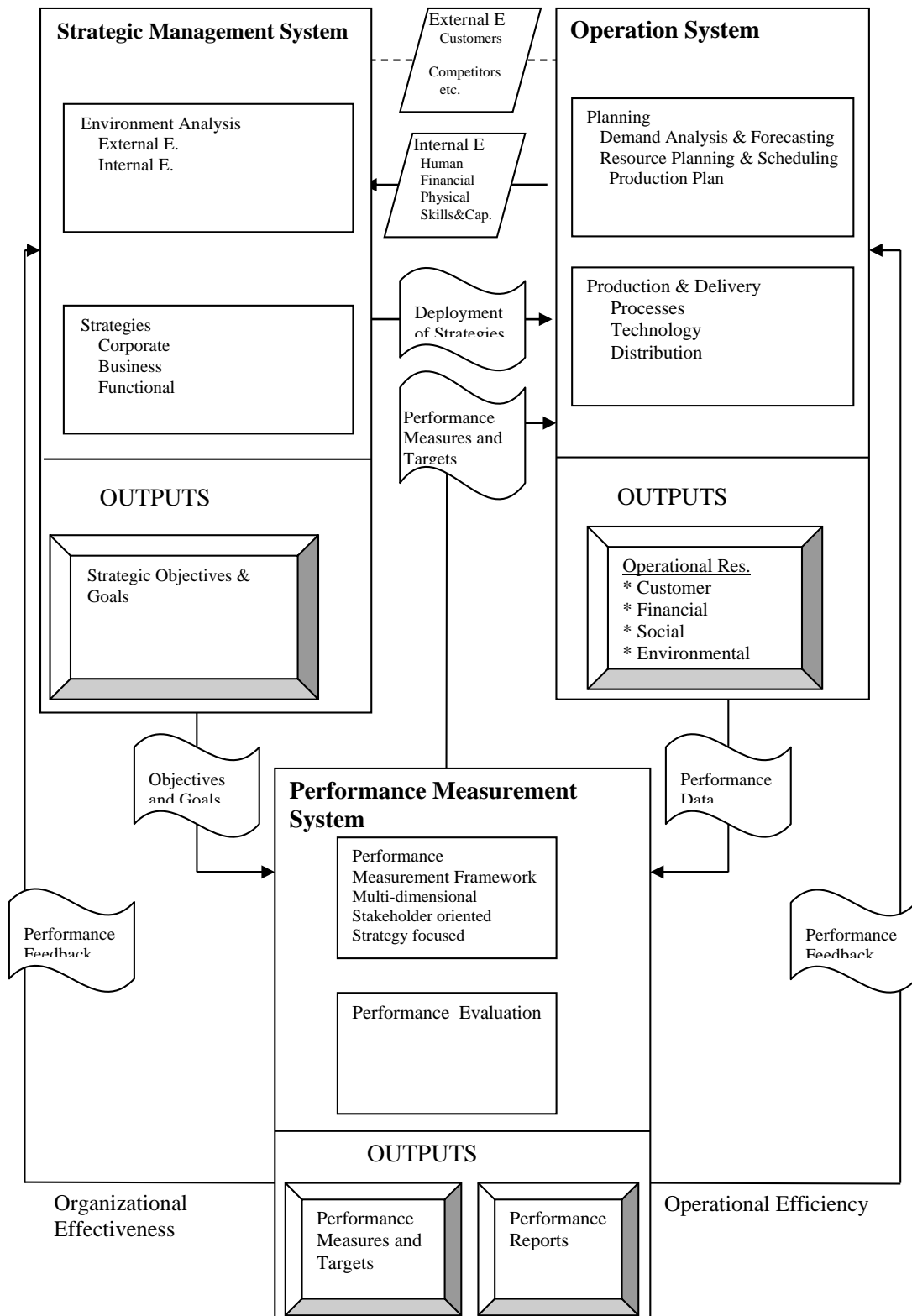
Fig. 1. Strategic Performance Management Framework For Tourism Companies

Discussion

Proposed framework in this study which was developed in the light of system approach and with a holistic view could be useful tool for managers of tourism companies while they are establishing the strategic performance management systems. The relationships between strategic management system, operation system and performance measurement system and also their functions to achieve the strategic objectives and goals takes part in this framework.

As the literature examined, the various studies can be evaluated with the aid of this framework. When the specific measures or system wide measures driven studies examined, despite being a dense studies on financial measurement, little research deals with the balanced and multi-dimensional performance measurement systems in tourism industry. It seems also a lack in the literature of the studies that include the environmental and social dimensions in their performance measurement and management systems.

Evident also in the literature that there is a limited number of studies that see the tourism business with a holistic approach. Most of the studies rather focus on some parts, i.e. only operation part (or even a part of the operation) or adaptation of PM models developed for manufacturing companies to the tourism case (like Balanced Scoreacard for hotels). Strategic management is another area that deserves more attention in tourism management literature. According to a literature review that examines the strategy related studies in tourism and hospitality industry, it is found that only 27 percent of the total articles are somehow related to strategy (Harrington and Ottenbacher, 2011).

There is huge gap in the literature about the performance management for tourism industry and this study proposes a framework for both professionals and researchers. Further studies can test the usefulness of the framework especially with case study methods to be applied in different sectors of the tourism, i.e. hotel, travel and transportation sectors which will give more insights about the applicability of the framework.

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Measuring the Attitudes of Undergraduate Tourism Students towards Tourism Sector and These Attitudes' Effects on Career Choice of Students

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Abstract

This study is aimed to examine the attitudes of undergraduate tourism students towards tourism sector and these attitudes' effects on career choice of students after graduation. The research was conducted on a total of 251 students who were enrolled in Akdeniz University Tourism Faculty. In the context of the research students responded to a questionnaire measuring the attitudes of university level tourism students towards tourism industry and factors that affect their career choice. The exploratory factor analysis is used to the scale of attitude toward sector and the effects of sub-dimensions of the scale on the career choosing are determined.

Keywords: Undergraduate Tourism Students, Attitudes towards Tourism Sector, Career Choice.

Introduction

As one of the sectors that develop the most and are predicted to develop in the future as well, tourism sector creates a significant volume of labor due to its labor-intensive characteristics (Davras and Bulgan, 2012). Therefore, the development of tourism sector in a country would enable employment of the people of this country in this sector and it could also be an important factor in resolving unemployment problem without the need of intervention (Çeken and Erdem, 2003). To obtain an advantageous position in the increasingly competitive environment of international tourism market, will only be possible by giving qualified service through the usage of the potential of the skills the sector has (Üngören, 2007) and enabling satisfaction of customers. The qualified labor needed to enable customer satisfaction, on the other hand, may only be provided by effective and high-quality tourism education (Ünlüönen, 2000) and training and by the employment of tourism school graduates in the sector (Kuşluvan,2000). Since higher occupational, technical and educational levels of the labor employed in the sector would enable higher service quality in modern tourism approach and healthier and high-quality relations between tourists and people providing service for them (Christou, 1999; Alp, 1992: 47). Turkey Tourism Strategy 2023 Action Plan indicates that high-quality basic training would enable the development of effective labor and contribute in the prevention of disorganization and lack of coordination in the sector. In addition, effective and successful tourism education is specified as a factor that would change the perspective of the people who work or will be working in the sector concerning tourism service sector and that would affect not only the choice of profession of the individual but also the success individual would achieve throughout his/her career significantly (www.ktbyatirimisletmeler.gov.tr).

The present study has been conducted in order to investigate the attitudes of undergraduate tourism students towards tourism sector and these attitudes' effects on their professional career choices after graduation. The first section of the study contains information regarding tourism education in Turkey and the notions of career and career choices. The second section presents findings to specify the effect of the attitudes of undergraduates concerning the sector on their career choices after graduation. And the conclusions regarding the findings and some suggestions are given in the last section.

Tourism Education in Turkey

Employment is rendered easier and more effective in tourism due to the labor-intensive characteristic of the sector while this very fact increases the need for educated and qualified labor in terms of occupational knowledge and behavior due to the intensive face-to-face relations tourism service industry has (Kozak, 2012: 12). What is needed for tourism development is enabling professional training of the labor force in tourism sector. In this way, personnel of the sector would contribute effectiveness and meaning to the physical elements found in the tourism activity as a potential representative of tourism (Ünlüönen, 2004: 109) and provide tourists the services they expect (Ünlüönen and Boylu, 2005: 11). And this could only be provided by institutions giving effective tourism training in Turkey (Üngüren, 2007) which has been developing especially since 2000 (Çatı and Bilgin, 2013: 24) by increasing its international competitive power in tourism sector.

There are more than 50 institutions providing tourism education in undergraduate and two-year degrees in Turkey (www.turkturizmkurultayi.org). Tourism education in Turkey could be classified in two groups: formal education and non-formal education. The educational institutions providing formal education in tourism field are constituted of the schools giving tourism education in secondary and higher education (two-year degree/undergraduate/graduate) levels while short-term occupational courses concerning tourism given by official or private organizations are classified under non-formal education (Ünlüönen and Boylu, 2005: 15). 6% of the people receiving tourism education from these foundations are located in Antalya with approximately 4 thousand students in 18 institutions (www.aktob.org.tr).

Career Choice in Tourism Sector

Career, in its most general terms, means to take on responsibility in the business field of choice, to achieve a status and to earn respect (Taştepe, 2001: 27). Career is defined as "the model of experiences determining a person's flow of life" (Robbins et al., 2006: 736) and "the series of works arranged in time" (Riley and Ladkin, 1994: 225). Although career, in its wider sense, is defined as the whole of the works a person has undertaken in professional life, it has a wider meaning beyond this definition. A person's career is not only the job that person undertakes but also education the person gets in order to realize the expectations, targets, emotions and desires regarding the professional role and advance in professional life (Yalçın, 1990 *cited by* Pehlivan, 2008). The individual's inclination towards one of the options in front of him/her, emerges as a cognitive process (Payne et al., 1988). Career, in this sense, could be seen as a process starting with entering a job, having different jobs in the ongoing process and ending with leaving labor force (Özsalmanlı, 2004).

The choice of occupation and career also means the evaluation of jobs with regard to the individual's characteristics and living one's life by choosing one of the options which has more desired characteristics than undesired ones in terms of personal needs (Baltaş, 1993: 36). Researchers have classified the factors effecting individuals' occupation and career choices in various ways (Razon, 1983; Kuzgun, 1991; Aytaç, 1997). Razon (1983) lists the factors effecting career choice as follows: coincidences, environment, individual conditions and family. In business literature, on the other hand, psychological and social characteristics have been studied as the factors effecting individual's career choice (Ahmed et al., 1997; Kochanek and Norgaard, 1985; Paollilo and Estes, 1982). And, some sociologists suggest that career choice takes shape by the effect of social institutions or communities such as culture, family structure, school and friendship relations (Kuzgun, 1991: 94).

Working in tourism sector does not look very attractive to individuals due to various reasons. The negative perception of tourism sector in the society sometimes prevents people from seeing tourism as a promising field of work (O'Leary and Deegan, 2005). Many issues standing in the way of making a career in tourism are emphasized in the relevant literature, including many jobs in the sector being seasonal and preventing people from permanent employment, inadequate social security opportunities, stressful work environment, society's having a low value of tourism as an occupation, irregular and long working hours, sector's limitations on personal, social and family life, low wages, restricted opportunities with regard to progressing in the job, high turnover observed in the sector etc. (Öztürk and Pelit, 2008). Following previous researches, Walmsley (2004) has expressed the general characteristics of the occupations found in tourism sector as follows: "low waged, requiring low skills, having a negative image that leads to see these jobs as insignificant and simple, being subject to bad management, seasonal and lacking career structure". Many people who will be participating in labor force in the future do not see hotel and restaurant jobs as career choices, although there have been some positive developments in years to improve the image of tourism and hotel management sector (Baum, 2007:1390). In the study conducted by Altman and Brothers (1995) in America, 30,6% of the people who graduated from tourism and hotel management schools have been seen to leave the sector within first five years. In another study

conducted by Pavesic and Bryner (1990), on the other hand, the findings showed that 20% of the students who received tourism education have left the sector within the first year while 33% have left the sector within 5 years following graduation. Koko and Guerrier's (1994) findings revealed that majority of graduates left the sector due to various reasons such as working conditions, the banality of the job, low wages, long working hours, low motivation and work dissatisfaction. The relevant studies conducted in Turkey have revealed similar results as well. For example; Kuşluvan and Kuşluvan (2003) have revealed that 33% of the students receiving tourism education at the level of undergraduate do not plan on working in the sector and only half of them see their future in tourism sector. In the study conducted by Duman et al. (2006), findings have revealed that the students think that the nature and working conditions of the job are heavy, wages and additional benefits are low, and the factors effecting their motivation of working in the sector are harmony of individual with the industry and promotional opportunities.

The vision and mission of many universities include the future and career of their students. There are many ongoing implementations in higher education institutions related to career planning and development. In Akdeniz University Faculty of Tourism which constitutes the sample of the present study, this is considered a very important issue and activities such as "Employment Fair", "Career Days" and "Career Talks" are organized with the purpose of bringing students and sector representatives together.

Aim and Importance of the Research

The present study has been conducted in order to investigate the effect of the attitudes of the students currently receiving tourism education on their professional career choices after graduation. The findings obtained as a result of the study have a great importance in terms of evaluating the tourism sector and tourism education in Turkey from the perspective of students receiving tourism education at undergraduate level and determining future oriented education policies.

Research Question 1. Do the attitudes of students concerning the sector differ depending on their classes?

Research Question 2. What are the factors influencing the desire of making a career in tourism sector after graduation?

Research Question 3. What kinds of relationships are there between the dimensions influencing the attitudes of students towards the sector?

Research Question 4. How do attitudes of students participating to the study towards the sector influence their desire of making a career in the sector after graduation?

Methodology of the Research

The universe of the present study consists of the students studying tourism at the level of undergraduate in Akdeniz University Faculty of Tourism. The number of students studying tourism at the level of undergraduate in the Faculty of Tourism is 1619 as of 2013-2014 Spring Semester. The questionnaire has been applied on volunteer students studying at the level of undergraduate in Akdeniz University Faculty of Tourism who were chosen by convenience sampling. 285 students were reached during the period of questionnaire implementation and 251 of these questionnaires were returned and subjected to analysis. 251 people who have participated to the study have the power to represent the universe with an error margin of 10% and a reliability level of 90% (Ryan, 1995). A pilot study has been conducted with the participation of the students (100 persons) in December 2013 before the implementation of the questionnaire. The reasons of the choice of Akdeniz University Faculty of Tourism in this study include its being a prominent institution giving tourism education for years in line with its targets, ability to collect the results more conveniently and easily, and time limitation.

For the study, a literature review has been conducted related to tourism education in Turkey and career notions and secondary data analysis has been conducted with the theoretical information obtained from this review. Questionnaire technique has been preferred as the data gathering tool. The questionnaire consists of three sections. First section contains items measuring the attitudes of the students towards the sector. Second section contains items related to the desire of the students towards making a career, and the final section contains questions related to demographic information concerning the students. In the questionnaire, the scale created by Duman et al. (2006) has been used to measure the attitudes of the students regarding making a career in the sector and to determine their career choices. The dimensions in the scale measuring the attitudes of the students towards tourism sector may be listed as follows; (1) the nature of the work and work conditions, (2) the harmony of individual and sector, (3) managers, (4)

promotions and wages, (5) Education and work environment. The desire of students of making a career in tourism sector, on the other hand, has been measured by a total of 10 scale items gathered from the studies of Kuşluvan and Kuşluvan (2003) and Riegel and Dallas (1998) and adapted to Turkish by Duman et al. (2006). 39 items in the scale and 10 items in the career choice scale have been evaluated through 5 point Likert scale as 1=I definitely disagree and 5=I totally agree.

Findings

57.3% of the students participating in the questionnaire were male and 42,7% were female. 69% of the students have put the department they are studying at in their first three choices. 53.1% of the students participating in the study were studying in first and second classes while 46,9% of them were studying in third and fourth classes. 66% of the students answered the questions related to the person(s) who had an active influence in their choice of the department as "my own choice". This indicates that the majority of the students have chosen their departments willingly and voluntarily by themselves by putting the department in their first choice.

Table 1. The Distribution of the Attitudes of the Students towards Tourism Sector According to Their Classes

Statements	1st&2nd Classes $\overline{X}$	3rd&4th Classes $\overline{X}$	t	p
Working hours are irregular.	3,96	4,27	-2,156	,032*
Working conditions are generally well.	2,60	2,32	2,038	,043*
Working hours are long.	3,87	4,11	-2,012	,045*
Work does not receive much respect in society.	3,31	3,61	-2,030	,043*
Work motivation of workers is high.	2,93	2,51	2,864	,005*
My personality is suitable to work in this sector.	3,70	3,23	3,072	,002*
I can use my knowledge and skills in the sector.	3,96	3,59	2,581	,010*
Many jobs in the sector have low wages.	3,64	4,11	-3,366	,001*
Side incomes outside of the sector are inadequate.	3,61	3,94	-2,385	,018*
The wage in the sector is inadequate.	3,37	3,79	-2,931	,004*
Promotional opportunities in the sector are limited.	3,29	3,65	-2,902	,004*
Managers confer power to their employees.	3,42	2,94	3,466	,001*

*p<0,05

Students who are still in their first two years (1st and 2nd classes) and who are closer to graduation in their last two years (3rd and 4th classes) have been compared and evaluated in terms of their attitudes towards tourism sector and the statements which have a significant difference compared to each other have been shown in Table 1. 3rd and 4th classes are observed to have a more negative perspective on the statements compared to 1st and 2nd classes in terms of "working hours and promotional opportunities in the sector, the prestige of the sector, the income gained from the sector". It is also possible to say that students in their first years of university have a more positive outlook for the statements regarding "the work conditions in the sector, their personality's harmony with the sector, the motivation of the employees in the sector, use of their own knowledge and skills and managers' conferring power to their employees".

Table 2. Factor Analysis Results Related to the Attitudes towards Tourism Sector

Factors	Factor Loading	EV[a]	Pct of explained variance[b]	α[c]
Factor 1.The Nature of the Work and Working Conditions				
Working hours are too long.	,872	**4,763**	**22,681**	**,822**
Working hours are irregular.	,777			
Work environment is stressful.	,730			
To find a job in the sector and seasonality is challenging.	,676			
My private life is important to me.	,635			
I find weekend break important.	,558			
It is hard to sustain a family life while working in the sector.	,524			
Factor 2.Harmony of Individual and Sector				
I can use my knowledge and skills in the sector.	,803	**3,719**	**15,136**	**,745**
My personality is suitable to work in this sector.	,764			
I like fast-paced work environment.	,759			
I think working in the sector is fun.	,534			
Factor 3. Managers				
Managers enable occupational training for their employees when required.	,824	**1,751**	**8,340**	**,777**
Managers take the suggestions of their employees in consideration.	,807			
Managers confer power to their employees in order for the employees to fulfill their jobs better.	,805			
Factor 4. Promotion and Wages				
It is hard for a person to get promoted in the sector if the person does not have any acquaintances.	,695	**1,273**	**6,060**	**,600**
Side incomes outside of the sector are inadequate.	,632			
Many jobs in the sector have quite low wages.	,620			
I don't think I can earn much money in the sector.	,537			
Factor 5. Education and Working Environment				
Majority of the managers in the sector have not received tourism education.	,730	**1,193**	**5,680**	**,631**
Employees have not developed a team spirit.	,720			
Managers do not spend enough effort to increase employees' commitment to the business.	,699			

Total variance explanation rate (%): 57,897   **KMO:**0,823

EV[a]: Eigenvalue   **Pct of variance[b]:** Percentage of explained variance   **α[c]**=Cronbach's alpha.

According to Table 2, first factor that is observed to have an important influence on the perspective of students towards the sector explains 22.681% of the total variance and it consists of 7 items. Factor 2 explains 15.136% of the total variance and it consists of 4 items related to the investigation of whether the personality traits, knowledge and qualifications of the students are suitable for tourism sector. Factor 3 explains 8.340% of the total variance. According to 3 statements within this factor, the attitudes of managers may be said to have an influence on the perspectives of the students. Factor 4 explains 6.060% of the total variance and consists of 4 items. This structure shows that students evaluate tourism sector by considering promotional opportunities together with the wages and that they place an importance on promotional opportunities and wage. Factor 5 explains 5.680 % of the total variance and 3 items found under this factor are related to the investigation of the opinions of the students with regard to the working environment in the sector and whether employees have received tourism education. The result of the factor analysis applied in order to determine the dimensions of participants' attitudes towards sector showed that the data was suitable for factor analysis with the KMO adequacy of sample value being 0,823 (p<,000). 5 factors obtained explain approximately 58% of the total variance and the reliability

coefficients of the factors calculated by Cronbach Alfa are between 0,600 and 0,822. Factor loads, reliability values, eigenvalues and the variance rate explained by each factor are shown in Table 2.

Table 3. Factor Analysis Results of the Desire of Making a Career in the Sector

The Desire of Making a Career in the Tourism Sector	Factor Loading	EV[a]	Pct of explained variance[b]	α[c]
I would gain nothing by making a career in the sector.	,872	4,123	59,777	,868
I don't think I will be working in this sector when I graduate.	,777			
I cannot work in this sector for years.	,730			
I don't know what job I will be doing when I graduate.	,676			
It was a mistake for me to choose this occupation.	,635			

Total variance explanation rate (%): 59,777   **KMO:** 0,839

EV[a]**:** Eigenvalue **Pct of variance**[b]**:** Percentage of explained variance.   α[c]=Cronbach's alpha.

Before the scale with 10 items related to the measurement of the desire of making a career in tourism sector was subjected a separate factor analysis, the negative statements were inverse coded and the factor loads, reliability values, eigenvalues and variance rate explained by a single dimension are shown in Table 3. The single dimension obtained had a reliability coefficient of 0,868 and this dimension explained approximately 60% of the total variance.

In Table 4, a factor average representing the factor has been calculated through the items constituting the factor. And in Table 5, a factor score to represent the variable of "the desire of making a career in the sector" which was constituted out of the questions aiming to measure the students' desire to choose the sector as a career path has been calculated. In Table 4 and Table 5, whether factor averages are different than the value 3 (I am undecided) which constitutes the middle value in the 5 point Likert scale was analyzed by the usage of t-test.

Table 4. Mean Ratings of the Factors of the Attitudes toward Tourism Sector and t-Test Results

Factors	$\overline{X}$	Std. Dev.	t	p
The Nature of the Work and Working Conditions	4,10	1,129	57,484	,000*
Harmony of Individual and Sector	3,48	1,233	44,684	,000*
Managers	3,16	1,156	43,156	,000*
Promotion and Wages	3,86	1,120	54,514	,000*
Education and Working Environment	2,99	1,116	42,242	,000*

*p<,001 , ** 5 Point Likert Scale (1=I definitely disagree, 3= I am undecided, 5= I totally agree). Marked negative dimensions include negative statements.

The evaluation of the t-test results found in Table 4 should also consider the positive or negative items in the factors. "The nature of the work" factor containing negative statements had a significantly higher value (4.10) than the middle value 3 (t=57.484). This value indicates that the students included in the study find the working hours in the sector to be long and irregular, the working environment to be stressful and finding a permanent job challenging. The second issue which was negative from the perspective of the participants was "wage and promotion" factor which also had negative items and its factor average was 3.86. The average value of the factor of "harmony of the individual and sector" was found to be 3,48. This value indicates that students who had participated in the study find their personality suitable to work in tourism sector. When the values belonging to the factor of "education and working environment" (2.99) are analyzed, a result close to the average is observed. And finally, the average of the factor which included positive statements with regard to managers was calculated as 3.16.

Table 5. Mean Rating of the Desire of Making a Career in the Sector Factor and t-Test Results

Variable	$\overline{X}$	Std. Dev.	t	p
The Desire of Making a Career in the Sector	2,76	1,344	32,343	,000*

*p<,001

According to the values in Table 5, the factor average for the variable of the desire of making a career in the sector is observed (2,76) to be lower than the middle value '3'. The "desire of making a career in the sector" dimension which is fully constituted of negative statements has been inverse coded before the

factor analysis. When the participants stated that they agree with the negative statements found in this dimension, they showed in general that they don't want to make a career in tourism sector after they graduate.

Table 6. Results of Correlation Analysis of the Attitudes toward Tourism Sector Factors and The Desire of Making a Career in the Sector

Factors	1	2	3	4	5	6
1. The Desire of Making a Career in the Sector	1	-,381*	,473*	,114	-,228*	-,103
2.The Nature of the Work and Working Conditions		1	,149*	-,089	,215	,031
3.Harmony of Individual and Sector			1	,219*	-,199*	-,014*
4.Managers				1	-,046	-,022
5.Promotion and Wages					1	,180
6.Education and Working Environment						1

The data obtained through correlation analysis conducted with the purpose of analyzing the relations between factors are presented in Table 6. Since the factors of "the nature of the work and working conditions," "promotion and wages" and "education and work environment" and the variable of "the desire of making a career in the sector" have been constituted of negative statements, some of the relations that seem like inverse relations in the correlation table actually indicate direct relations. The highest correlation within the dimensions measuring the attitudes of the students towards the sector was found between "the desire of making a career in the sector" and "harmony of the individual and sector" (r=,473). According to this fact, the desire of making a career in the sector increases as the harmony between the individual and the sector increases. According to the results of correlation analysis, even if inverse relation is seen between "the nature of the work and working conditions" (r= -,381) with "promotions and wages" (r=-,228) and "the desire of making a career in tourism sector", because of containing negative substances, in fact there is a direct relation.

Tablo 7. The Desire of Making a Career in The Sector and The Attitudes Toward Tourism Sector Regression Analysis

Dependent Variable	Independent Variable	β	t	p	R-square (Corrected)
The Desire of Making a Career in the Sector	The Nature of the Work and Working Con.	-,102	2,061	,048	,420
	Harmony of Individual and Sector	,405	7,268	,000	
	Managers	-,047	,624	,689	
	Promotion and Wages	-,096	-1,593	,172	
	Education and Working Environment	-,006	302	,860	

Table 7 shows the multiple regressions analysis conducted with the purpose of evaluating the relations between the factors influencing the attitudes of the students towards the sector and their desire to choose tourism sector as a career path. Factors explain in the ratio of 42% of the desire of making a career in the industry. The most important factor that influence the students' desire of making a career in tourism sector is observed to be the factor of "harmony between the individual and the sector" with a Beta value of ,405 (p<.000). According to this result; the students who find their personality suitable to work in the sector have a desire of making a career in the sector. Another influential factor that effects the desire of making a career in the sector is observed to be the factor of "the nature of the work and working conditions" (Beta= -,102, p<.048). As long as the working conditions are getting harder in tourism sector, the desire of making a career in tourism sector is getting weak. Other factors have a limited impact on explaining the desire of making a career in tourism sector.

Results and Suggestions

The lack of qualified personnel appears as one of the most important issues of the sector since people who have received tourism education do not prefer to work in the sector (Baltacı et al., 2012:17) or leave the sector after a short period of employment although the number of the institutions giving tourism education (Eser, 2002:144) at the undergraduate level gradually increases. The present study which has been conducted with the purpose of measuring the attitudes of the undergraduate tourism students towards tourism sector and analyzing the effect of these attitudes on career choices of the students has been limited with the undergraduate students of tourism studying in Akdeniz University Faculty of Tourism. The findings of the study show similarities with the findings of other studies found in the literature (Kuşluvan and Kuşluvan, 2000; Birdir, 2002; Aksu and Köksal, 2005; Duman et al., 2006; Aymankuy and Aymankuy, 2002; Aymankuy and Aymankuy 2013; Erdem and Kayran 2013).

In the present study, 5 fundamental dimensions, namely (1) the nature of the work and work conditions, (2) the harmony of individual and sector, (3) managers, (4) promotions and wages, (5) education and work environment were determined with regard to the attitudes of tourism undergraduates towards tourism sector. When factor averages concerning the attitudes towards the sector are analyzed; the students participating to the study are observed to have negative attitudes towards the nature of the work and working conditions due to reasons such as difficulty in finding a permanent job, long and irregular working hours, and stressful working environment. Another dimension the participants have a negative attitude towards appears to be promotion and wage issue. The promotional opportunities should be put in place in tourism sector with the consideration of the level of education. Here, a great responsibility is placed over the shoulders of managers who should be selecting and offering promotional opportunities to the people who have the expected qualities in order to increase the service quality in tourism. The present study explains the effect of the determined factors on the students' desire of choosing tourism sector as a career path. Majority of the participants are observed to include the department of tourism in their first three choices when they entered the university and to have chosen this sector willingly. Nevertheless, the desire of making a career in the sector is observed to be low due to reasons such as the employers in tourism sector preferring to employ seasonal labor and trainees by employing the labor force without tourism education for low wages, not providing enough support and opportunities to the qualified personnel in terms of wages and promotions, the lack of job security etc. Students should be informed about the department they are going to choose in university, should be aware that they are making a choice of profession, should be provided with career planning service (Ehtiyar and Üngüren, 2008:175), should be informed about the challenges and negative sides of the sector in order to plan their career in a better way. Sector managers and educational institutions could cooperate in order to raise qualified people who have the necessary skills to provide the expected services and group works could be emphasized in the total quality management implementations in order to encourage capable students (The Ministry of Culture and Tourism, 2007) who are innovative and open to improvement. Another issue to place an importance on is the improvement of the quality of occupational tourism education and the institutional capacities of educational institutions.

The most important factor influencing the students' desire of making a career in the sector is observed to be the harmony between the individual and the sector. We can say that people who find their personality suitable for working in the tourism sector have more desire for working in the sector. Sector employee will show a parallel attitude as long as the attitudes of the managers towards their employees are positive. The relation of the personnel and the sector will be negatively influenced under the fast work pace and the working conditions provided by the managers, and the exhausted personnel (Pehlivan, 2008:88) will not be able to provide a quality service as expected. According to Mısırlı (2002) the constitution of an occupational law by politicians in order to strengthen human resources of businesses and provision of all tourism personnel to be employed in tourism sector only from the graduates of tourism high schools, two-year tourism degree graduates, undergraduates and graduates and provision of more secure career opportunities for qualified people of the sector will lead students to make more positive evaluations with regard to making a career in the sector as well as increasing the prestige of the sector. Therefore, the rights of the people who have studied tourism must be protected and an obligation should be constructed in tourism sector for the employers to employ qualified labor force at a certain rate.

The present study has also compared the attitudes of students towards the sector based on their classes, i.e. third and fourth classes who are closer to graduation are compared with first and second classes who are at the beginning of their education. The students who are at the beginning of their education have been observed to have a more positive attitude towards sector compared to the ones who had an opportunity to know more about the sector by working in it or being a trainee. A similar study has been conducted by Baron and Maxwell (1993), where three groups of selected students were compared; these groups were first classes, the students who have just returned from their training and new graduates of the same educational institution. The result of the study showed that first classes had positive career expectations in terms of the sector while the first classes returning from their training and new graduates had a negative outlook concerning the sector. When especially this study and the study of Aksu and Köksal conducted in 2005 were compared based on the years, the negative attitude of the tourism students has been observed not to have changed.

To conclude, the existence of qualified personnel who received tourism education has a great importance since tourism is a labor-intensive sector and the quality of service provided in the sector is directly related to human. The investments in the field of tourism do not provide any benefit and have any importance unless they are supported by human resources who received tourism education (www.tiyader.org). The employment issue in tourism sector may be resolved by creating a "quality awareness in tourism" which

could constitute the key stone of the strategies concerning employment as it is specified in 2023 Turkey Tourism Strategy (www.ktbyatirimisletmeler.gov.tr).

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Co-Marketing Strategy and Developing New Products: A Case of Trabzon Local Tourism Destinations

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Abstract

It is evident that the incomes gained through tourism makes a significant contribution to the sustainable local development worldwide. Principally, small-scale local tourism destinations should develop marketing strategies which can create an edge over distinguished tourism destinations. *Co-marketing strategy*, as the optimum marketing strategy, provides advantage to small-scale local destinations in terms of cost reduction, enhancing efficiency, and creating rich resource for tourism while carrying on tourism activities. The aim of the study is to exemplify marketing activities in line with co-marketing strategy by grouping tourism resources of a specific region in a way that supports sustainable development and advancing new small-scale destinations. Thereby, with competitive advantage they gained, new small-scale tourism products (destinations) which unify their resources can contribute to the regional development. To that end, *61 tourism resources* in and around the city Trabzon are included in the sample of this study. The data were collected through site observation and analysed in line with qualitative methods. As a result, in and around the city Trabzon, related to co-marketing, having different themes from each other four new small-scale local destination plans were developed and suggestions were made.

Keywords: Tourism, Tourism Destinations, Developing New Destinations, Co-Marketing, Trabzon.

Introduction

Tourism is of a great economical importance as well as being a fast moving global industry (Yergaliyeva, 2011). For these reason countries, regions and touristic enterprises need to find alternative ways in order to increase or at least maintain their share in tourism markets. It is necessary to diversify the touristic products by considering changing tourist profile in order to have advantage against the rivals in the international, national or regional markets. It is possible to do it by diversifying the available touristic sources or developing new touristic products (Sarkım, 2007).

One of the important problems is the marketing of the destinations. With the ease of reaching the information, in an atmosphere where international competition rises, for the countries the marketing of the products and services and attracting tourist and investment is possible if the bussinesses try to understand international consumer behaviours better (Ayyıldız and Bilgin Turna, 2012). For this reason many countries, regions and tourism establishments try to create new competition tools. In our day, one of them is the diversity of marketing activities. There are no problems with the marketing of world wide known destinations but the real problem is in the marketing of small scaled regional destinations. It is almost impossible for them to compete with the big scaled destinations as they are lack of experience and as they don't have enough financial sources. At this point *"cooperative marketing''* arises as an important strategy for providing competition power by forming a cooperative marketing organization of the small scaled regional destinations which are close to each other and which can have a functional cooperation and by marketing them under a common name (Yavuz, 2008).

The best way for the regions which don't have any industry or any kind of production to develop seems to be that the small destinations lacking of pecuniary sources and experience support the regional sustainable development by competing with the important destinations. Regional parts should categorize the tourism sources they have and form new tourism products and each new destination formed should establish *Destination Marketing Organization* by combining their sources in accordance with the cooperative marketing.

The purpose of this study is to categorize the tourism sources in and around Trabzon Province in a way to form new tourism product in the scope of sustainable development and to realize the marketing

activities of the small scaled regional tourism products with cooperative marketing and improve the tourism in Trabzon province and contribute to the regional development.

It is not a new thing to market a country, city or region as a new destination by categorizing it with cooperative marketing strategy. For example many destinations such as Oregon, Northeast Ohio and New Mexico states of USA, Newfoundland and Labrodor states of Canada categorize the tourism sources according to the history and cultural heritage they have and conduct cooperative marketing activities. The first study for developing a new product with cooperative marketing in Turkey was made in Ceyhan region. In this work, research scope was kept narrow and as the tourism sources are not enough for a destination in Ceyhan region, the tourism sources around were also put into the study. Certain places in Ceyhan were determined as destination especially in the practice part. Reach tourism sources were chosen in the study and Trabzon province has been divided into four destination and all the tourism sources have been shown in the google map according to their coordinates. Also a research model has been developed to be used as a sample for the other destinations.

The Definition and the Features of Destination

Destination, in general terms, is the place the tourists plan to travel for vacation. According to Upadhyaya (2012) the place for a tourism marketer is a destination people (and organizations) visit. Thus, tourism is an obvious aspect of the economic development of a place.

Tourism destinations should ensure the visitors with respect to their whole appeal that they are superior than or equal to all destinations they compete with. The factor conditions (for example, physical, historical, cultural and entertainment) are important for identification of the destination appeal as well as the travel requirement of a tourist in order to have destination experience (Eysteinsson and Gudlaugsson, 2012). Torism destinations may be considered as complex networks including a major part of the co-productive participants who deliver several products and services. While the tourists perceive the destinations as a unit, an integrated experience or destination product is offered and this experience or product is created by individual participants and produced anyhow (Haugl and et al., 2011).

By an extensive definition, tourism definition is a region having a branded national area which has gained a specific image in human brain - an area smaller than the country boards and larger than many cities in the country - and important tourist attractions, centers of attraction, several activities like festivals, carnivals, a suitable transportation network installed within the region, development potential, interregional and countrywide transportation possibilities connected to internal transportation network and a geographical area sufficient for the development of touristic facilities. In order for an area to be regarded as a tourism destination, it should be a geographical area having the same cultural, climatic and natural conditions, natural and cultural wealth, region specific activities developed for offering the customers, accommodation, feeding, transportation and communication possibilities, and it should also be a geographical area having a branded image and consisting of tourist attraction centers in which public services are offered (Ersun and Arslan, 2011).

In order for a region to be a touristic destination the existence of transportation, accommodation, food and beverage, park, museum, ruin and similar recreational possibilities is quite important. These possibilities generate the attraction of this destination (Atay, 2003). Coltman (1989) on the other hand, expressed the destination as places hosting different natural attractions and features regarded as attractive for the tourists. In terms of a concept, destination is expressed as a combination of goods, services and vacation experiences offered in a local scale. In short, destination means touristicplace, point of arrival, touristic attraction center and the places the tourists travel to. The main reason for a temporary replacement is to visit a specific tourism region. Since the regions in question have several attraction items, they attract the visitors (Atesoglu et al., 2009). The attraction items of the destination centers may be quite different and they may even have multiple attraction items. The more a tourism region has attraction items, the more they become successful in attracting the visitors.

Buhalis (2000) collects the tourism destinations under six titles. These destinations consist of attractions (natural formations or built constructions etc.), transportation, accommodation, food and beverages, shopping possibilities, scheduled tours, activities and other service units (banks, means ofcommunication etc.). According to Pike (2004), the basic features of the destinations are being abstract and having no risk, having the substitution possibility and a heterogenous structure, being dependent, variable and indurable.

Co-Marketing and Destination

In the developed western countries, it is possible to express this tangibility forming in the management, production and marketing parts among the cities which are member of a certain region, as 'partnership', 'networks' and some other regimes. The concept of 'Partnership' could be defined as organizational and corporate alliances between different associations. In general text, the concept of partnership describes the cooperation between the cities (Haseki, 2011).

Co-marketing is the act of cooperation of independent manifecturers, wholesalers, consumers or their resultants with purchase and sale or in both of them. Co-marketing is the forming of a relation between the parties in the level of individual, group, company or organization and it is a new area in the marketing literature. In the marketing literature, it is comparedly a new field and it is the idea of gathering of two or more individual, group, company or organization in order to establish a relationship which is based on common benefit. The mechanism of product development, sales promotion, price organizations and locations of this cooperation is standart marketing channel in the 4P level. When realizing this, the channel members of cooperation confirm to use their own sources by combining them and they share the related costs in order to solve their source restrictions (Dieke ve Karamustafa, 2000).

Tourists should support their purposes with different destinations in a region rather then restricting it with a region or a part of a destination to excel in their travel profit. For this reason the destinations in a region should be aware of the requirement that they should act together to present a total product which is attractive and satisfactory and to develope their individual positions in the market.

As well as classical destination marketing concept, recently *'cooperative destination marketing'* activities are also getting preffered. Especially in tourism the tendency in the destination marketing based on cooperation rather than competitive destination marketing concept, the developments in the technology, the will to create powerful brands, creating sinergy and the will to develop a new product could be counted as the reasons causing this. Especially day by day the tendency of marketing of a country as having one destination and one touristic product has been quit and the certain parts of the countries have highlighted their certain identities and marketing and advertising of a city and region have become more popular (İlban, 2008).

Research Method

In this study, the available and potential tourism sources Trabzon Province has have been determined and the marketing of the new products formed by categorizing according to the certain criteria with the cooperative marketing strategy is considered. In this direction, quality research approach is preffered as it enable the analysis and collection of the data. As a general description, sample research method is the examination of a single sample in certain kind of actions. According to another definition sample case is defined as the research methodology which tries to understand the available Dynamics in case of management (Christie and et al., 2000).

The stages accepted generally in the sample case studies (Yavuz, 2008):

- Determining of research focus

- Determining of data to be collected

- Collection of data

- Evalation of data

- Reporting of Suggestions

In the first stage, it is required to determine the tourism sources for the study that Trabzon has in a way that it will contribute to the economical development of the region and define the determined sources. The defined tourism sources may differ in terms of culture, nature, archeology and geography and they may be scattered in different parts of the region. The places of the sources should be established and they should be located in the framework of sustainable decelopment strategy then it is suitable to start marketing activities. Using of cooperative marketing strategy is regarded as the most suitable marketing strategy as it increases the competitive power and the effectiveness of the marketing of regional tourism sources in the marketing activities.

The first part of the research composes of the determining of the data to be collected with the focus of research. This study in which the tourism sources taking place within the research borders covers the studies of examining of the article about the tourism resources in and around Trabzon with the practising

of cooperative marketing strategy in the marketing of new tourism destinations formed with available and potential sources. In the second part of the study, the information prepared about the tourism sources are used and observation, data collection and examination works have been realized in and around Trabzon. Some of the sources taking place in the study are observed in its original place and information has been gathered about their current situation and on the other hand new sources with the potential have been determined and added to the study. In the third part the findings of the research have been collected and the views have been reported.

Research Model

In the research, the subject of marketing of the new products to be composed by recategorizing the tourism sources that the small scaled regional destinations have according to their geographical closeness and similarities with the strategy of cooperative marketing. The conceptional model about the marketing of new destinations is given in the Figure 1. This model foresees that new regional tourism sources are developed from the tourism sources taking place in the borders of a region, in small groups according to their similarities and geographical closenesses. In this way, it is aimed that the sources of small scaled new regional destinations are integrated and this way it will contribute to the sustainable development of the region by providing competitive power.

Fig. 1: Research Model
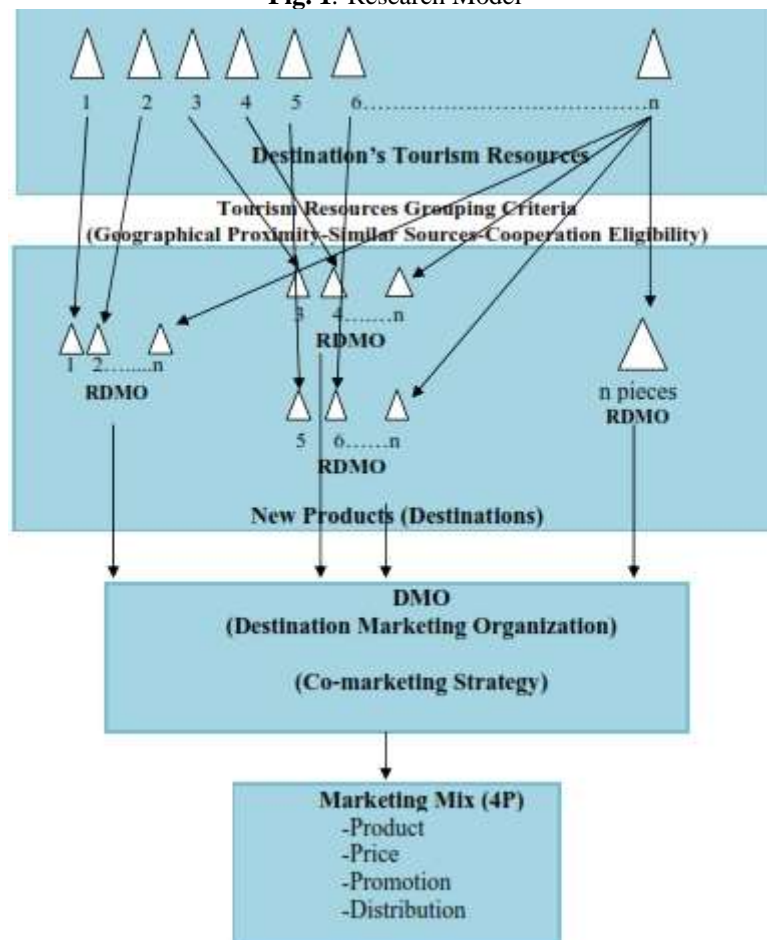
Trabzon and Tourism

Trabzon having a surface area of 4.664 km^2 is located between 38° 30' - 40° 30'east meridian and 40° 30' and 41° 30'north parallels in the northern slopes of Kalkanlı mountain mass which is in the middle of the arc formed by Eastern Black Sea Mountains. In the South of Trabzon Gümüşhane and Bayburt, in the east of it Rize, in the west of it Giresun is located.

Trabzon is a mountainous area like the other provinces in the Eastern Black Sea Region. When we look at the distribution of the land forms we see that it is mainly formed of mountains.77, 6 % of Trabzon land is covered with mountain whereas 22,4% of it is covered with plateus. There are no low lands except

very small aluvial flat lands. The South part of the province is covered with the mountains streching parallel to the sea. The most important pass on these mountains is Zigana Pass which is located on the height of 2306 metres on the Gümüşhane-Trabzon track (Genç, 2005).

The Ionian people from Miletus came to Black sea region after Western Anatolia and established colonial cities in the shores. Trabzon and Sinop were also two of these colonies. Many researcher show the foundation of the city with this period. But native tribes such as Kolkhs, Drills, Macrons lived around Trabzon way earlier. In the same century, Black Sea region was invaded first by Cimmerians coming from Caucasia and then by Scythians. After the sudden death of the King of Macedonia Alexander the Great, the son of Ariantes the Second Mithridates founded the Pontus Empire with the support of local people. In 1204 with the foundation of Trabzon Roman State the Greeks who are the citizens of this state became the citizen of Ottoman Empire with the abolishment of this state by Mehmet the Second. When Ottoman Empire was about to fall, the Greeks started to organize seperation movements supporting Pontus İdeology starting from XX.Century. With the agreement signed in the 30th of January 1923, the goverments of Turkey and Greece arranged a population swap and starting from 1st of May 1923, Greek Orthodox people were moved to Greece and the Greek population in Black Sea region was over (Tellioğlu, 2005).

The Trial of Modelling of Cooperative Marketing Strategy with the Sample Event Method by Developing a New Product with the Tourism Resources in Trabzon Region

Even the sources in the offical borders of Trabzon province are found adequate in terms of quantity within cooperative marketing strategy, although they are within the official borders of Gümüşhane province, the settlements in Zigana, Kadırga Highland and Santa Churches have been included into the study for providing integrity as they are important part of Trabzon tourism. The detection of some attraction elements having antropologic, folkloric and some cultural specialities have not been included into this study because of the requirement of a different study by the specialists on these fields. The subjects such as Nature, History and archeology have been used as attraction points. In Table 1, *61 tourism sources* which are possible to attract the tourist to the region are listed. The sources taking place on this list are categorized by taking their potential of forming cooperation and assimilation and their geographical closeness.

Table1: New Tourism Product in and around Trabzon Region

S.No	Tourism Sources	Supportable Tourism Types	Tourism Product
1	Hagia Sophia Museum	Culture, Belief	
2	Atatürk Kiosk	Culture, History	
3	Küçük Ayvasıl Church (St.Anna)	Belief, Culture	
4	Open Tumb (Hamzapaşa Tumb)	Belief, Culture	
5	Paşa Bath	Culture, History	
6	Arsenal	Culture, History	
7	Gülbahar Hatun Mosque and Tumb	Belief, Culture	
8	Vakıf Inn (Gön Inn, Attar Inn)	Culture, History	
9	Zağnospaşa Bridge	Culture, History	
10	Ortahisar Houses	Culture, History	
11	Ortahisar Fatih Mosque	Belief, Culture	
12	Tabakhane Bridge	Culture, History	**(1)**
13	Abdullahpaşa Fountain	Culture, History	
14	Taşhan	Culture, History	
15	Sekiz Direkli Bath	Culture, History	
16	Bazaar	Culture, History	**Hagia Sophia/Trabzon Coast**
17	Santa Maria Church	Belief, Culture	
18	İskender Paşa Mosque	Belief, Culture	
19	Nemlizade Mansion	Culture, History	
20	Trabzon Museum (Kostaki Mansion)	Culture, History	
21	Fatih Bath	Culture, History	
22	Yeni Cuma Mosque	Belief, Culture	
23	Trabzon Castle	Culture, History	
24	Kızlar Monastery	Belief, Culture	
25	St. Savaş Cave Church (Meşatlık)	Belief, Culture	
26	Ahi Evren Dede Mosque ve Tumb	Belief, Culture	
27	Kaymaklı Monastery	Belief, Culture	

28	Araklı Beach	(sea, beach, sun)	
29	Memişağa (Kastel) Mansion	Culture, History	
30	Çakırağa Mansion	Culture, History	
31	Sera Lake	Nature, Special Interest, Camping-Caravan,	
32	Ortamahalle-Akçaabat Houses	Culture, History	
33	Akçakale	Culture, History	
34	Yalıköy-Çarşıbaşı Beaches	3S (sea, beach, sun)	
35	Beşikdüzü Adacık Beach	3S (sea, beach, sun)	
36	Maçka Şolma Tourism Center ve Highland	Highland, Youth, Nature, Third Age	(2) Sumela Monastery
37	Mavura Highland	Highland, Camping-Caravan, Nature Walks	
38	Lişer Highland	Highland, Culture, Sport, Nature	
39	Vazelon Monastery	Belief, Culture	
40	Zigana Winter Sports Tourism Center	Winter Tourism	
41	Kiraz Highland	Highland, Sportive Handline Fishing, Sport, Culture	
42	Akarsu Village Cave	Cave, Health	
43	Altındere Valley National Park	Nature Walks, Bird Observation, Culture, Trekking, Camping	
44	Sumela Monastery	Belief, Culture	
45	Santa Church Group	Belief, Culture	
46	Kuştul Monastry(Peristera)	Belief, Culture	
47	Harmantepe Highland	Highland, Belief, Arkeoloji, History	(3) Uzungöl
48	Araklı Yeşilyurt Tourism Center	Highland, Nature, Trekking	
49	Araklı Pazarcık Tourism Center	Highland, Nature, Trekking	
50	Uzungöl Highland	Highland, Botanic, Trekking, Nature, Sportive Handline Fishing	
51	Uzungöl Nature Park	Highland, Botanik, Trekking, Nature,	
52	Cevdet Sunay Museum	Culture, History	
53	Çaykara Sultan Murat Highland	Highland, History, Arkeoloji, Belief, Culture	
54	Hıdırnebi Highland	Highland, Nature, Photo Safari, Culture, Health	(4) Sis Mountain and Highlands
55	Balıklı Lake	Nature, Trekking,	
56	Akçaabat Karadağ Tourism Center and Highland	Highland, Nature, Sport	
57	Çalköy Cave	Cave, Nature	
58	Düzköy (Haçka Tent Side) Highland	Highland, Religion, Culture	
59	Kadırga Highland	Highland, Culture	
60	Tonya Erikbeli Highland and Tourism Center	Highland, Nature	
61	Sis Mountain Highland	Highland, Culture, Trekking	

With the development of new regional tourism products as a result of recategorizing of available tourism sources in and around Trabzon province according to the certain criteria, it is possible to create tourism attraction center for 16 nights and 17 days for Trabzon. Marketing of these four new destinations which complete each other on their own will both bring more costs and this won't be enough to reach the aim. For this reason, marketing of new tourism products according to the comarketing strategy will provide competitive advantage.

In the scope of the marketing activities of the new created tourism products (destinations) the best strategy for determining the marketing combination seems to be co-marketing strategy. Every new destination created as common market strategy should create its own *Regional Destination Marketing Organization. Hagia Sophia-Trabzon Coast, Sumela Monastry, Uzungöl and Sis Mountain and Highlands* destinations formed in Trabzon Travel destination should establish their own Regional Destination Marketing Organization with their own shareholders and Board of Management of RDMO of four destinations should form Trabzon Destination Marketing Organization (TDMO) with public and other related sector representatives.

Figure 2: Regional Destinations of Trabzon Province for Co-Marketing
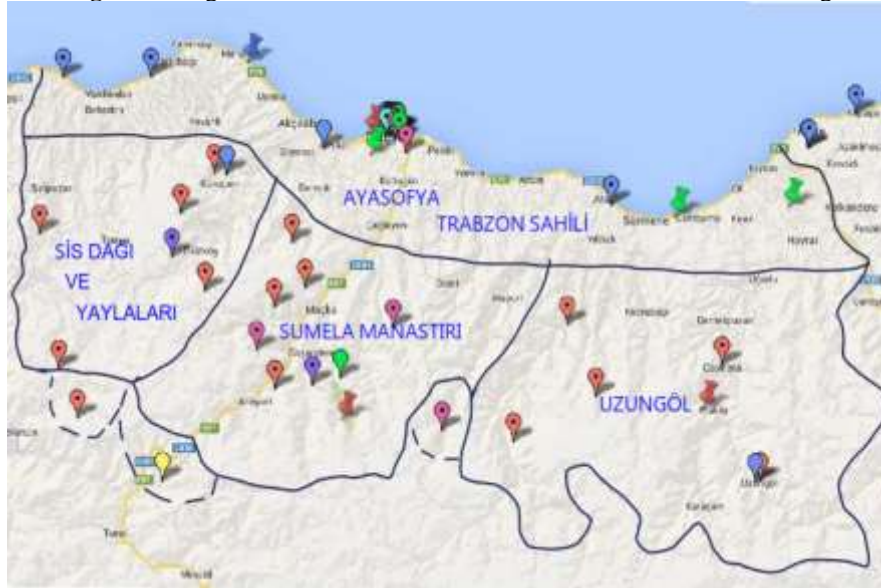
Source: Google Maps (2013). Trabzon Map. Adapted from [29.09.2013]

Table 2: The Meanings of the Symbols on the Map

Symbol	Meaning
	Beaches
	Lakes
	Highlands
	Churches and Monasteries
	Mosques and Tombs
	National Parks
	Caves
	Winter Sports Tourism Centers
	Museums
	Castles
	Caravanserais and baths
	Kiosks and mansions

Results and Suggestions

The purpose of this study is to develop small-scaled new tourism products with the co-marketing strategy by determining the tourism resources in and around Trabzon Province and classifying them comprising proximity and cooperation in order to support sustainable regional development. Some of the tourism sources in Gümüşhane province are also included in this study in order to increase the demand and have competitive advantage by creating resource diverstiy and integrity.

In this study, the tourism resources of Trabzon destination are classified according to the certain criteria and a new research model is developed as a result of the research made about the marketing of the new small-scaled tourism products with the co-marketıng strategy. The main purpose of this model is to classify the tourism resources which are scattered in a region according to the certain criteria and to form small-scale tourism products and to support the sustainable development of the region by increasing the competitive capacity with the method of associate the resources and methods of the destinations which are close to each other in order to market these small-scale tourism products. As a result of the reevaluating the available products, each of four determined regional destinations has a leader product and the destinations are named after this leader product. Hagia Sophia in *"Hagia Sophia/ Trabzon Coast"* destination, *"Sumela Monastry"* in Sumela Monastry destination, Uzungöl in *"Uzungöl"* and *"Sis*

Mountain and Highlands" destination are determined as leader product. Marketing and advertising activities are intensified on the leader products. It is also aimed to be a model for the other regions.

The study has been conducted by taking the objectives of the study of ' The Tourism Strategy of Turkey' of the Ministry of Culture and Tourism. The start of the *'Highland Corridor'* works called as *'Green Track'* reaching out from Samsun to Hopa, which is also one of the seven thematic tourism development places determined in countrywide among the 2023 objectives and the plan of completing it within three years has helped the shaping of the study. For this reason, new small scaled highland tourism centered tourism products have been developed by supporting the highland tourism with the other tourism products within the borders of Trabzon province.

As a result of the study, it is determined that Trabzon Province and its environment is possible to be a destination which can contribute to the sustainable regional development with its new small scaled tourism products developed in accordance with the co-marketıng strategy based on cooperation. There is a need of Destination Marketing Organization having a corporate structure for realizing the comarketing activities based on cooperation of for new tourism products which are composed in accordance with comarketing strategy (Hagia Sophia / Trabzon Coast, Sumela Monastry, Uzungöl and Sis Mountain and Highlands) . As tourism organizations from different levels play role in the destination marketing, there is a need for the coordination of some organizations as a requirement of the realizing of important marketing duties in a harmony such as the existince of the destination in the global market. In the international scale, it is possible to count Congress and Visitor Buros, Regional Tourism Organizations and Destination Marketing Organizations (Yaylı and et al., 2009). In this direction, it is required for the four new tourism destionations to reunite the economic power and the tourism resources of each of their regional destination management and to share out the common costs and needs among the shareholders for a successful marketing activity. For an active marketing activity, related organizations should find the least common denominator. The purpose of comarketing strategy is to provide the shareholders to act in cooperation.

No matter which organization structure it is, *Trabzon Tourism Council* should determine which shareholders Destination Marketing Organization will compose of. It is also necessary to develop a membership system for the shareholders of the Destination Marketing Organization in the destination according to the certain criteria. It is also required to determine the cost of the services the organization give to its shareholders and the shareholders should pay for the service they demand to use. Because no matter how formal the organization is, it still needs a budget to realized its marketing activities.

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The importance of Marketing Places in Developing Tourist Regions. Study of Thermal Spa in Portugal.

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Abstract

Thermal springs have gained preponderance in developing sustainable tourism projects in several regions worldwide. However, thermal spas need to guide their development strategy in areas of intervention that should go beyond the traditional product, by basing the positioning on a product capable of satisfying different market segments. This paper intends to study the thermal spa based on an integrated approach to the various stakeholders in order to create a strong brand that values and enhances the visibility and attractiveness of a region. It aims to highlight that the effective and integrated use of marketing tools by different actors, has become more than a simple tool to promote a spa resort and attract tourists, residents and organizations. Marketing should be viewed as an important tool not only for local economic development, but also to enhance competitiveness of tourist destinations. Through an empirical study, based on the users of a spa resort, the factors that tourists consider more important when choosing a tourist destination were identified. These factors should be considered in future strategy decisions for sustainable development of thermal resorts.

Keywords: Marketing Places, Tourism, Thermal Spa

Introduction

The evolution of tourism in recent years and the increasing complexity of markets brings new concerns to the tourist organizations. With increasing competition from tourist destinations, both in existing destinations or with the onset of new destinations is attributed increasing importance of marketing tools.

This uncertainty scenario of tourist destinations has led to new approaches to marketing, which highlights the territorial marketing. Your goal is to gain resources, whether investment, tourists or residents. The product is his territory with its heritage, its history, its people and its economic, social and cultural dynamics.

The spas, with all its richness in terms of water resources, its history and its various tourism products have gone through troubled times, with growth rates sometimes positive and sometimes negative. Some resorts have been able to create richness for their people, attracting investments, businesses, tourists and even residents. But others have been losing dominance in the realm of hydrotherapy, dragging with it the whole development based only on that product. In this sense, it is necessary to work the factors of differentiation and positioning of the territory, given the increasingly demanding markets in order to attract new customers, whether they are tourists, investors and residents.

The investigations in this field are still scarce in Portugal. Although some investigations arise, and articles related to territorial marketing and its application to thermal spas have been inchoate.

From this perspective, the present study arises. It seeks to explore how the tools of territorial marketing have been used in the development of spas. The study focuses on S. Pedro do Sul Spa, being the highest expression in Portugal. It seeks to analyze the performance of a county that showed consistency in their development process, considering hydrotherapy as the anchor of all its dynamism.

This study intends to contribute the understanding of the dynamics of thermal spa market that can help the sustainability of the growth and success of a spa resort, in the specific case of the S. Pedro do Sul Spa.

This paper is structured as follows: after this introduction it is analyzed the importance of territorial marketing in the development of a place. It analyzes the different theoretical contributions and developments in this new branch of knowledge. Then, the study methodology is presented in section 3, presented below, in Section 4, the results of an empirical study to customers of the spa of S. Pedro do Sul. Finally, the conclusions of this work and some clues for future research are presented.

The Role of Territorial Marketing in The Development of A Destination

The issue of territorial marketing has gained notability and comprises a set of practices aimed at disseminating knowledge of a place, a region or a particular territory and the specific characteristics that may contribute to your long-term development.

But the application of marketing approaches to localities, not only implies the adoption of an additional tool to solve problems, but rather the adoption of a new management philosophy. The marketing of places has become more than a mere tool used to attract tourists and organizations. It is now seen as a component essential for the planning and development of places and is considered an important tool for local economic development. A place, whatever their condition, consists of a multitude of products and features designed to meet the needs of visitors, residents, investors and traders / businessmen (Guerreiro, 2008).

This branch of marketing was initially developed by Kotler, Haider and Rein (1993) in his book Marketing Places: attracting investment, industry, and tourism to cities, states, and nations. Another study in this issue of great importance is the study by Rainisto (2003) which presents examples of development in Helsinki, Stockholm, Copenhagen and Chicago.

In the work of Kotler, Haider and Rein (1993), the elements of territorial marketing in the model are summarized in three levels (Fig. 1). As a starting point, it is necessary to define who are the key players in the planning process and control of marketing strategy; a second level, define the marketing factors that include attractions and the infrastructure of the place, its people, image and quality of life; the third level is the definition of target markets, ie, the segments selected for which the marketing communication will be issued (tourists, exporters, new residents, corporate offices, industries and services).

Fig. 1. Levels of Place Marketing
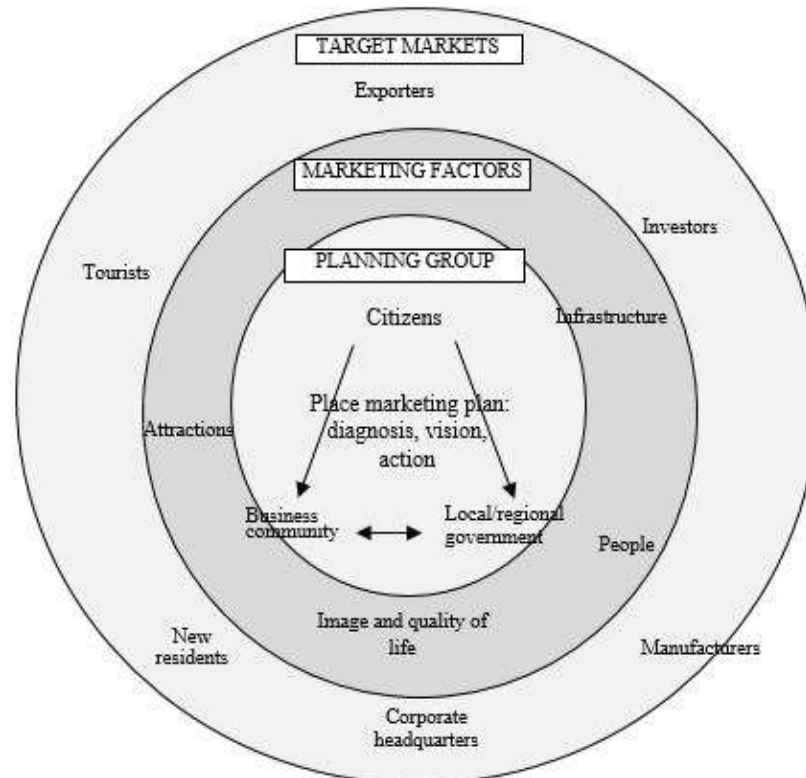
Source: Kotler, Haider e Rein (1993)

The initial task is so to organize a planning group consisting of citizens, businessmen and local and regional government authorities. This planning group will validate the importance of cooperation between the public and private sector, and the need to involve all taxpayers in the preparation of the future of a place. He has three obligations: first, to define and diagnose the conditions of the community, their main problems and their causes. As a second function, should develop a strategy to address the long term problems of the community, based on realistic assessments of their values, resources and opportunities. Finally, develop a plan for long-term action, involving several intermediate stages of investment and transformation.

This action plan involves a long-term improvement of four major marketing factors, to achieve the strategic objectives for all stakeholders (Kotler, Haider and Rein, 1993; Rainisto, 2003):

– Ensure provision of basic services and the maintenance of a satisfactory structure for its citizens, businesses and visitors;
– Create new attractions that improve the quality of life for residents and, thus, maintain current business and public aid, attracting new investments, companies and individuals;
– Disseminate their improvements and quality of life of the community through an image and a program of aggressive communication;
– Create a hospitable and enthusiastic image of the place in order to attract new businesses, investment and visitors to this place with the support of its citizens, leaders and institutions.

These four marketing factors influences the success of a place to attract and satisfy its five target markets: producers of goods and services, commercial offices and local offices; foreign investment and export markets; tourism and business meetings; and new residents (Kotler, Haider and Rein, 1993).

But when we are approaching the theme of destination marketing, particularly in tourist destinations, we can not ignore the concept of sustainability and Tourist destination image.

To Buhalis (2000), the marketing of destinations should balance the strategic objectives of all stakeholders as well as the sustainability of local resources.

The market attaches more importance to the sustainability of the tourism industry. The number of tourists and investors who attribute added value to sustainable tourism ventures has been growing. This is the result of growing awareness of the tourists who increasingly seek destinations that respect social and environmental surroundings. This growing demand of tourists makes investing in sustainable projects more attractive to investors (Santos et al., 2009).

Regarding the destination image, surveys conducted over the past decades have demonstrated the important role it plays in the selection of the target process.

To Echtner and Ritchie (2003) destination image, consists of the functional characteristics of the most tangible aspects of destiny and psychological aspects concerning the more intangible characteristics.

To Baloglu and McCleary (1999), destination image has been an important factor influencing the choice of holiday destination. In that study, the image can be formed by stimulating factors, and characteristics of tourists.

Following this, other studies also address the importance of the role of destination image on tourist choice behavior (Kastenholz, 2002) and the implications of marketing in the creation and improvement of the image of tourist destinations (Baloglu and McCleary, 1999).

In turn, the study by Chi and Qu (2008), the destination image is a strong influencer in the choice of a specific target process and plays an essential role in tourist satisfaction as well as loyalty. Improvement of the overall image in the possession of an individual increases the propensity for him to make a positive assessment of their stay and increases their intention to return in the future and recommend it to others.

To Echtner and Ritchie (2003) the image of a tourist destination has a relevant role in the success of destinations, through its influence on consumer behavior and its importance to the marketing strategies of destiny considering it as one of the most important components of the product positioning or tourist destination. For an effective promotion in target markets, a destination must be favorably positioned in the minds of consumers. A key component of this positioning process is the creation and management of distinctive and attractive image perception of the destination.

Therefore, the destination image affects the subjective perception of tourists, the consequent behavior and destination choice. The image will influence the tourist's decision to choose the tourist destination (Baloglu and McCleary, 1999; Echtner and Ritchie, 2003) and its future intentions to return (Chi and Qu, 2008).

In relation to tourism in Portugal, the National Tourism Strategic Plan reinforces this idea. It is essential acting, at the enrichment level of supply, developing and innovating traditional Portuguese content, constituting factors tourist differentiation, enabling distinctive experiences for tourists (TP, 2007).

One of Portuguese tourism products with high growth potential, but with some difficulties statement is thermal spa product. The lack of a marketing strategy has contributed to their poor development. Thus, with the aim of contributing to a better knowledge of demand, towards a better adjustment of supply, there was an empirical study to the spa goers of S. Pedro do Sul, in order to know their needs, preferences

and motivations. For the realization of this study we defined a methodology that will be presented in the next section.

Methodology

The methodology for this study was based on a literature review, exploratory interview to the responsible for the spa of S. Pedro do Sul and the use of a structured survey conducted to the goers of that spa.

Pre-tests were carried out at a reduced sample and researchers related to tourism, in order to better tune the measuring instrument. Sampling was based on quota sampling, based on the gender variable. For data processing, we resorted to the SPSS (Statistical Package for Social Sciences), version 20.0.

Results

In relation to the characterization of the sample (97 respondents), in terms of demographic variables, it appears that goers of the baths are mostly female (60.8%) and represent a very aged population, where 35% are aged over 65 years and 76.6% with over 55 years of age. The qualifications are mostly the primary level (43.3%) and in terms of occupation, are largely pensioners / retirees (37.1%).

Sought to know if goers of the spa of S. Pedro do Sul repeat visit or are for the first time at the resort. The results show that the vast majority (84.4%) have been other times in this resort, against only 15.6% which is the first time (Fig. 2).

Fig. 2 - First time who frequents the S. Pedro do Sul Spa resort
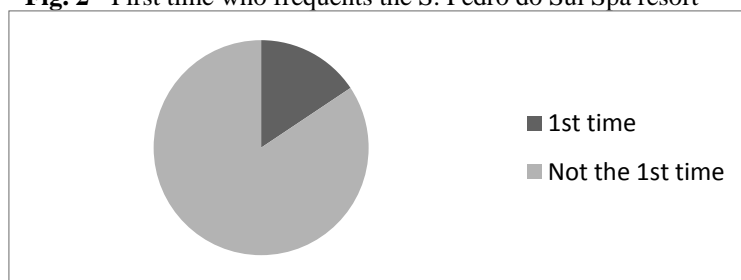
The customers who had previously attended the spa of S. Pedro do Sul (81), sought to know how many times they've frequented this resort. The results in table 1 show that a significant number of customers have attended in this resort for several years.

Table 1. Number of times you have stayed in S. Pedro do Sul Spa resort

Number of times	Answers	Percentage
1 time	12	14,8
2 to 5 times	30	37,1
6 to 10 times	23	28,4
More than 10 times	12	14,8
Not answer	4	4,9
Total	81	100,0

The decision to choose the spa of S. Pedro do Sul was largely medically indicated (45.4%), followed by own initiative (34%) and the advice of friends and family (20.6%). The results allow to draw attention to the role that physicians have in this whole process, just leaves a reminder of marketing activities to develop along these prescribers.

Table 2. Decision to attend the S. Pedro do Sul Spa resort

Type of decision	Frequency	Percentage
Own initiative	33	34,0
Advice from friends and family	20	20,6
Medical indication	44	45,4
Total	97	100,0

Another analysis that can be made is in relation to the frequency of other spas. Customers who are first time in S. Pedro do Sul, only 2 have attended other spas. Those who have come to S. Pedro Sul several years ago, 16 have already been on other spas (Table 3).

Table 3. Crossing variables between the first time in S. Pedro do Sul Spas and other spas

| | | Other spas | | |
		Yes	No	Total
First time in S. Pedro do Sul Spas	Yes	2	13	15
	No	16	65	81
Total		18	78	96

The following analysis aims to assess which factors underlie the influence of the customer to decide for specific spa.

Thus, we listed a number of items related to the spa, where you wondered about the importance of each of them, by submitting affirmations. In a 7-point scale Likert were asked to answer 1 - strongly disagree to 7 - strongly agree.

First we start by presenting the respective values for the mean and standard deviation of these variables (Table 4). It appears that almost all items have higher mean than the midpoint of the scale (3.5), except V4 item, which means that people largely agree with the statements presented. Initially it had been considered more an item related to the traffic locally, but in reverse order. This item was removed from the analysis by presenting very different values, possibly be an inverted scale which may have caused difficulty in interpretation.

Table 4. Mean and standard deviation of items related to the spa

Variable	Items	Mean	Standard deviation
V1	This locality has a natural landscape of great beauty	6,43	1,115
V2	You can easily have access to cultural and recreational activities	4,40	1,959
V3	There are appropriate places for the practice of various sports	3,67	1,910
V4	There is easy parking at this spa	3,43	2,177
V5	It's easy to find the desired type of accommodation	5,66	1,499
V6	There are security in this locality	5,52	1,472
V7	This resort has good accessibility (road or other)	4,98	1,872
V8	This locality has good support structures (banks, pharmacies, shops and other services)	4,09	1,993
V9	There is a great cleansing of the locality	5,39	1,608
V10	This locality is quiet	6,21	1,245

Proceeded to principal component factor analysis of this set of items in order to find combinations of variables (factors) that explain the correlations between all pairs of variables. For implementation and validation of this technique is necessary to evaluate the correlations between the variables for whether it is legitimate to perform a factor analysis.

The value of Kaiser-Meyer-Olkin (KMO = 0.705) shows that the value of the measure of adequacy, the analysis considers the medium level. Bartlett's test, which tests the null hypothesis that the correlation matrix is an identity matrix, shows the value 274.663 and an associated probability of 0.000, which rejects the null hypothesis that the correlation matrix is an identity matrix (Table 5) . These tests indicate that the 10 variables are appropriate for a factor analysis is performed.

Table 5. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,705
Bartlett's Test of Sphericity	Approx. Chi-Square	274,663
	df	45
	Sig.	,000

Through the Kaiser criterion (eigenvalues greater than 1), three factors that explain 61.852% of the total variance in the set of 10 variables were found (Table 6).

For better interpretation of the factors, we proceeded to a rotation of the axes through the varimax method. The proportion of variance explained by the components remain constant, just distributed differently so that differences are maximized between combinations of variables: increasing that contribute most to the formation of the factor and decreasing the weights of which contribute least.

Then, it examined whether the internal consistency of each factor using Cronbach's alpha (α). Of these factors, only one has a low internal consistency (less than 0.70). However, it should be noted that this low value of alpha may be associated with scales that include a reduced number of elements. When the number of elements increases, the alpha value also increases. Therefore, the acceptable limit of alpha can become 0.6 or 0.5 for scales contained in a small number of elements (Carmines and Zeller, 1979).

Table 6. Total Variance Explained

Comp.	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3,496	34,961	34,961	3,496	34,961	34,961	2,225	22,246	22,246
2	1,405	14,053	49,014	1,405	14,053	49,014	2,188	21,879	44,125
3	1,284	12,838	61,852	1,284	12,838	61,852	1,773	17,727	61,852
4	,976	9,762	71,614						
5	,788	7,883	79,497						
6	,670	6,702	86,199						
7	,441	4,406	90,606						
8	,372	3,721	94,327						
9	,318	3,179	97,506						
10	,249	2,494	100,000						

Extraction Method: Principal Component Analysis.

The weight factor for each of the variables are presented in table 7. Thus, factor 1 is composed of the V3, V2, V4 and V1 variable which we call "Entertainment Activities and Attractiveness." The second factor consists of the V10, V11, V9 and V7 variable, which we call "Support Structures and Tranquility". The third factor, consisting of the V5 and V6 variable, which we call "facilities for accommodation and security." Were only considered weights in excess of 0.5 for easier interpretation and for each variable was only a single factor weights.

Table 7. Components Matrix after Rotation[a]

Items	Component		
	1	2	3
There are appropriate places for the practice of various sports	,829		
You can easily have access to cultural and recreational activities	,762		
There is easy parking at this spa	,649		
This locality has a natural landscape of great beauty	,623		
There is a great cleansing of the locality		,863	
This locality is quiet		,757	
This locality has good support structures (banks, pharmacies, shops and other services)		,564	
This resort has good accessibility (road or other)		,546	
It's easy to find the desired type of accommodation			,917
There are security in this locality			,797
Engeivalues	2,225	2,188	1,773
Cumulative variance explained	22,246	44,125	61,852
Cronbach's alpha	,747	,640	,751

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

These factors may therefore serve to support decision makers in strategic decisions. It appears that Factor 1 - Animation activities and attractiveness of location is what matters most, so there is need to assign and make efforts to develop animation activities, such as cultural and recreational activities and arrangements related to sport and protect and preserve the natural landscape of the locality. It is also necessary to keep the city clean, promote tranquility and structures provide essential support for an enjoyable stay, able to

meet the expectations of customers. The facilities to find the desired accommodation, able to meet the tastes and needs of each locality and security are also factors to be taken into account in future decisions.

Finally, we tried to know the level of loyalty to the spa of S. Pedro do Sul. For this purpose we used a Likert scale of 7 points (1 - strongly disagree to 7 - strongly agree). This variable is measured by three items which reflected the repeat purchase and the "word of mouth". This scale is adapted from Foster and Cadogan (2000) and Garbarino and Johnson (1999) and is presented in table 8.

This scale was validated by its psychometric properties according to the suggested by Churchill (1979). Thus, the acceptability of this type of scale is based on two aspects of its construction: reliability and unidimensionality.

According to Hair et al. (1998), reliability is the degree of consistency between multiple measurements of the construct. The Cronbach's alpha is the measure most commonly used to measure this property.

Thus, to verify the unidimensionality of the constructs, conducted a principal components factor analysis, resulting in only a factor. In relation to the internal consistency, Cronbach's alpha value shows a very good value with the value of $\alpha = 0.952$.

The average values for each item show a value of 6, (possible value between 1 and 7) which show a high level of loyalty to the spa of S. Pedro do Sul, which incidentally other values presented above already confirmed (Table 8).

Table 8. Loyalty scale of the spa

Loyalty	Mean	Standard deviation
I intend to continue to come to this spa resort in the next years	5,98	1,299
I often say well of this spa when I talk to other people	6,07	1,148
I recommend to my family and friends to come to this spa	6,08	1,205
Cronbach's alpha	0,952	

Conclusions

The health tourism and wellness takes, these days, an increasing importance due to new concerns of people, originating in the way of life of modern societies. This proliferation of motivations for the demand has led to the development of thermal products, with special emphasis on the thermal spa. Portugal begins to take its first steps. However, the Portuguese spas still have difficulties to meet the new requirements demand. There is a need to revitalize spas, either by offering these new products, and the creation of infrastructure related to health, restaurant sector, leisure and entertainment appropriate levels of market demand.

The Spa of S. Pedro do Sul has taken important steps in this direction, trying to offer a set of services targeted at the two thermal components: classic spa and wellness spa. However it highlights the need for tourism planning with all stakeholders in order to maximize the benefits of Hydrotherapy to the spa and reduce the negative aspects that may lead.

Due to stiff competition among spas, there is a growing need to attract more businesses, tourists and residents. Hence the need for innovation and promotion, continuously using the techniques of territorial marketing. You must know and understand the needs of customers so that the thermal organizations to provide a service with quality and personalized way in order to increase the satisfaction and loyalty of its customers. In the present study, we found that customers value highly a number of factors that must be taken into account in the definition of new products and organizational strategies.

This study is intended to contribute to the development of thermal organizations and all the surrounding locality, trying to analyze the differences between the various motivations to contribute to the adequacy of the supply to the characteristics of a demand with increasingly specific needs.

This work allowed the assessment of the potential of territorial marketing. However the various dimensions were only partly addressed. Thus, as clues for future research, let the challenge for the study of other actors of territorial marketing: residents and investors. The knowledge of these actors can provide the basis for better strategic decisions, to the sustainable development level of Spa of S. Pedro do Sul.

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Authenticity in the Experience of Tourism Product

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Abstract

The increasing popularity of seeking for the difference in tourism field has resulted in searching for new ideas for the touristic experience. While this search intensively has focused on the indigenous and authentic experiences, it also has helped to bring a remarkable change to what destinations were used to offer. At this point, it has created a perceived value by including the tourist in the processes of production and consumption, so tourist started to be formative as well other than consuming only. As a result, tourist has become an active participatory element of the production process rather than just demanding the instant tourism product. In this study, in regard to touristic attractions the relationship between organic agriculture and organic production, as well as authenticity experience as a latter phase has been researched. Izmir/Kaynaklar Region, where organic agriculture and production have recently increased, was chosen for the field work of this research. In this region, face to face interviews have been conducted with related persons/bodies such as neighbourhood units (*mukhtars*), craftsmen, producers and opinion leaders. The data collected from interviews has been processed by content analysis method, and it has been found that production, supply and consumption of organic products offer tourists opportunity to experience the authenticity. It is also observed that this helps strengthening the tourism potential of the region, as well as bringing increase on tourism income. As a result of the research, it has been observed that cultivation of indigenously organic products facilitates consolidation of tourism potential in the region, and increases the farmer's income. Therefore, after realizing its benefits it is believed that more farmers have preferred organic agricultural facilities. Furthermore, it is realized that tourists have started to leave the region with good impression after they visited the region and had opportunity for active involvement in the production process. It is suggested that local products should be marketed the world outside, and relevantly some attempts have been observed, yet the need for more enterprise and support is still available.

Keywords: Authenticity, Experience, Tourism Product

Introduction

The situation that above explained and which coincides with organic agriculture and local production constitutes a focal point in the global market (Demiryürek, 2004). In fact the worsening conditions of the environment and nature points out the importance of organic production (Güler, 2005). Therefore, this new status re-shapes the frame of the touristy products, yet additionally it also brings out an unstudied area for researching the local production and the authenticity of the touristy products.

Experiencing the Touristy Product and Authenticity

The quality of the touristic experience is usually affiliated with the authenticity impact on the tourist's perception (Doğan, 2004). Furthermore, the authenticity image that holds a place in tourist's perception can be shaped via social link between tourist and the product (Hughes, 1995), because it has been thought that authenticity keeps an existential position for tourist and this position is created by a certain touristic experience. In addition to this opinion, it is claimed that tourist participates in activities other than tourism to fulfil the need for self-actualization, since a tourist who lives authentic touristy experience can build a bridge between self and the actualized activity (Wang, 1995).

Seeking Meaning in the Different One

Urban life hosts a complicated structure which requires people to constantly guard themselves against changing conditions. This structure suspends townsman from being a free individual and assimilates him with the norms of urban life which more imposes people doing the similar (Altan, 2008). Hence, it points out that tourists' escape from the crowd into the nature refers to returning back to the authentic selfhood and seeking for new meanings for their lives (Olalı and Timur, 2008). To put it differently, seeking authenticity emerges for the need to natural, mental and cultural purity when people feel alienated from the nature, and when life appears very artificial and fake (Taylor, 2001). This search is also very closely linked with the concepts of reality and legitimacy. To state it much clearly, tourist who searches for the

authenticity does not prefer artificial, he will usually look for the original and cultural ties between the product and the local place. Therefore, carrying domestic features will make the product satisfactory for the tourist whose concern is about the originality (Sims, 2009).

The Local Production and the Locality of Production

Locality and local production are considered to be near terms to the authenticity. Locality can be described as the production and sales of a product limited to a certain region. On the other the local product refers to a product that is special to and associated with a certain region, and also brings added value to the region via import and export. The raw material and production method are the core points that make the product authentic. Authenticity also emerges when tourists visit the region and try to build relationship between the product and the local features (Sims, 2009).

On the other hand, it can observed that the touristic interest in local products creates a new marketing opportunity, and helps attaining sustainable agriculture, preserving agrarian lands and boosting local economy (Buller and Morris, 2004). Beside, while agriculture in rural areas was not seen profitable in the past, now with good quality local products there are more financial interest ever than before. With this interest, more projects come to the urban areas and this provides new life opportunities there, not only economically but also socially (Lopez and Martin, 2004).

This tendency in local production has been observed within recent agriculture policy of EU and of similar organizations. New agricultural regulations, rural development programs like LEADER, discussion on organic production, Slow Food, Good Food, and Fair Trade etc. point out the importance of rural regions as a resource for local production, brings quality standards for local production, and attempts to name products based on their originality. In regard to this, in order to offer not only diet, but also nature, landscape, culture, health and tourism to different markets, for rural areas traditional but modern production has been preferred (Buller and Morris, 2004). As a result, consumption of the product at its place and the association of the consumption with the region can create quality perception. Therefore the authentic product, which is embarked with locality and local culture, can be advantageous against other regional products as settling quality image (Martin and Lopez, 2002).

Tourist's Experience and Locality

Changes and transformations in tourism perception have directed world countries to the search for the new and so new tendencies have recently shown up (Tosun and Bilim, 2004). As a matter of fact, it has been seen that the direction of the ongoing touristic activities positively leans towards service which concerns nature and culture (Öztaş and Karabulut, 2007). Such a changing trend in touristic activities has required tourists to observe local production and obtain authentic experience in the local area itself (Kılıç and Kurnaz, 2010). Hence tourism can provide opportunity to tourists for being proactive and attending local experiences in order to improve their capacity (Richards and Raymond, 2000).

Authenticity within the Local: Organic Agriculture

Due to its harmful impacts, synthetic manure (agricultural chemical) is the main driven of the organic agriculture. Improving consumer awareness and tendency to select more ethic products furthermore have become a new marketing desire (Albeni, 2011). Eventually, in order to improve efficiency and meet increasing market demand chemicals have been intensively used in cultivation and this has recently risen up the significance of organic agriculture, in other words farming with classical methods (Uzun, 2006; Albeni, 2011). This situation also introduces the importance of authentic products, the preservation of local identity and a sustainable tourism (Kaya, 2012).

Methodology

In regard to touristic attractions the relationship between organic agriculture and organic production, as well as authenticity experience as a latter phase has been researched. Izmir/Kaynaklar Region, where organic agriculture and production have recently increased, was chosen for the field work of this research. Since the organic agriculture and touristic activities in the region are in the process, it has been aimed to convey survey with as many stakeholders as possible. Necessary information for the research has been collected through face to face interviews with related persons/bodies such as neighbourhood units (mukhtars), producers/farmers, tradesmen, craftsmen and opinion leaders. In the mentioned interviews, semi-structured interview technique has been used in order to obtain deep knowledge, increase the awareness for some subjects, and acquire flexibility to participants for information supply on important

subjects (İslamoğlu, 2003). In the interviews, open-ended questions have been asked and the information gathered has been classified under certain sub-categories according to the answers' frequency.

Findings

During the interviews, it is asked "*How organic products are reached to final consumers and tourists?*"

Table 1: Supply of Organic Products to Consumers

Category	Frequency	%
Street Bazaar	20	59
Restaurant	10	29
Supermarket	4	12
Total	**34**	**100**

Participants stated that producers in the region find opportunity to directly sell their products to on certain days in the street bazaars which are certified by the municipality. Thus, a local organic market is formed, and direct communication with producers and tourists is built. Moreover, in some restaurants breakfasts with organic products are available. Finally, although very few in number, it is possible to meet organic products in village mini-markets.

During the interviews, it is asked "*whether tourists are interested in the production process rather than just buying a product? And how*"?

Table 2: How tourists track organic products?

	Category	Frequency	%
Yes	Accommodation at Village Houses	3	9
	Visiting Restuarants' Production Units	5	15
Yes	Excursionist	26	76
Total		**34**	**100**

Participants stated that 9 percent of the tourists, who are brought by travel agencies, are hosted in village houses and so they are able to see production in its place. It has been observed that tourists, who escapes from urban life and never before experience agricultural activities, leave the region with good impression. In addition, it has been measured that 15 percent encapsulate tourists visiting restaurants' cultivation units. However the majority of tourists, with 76 percent, constitutes from daily excursionists who have no opportunity to see farms and witness production process.

During the interviews, it is asked "*whether the marketing of the local products are limited within the region?*"

Participants stated that other than visitors the products are also marketed in Bosnia and Herzegovina. Thus, it is understood that producers try their best to at least promote their products to the near regions.

During the interviews, it is asked "*whether there is organic farming activity, other than production process, that tourists are involved. If so, what examples can be given?*"

Table 3: Tourists' involvement in organic agricultural activities

	Category	Frequency	%
Yes	Worked in farms	4	11
	Worked in agriculture via participation in eco-mansions	2	6
	Worked in restaurants' organic farming units	3	9
No	Bought products from Street markets	15	43
	Experienced eating at restaurants	11	31
Total		**35**	**100**

Participants stated that similar activities such as eco-tourism have been implemented by some entrepreneurs. According to the participants, during their stay tourists find opportunity to plant their fruits and vegetables, and consume them in the mansion. Nonetheless, 26 percent of the answers claim that tourists are not involved in organic cultivation activities.

During the interviews, it is asked "*other than foreign tourists what the level of demand domestic tourists show to the region?*"

All participants stated that the domestic tourists have intensive interest to the region. Particularly, people from Izmir and its vicinity come to the region on weekends in order to have their breakfasts from organic products.

During the interviews, it is asked "*what benefits has the region acquired out of organic farming activities?*"

29 percent of the participants stated that no significant earning/change has yet taken place since mentioned activities are very new for the region. Nevertheless, 38 percent of the participants posit that local producers have made significant income increase out of sustainable agricultural activities.

Table 4: The benefits of organic agriculture to the region

Category	Frequency	%
Income increase	13	38
Employment	8	24
Superstructure-Infrastructure	2	6
Social Activities	1	3
No Earnings	10	29
Total	**34**	**100**

During the interviews, it is asked "*whether there is any work to promote the regional farming activities so as to reach more people?*"

Participants stated that in order to promote cultivation activities and the organic products they organize festivals in certain periods and they attend commercial fairs. Bardacik Festival which lasts 2 or 3 days every year is given as an example. Organic bazaar that is established with this festival gives chance to the producers for marketing their products.

Conclusion and Recommendations

Concerning the subject, many more projects, which can be supported by regional development agencies, are anticipated to be necessary. At this point, so as to improve organic agriculture and bring about more effective touristy experiences for tourists, governmental subsidies and investments should be increased; market guarantee, supportive purchase, and loan easiness should be implemented by official policies. On the other hand, in order to increase national sales regional enterprises should be backed up, and awareness on organic agriculture among producers/farmers should be raised. Ultimately, in order to sell organic products for reasonable prices, and ease the accessibility to the products more market places should serve the consumers, and tourists' experience on the production and the product should be used to enhance neighbouring areas.

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Management Process of Food and Beverage Sector and a Model Proposal

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Abstract

The international competition and globalization trends all over the world have oriented tourism professionals improve their service quality. More than 70 percent of national GDP of some countries – such as USA and Canada - came from service industries. Food and beverage sector, which is also operating in service industry, try to extend their products and improve service quality. To do so, they are aiming to organize a successful management process. The common management process in product industries consists of planning, organization, orientation, and coordination and control stages. However, there is a new management model developed for the food and beverage sector. The management process was investigated in detail and two more stages - assignment and evaluation – were added to the new management model. This descriptive study is aiming to (1) explain the new management model to managerial staff of food and beverage sector in order to improve the service quality and; (2) to understand how they could reach their goals with the resources they already have. Food and beverage sector in Istanbul, Turkey was investigated for the theoretical part of the study and a model proposal. The managerial staff of food and beverage sector was interviewed and their opinions were taken into consideration when proposing the model.

Keywords: Management, Food and Beverage Sector, Service Industry, Service Quality.

Introduction

Currently, a significant number of owners and managers of food and beverage business manage their business unconsciously, disregarding the management process that has been developed scientifically. This presentation builds on an example of a food and beverage organization to show the owners and managers of tourism organizations several different ways that will lead to the achievement of established goals with the sources at hand. The introduction covers brief information on management and managerial process. Then, you will be given some information about specific activities and tasks involved in the management process. Finally, the presentation ends with suggestions to the owners and managers of food and beverage organizations.

The Management Process

What is a manager and what does s/he do? To shortly answer these questions we can say a manager is the one who exerts effort to achieve organizational goals as fast and cost effectively as possible by using the resources available. What a manager of a food and beverage company has in terms of available resources are money, human force, knowledge, time, energy, equipment, products, and the operating system. However, these resources are generally limited; and this leaves the manager with inadequate number of qualified personnel, inadequate amount of organizational capital, and inadequate equipment. A manager has to direct the limited amount of organizational capital in accordance with the organizational goals (Koçel, 2005: 16-17).

The managerial process within food and beverage companies; seven interrelated tasks: planning, organizing, staffing, coordinating, directing, controlling, and evaluating.(Figure 1)

Fig.1. Controlling Process (Reference: Jack D. Ninemeier, Management of Food and Beverage
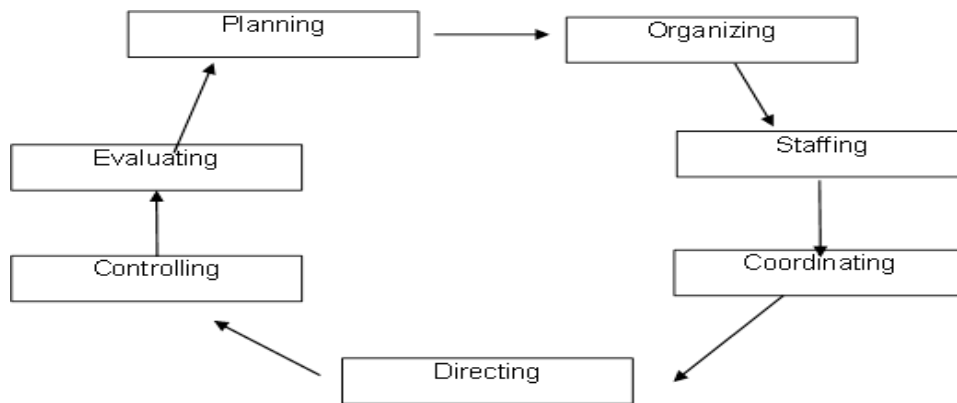
Operations, AH&MA, Michigan 2000.)

Planning

Planning is a process that involves setting goals and objectives and determining related methods, policies, techniques, and programs to reach those goals within an action plan. Goals and objectives indicate what you want to do action plans how you propose to do it. Planning is the very first task to be completed before undertaking any other task. Who will do what, how, when, and by using which sources in order to reach the organizational goals is determined during the planning process (Tosun, 1992:199–200). Whoever undertakes the roles and responsibilities of a manager has to make a plan regardless of the management level – be it highest, intermediate, or lower. At the highest management levels long-and-intermediate-range planning is carried out, while intermediate level managers are mainly engaged with short-term plans and lower level management entails planning for only daily or weekly works (Henschel, 2001: 141-142). It's always the top managerial level that should initiate the planning process in a food and beverage company. Other factors that influence an effective planning process are as follows: (Ninemeier, 2000: 44–45).

Knowledge: A prerequisite for planning in a food and beverage company is to have knowledge about the work field. What we mean by knowledge covers theoretical information, practicum and experience.

Communication: Managers should keep all the communication channels open with other departments during the planning process. The food and beverage director of a big hotel should communicate and consult not only the kitchen chef, bar chef, and restaurant chef, but also the head of the purchase department while planning the menu.

Flexibility: Plans developed by the directors should be flexible and adaptable to emerging conditions.

Implementation: All things mentioned in a plan should be carried out thoroughly so that the plan can affect and influence the employees positively. On the other hand, plans should be developed and executed within a reasonable time frame.

Organizing

Organizing involves determining actions compatible with the goals and objectives set during planning; categorizing and grouping these actions, providing necessary equipment and optimal physical conditions within the work setting, identifying the number, talent, and experience of employees needed for the work; and combining all these in a systematic structure (Denizer, 2005: 26-27). Organizing task at a food and beverage company starts with reviewing the goal and objectives defined during planning, continues with arranging the physical conditions of the work setting, then gets more detailed by grouping the tasks (kitchen, service, bar, cashier etc.), providing necessary tools and equipment, determining the number of personnel needed for the work, defining related talent, knowledge and experience that will be required for future employees, and finally clearly defining each positions before any employment. Each position in a food and beverage company requires a certain amount of training, talent, and experience. In this aspect, "*employee compatible with the position*" should be the motto during any employment process. Another critical responsibility to carry out during organizing is to identify the horizontal and vertical

hierarchical structure. This structure defines the roles and responsibilities of the staff together with the limits of the managers' authority and determines the mode of communication and cooperation between the mangers and the staff (Olsen, 1998: 56).

Supervision frameset is another vital factor that should be taken into consideration during organizing. This frameset determines the number of employees directly tied up to and controlled by a manager. Each and every worker at a food and beverage company, regardless of the type of the organization, should have one supervisor. In all food and beverage companies kitchen workers take orders and are supervised by the kitchen chef, while service staff is directed by the service chef. The number of employees to be supervised by one manager and the responsibilities the same manager will undertake should not exceed the limits of a manager's knowledge, skill, and comprehension. The experience of the manager, the complexity of the work, and the level of training of the employees are other crucial factors. Excessive number of employees, supervised by only one manager, has a negative impact on both efficiency and productivity. On the other hand, each staff member should take orders from only one supervisor. Staff member may easily get confused about what to do if conflicting orders are given by two different supervisors; which may lead to organizational turmoil and clash of authorities (Powers & Barrows, 1999: 27).

Staffing

The third component of managerial process, staffing, is categorized under organizing task or personnel management in some other sources. On the contrary, we believe that staffing should be handled in isolation since the human factor bears such critical importance in the service delivery nature of the food and beverage companies. Staffing entails employing and appointing appropriately qualified personnel to basic departments such as kitchen, service and bar. Therefore, the workforce must be planned in accordance to the present and future goals of the organization. It is important to identify the correct number and the necessary qualifications for each position; otherwise, improper staffing may hinder the development of the organization. Once the workforce is properly planned, the next step is to analyze the duties that should be carried out (Koçak, 2006: 23-25). Job descriptions and requirements determined after job analysis are important tools utilized during staffing. Job descriptions are summary statements regarding the responsibilities, conditions, and features for a specific position. Job requirements, on the other hand, are the list of qualifications that possible employees must possess to conduct a specific job at a desired productivity level. In short, the manager of a food and beverage organization seeks ways to employ the best worker according to job analysis, and tries his/her best to make the most of the employees' knowledge and skills (Oral, 2005: 290-291).

Coordinating

Another component of managerial process, coordinating is combining and arranging actions performed by different departments in harmony so as to reach the organizational goals. Coordinating, also known as adapting and arranging, is one of the most crucial steps of maintaining and managing an operation. Efforts exerted by different departments (eg. kitchen, service, cashier, and public relations etc.) in a food & beverage operation should be successfully harmonized by the manager (Davis & Stone, 1992: 9-10).

Most of the time, successful coordination at a food & beverage company is closely linked with good communication. An effective channel of communication, both top-to-bottom and bottom-to-top, should be built and kept open within the organization.

Besides coordination, delegation within a food and beverage operation must be carried out appropriately. Accomplished properly, delegation may help finish the work more productively and effectively in a lesser time. Delegation does not necessarily take away the responsibilities of the person who delegates his/her authority.

Directing

Managerial process starts with planning, and the governing structure of an organization is formed through organizing and staffing procedures. For a food & beverage operation, we can say that after the physical conditions of the kitchen, restaurant, and bar have been settled, all the tools and equipment have been placed, appropriate employees have been hired, and trial sessions have been successfully completed, the next thing to do is to act. When it is time to direct the workers, managers order "*move*". In other words, they direct the workers toward the planned goals. The concept of giving orders should be handled together with leadership aspect. A good leader is the one who coordinates all the workers in accordance

with the organizational goals, who can bring out the best in people, and who has superior characteristics. Directing can also be formulated like executing the chain of commands (Koçel, 2005: 633-635).

The directing task of the management process requires putting the food and beverage organization into action. Directing is especially important in food and beverage organizations that heavily operate on labor. A successful director must possess insight into the wants, needs, and expectations of the workers, and problem solving skills. A manager should also be a good leader, who can motivate the employees, can use reward as an instrument, and who can build solid communication (Bolat, 2008: 149-152).

Controlling

The last, but not the least, element of management process, controlling should be an ongoing procedure. This component checks what happened during the previous tasks, and executes corrective action if needed. If the strategies, principles, and standards determined by the senior management are applied, and the organizational sources are used properly and effectively, then controlling involves only monitoring and executing corrections when necessary. If the organizational goals have not yet been met, senior management should be informed through a report (Efil, 1999: 147-148).

The manager of a food & beverage company should carry out the controlling process along with a flowchart. The top-down components of a control process are shown in **Figure 2**. (Aktaş, 2002: 208-209)
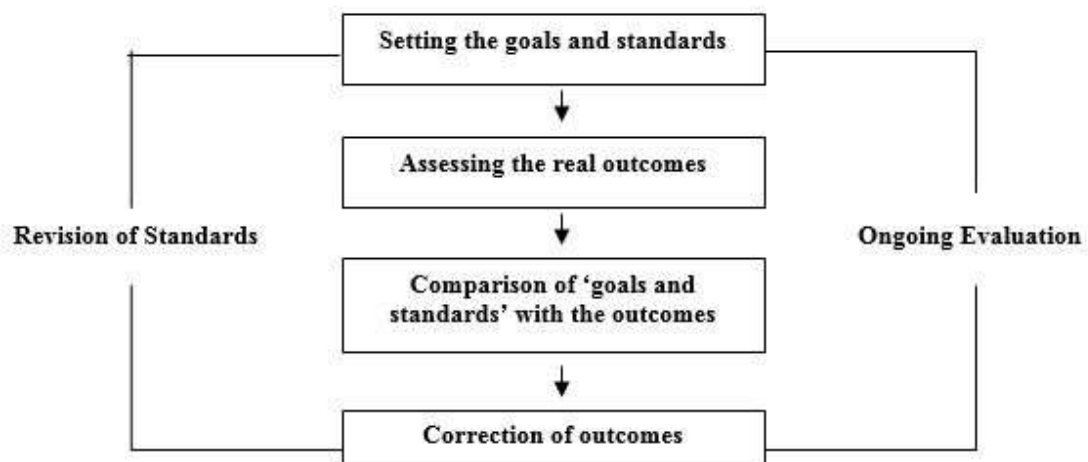
Setting the Goals and Standards: Goals, objectives, and standards should be set before controlling can be conducted. Actions can be judged as successful or unsuccessful only according to standards or objectives (Özalp & Koparal, 2007: 160)

Assessing the Real Outcomes: The second step of controlling process is to assess the outcomes achieved. The manager of a food & beverage operation should follow sales on a daily, weekly, and monthly basis; should calculate the amount of total sales per meal time, total income per person, and the percentage of meal groups in the menu over total sales (Maviş, 2006: 256)

Comparison of 'goals and standards' with the outcomes: In this step, the standards and goals set beforehand are compared with the outcomes obtained at the end of the operation. During the comparison, the manager looks for any deviation from the objectives determined earlier. If s/he finds any significant deviation, s/he is responsible for investigating the reasons and informing the senior management.

Evaluation and Correction of Outcomes: If deviations from the earlier objectives and standards are significant or unacceptable, the problem is closely investigated. There may be many reasons leading to the deviation.

- There may be a problem regarding the flavor of meals.
- Service staff may not be smiling and kind any more.
- There may be a kind of economic crisis at large.
- Promotions may not be adequate.

If the above possibilities are not accepted by the operation and if the managers are convinced that everything is carried out properly, then the organization may be in an inappropriate environment. Maybe, the regular customers of the operation may have simply gone to another place. If sales still do not get

any better after all these possibilities are investigated thoroughly, the last resort may be reduction of organizational goals and objectives.

Evaluating

Controlling and evaluating are two interwoven components of management process. Controlling should be conducted prior to evaluating, as the aim of controlling is also to evaluate to some extent. Evaluating is to decide if the goals and objectives determined during planning have been met or not. To what extent the goals and objectives have been reached should be identified, and corrective precautions should be run if needed. Here, the aim is to establish the relationship between what is achieved and what was planned to be achieved. Workers' performance and the effectiveness of training programs can also be evaluated during this step. The manager of a food & beverage operation should constantly seek the answer to the question; "How can a food & beverage operation be managed better?" Evaluation should be regarded as an ongoing process that does not end with the accomplishment of set goals and objectives because there is no guarantee that the operation will not face any problems in the future. For instance, a new and better company providing the same service cheaper and with more qualified tools and staff may start functioning in the same environment as your company. Apart from this, if the planned goals and objectives have been achieved then action must be taken to move towards new goals and objectives.

Conclusions and Suggestions

- Currently, a significant number of owners and managers of food and beverage business manage their business unconsciously, disregarding the management process that has been developed scientifically.

- However, managers of food & beverage operations should stick with the management process consisting of the seven tasks developed for food and beverage organizations: planning, organizing, staffing, coordinating, directing, controlling and evaluating.

- Applying the tasks of managerial process, the managers should have adequate command and knowledge of food and beverage operations, and should build a healthy communication among departments (Cichy, & Wise, 1999: 10).

- There are two main issues that food and beverage operations must focus on during planning: menu and sales planning. In terms of menu planning, the preferred meals, drinks and service delivery of the target market should be identified. As for sales planning, an educated and precise guess should be made about the number of food and drink portions to be sold (Schaetzing, 2004: 27).

- The first thing to do during the organizing step is to set up basic operation places such as the kitchen, service, and bar.

- Next, determine the number and the qualifications of the personnel needed to prepare food and drinks for each work group (Baum, 2006: 240-241).

- The issues managers are expected to communicate and cooperate with heads of other departments (such as service and kitchen) should be clearly and explicitly defined.

- The time and type of communication that each department head will have with the manager should be stated clearly.

- Adequate number of appropriately qualified personnel should be employed during the staffing step. To do this, workforce planning and job analyses should be completed beforehand (Scanlon, 1997: 180).

- During the coordinating step, departments such as kitchen, service, and bar should be harmonized first, and then ways of coordinating these departments with other outside components should be sought.

- Directing involves putting the food and beverage operation into action by delegating tasks. A manager should have a good team and should know the members of his/her group closely in order to be successful.

- Controlling is an ongoing process, which involves the assessment of the performance and implementation of the management process. In order to judge the success of the operation, the company must have a set of well-defined standards by which to make a comparison.

- Controlling and evaluating are two intricate concepts. Controlling must precede evaluating. Performance of workers should also be evaluated during this step (Cousins, 2002: 32).

- The manager of a food & beverage operation should invest most of his/her time to solving the problems of both guests and staff members. S/he should always track the wants, desires, and opinions of the guests, and should run the operation in accordance with their expectations.

- Furthermore, the manager should have solid and open relationships with suppliers providing materials and products to the operation, governmental organizations, local health authorities, and local culture and tourism authorities (Boella & Goss, 2005: 191).

In conclusion, owners of organizations and clients are generally not interested in what sort of daily problems a manager encounters and what s/he does to overcome them. Owners are mainly concerned with the amount of sales and profits while clients expect to have a good time in a clean and healthy environment, serving delicious food through attentive and smiling service staff, and as cheap as possible. It is the responsibility of the manager to meet both the owner's and clients' expectations.

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Personality Trait Inferences about Hotel Businesses: Development of a Scale

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Abstract

According to the Instrumental and Symbolic Attributes Framework in the early stages of the recruitment process, prospective applicants assign personality traits to organizations. The purpose of this study was to develop an instrument to explore and measure personality trait inferences of hotel businesses. The sample was drawn from five star hotels located in Istanbul. The development of the scale begun with reviewing the literature, and an item pool was developed through the traits which were studied in various works. 698 personality traits were listed and reviewed, then a final list consisted of 72 personality traits was obtained. A pilot test has been employed before the actual survey. The field study has been conducted on participants that can be prospective employees of five-star hotels, located in city centers. Participants were requested to pick a hotel of which they knew most and by which they were not employed. Participants, then, were asked to rate their level of agreement with the degree to which traits described the hotel they picked. The factor structure of personality trait inferences of hotel business was determined through exploratory factor analyses and was confirmed with first and second order confirmatory factor analyses. Four factors emerged from the 18 items: Exclusiveness, sensibility, competence and prestige.

Keywords: Organizational Attractiveness, Personality Trait Inferences, Hotel Business

Introduction

Personality trait inferences (PTI) about organizations examined in organizational attractiveness literature for the last decade, affect significantly both attractiveness of organizations as employers and differentiate from other employers. PTI can be expressed as organization personality perceptions or symbolic attributes adapted from the brand personality concept in the marketing literature and means that, traits which the prospective applicants ascribed to organizations in the early stages of the recruitment process. There are various studies about personality trait inferences about organizations but none of these about hotel businesses. Most of hotel businesses with similar characteristics provides similar salary, similar career opportunities, similar work conditions to protective applicants. Therefore other properties are needed to differentiate of hotel businesses as employers and to make the hotel businesses attractive work places. For this reason developed a scale which personality trait inferences about hotel businesses in the present study.

Literature Review

The first study on determining personal traits inferences about organization is based on the study conducted by Aaker (1997). Aaker (1997) determined brand personality traits and developed an important scale based on these dimensions and the scale is used to measure brand personality. Lievens and Highhouse (2003) adapted the concept of brand personality on employment literature and defined personality trait inferences about organizations as symbolic traits which influence organizational attractiveness. In this study conducted with banking sampling, the researchers found that potential worker candidates attributed consciously symbolic traits to businesses which they perceived as potential work places, and the study also revealed that these features increase the variance which is explained as the determiner of the company's organizational attractiveness. Moreover, according to the results of the study, symbolic traits usually have high influence on perceiving banks significantly different compared to their opponents. As a result of the study, a five-component structure (Sincerity, Innovativeness, Competence, Prestige, and Robustness) was determined for personality trait inferences about organizations.

Another important study investigating organizational attractiveness in the framework of symbolic traits was conducted by Slaughter et al. (2004). Slaughter et al (2004: 86) defined the concept as "a series of human personality traits perception related to an organization". The researchers of the current study found the brand personality scale of Aaker (1997) and symbolic trait scale insufficient in measuring personal traits related to an organization, and they developed a multi-dimensional scale (Boy Scout, Innovativeness, Dominance, Thrift, Style) to measure organizations' perceptions of personal traits. The

findings of the study displayed that organizations showed differences in terms of the personality attributed to them and inferences related to personal traits have a relationship with organizational attractiveness. Furthermore, according to the findings of these studies, in addition to the perceived organizational attractiveness, symbolic attributes are also related to organizational sincerity and prestige.

In 2009, Schreurs and his colleagues investigated the effects of the relationship between five important personal factors: Extroversion, Neuroticism, Agreeableness, Conscientiousness and Openness to Experience; symbolic attributes which are Sincerity, Excitement, Competence, Prestige and Ruggedness and organizational attractiveness. The study was conducted with the potential candidates of the Belgium army and the measurement tool of Lievens et al. (2005) was used. They adapted the scale of Aaker (1997) to determine the attractiveness of the Belgium army as an employer. The findings showed that while individuals evaluate attributes as attractive, they showed differences in terms of personality constructs. Another significant finding of this study is that personality trait inferences about organization and personality traits belonging to an individual cannot be matched as easily as it is thought and the personality traits of an organization does not have to be coherent with a personality taxonomy such as "Big Five".

Anderson and his colleagues (2010) conducted a research with data on a much larger number of firms, using a multi-cultural sample. Their exploratory and confirmatory factor analyses reveal a seven-factor structure of personality trait inferences that includes the five factors identified by previous researchers, suggesting that while the five factors have some generalizability outside the US, there may also be important differences.

The studies above show that the dimensions constructing personality may show differences in terms of culture and businesses. Also, in the literature, it is stated that the determiners of attracting a candidate may show differences in terms of occupations, and therefore, in the studies focusing on a specific industry, the results may be more vivid. As a result, in this study, it was decided to develop a measurement device to measure the symbolic attributes of five-star hotel businesses in city center.

Methodolog and Findings

While determining the steps to be followed during the scale development process, in addition to the basic resources on this issue (Churchill, 1979; Gerbing ve Anderson, 1988; Hinkin, 1995; Tezbaşaran, 1996; DeVellis, 2003 ve Erkuş, 2010), the steps followed in studies on brand personality (Aaker, 1997; Aksoy and Özsomer, 2007) and on symbolic attributes of Lievens and Highhouse'un (2003) Slaughter et al.. (2004) and Schreurs et al.(2009) were taken into consideration. Considering these studies, initially, the trait to be measured was defined conceptually. Symbolic attributes are personality traits attributed to a business by potential candidates. Next, an item pool related to the symbolic attributes of businesses was created. While creating the item pool, firstly, on condition that the adjectives have not taken place in other lists, on total 423 adjectives from the study of Goldberg et al. (2000: 503-510, 515-521), 17 from Bacanlı et al.'s study (2009: 266-67), 20 adjectives from Dündar Kurtuluş's study (2008: 294), 26 adjectives from Somer et al.'s study (2002:27), 2 adjectives from Wasti et al's study (2008: 672-73), 126 adjectives from Somer and Goldberg's study (1999: 436-40, 442-45), 40 adjectives from Slaughter et al.'s study (2004: 102), 10 adjectives from Aaker's study (1997: 354), 6 adjectives from Guens et al.'s study (2009: 101), 28 adjectives from Mugge et al.'s study (2009: 295) were selected and on total a list of 698 adjectives which determine personality traits was formed. Later, to reduce the number of adjectives on the list, the dictionary of synonyms taking place on the website of Turkish Language Association was checked and each adjective which had a synonym in the list was omitted. After this stage, the number of adjectives on the list was reduced to 438. After this step, the reduced adjective list was examined by the researcher and two other university instructors independently in terms of synonym, antonym, and adjectives which are not commonly used in daily life and which are regarded as adjectives not used in hotel businesses, and then adjectives with these features were omitted from the list and an adjective list with 286 adjectives was created. At the third stage, the list with 286 adjectives was used to ask for expert opinion (on total 30 experts who were 13 university instructors, 7 professors, 10 tourism department students) with the aim of selecting adjectives reflecting symbolic attributes of hotel businesses. By including expert opinion, it was aimed not only to reduce the items on the list but also to provide content (concept) validity of the adjectives on the list.

During the expert opinion process, the frequency distributions of the adjective lists were examined separately for all three groups, and in all groups it was decided to include 80% of the preferred adjectives in the question form of the pilot study. As a result, a list with 72 items was created. To measure the attitudes toward the adjectives a 5-point Likert Scale as "absolutely agree", "agree", "partly agree",

"disagree" was included in the question form. By asking an open-ended question such as "If the brand-business were a human being, to what extent would the adjectives below define his/her personality?", the participants were asked to evaluate the brand and the pilot study was conducted. An item analysis was performed based on item-scale total correlation and content consistency criterion on the obtained data. It was found that item-scale total correlations related to all expressions were significant and positive at the p=0.01 significance level, and it was observed that the relationship level showed changes between strong (between r.=.0,60-0,80) and high (r.>.0,80) values. The item-scale total correlation for all expression was found at p=0.01 significant level and their directions were positive, and their relationship levels were found to show changes between strong (between r.=.0,60-0,80) and high (r.>.0,80) values. According to the t-test results, it was observed that top and bottom group mean difference for each adjective was at p=0.01 significance level; in other words, it was found that the adjectives had distinctive traits. After the pilot study, it was decided to use the scale without omitting any items.

Field research was conducted with over 15 participants who accepted to participate in the study from their 5-star hotels in city center in İstanbul between 25 October and 25 November 2011. 800 questions forms were delivered to the determined 555 participant sampling, 384 of these questions forms were completed and 69% of the targeted sampling was reached. Questions forms with missing, incorrect entries and extreme values were omitted and on total n=300 question forms remained as data set of the study.

The data were first analyzed whether they met the normal distribution premise. While performing this analysis, various descriptive statistics, graphical approaches and kurtosis and skewness values were used. The kurtosis and skewness values of variables in the research data showed a negatively skewed distribution less than normal, and it was found that these values were close to the values meeting the normal distribution premise.

When the demographic information of the participants was examined, it was observed that the participants were knowledgeable and experienced about the hotel management sector; their education level was high and had vocational education and the research sample consisted of chefs, department directors and young hotel workers.

First, item analysis was performed on the data set. In this study, while evaluating the results based on item-scale total correlation analysis, first the significance level p=0.01 was tested for each expression. Then, reevaluation was carried out for the expressions which showed low relationship (r.<.0,40) considering correlation coefficients of the items which show significant correlation with the total scale point.

Significance level was taken as basis for the item analysis based on the internal consistency criterion during interpreting the t test results, and items which did not show relationship at the p=0.01 significance level was examined again. As a result, it was observed that all adjectives showed significance at p=0.01 level and with positive direction in the item-scale total correlation (except the item) and their relationship level showed changes between medium (between r.=.0,60-0,80) and strong (between r.=.0,60-0,80) values, except the adjective "professional". Moreover, according to the t-test results, it was observed that top and bottom group mean difference for each adjective was at p=0.01 significance level; in other words, it was found that the adjectives had distinctive traits. Therefore, as a result of the item analysis, it was decided to omit only the adjective "professional" from the scale because it showed low value of correlation (r=0,242).

To determine the PTI dimensions and to reduce the scale by reducing most of the items that constitute the scale, first the factor design of the scale was explored by means of exploratory factor analysis (EFA). As a result of the item analysis, one item was eliminated and symbolic traits consisting of 71 items were determined as 0.944 for the KMO test and $\chi^2_{(2485)}$.=.22735,631; p.<.0,01 for the Bartlett's Sphericity test. These values show that the sample was sufficient for the factor analysis and significant difference, and that the data set is appropriate for factor analysis. After the basic presumptions were met, by applying basic components analysis as factorial method and Varimax rotation as rotation method EFA was performed. While determining the factors forming the scale, items which were higher than 1 as eigenvalue statistics and over 0.50 factor load, and commonality and variance extracted percentages were considered.

It was observed that there were 10 components with over 1 eigenvalue as a results of the first EFA which was performed on the 71-item PTI scale. The contribution of these components on total variance is 73.15%. When these 10 components were evaluated in accordance of the importance they made on the total variance by examining the scree plot graphic and the total variance table, it was observed that the contribution of the last six components on variance was both small and almost the same. Considering

this, items that were cyclic (items that have little difference below than 0,10 between the two factors' load values), which have low value in terms of commonality and factor load, and items which were found difficult to name during the factor analysis were omitted and after the analysis, a construct was created with four dimensions and 18 items. The contribution of these four factors on total variance is 72. 43%. The factor load of the factors of the scale, commonality, eigenvalue, extracted variance and the Cronbach Alpha coefficient can be seen in Table 1.

PTI about Hotel Businesses		Factors and Factor Loadings				Commun alities	Eigen values	% of Vriance	Crombach Alpha
		F1 Exclusiveness	F2 Sensibility	F3 Competence	F4 Prestige				
F1 Exclusiveness	Elegant	,844	,179	,186	,202	,819	8,994	49,968	,937
	Luxury	,829	,078	,181	,221	,775			
	Private	,768	,288	,213	,206	,761			
	Attractive	,737	,195	,396	,197	,777			
	Ambitious	,716	,330	,229	,148	,695			
	Beautiful	,711	,274	,216	,311	,724			
	Noble	,649	,254	,238	,317	,643			
F2 Sensibility	Social responsible	,116	,851	,140	,197	,796	1,648	9,155	,862
	Supportive	,194	,816	,206	,189	,781			
	Environmentally-responsable	,263	,737	,152	,015	,635			
	Honest	,416	,673	,240	,078	,690			
F3 Competence	Reliable	,191	,108	,800	,154	,712	1,284	7,134	,822
	İdealistic	,279	,200	,758	,127	,709			
	Hardworking	,215	,137	,680	,211	,571			
	Enterprising	,255	,398	,673	,044	,679			
F4 Prestige	Familiar	,251	,134	,023	,849	,802	1,111	6,173	,825
	Prestigious	,285	,112	,278	,766	,758			
	Popular	,356	,173	,310	,676	,710			

Table 1. Dimensions of PTI about Hotel Businesses Scale

When Table 1 is examined, it can be seen that the factor load at dimension level showed difference between 0,64-0,84 for (a) F1-Exclusiveness dimension, between 0,67-0,85 for (b) F2-Sensibility dimension, between 0,67-0,80 for (c) F3-Competence dimension, and between 0,67-0,84 for (d) F4-Prestige dimension. The contribution of these four factors on total variance is 72. 43%. In naming the dimensions related to the scale, the field scales used in Aaker's study on brand personality (1997), Aksoy and Ozsomer's on brand personality (2007), Lievens and Highhouse's on symbolic attributes and Slaughter et al.'s on personality trait inferences about organization were taken as models.

To determine the internal consistency of the factors in the symbolic attribute scale, Cronbach Alpha test was used, and the Cronbach Alpha coefficient which constitute the scale are 0,93 for the Exclusiveness factor, 0,86 for the Sensibility factor, 0,82 for the Competence factor and 0,82 for the Prestige factor and the general Cronbach Alpha coefficient of the scale is 0,94. Regarding the Cronbach Alpha values, it may be concluded that the internal consistency of the symbolic attribute scale is quite high and the subdimensions of the construct is reliable, and that the attribute to be measured is measured most probably accurately.

The relationships between 18 items of the PTI scale whose factorial structure was determined at EFA and 4 subdimensions were tested with first level confirmatory factor analysis (CFA). During the analysis, the four dimensions of the factorial structure were regarded as implicit variable and the 18 expressions used to measure these implicit variables were the indicators, in other words, the observed variables. The results of the CFA can be seen in Figure 1 and Table 2.
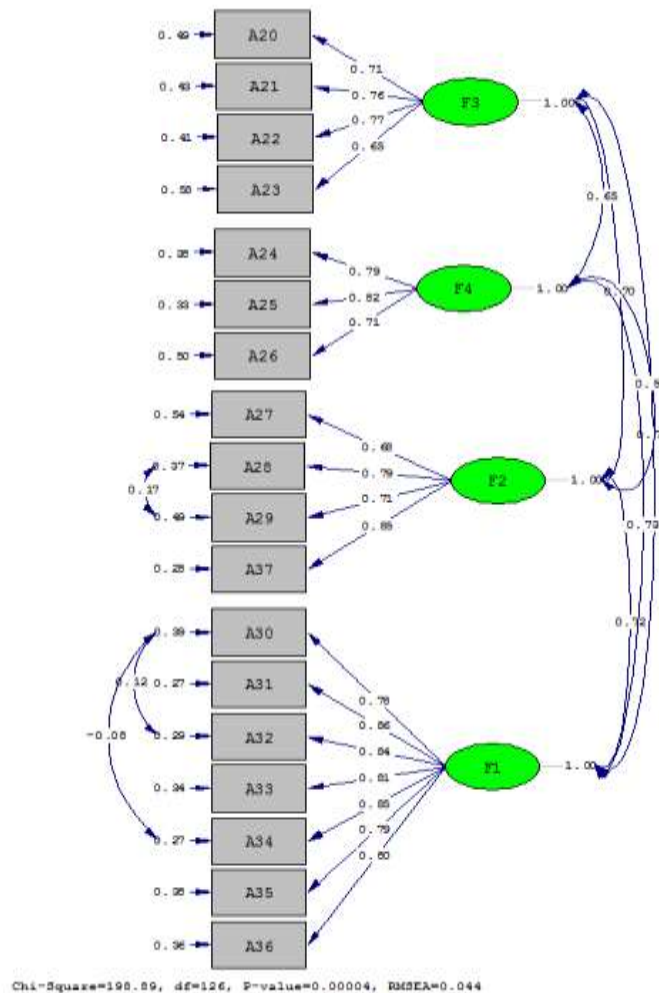
Fig. 1. Confirmatory factor analysis

Table 2. Confirmatory factor analysis

Latent and Observed Variables	Standardized Solution	Eror Covariance	t Values	R²	CR	VE
F3 - Competence					0,81	0,79
A20. Reliable	0,71	0,49	12,56	0,51		
A21. Enterprising	0,76	0,43	16,07	0,57		
A22. İdealistic	0,77	0,41	14,53	0,59		
A23. Hardworking	0,65	0,58	12,15	0,42		
F4 - Prestige					0,81	0,52
A24. Prestigious	0,79	0,38	14,26	0,62		
A25. Popular	0,82	0,33	15,21	0,67		
A26. Familiar	0,71	0,50	11,11	0,50		
F2 - Sensibility					0,84	0,57
A27. Environmentally-responsible	0,68	0,54	11,67	0,46		
A28. Supportive	0,79	0,37	17,09	0,63		
A37. Honest	0,85	0,28	18,67	0,72		
A29. Social responsible	0,71	0,49	14,88	0,51		
F3 - Exclusiveness					0,93	0,67
A30. Luxury	0,78	0,39	14,59	0,61		
A31. Private	0,86	0,27	20,72	0,73		
A32. Elegant	0,84	0,29	17,47	0,71		
A33. Ambitious	0,81	0,34	18,14	0,66		
A34. Attractive	0,85	0,27	18,75	0,73		
A35. Noble	0,79	0,38	17,62	0,62		
A36. Beautiful	0,80	0,36	15,58	0,64		

While evaluating the analysis results, first, the t values of the variables were standardized, and the parameter values and error variance were checked. When Figure 1 is examined, it can be seen that standardized parameter values of the variables are below 1 and their error variance shows changes between 0,28 and 0, 58. Moreover, Figure 1 shows three pieces of modification (items between 28 and 29; between 30 and 32 and between 30 and 34) which were developed during the first level of CFA of the scale and provided significant contribution to the goodness of fit index. When Table 2 is examined, it can be seen that the latent variables show significance in t value 0,01 (99%) related to how latent variables explain observed variables. Thus, it may be stated that all items which were decided to be kept in the scale showed significant and high value of t value while extracting the latent variables.

As the second step of evaluation of the analysis results, the competency and composite reliability of indicators in the scale were examined in terms of validity and reliability of the scale. During this analysis, two types of reliability values were calculated as composite reliability and variance extracted by each structure. Calculated value of composite reliability should be higher than 0,70 and variance extracted should be higher than 0,50 (Hair et al., 1998: 611-612). When Table 2 is examined, it can be observed that structure reliability value is over 0,70 and variance extracted value is over 0,50 for all the latent variables in the scale. According to these results, it may be stated that the converging reliability was achieved for this scale considering the results regarding the fact that the internal consistency of dimensions forming the scale and their strength to extract the structure were sufficient and extracted variance of the structure was above 0,50 and close to 0,50 which is a basic condition.

Finally in CFA, goodness of fit index of the whole model was examined. The p value (p<0,01) of the chi-square value ($\chi^2_{(126)}$ = 198,89) is significant. However, since the χ^2 test is highly sensitive to the sampling size (Hair et al., 1998; 655), the model acceptance should not be evaluated just considering the χ^2 value and evaluation should be made with other measures too. When the model was evaluated considering the χ^2 and degree of freedom ratio (χ^2/sd=198,89/126 = 1,57), it can be seen that the fit is good according to the obtained results. When the other goodness of fit indexes were examined, for this model RMSEA= 0,044; NNFI= 0,99; CFI= 0,99, for standardized RMR = 0,041; GFI=0,91 and AGFI =0,88 were detected. Only GFI and AGFI of the goodness fit indexes which were tested in the model are within accepted fit border. χ^2/sd, on the other hand RMSEA, SRMR, NFI, NNFI and CFI's are within goodness fit border and it is accepted that the model displays sufficient goodness fit and it may be stated that the scale is fit and consistent with the empirical data. In other words, it can be stated that the scale is valid statistically.

As the result of the CFA, second order of CFA was performed for the four dimensions whose items were identified as accurate to find out whether they were the subdimensions of PTI. During this process, the four subdimensions in CFA were defined as observed variables and the symbolic attributions were latent variables. Figure 2 displays standardized parameter values and error variances which were achieved as a result of the second order CFA. The metafunctions which were achieved in the previous step of second order CFA were saved. When Figure 2 is examined, it can be seen that all standardized parameter values of related variables were below 1, and when Table 3 is examined, it can be seen that all t values were significant at 0,01 (99%) level.
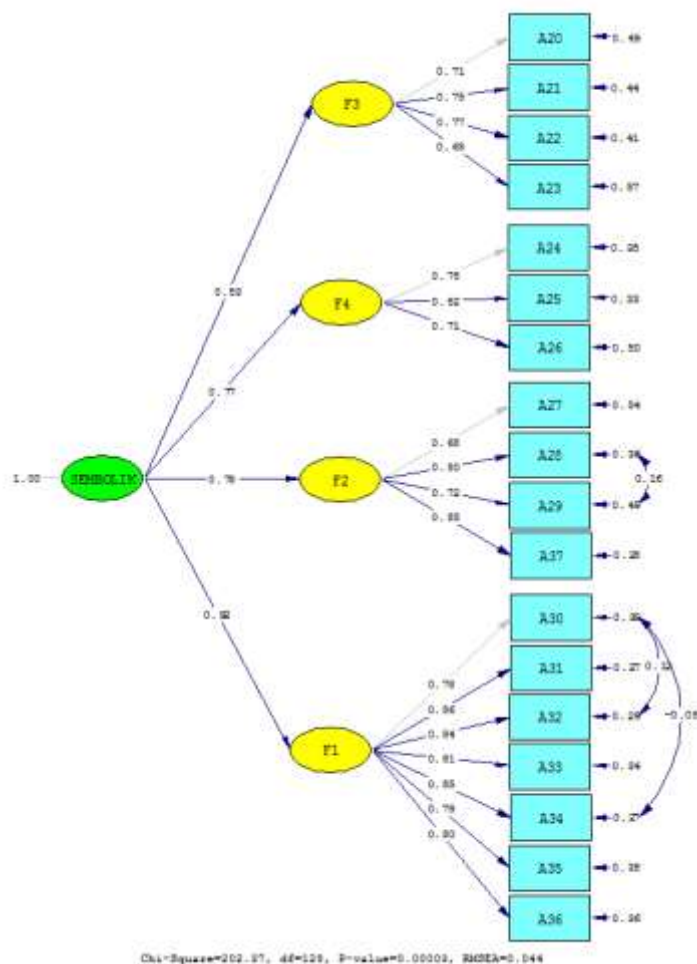
Fig. 2 Second order confirmatory factor analysis

Table 3. Second Order confirmatory factor analysis

Latent and Observed Variables	Standardized Solution	t Values	R^2
PIT about Hotel Businesses			
F1 - Exclusiveness	0,92	13,44	0,84
F2 - Sensibility	0,78	8,97	0,61
F3 - Competence	0,83	11,26	0,70
F4 - Prestige	0,77	10,46	0,60

When the all goodness fit indexes of the model were investigated, it was seen that the p value (p=0,044) related to the chi-square values of the model ($\chi^2_{(128)}$=202,37) was not significant. Furthermore, when the model was evaluated according to the chi-square and degree of freedom ratio (χ^2/sd=202,37/128=1,58), it was detected that the results were within fit borders. When the other goodness of fit indexes were investigated, it was found that for this model they were RMSEA= 0,044; NNFI= 0,98; CFI= 0,99; and standardized RMR = 0,041; GFI=0,91 and AGFI =0,87. It was found that χ^2/sd, RMSEA, SRMR, NFI and NNFI and CFI of the checked goodness fit indexes of the model were within the fit border, and GFI and AGFI were within acceptable fit border, and it is accepted that the model shows sufficient fit. In this

respect, as a result of the second order confirmatory factor analysis performed, it has been determined that the dimensions of Exclusiveness, Sensibility, Competence and Prestige of PTI were constructed.

Results and Suggestions

Because of the reasons that employees and customers experience a dense face to face communication and that success is most of the time depended on the employee's attitude, skill and performance, it has become essential for hotel businesses to attract qualified people to the business. However, the thought that works that the employees of these business have to do to achieve a certain level are usually low-qualified, require ordinary skills, does not require high education level and have low payment influence the attitudes towards working in hotel business negatively. At this point, to attract qualified employee candidates to the hotel business is becoming more difficult compared to the other sectors, and for these business, organizational attractiveness becomes more essential. Most of the hotel businesses possessing similar attributes offer their employees similar opportunities in salary, promotion probability, working conditions. It is believed that determining personality trait inferences of organizations which is effective in differentiating hotel businesses from one another and creating the perception of attractiveness as an employer is significant for hotel business.

The dimensions which constitute the developed scale do not have a one-to-one overlap with the dimensions forming the human personality and brand personality scales in the literature. Schreurs and his colleagues stated in their study conducted in 2009 that personality traits inferences of organization and personality traits belonging to an individual cannot be matched as easily as it is thought and the personality traits of an organization does not have to be coherent with a personality taxonomy such as "Big Five". Moreover, various studies on brand personality (e.g. Aaker et al., 2001; Sung and Tinkham, 2005; Aksoy and Özsomer, 2007) showed that the dimensions constituting the scale display differences from culture to culture. In this respect, the scale developed in this study is important to display the symbolic attributes of hotel businesses in Turkey.

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Application of Cash Waqf Transfer in Islamic Financial Industry: Indonesian Study Case

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Abstract

World have become witness for the Indonesian rapid economic growth todays. This rapid economic growth has elevated most of their population standard of living. Nevertheless, this rapid economic growth did not guarantee every citizen in this country live properly. About 35 percent of its population lives with income less that 2 dollar a day. Hence, Poverty is the major problem for Indonesia since this country got their independence. Waqf is the one of the several priceless Islamic heritages that can be utilized for Muslim in Indonesia to tackle their classic problem. Moreover, Muslim in Indonesia has a chance to maximize the momentum of rapid growing of Islamic finance industry by introducing once again waqf as the tool for poverty problem. The unique characteristic of waqf, perpetuity and temporary concept, that inherent with waqf itself can be strengthened by offering applicable method that can be matched with Islamic financial industry todays. Several methods have been offered by many Muslims scholar in the world to re-juvenile the waqf into the Muslim economic activity. One of the most populist is cash waqf transfer. This method is more concern upon return on investment and cash collecting as main source of waqf fund. This concept can be combined by utilizing the Islamic capital market that growing fast recently in Indonesia. The objective of this paper is try to inform several objectives: review the concept of cash waqf transfer, its implementation in Indonesia and jurist opinion about cash waqf transfer. From several explanations above we can conclude some information regarding this topic. The main objective of cash waqf transfer is increasing participation of Muslim in waqf their money through buying cash waqf certificate from bank or waqf institution. The cash will be mobilized to financing social project and profitable project to support financing of social project. Several jurist suggest the project must be implemented under musyarakah and mudarabah contract to avoid back door riba practice. Several jurist different in analyze the ahkam of cash as instrument of waqf. Syafii schools tend to avoid the using of money as asset of waqf and prohibit changing waqf asset. Nevertheless Imam Hanafi allows changing waqf asset to different asset as long as it bring more benefit. Several countries has already allows the practice of cash waqf transfer such as Malysia, Indonesia, and Singapore. Several condition must be consider to success in implementing cash waqf transfer such as criteria of waqif, quality and transparency of nadzir, and investment process that should be in line with shar'iah. From the perspective of syiasah shar'iah the government should actively encourage the participation people in waqf to achieve better maslahah. The silent regulation and transparency must be constructed in order to increase participation of people.Several recommendations can be addressed to government in order to achieve Maqasid Shar'iah. Firstly, The government can help revive waqf institution by create strong regulation according transparency and accountability of waqf institution. The government could help through providing good manager in maintaining waqf asset.

Keywords: Indonesia, Poverty, Waqf, Islamic Financial Industry.

Near Field Communication Technology (NFC) in the Hospitality Industry

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Abstract

A new technology that has already being used in smartphones and offering numerous applications for the hospitality industry is the Near Field Communication (NFC) technology. NFC, developed through collaboration between Phillips and Sony, is based on small radio frequency identification (RFID) chipset that can be embedded inside a phone. One example of NFC technology, which is slowly gaining market share, is the mobile payment systems such as digital wallets. A digital wallet works with near-field communication (NFC) technology, which passes encrypted data between devices at close range without contact. The idea is that instead of swiping a credit card, shoppers can simply wave their phones at a checkout terminal to pay for their goods (Arthur, 2013). NFC technology is gradually entering the hospitality industry. For example, a pilot test was implemented at The Clarion Hotel in Stockholm. When the guests arrive, they received a welcome text message. After representing their room number, they were able to download the virtual NFC key through a link to the mobile web site of the hotel. The mobile hotel key application saves the virtual key on the SIM card of the mobile phone. The guests can then open their room door by a simple move of their mobile phone. For check out they just tap their phone on an NFC tag in the lobby area (Egger, 2012).Despite the fact that NCF is currently perceived to be one of the most promising technologies for the future, little or no research has been conducted to determine the perception and the acceptance of NCF technology in the hospitality industry. The purpose of this study is to examine customers' perception and acceptance of NFC technologies in the hospitality industry. Technology Acceptance Model (TAM) (Davis, 1989) will be adopted to identify factors affecting customers' acceptance of NFC technology. For the NFC technology, some of the technological and usage-context factors such as privacy and security issues may be more critical compared to other types of technologies. Therefore, in addition to "perceived ease of use" and "perceived usefulness", TAM will be extended by adding five constructs to it; (1) perceived risk (2) privacy concern,(3) trust, (4) innovativeness, and (5) perceived enjoyment. After an extensive literature review, an online questionnaire will be developed. The data of this study will be collected from US travelers. A marketing company (e.g., Qualtrics) will be contacted to distribute the link for the online questionnaire. Frequent travelers who stayed at a commercial hotel at least once during the previous six months will be the target population of the study. All demographic information of the respondents will be developed by using the participants' age, gender, education, and income. In the second stage of data analysis, multivariate analyses will be conducted. Structural equation modeling (SEM) in Lisrel 8.52 will be used to analyze the relationships between independent and dependent variables. The findings of this study can be used to guide managers and decision makers in hospitality organizations who are considering NCF implementation.

Keywords: Near Field Communication, Hospitality, Technology Acceptance

The Influence of Corporate Reputation on Affective Commitment: Mediating Roles Played by Organizational Factors

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Abstract

This study aims to investigate the influence of corporate reputation on affective commitment as well as the mediating role played by organizational factors. Within the literature, studies suggest that corporate reputation can lead employees to exhibit positive attitudes and behaviors. Accordingly, and within the scope of the study, organizational based self-esteem, organizational identification, organizational trust, job satisfaction and affective commitment are considered potentially important consequences. These have traditionally been thought of as being potentially influenced by corporate reputation. Therefore, data collected from 210 hotel establishment employees using the survey method was analyzed. This was done by using the structural equation modelling technique. The results of this study indicate that corporate reputation has no direct influence on affective commitment and job satisfaction. It was, however, found to have a direct effect on organizational based self-esteem, organizational identification and organizational trust. Interestingly, it was discovered that organizational based self-esteem and organizational trust had a partial mediating effect on the relationship between corporate reputation and job satisfaction. Moreover, job satisfaction played a partial mediating role on the effect that organizational based self-esteem and organizational trust had on affective commitment.

Keywords: Corporate Reputation, Affective Commitment, Organizational Factors, Mediating Effect,

Introduction

Due to increasing competition in today's business environment, organizations constantly strive to uncover new ways to be unique and to differentiate themselves from their rivals. This is done in order to gain a competitive edge. In today's market, a sustainable competitive advantage depends more on the intangible assets of an organization rather than more traditional physical and financial indicators (Alniacik, Cigerim, Akcin and Bayram, 2011: 1177; Shamma, 2012: 151). One of the most valuable and important intangible assets that an organization can possess is a good corporate reputation (Helm and Tolsdorf, 2013: 144). Corporate reputation generally refers to an organization's accumulated attributes and perceived quality over time (Piriyakul and Wingwon, 2013: 742). However, a corporate reputation is a collective assessment of a company's ability to provide valued outcomes to various stakeholders. These stakeholders include investors, suppliers, customers and employees (Walsh, Mitchell, Jackson and Beatty, 2009: 190). In other words, these stakeholders make decisions based on the reputational status the organization. For example: an employee's willingness to work for, an investor's decision to invest in, and a customer's choice to buy products and services all depend on corporate reputations. Therefore, organizations need to build, sustain, and manage a favorable corporate reputation in order to achieve success and a competitive advantage. Due to the fact that a favorable corporate reputation a) encourages shareholders to invest in a company; b) attracts qualified employees; and c) allows organizations to retain both customers and employees, it can directly lead to superior financial performance (Chun, 2005: 91; Maden, Arıkan, Telci and Kantur, 2012: 655). In addition, a positive corporate reputation ensures that an organization can compete successfully within the market. This allows companies to improve their image, and to build an ethical and high performance work culture (Burke, 2009: 5).

Moreover, a positive corporate reputation can help customers perceive products and services as being of higher quality. This helps to generate greater customer loyalty. It also causes employees to exhibit positive behaviors and builds a strong identification between employees and their organizations (Caruana and Chircop, 2000: 45; Friedman, 2009: 230). Within the literature, research indicates that corporate reputations have some effect on individual attitudes and behaviors. This includes things like organizational engagement, organizational citizenship behaviors, turnover intentions, organizational

commitment, job satisfaction, affective commitment and organizational identification (Alniacik et al., 2011: 1177; Dolatabadi, Ghujali and Shahmohammadi, 2012: 227; Öncer and Yıldız, 2012: 721; Esen, 2012: 54; Mehtap and Kokalan, 2013: 3609; Karami, Soltanpanah and Rahmani, 2013: 718). Accordingly, it can be said that a positive corporate reputation provides clear benefits for both organizations and the individuals who work for them. This study focused on organizational-based self-esteem, organizational identification, organizational trust, job satisfaction and affective commitment as variables. These variables are important because there is currently no research that has investigated the relationship between corporate reputation, affective commitment and the organizational factors listed above. It would appear to be important that all these factors be considered together. Within this context, this study aimed to investigate the effects of corporate reputation on affective commitment, organizational based self-esteem, organizational identification and organizational trust. However, the main goal is to investigate the mediating effect of organizational based self-esteem, organizational identification, organizational trust and job satisfaction on affective commitment. Hopefully, the results presented here will represent a new contribution to the literature.

Theoretical Framework and Hypotheses Development

Corporate Reputation

Corporate reputation has been discussed extensively by academics and practitioners over the last four decades. Despite the increasing number of studies that have been published on this topic, there has yet been no agreement on a proper definition (Gotsi and Wilson, 2001: 24). Generally, corporate reputations are considered as being an "overall view of the company". Corporate reputation can also be broadly defined as a comprehensive concept that comprises aspects like corporate image, corporate identity, corporate branding, corporate personality, corporate associations and corporate communications (Shamma, 2012: 155). However, a corporate reputation also involves some of the components that are related to an organization's characteristics. Within the literature, these components are commonly classified as emotional appeal, products and services, vision and leadership, financial performance, workplace environment and social responsibility (Schwaiger, 2004: 55; Friedman, 2009: 231). From these components, some have priority within certain organizations, especially the hospitality industry. For example, products and services have a direct and important impact on the service quality of hotel establishments. Therefore, they can also impact customers' ideas and feelings, and they can lead to a positive or negative reputation. On the other hand, it can be said that other components have a significant impact on employee attitudes and behaviors within the hospitality industry. In other words, due to this industry's specific properties like high labor intensity and high employee turnover, a favorable reputation might play an important role an individual's attitude (Ozturk, Cop and Sani, 2010: 4). Some researchers (Alniacik et al., 2011; Dolatabadi et al., 2012; Öncer and Yıldız, 2012; Esen, 2012; Mehtap and Kokalan, 2013; Karami et al., 2013), have suggested that corporate reputation leads individuals to exhibit some positive attitudes and behaviors. It also has implications for employee perceptions about positive working conditions. Within this context, the following hypotheses are being proposed:

H_1: Corporate reputation positively and significantly influences affective commitment.
H_2: Corporate reputation positively and significantly influences organizational based self-esteem.
H_3: Corporate reputation positively and significantly influences organizational identification.
H_4: Corporate reputation positively and significantly influences organizational trust.
H_5: Corporate reputation positively and significantly influences job satisfaction.

The Mediating Role of Organizational Factors

A corporate reputation is regarded as an important component in terms of management. This is because it reflects employee images, ideas and feelings towards an organization. When employees perceive the corporate reputation of an organization positively, it is possible for them to derive positive feelings and attitudes directed towards organizations (Freund, 2006: 69; Yu and Cable, 2011: 107). Within this context, it can be said that a favorable corporate reputation results in employees feeling organizational based self-esteem, organizational identification, organizational trust and affective commitment. Organizational based self-esteem involves an "employee's evaluation of his or her personal adequacy and worthiness as an organizational member" (McAllister and Bigley, 2002: 864). Within the literature, it has been suggested that organizational based self-esteem emerges depending on organizational factors like work environment, organizational policies and procedures, perceived organizational justice, supervisory and co-worker support, and reputation etc. When an organization builds a positive reputation and shares the same values and norms with employees, it is possible for them to feel identification with

the organizations. This can then be turned into organizational based self-esteem over time. Research has indicated that organizational based self-esteem influences employee job satisfaction, organizational commitment and affective commitment levels. For this reason, organizational based self-esteem has been used as a mediator variable within this research (Fan, 2008: 5-20; Uçar and Ötken 2010: 99; Ho, 2012: 37; Gardner and Pierce, 2013: 122). Therefore, the following hypotheses are being proposed:

H6: Organizational based self-esteem positively and significantly influences job satisfaction.

H7: Organizational based self-esteem positively and significantly influences employee affective commitment.

H8: Organizational based self-esteem, organizational identification and organizational trust play a mediating role between corporate reputation and job satisfaction.

Corporate reputation is considered as a crucial predictor. It leads employees to feel a connection and belonging to an organization. In other words, it is seen significant factor which influences organizational identification (Smidts, Van Riel and Pruyn, 2000: 5). Organizational identification refers to the perception of oneness with - or belonging to - an organization (Jones and Volpe, 2011: 413). Therefore, it reflects the psychological bonding between individuals and their organizations (Reade, 2001: 1269). Organizational identification may appear depending on organizational factors like job characteristics, job involvement, organizational image, organizational communication, organizational trust, organizational justice and perceived organizational support (Katrinli, Atabay, Gunay and Guneri, 2009: 68; Tüzün and Çaðlar, 2009: 290; Kanten, 2012: 178). In addition, research has indicated that organizational identification has a profound impact on many organizational attitudes and behaviors. These include things like organizational citizenship behaviors, turnover intention, job satisfaction, and organizational commitment etc. (Cole and Bruch, 2006: 585; Witting, 2006: 1; Chughtai and Buckley, 2010: 578; Oktug, 2013: 219; Loi, Chan and Lam, 2014: 52).Therefore, we have hypothesized the following:

H9: Organizational identification positively and significantly influences job satisfaction.

H10: Organizational identification positively and significantly influences affective commitment.

Within the literature, it has been stated that a positive corporate reputation contributes to organizational trust. Organizational trust involves employee expectations about relations and behaviors within organizations. However, organizational trust also refers to the "positive expectations which people have, based on organizational roles, experiences, mutual dependency, resulting from the different behaviors of organizational members" (Fard, Rajabzadeh and Hasiri, 2010: 31; Esen, 2012: 49). Research has suggested that organizational trust depends on factors like leadership roles, organizational structure, organizational values, norms, communication networks and working group harmony, as well as mentoring relationships. (Erden and Erden, 2009: 2181; Li, Bai and Xi, 2011: 375). Moreover, studies have also shown that organizational trust levels within an organization can influence turnover intention, job satisfaction, organizational commitment, and affective commitment (Monji and Ortlepp, 2011: 192; Kelly, Lercel and Patankar, 2011: 3; Mohamed, Kader and Anisa, 2012: 1; Lee, Song, Lee, Lee and Bernhard, 2013: 406). According to these findings, the following hypotheses are being proposed:

H11: Organizational trust positively and significantly influences job satisfaction.

H12: Organizational trust positively and significantly influences affective commitment.

Job satisfaction and affective commitment are important employee attitudes. They are critical to improving organizational performance (Alniacik et al., 2011: 1179). Job satisfaction refers to a pleasurable or positive emotional state resulting from the appraisal of an individuals' job or job experiences. Scholars emphasize that a variety of factors can influence an individual's job satisfaction levels. Some of these factors are classified as the level of pay and benefits, the perceived fairness of the promotion system, working condition quality, social relationships, as well as the clarity of job description, requirements and leadership. That being said, studies have suggested that job satisfaction is the strongest predictor of organizational commitment and affective commitment (Schwepker Jr., 2001: 46; Yang, 2010: 609; Gunlu, Aksarayli and Perçin, 2010: 706; Azeem, 2010: 297; Kim and Brymer, 2011:1024; Singh and Jain, 2013: 105). Affective commitment is characterized as an employee's emotional attachment, sense of belonging, and participation within the organization. It refers to an individuals' sense of belonging and emotional affection with an organization and its goals. Previous research has indicated that there is a positive relationship between affective commitment and job satisfaction. In other words, when an employees' job satisfaction levels increase, their affective commitment levels also increase at the same time (Yew, 2007: 27; Wendong et al., 2008: 137; Akpinar,

Taº and Okur, 2013: 172; Imam, Raza, Shah and Raza, 2013: 272). Therefore, we have hypothesized the following:

H13: Job satisfaction positively and significantly influences affective commitment.

H14: Job satisfaction plays a mediating role between organizational based self-esteem, organizational identification and trust, and affective commitment.

According to the theoretical framework, the hypotheses and research model were developed for this study. Figure 1 illustrates the research model that was used. According to this research model, it was expected that corporate reputations influenced employee behaviors and attitudes within organizations. However, it was also expected that some organizational factors would have a mediating effect on behavioral outcomes.
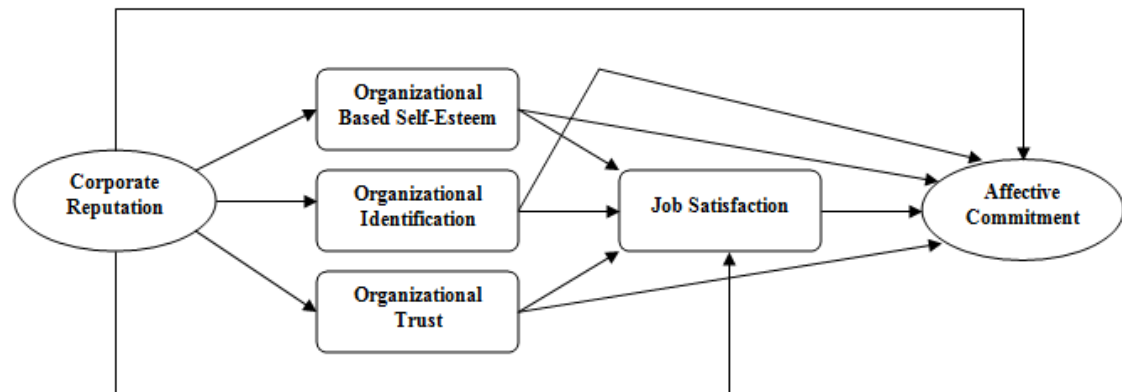
Fig. 1: Research Model

Research Method

Sample and Procedures

The research sample was composed of subjects from five-star hotels in Ankara (which is located in Turkey). The sample used for this study consisted of 300 employees working at the 5 different hotels. The questionnaire survey method was used for data collection. The questionnaires were formally issued from March, 2014 to April, 2014. Each questionnaire form contained six different measures related to research variables. From the 300 questionnaires that were sent out, 220 were returned, representing a response rate of 73%. After the elimination of cases with incomplete data and outliers, 210 questionnaires (66%) were accepted as valid and considered during the evaluation.

Measures

The measures used in the questionnaire forms were adapted from the previous studies within the literature. All items were scored using a 5-point Likert-type scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). For the validity of scales, a confirmatory factor analysis (CFA) was applied. For the reliability of the study, Cronbach Alfa values were evaluated.

Corporate Reputation Scale: CR scale was developed by Baran, Kanten and Bozkurt (2009). The scale consists of 32 items and six factorS. Example items include "I esteem this firm"; "There is good communication among the firm's employees".

Organizational Based Self-Esteem Scale: The Pierce, Gardner, Cummings and Dunham (1989) 10-item OBSE measure was used. Participants responded to questions like: ''I am important around here". The adaptation of the scale to Turkish was made by Akalın (2006). In a manner consistent with the original study, the results of the factor analysis revealed one factor.

Organizational Identification Scale: The OI scale was developed by Mael and Ashforth (1992). The scale consists of 6 items and a single factor. Participants responded to questions like: ''When someone criticizes (name of hotel), it feels like a personal insult". The scale was adapted to Turkish by Tüzün (2006).

Organizational Trust Scale: The OT scale was developed by Adams (2004). The Turkish standardization of the instrument by Kanten (2012) confirmed its validity for use in Turkey. A sample item reads "I have complete trust that the members of my work group will treat me fairly".

Job Satisfaction Scale: To measure job satisfaction, the authors used the job satisfaction measure that was developed and tested by Tsui, Egan and O'Reilly (1992). The scale consists of 5 items and a single factor. Sample items for the five-item job satisfaction include: "How satisfied are you with the nature of the work you perform?". The scale was adapted to Turkish by Tuna, Ghazzawi, Yeşiltaş, Tuna and Aslan. (2013).

Affective Commitment Scale: Affective commitment was measured with six items taken from Allen and Mayer (1990). Sample items for the six-item affective commitment include: "I would be very happy to spend the rest of my career with this organization?" The scale was adapted to Turkish by Bolat and Bolat (2009).

A confirmatory factor analysis was conducted by Lisrel 8.80 for all scales. Fit index quality has been presented in Table 1. It can be seen that all of the fit indexes fall within the acceptable ranges (Schermelleh-Engel, Moosbrugger and Müller, 2003: 52; Meydan and Şeşen, 2011: 35).

Table 1. Scale Fit Index Quality

Variables	X^2	df	$X^2/df \leq 5$	RMSEA $\leq.0.08$	CFI $\geq.90$	NFI $\geq.90$	NNFI $\geq.90$	SRMR $\leq.010$
Organizational Based Self-Esteem	20.99	11	1.90	0.066	0.99	0.99	0.99	0.024
Organizational Identification	3.95	3	1.31	0.039	1.00	0.99	0.99	0.016
Job Satisfaction	7.56	4	1.89	0.065	0.99	0.98	0.98	0.026
Affective Commitment	3.30	3	1.1	0.022	1.00	0.99	1.00	0.016
Organizational Trust	5.34	4	1.33	0.040	1.00	0.99	0.99	0.023
Corporate Reputation	456.45	232	1.96	0.068	0.98	0.96	0.98	0.047

Data Analysis

SPSS for Windows 20.0 and Lisrel 8.80 programs were used to analyze the obtained data. In the first step, a confirmatory factor analysis was conducted for all scales. Then, respondent profiles and descriptive statistics like means, standard deviations and a pearson correlation analysis of the study variables were examined. Finally, structural equation modeling (SEM) was used to conduct a test of the variables within the hypothesized model in order to examine the extent to which they were consistent with the data. However, the data was analyzed using the two-step approach that consisted of CFA and SEM (Anderson & Gerbing, 1988). The overall measurement quality was evaluated through CFA. Then, the fully mediated model was compared with the partially mediated model based on the X^2 difference test. In addition, we compared RMSEA (Root Mean Square Error of Approximation), CFI (Comparative Fit Index), NFI (Normed Fit Index), NNFI (Non-normed Fit Index) and SRMR (Standardized Root Mean Square Residual) for the validity of model.

Research Findings

Respondent Profiles

67% of employees were male and 33% were female. The majority of the employees (77%) were between the ages 20-39, and 20% employees were between the ages 40-49. In terms of education level, 63% had a high school education and 15% of them had vocational school. 9% of the respondents had a bachelor's degree. The sample also consisted of 46% from food and beverage departments, 16% from the front office department, 22% from the housekeeping department, and rest were from the human resources, security, or accounting departments. In terms of the duration of their employment within the hotel establishments, 53% of the employees had been employed at their specific hotel for 3 or less years, 25% for 4-6 years, 9% for 7-9 years and 13% for 10 years or more.

Measurement Results

For verification, the two-step model approach by Anderson and Gerbing (1998) has been used. According to this approach, prior to testing the hypothesized structural model, first the research model needs to be tested to reach a sufficient fit index quality. After obtaining acceptable indexes, it can be proceed with the structural model. The results suggested a good fit between the measurement model and the data. The results of the measurement model are: $X^2 = 932.77$, $df = 466$; $X^2/df = 2.00$; CFI = 0.97; NFI =0.94; NNFI=

0.96 RMSEA =0.069; SRMR =0.080. These values indicate that the measurement model is acceptable (Schermelleh-Engel et. al., 2003: 52).

Descriptive Analysis

Correlations, standard deviations and means have been computed. This was done in relation to corporate reputation, organizational based self-esteem, organizational identification, organizational trust, job satisfaction and affective commitment. These figures are provided in Table 2.

Table 2. Means, Standard Deviations, and Correlations of the Study Variables

Variables	C.Alfa	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11
Org. Based Self-Esteem	0.92	3.91	.81	1										
Org. Identification	0.85	3.89	.78	.647**	1									
Job Satisfaction	0.83	3.64	.86	.544**	.430**	1								
Affective Commitment	0.84	3.56	.86	.515**	.398**	.587**	1							
Organizational Trust	0.85	3.38	.92	.282**	.229**	.501**	.607**	1						
Corporate Operation	0.76	3.98	.78	.563**	.474**	.479**	.497**	.306**	1					
Emotional Attraction	0.91	3.93	.82	.545**	.528**	.428**	.381**	.161*	.545**	1				
Service Quality	0.86	3.95	.71	.560**	.533**	.461**	.447**	.236**	.605**	.707**	1			
Social and Environmental Respons.	0.91	3.88	.79	.572**	.517**	.494**	.438**	.356**	.600**	.698**	.781**	1		
Financial Strong	0.79	3.88	.84	.404**	.389**	.366**	.386**	.272**	.352**	.453**	.517**	.512**	1	
Communication	0.88	3.86	.84	.477**	.424**	.448**	.483**	.372**	.515**	.594**	.614**	.777**	.484**	1

*p<0.05   **p<0.01

Test of Structural Model

We tested our proposed model using structural equation modeling (SEM). The study compared the partial mediation model to the full mediation model; the X^2 difference of two models indicated that the partial mediating model was better than the full mediation model. The results revealed that the partially mediated model (X^2:859.03; df: 476) provided a better fit than the fully mediated model (X^2: 895.75; df: 481). The adaptability index, CFI, NFI, NNFI, SRMR and RMSEA of the partial mediation model demonstrated that the partial mediation model exceeded the full mediation model in terms of adaptability.

Table 3 presents the SEM results. The results show that corporate reputation has positive and significant influence on organizational based self-esteem (γ=.68; t-value=9.45), organizational identification (γ=.63; t-value=6.04) and organizational trust (γ=.40; t-value=5.55). Therefore; H_2, H_3 and H_4 were supported. However, results indicated that there was no significant influence by corporate reputation on affective commitment (γ=.14; t-value=.85), thus, H_1 was not supported. According to these results, an organization's reputation exerts a direct influence on an employee's organizational based self-esteem, organizational identification and organizational trust. Consistent with this view, if employees perceived a favorable reputation, they identified with the company and trusted the organization much more.

From the partial mediation model in Table 3, corporate reputation had no influence on job satisfaction (γ= .33; t-value=1.54). Furthermore, organizational identification had no effect on job satisfaction (β= .04; t-value=0.41). Therefore, hypotheses H_5 and H_9 were not supported. The results also demonstrated that organizational trust had a positive effect on job satisfaction (β= .39; t-value=4.68), and therefore, H_{11} was supported. The results indicated that organizational based self-esteem was significantly and positively related to job satisfaction (β= .33; t-value=3.13). This finding gave empirical support for H_6.

As can be seen in Table 3, organizational trust (β= .42; t-value=4.61) and job satisfaction (β= .23; t-value=2.06) both had a positive effect on affective commitment. This supported H_{12} and H_{13}. In addition to this, organizational based self-esteem (β= .18; t-value=1.85) and organizational identification (β= .05; t-value=0.67) had no significant effect on affective commitment. Therefore, H_7 and H_{10} were not supported.

Table 3 : Path of Structural Model (Standardized path coefficients; t-value).

Full Mediating	γ/β	t-value	Partial Mediating	γ/β	t-value
			CR → AC	**.14**	(**0.85**)
CR → OBSE	.69	(9.49*)	CR → OBSE	.68	(9.45*)
CR → OI	.63	(6.08*)	CR → OI	.63	(6.04*)
CR → OT	.42	(5.76*)	CR → OT	.40	(5.55*)
OBSE → JS	.45	(5.34*)	CR → JS	**.33**	(**1.54**)
OI → JS	.12	(**1.76**)	OI → JS	**.04**	(**0.41**)
OT → JS	.50	(5.13*)	OT → JS	.39	(4.68*)
JS → AC	.76	(6.29*)	OBSE → JS	.33	(3.13*)
CR: Corporate reputation			OBSE → AC	**.18**	(**1.85**)
OBSE: Organizational based self-esteem			OI → AC	**.05**	(**0.67**)
OT: Organizational trust			OT → AC	.42	(4.61*)
JS: Job Satisfaction **AC:** Affective Commitment			JS → AC	.23	(2.06**)
OI: Organizational Identification					
X^2: 895.75; **df**:481; X^2/**df** : 1.86; **RMSEA:** 0.064; **CFI**:0.97; **NFI**:0.94; **NNFI**:0.97; **SRMR**:0.099			X^2:859.03; **df**: 476; X^2/**df**:1.80; **RMSEA**: 0.062; **CFI**:0.98; **NFI**:0.95; **NNFI**:0.97; **SRMR**:0.092		

*p<0.01; **p<0.05

Additionally, our study used the testing approach adopted by Baron and Kenny (1986) to examine whether or not organizational based self-esteem, organizational identification, organizational trust and job satisfaction were mediating variables. According to this approach, the procedures for regression analysis are as follows: (1) regressing the dependent variable on the independent variable; (2) regressing the mediator on the independent variable; and (3) regressing the dependent variable on the independent variable and mediator. If the independent variable shows significance on the mediator, the mediator shows significance in the dependent variable, and the independent variable is not significant on the dependent variable, there is likely to be a mediator between the independent variable and the dependent variable (Baron and Kenny, 1986).

The SEM test for this study showed that organizational based self-esteem was a mediator variable for the relationship between corporate reputation and job satisfaction. The structural equation model showed that corporate reputation influenced employee job satisfaction via organizational based self-esteem. As a result, when employees perceived a favorable corporate reputation associated with their organization, they felt themselves worthy and valuable. This meant that their job satisfaction levels increased depending on organizational based self-esteem. However, organizational trust was a mediator on the link between corporate reputation and job satisfaction. When employees perceived a corporate reputation positively, their organization trust levels were higher and they were satisfied with their job. This means that H_8 was partially supported. Furthermore, we investigated whether or not job satisfaction had a mediating role amongst organizational based self-esteem, organizational identification, organizational trust and affective commitment. The results from the SEM revealed that job satisfaction mediated the effect of organizational based self-esteem and organizational trust on affective commitment. These results show that employees who have higher self-esteem and trust in their organization were more satisfied with their jobs and their affective commitment levels increased. Therefore H_{14} was partially supported.

Conclusion and Implications

Corporate reputation is considered a unique and valuable intangible asset possessed by an organization. This is due to its significant influence on stakeholder attitudes and behaviors. However, corporate reputation is seen as a key component that organization's use to achieve a sustainable competitive advantage, customer satisfaction and service quality within hospitality industry. In other words, employee and customer perceptions of a favorable corporate reputation play a crucial role in service quality and customer satisfaction. In this regard, this study aimed to determine the impact of corporate reputation on employee attitudes. It did so by exploring if some of the organizational factors had a mediating effect on behavioral outcomes in hospitality employees. As a result of this research study, it has been determined that more significant results were derived from the partial mediation model than for the full mediation model. In addition, corporate reputation had no direct effect on employee attitudes about job satisfaction and affective commitment. Meanwhile, corporate reputation did have a direct effect on organizational based self-esteem, organizational identification and organizational trust. Moreover, corporate reputation influenced employee job satisfaction through organizational based self-esteem and organizational trust. Therefore, it can be said that organizational based self-esteem and organizational trust have a partial mediating effect in terms of the relationship between corporate reputation and job satisfaction. Due to the fact that organizational identification had no effect on job satisfaction and affective commitment, it had no mediator role. On the other hand, job satisfaction mediated the effect of organizational based self-esteem and organizational trust on affective commitment. Therefore, our results showed that the perception of a favorable corporate reputation led to increased organizational identification, organizational trust and organizational based self-esteem. In this way, it would be expected that employee job satisfaction levels may increase.

Theoretical Implications

Within the literature, there are some studies which indicate the consequences associated with corporate reputation. That being said, there has not been any research into the relationships between corporate reputation, organizational based self-esteem, organizational identification, organizational trust, job satisfaction and affective commitment together. Furthermore, no studies have focused on these relationships by using the hospitality industry as the scope of a research model. Therefore, this study aimed to contribute to theory by exploring the relationships among these variables and determining their potential mediating effects. This study revealed the importance of corporate reputations on employee attitudes towards to their organizations in hotel establishments. Results showed that employee attitudes depended on corporate reputation.

Managerial Implications

The most important contribution that this study makes for managers is that it highlights the effect that corporate reputation has on employee attitudes and behaviors in hotel establishments. For this reason, organizations and managers need to place importance on building a favorable corporate reputation. These reputations are essential for attracting and retaining qualified employees and for maintaining service quality. In other words, organizational success and positive employee attitudes and behaviors depend on how they perceive an organization and its practices. Therefore, organizations should try to provide positive working conditions that include fairness and justice. Workplaces should provide a supportive

environment and with good working relationships. They should design and implement human resource policies and procedures that ensure employees perceive corporate reputations in a favorable way. This should lead to an increase in employee levels of well-being. Therefore, if employees perceive a corporate reputation positively, they are more likely to exhibit positive attitudes towards to the organization in general.

Limitations and Future Research

For this study, five different hotels were selected in a city in Turkey. This limited scope means that the results cannot be judged as being representative of all establishments within hospitality industry. Therefore, the study results remain valid for only hotel establishments. In further studies, the research model could be tested against larger samples or within other service sectors like travel agencies, health and logistics. A comparison of these results would likely be quite useful. However, there is a possibility that employees may be biased. In the survey method, researchers encounter this problem when gathering data from a single respondent. Therefore, in order to mitigate this problem, data can be collected from the managers and the results can be compared. On the other hand, employees may not be able understand and respond effectively to questionnaires because of the survey method. Therefore, in further studies, quantitative techniques – like interviews - could be used. Moreover, a research model could be designed that adds individual variables which are classified as consequences of corporate reputation. These could include such things as positive or negative influence and life satisfaction.

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Destination Marketing Organizations: A Comparative Study of the United States and European Union Countries

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Abstract

Destination marketing has become important because of increases in global tourism activities and the competition which occurs as a result of these activities. Advances in information technology have shaped this competition as well. Therefore, each destination develops its own unique strategies that can hopefully provide them with their own advantages. Destinations use web-based marketing and management models to promote the cities, states and countries in their international areas. Largely due to increases in internet usage rates, people are now meeting their information needs primarily from web-based destination services. These types of services benefit customers in terms of speed and ease-of-access. Therefore, using web-based applications to promote and market destinations within national and international areas has become more and more important. Accordingly, all Destination Marketing Organizations (DMOs) have been making efforts to increase tourism mobility to their destinations via prepared websites. A well-designed and well-maintained website has become one of the DMO's predominant business tools. They represent enormous potential to sell a destination. They also provide the opportunity to facilitate a meeting or convention efficiently from start to finish. In this study, the European capital city and U.S. State DMO websites were examined. A comparison was made between in these different websites. In order to make a comparison, the content analysis method was used. Website evaluations represent an emergent research area which, over the last ten years, has been explored using both qualitative and quantitative contributions. Academic researchers have long advocated the importance of assessing website effectiveness. However, as an emerging research area, the practice of website evaluation still has no globally accepted definition. In this study, the following research sample was used: 1. the official websites of European capital city DMOs which were available at the time of research; 2. the official websites of all U.S. states. According to the results of the study, the majority of the DMOs used the word visit in their domain names. They also used ".com" or an abbreviation of the country name like ".be, .fr" as an extension. When the DMOs of the US states and European capitals were compared, it was discovered that Lodging Information was located on the first line in both groups. While Lodging Information appeared on all EU capital websites, it was interesting that this information appeared on only 88% of those from the US states. That is to say, 12% of the American DMOs did not include this information on their websites. This is interesting because tourists tend to place a great deal of importance on this type of information. On the US destination websites, the "Things to Do" information ranked second. Meanwhile, on the EU destination websites, "Food and beverage" information ranked second. On the US destination websites, "Events/Festivals" Information ranked third. On the EU destination websites "Directions/Map" Information ranked third. On the US destination websites, "Food and beverage" information ranked fourth, while "Directions/Map" Information ranked fourth on the European sites. In accordance with the results, a model has been developed for the main pages found on the destination websites. The most important characteristic of this model is that both the EU and US best

practices have been referenced in its development. This model can be implemented internationally because it has been produced as a result of the examination of 78 DMO websites from many different regions. Furthermore, this model is well-suited to the needs of consumers because a mix of the most important information is presented in a concise manner. This includes considerations which must be made before the decision to travel, as well as all other relevant information required by the visitor during their stay. In this way, the demands and expectations of consumers can be met without the need for any other source of information. By creating this type content, the hope is that consumers will receive all the information they need during their travels. The content on DMO websites is constantly being updated. Therefore, website assessment studies can quickly become outdated. It is necessary to use similar studies done at different times and compare the obtained results for future research. It is hoped that this model can serve as a guide for current and prospective DMOs in their quest to create quality content.

Keywords: Destination Marketing, Oraganization, Tourism

Globalization, Production of Generics in Indian Pharmaceutical Industry: Problems and Prospects

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Abstract

Health care governance and delivery has undergone a sea change in India after the introduction of neoliberal globalization programme which progressively increased the role of private capital participation in sectors like health, hospitals and health care delivery. Andhra Pradesh government introduced much acclaimed Rajiv Arogyasri Health Insurance programme through the PPP model. The present paper examines the causes for the need to introduce a programme like RAI in Andhra Pradesh and the general rise in the medical expenditure due to corporatization of health care which became inaccessible to poverty ridden backward communities that constitutes 36% of the total population in the state. It is shown in the paper that the cost in the health sector, viz., consultancy fees of physicians, and surgeons, laboratory tests, surgical procedures, medical equipment, and pharmaceutical drugs ranged between a whopping 150 to 650% during 1995-2005 period which had to be met out of pocket expenditure by individual patients. Data is collected from field survey and compared with official sources. Exploratory analysis shows that majority beneficiaries are from urban, semi-urban and town-place people who are connected through influential networking clusters. The project has been partially successful in ameliorating patients suffering from cardio-vascular, oncological, and neurological diseases (32%). Concentration of specialized hospitals with advanced facilities being located in metropolitan urban centres.

Keywords: Health Care Delivery, Public Private Partnership (PPP) Model, Rajiv Aryogyasri Community Health Insurance (RAI)

Introduction:

Indian pharmaceutical industry has travelled a long distance from total dependency on foreign drug multinationals in the production, and sales of bulk drugs and formulations during the 1950s to near self sufficiency in all the departments of pharmaceutical manufacture and sales at the domestic level by the year 1995. So much so, the Indian pharmaceutical industry (IPI) has geared up to give a fierce competition in the worldwide generic market and is likely to secure top position by the year 2020 from the current 3rd position by the volume and 14th position by the value, though US pharmaceuticals market stands first in the world (www.listdose.com/top-10-world-largest-pharmaceutical-companies-2013). In another ranking of the world's 50 largest pharmaceutical companies by value it is shown that Indian company Ranbaxy has secured the 50th place in the list of top 50 companies (www.currentpartnering.com/insight/company-monitor/top-50-pharma/) in the world pharmaceutical market arena. Recently Ranbaxy has been acquired by Sun Pharma which shall result in the emergence of the largest pharmaceutical firm in India both by volumes and by value by end of the year 2014. This is going to be landmark deal in terms of giving tough competition in the international generic drugs market particularly challenging the position of Teva Pharmaceuticals the largest generic drug maker from Israel.

A science-based and technology-intensive industry, IPI has witnessed substantial raises in the Research and Development (R&D) expenditures ranging from 3 to 9 percent of the annual sales turnover of the Indian firms. It is a fore-runner amongst the science-based industries with an estimated value of $17.0 billion and is expected touch $25 billion by 2015 with annual average growth rate of 10-15 percent in the last five years. It has carved a niche in the production of drugs ranging from simple analgesics, anti-pyretic pills to antibiotic, cardio-vascular, Central Nervous System (CNS) drugs, oncological, anti-retroviral (ARV) drugs with substantive price-advantage in the world pharmaceutical market.

There has been a gradual shift in the approach of Indian drug companies to branch out into the production of generic drugs, biotechnology based new chemical entities, bio-similars, and active pharmaceutical ingredient (API) molecules, much ahead of India joining the World Trade Organization (WTO) and became part of the globalization process.

Policy Shift

India has joined and became member of the World Trade Organization in 2005 and has been following the product patents as part of the Trade Related aspects of Intellectual Property rights (TRIPs) regime. This has resulted in a major government policy shift which influenced the IPI in moving away from the process patent regime which was in force until 2005 and has focussed on the production and marketing of the generic drugs. A modified law was in compliance with TRIPs norms "2005 Patents (Amendment) Act" was introduced in place of 1970 Patent Act which was responsible for doing away with process patents and subsequently the much discussed, at times, controversial, reverse engineering technique attributed to the Indian drug firms has been relegated to posterity. Early indications of public policy shifts were noticed in the Drug Policy of 1986 and the revised Drug Policy of 1994 were extensively commented upon in an earlier study (Manohar Rao, 2007: 49-52). Indian government announced its final trajectory of launching an all out competitive model for IPI that were located in the Drug Policy of 2002. Public Sector units were reorganized into different public-private collaborations. A giant public sector firm with huge production facilities like the Synthetic Drugs Plant of Indian Drugs and Pharmaceuticals Limited of Hyderabad were closed down. The spill- over effects of IDPL Hyderabad, while in operation are clearly visible and attributable to what may be called horizontal technology transfer. Some cite Dr. Reddy Laboratories case as an example. The post-TRIPs scenario in India has been quite encouraging and challenging for the Indian drug firms which have increased their operations through both high R&D spends and utilizing the opportunities in the international market due to what is now referred to as "patent cliff". Beginning in 2010 it is estimated that approximately $250 billion worth sales revenue may be eroded due to the expiration of the so-called block-buster drugs by 2015 (DeRuiter and Holston, 2012). While on the one hand, this is discouraging news to the big firms with patent monopoly which acquired the patents with huge efforts in this sector, on the other, it is a challenge and opportunity to the generic producers all over the world including the IPI. India too is fully equipped to take part in this expansion possibilities arising in the world pharmaceutical market including the US generic market with major patent expirations on the anvil, IPI is likely to gain from the situation which is going to be a win-win situation for the US consumers (patients) on the one hand, on account of reduced medical care costs of drug-dispensing and the Indian drug firms on the other on account of enlarged market share.

Structure and Growth of IPI

Indian drug firms have started producing pharma and medical products in the year 1950 with a modest beginning of INR 10 crores ($10 million) to $4.5 billion in 2013 is a hard and well-rewarded journey to secure the present status of self-sufficiency in the drug production. With the Drug Policy of 2002 in operation the old three tiered structure viz., i) foreign (equity holding by foreign firm) ii) public sector (now only 5 units, with meagre operations) private does not strictly compartmentalize the activities of these units. IPI is predominantly private and follows strict World Health Organization's Good Manufacturing Practices guidelines in manufacturing of new drug discovery and delivery systems. There are 250 large scale units and approximately 8000 small scale units operating at present though the total number of registered units may touch approximately 20000. (www.pharmaceuticals.gov.in/annual-report/2011-12/). The IPI is expected to grow 19-20 per cent during 2013-14 due to impetus from expansion of rural markets for chronic therapies coupled with new drug discovery application filings by firms like Ranbaxy laboratories, DRL, Sun Pharma, Lupin and Cipla for at least 15 new drugs. It is estimated that Indian drug market is also open for multinational firms to the tune of $8 billion by 2015 and $35 billion by 2020 on account of specialty therapeutic drugs in the fields of cardiovascular, neurological, urological, diuretic, and other categories. This is what opens up a level playing win-win situation in the pharmaceuticals sector. India has become a lucrative destination for clinical trials and laboratory tests in the phase two and phase three stages (McKinsey Report, 2013).

Top Ten Indian Pharmaceutical Firms

Top ten major pharmaceutical companies by their annual sales turnover along with their rankings in the year 2013 are provided in the table below in Table 1 below. The top ranking firm Cipla with annual sales turnover of INR 69.77 billion ($11.9 billion) is located in Mumbai and manufactures drugs for arthritis, cardiovascular diseases, diabetes, etc. Cipla exports to more than 150 countries. It is also known for its achievements in technological innovations and receives royalties regularly for its know-how. Hyderabad based company Dr Reddy's Labs stood second with INR 66.86 billion ($11.11 billion) which produces around 200 medicaments and more than fifty active pharmaceutical ingredients (APIs). It has presence in more than 100 countries. It produces drugs for gastro-intestinal ailments, diabetes, oncology and analgesics. Third in line is Gurgaon-based (Haryana) Ranbaxy labs with sales of 63.03 billion INR ($10.50 billion). Japanese company Daiichi Sankyo has acquired a majority stake in the company in

2008. It is known for having one of the highest R&D budget among the drug companies in the world which is in the range of $100 million. Lupin Laboratories is one of the fastest growing generic producers with sales of 53.64 billion rupees ($8.91 billion) is in rank number 4. Aurobindo Pharma which has marketing tie-ups with Pfizer and AstraZeneca and manufactures both generic drugs and APIs has an array of drugs in its kitty like antibiotics, anti-retrovirals, anti-allergics etc., with sales of 42.84 billion rupees ($7.11 billion). Sixth ranking Sun Pharma with its headquarters in Mumbai, has achieved sales of INR 40.15 billion ($6.67 billion) in 2013 is major contributor in cardiology, psychiatry, neurology and the like. Cadilla Healthcare, Torrent Pharma, Wockhardt, and Jubilant Life Sciences followed with the subsequent ranks, with the sales turnovers of 31.52 billion rupees ($5.23 billion), 27.66 b. rupees ($4.59 b.), 26.5 b. rupees ($4.4), and 26.41 b. rupees ($4.38 b.) respectively.

The above trends clearly show that Indian drug firms are poised for a comfortable foray into the international pharmaceutical generic market with increase technological effort with high R&D outlays and competitive pricing policies which imply access to medicines at affordable health care management. Needless to add here, that the fillip to generic drugs worldwide was initiated with the introduction of US Drug Price Competition and Patent Restoration Act of 1984 (popularly known as Hatch-Waxman Act.)

Table 1 Top Ten Major Pharmaceutical Firms in India

Rank	Name of the Company	Net Sales (INR billion)	Net Sales (USD billion)
1.	Cipla	69.77	11.59
2.	Dr. Reddy's Labs	66.86	11.11
3.	Ranbaxy	63.03	10.50
4.	Lupin Laboratories	53.64	8.91
5.	Aurobindo Pharma	42.84	7.11
6.	Sun Pharma	40.15	6.67
7.	Cadilla Healthcare	31.52	5.23
8.	Torrent Pharma	27.66	4.59
9.	Wockhardt	26.50	4.40
10.	Jubilant Life Sciences	26.41	4.38

Source: http://www.mbaskool.com/fun-corner/top-brand-lists/7781-top-10-pharmaceutical-companies-in-india-2013.html (Last accessed on 15-04-2014.)

Indian pharmaceutical industry has set its path on patent expirations as a means of market expansion strategy, way back in 1995-2000 period, much before it became member of the WTO. Post-TRIPs scenario has only accelerated the momentum to look towards greener pastures by certain big firms which had already set up in-house research and development facilities and could foresee the possibilities of impending patent-cliff in store in the next decade. It has been pointed out in our earlier study that the unassailable competitive price advantage Indian pharmaceutical companies possess in certain select therapeutic categories like antibiotics, anti-ulcer drugs, and diuretic drugs. For example, drugs like cefotaxime, ranitidine, norflaxacin, felodipine, omeprazole, in the first phase of patent expiration between 1995 and 2000 and in the second phase from 2000 to 2005 drugs like famotidine, ciprofloxacin, oflaxacin, ondansetron when they became off-patent, the top ten firms mentioned above have not lost a moment to surf the wave of "cliff" to reach to the position that they are in now (Manohar Rao, 2007: 153-154). IPI has been one of the few industries which is showing positive balance of trade and a very favourable export rate of growth. As per the Directorate General of Commercial Intelligence and Statistics (DGCIS), Kolkata the value of exports of drugs and pharmaceuticals and fine chemicals has been showing a positive sign and greater than imports of the same from 2002-03 to 2010-11.

It can be observed from Table 2 that the overall trend of imports and export of pharma products is registering a positive growth with total exports exceeding the total imports for the ten year period under consideration. Occasional fluctuations in exports, notwithstanding, overall increase is observed in 2010-11. The decline in imports for the second consecutive year in 2010-11 signals self-sufficiency. (Government of India, *Annual Report 2011-12*: p.12 in www.pharmaceuticals.gov.in). Export of pharmaceuticals out of total exports of the country has been hovering around 4 to 4.5 percent for the period 2002-03 to 2010-11, whereas the pharmaceutical imports as a ratio of total imports stood at 0.6-0.7 for the period mentioned above.

Table 2 Imports and Exports of Indian Pharmaceuticals from 2002-03 to 2010-11 (Rs. in crores)*

Year	Imports	Growth (%)	Exports	Growth (%)
2002-03	2865	---	12826	---
2003-04	2956	3.18	15213	18.61
2004-05	3139	6.19	17228	13.25
2005-06	4515	43.8	21230	23.23
2006-07	5866	29.92	25666	20.89
2007-08	6734	14.79	29354	14.37
2008-09	8649	28.43	39821	35.56
2009-10	9959	15.15	42456	6.62
2010-11	10937	9.82	47551	12.00

Source: Government of India, *Annual Report 2011-12*, in *www.pharmaceuticals.gov.in*
*INR 1 Crore=$1.67 million

The investment from foreign firms is encouraged with more open arms than before 2005, and the bureaucratic hurdles in granting import licenses are smoothened. Bolstered by the performance of the private drug firms Indian government has initiated a horde of proactive industry-friendly measures with a view to share a major cake of the world pharmaceutical market. Marking a new era of foreign investment friendly environment in the Indian pharmaceutical industry by removing the mandatory no-objection certificate from the joint-venture partner of the local origin for operations in the local market has been initiated by the Pharmaceuticals Export Promotion Council (Pharmexcil) of India. This it is hoped will enhance and promote India as an investment destination and shall be instrumental in attracting higher levels of foreign direct investment (FDI) and technology inflows into the country as compared to its competitors, particularly, China and Brazil.

To encourage and promote competitiveness, innovation and international collaboration for end-to-end drug discovery the Department of Pharmaceuticals, government of India, has prepare a document *Pharma Vision 2020* for making India the preferred destination of the pharmaceutical corporate leaders by providing requisite infrastructure including English speaking, scientific, technical manpower at attractive wage-remuneration and other incentives at favourable terms. One of the important objectives stated in this document was to make India the global provider of quality medicines at affordable prices. This touches upon the sensitive issue of access to medicines at affordable prices, implying the welfare of the consumers the world over. The vision also proclaims to promote public private partnerships through international cooperation and collaboration with leading originator drug companies (Government of India, 2012).

In the foregoing analysis an attempt is made to show that IPI in the post-globalized era has made significant strides in achieving self-sufficiency in indigenous production, competitive capabilities in expanding generic production, export, innovation capabilities and also internationally viable conducive environment for FDI inflows. Some of the recent agreements between Indian and international drug firms stand a testimony to this fact. For example, Israel's Teva Pharmaceuticals and Procter & Gamble have agreed to set up world's largest over-the-counter (OTC) medicine facility in Gujarat. In another development Claris Life Sciences has entered into joint venture agreement with Otsuka Pharmaceuticals and Mitsui, both Japanese companies for producing and marketing injectibles. Aurobindo has received US Food and Drug Administration approval to manufacture and market oxacillin injections, nafcillin, and ondasetron injection. Eli Lily and Strides Arcolab have decided to collaborate to increase the delivery of oncologicals in the emerging markets.

Research and Development Trends

The technology augmentation efforts in the IPI have been, no doubt, witnessing an uptrend in the post-globalized era, but by no means are a source for complacency and neglect. On the contrary, the challenges are formidable and daunting, which need to be approached with more cogent and comprehensive target oriented commitments. An examination at the trends of R&D expenditures by the Indian pharmaceutical companies and global pharmaceutical companies show that India is on the trajectory of innovation and competition, whereas the efforts are feeble compared to global giants in the industry and the tasks are manifold and demand relentless efforts from both the government and industry. Data obtained from the Annual Report 2011-12, of the Department of Pharmaceuticals, Government of India is provided in Table 3. Indian pharmaceutical companies are ranked as per the R&D expenditures in the country in 2009, and global pharmaceutical companies seemed to have been selected on the basis of R and D spends from the list of top 50 pharmaceutical companies in the year 2009. Roche of Switzerland has topped in the global arena in that year with highest R and spends of $8570. However,

when we look at the data pertaining to top 50 global pharmaceutical companies of 2013, American firm Pfizer tops the list with $7046. (*Pharmaceutical Executive:* 2013). It is also noted in the same issue that Ranbaxy joins the global pharma 50 list for the first time. It also emphasises the fact that prescriptive global generic firms benefit from innovative portfolio diversification: Teva is nipping at the heels of Eli Lilly, at just one slot short of the top 10. It is also observed that the power of market concentration in terms of dwindling sales fortunes is getting diluted over several years. Novartis which ranked 2 in sales turnover in 2012 has topped in that year with highest R and D spend of $8831 higher than Pfizer (*Pharmaceutical Executive*: 2013). Surprisingly, Roche's expenditure on R and D still remains higher even after five years in absolute terms. We may infer here, that giant pharmaceutical companies may be shying away from R and D spends due to 1) patent cliff; 2) fierce generic competition and of course, the enduring uncertainty, risk and high costs involved in long and arduous research trials before new drug discovery and actual marketing.

Table 3 R & D Expenditures of Indian and Global Pharmaceutical Companies 2009 (In USD in million)

Indian Pharmaceutical Companies			Global Pharmaceutical Companies		
Rank	Company	R&D Expenditure	Rank	Company	R&D Expenditure
1	Ranbaxy	99	1	Roche	8570
2	Dr Reddy	89	5	Glaxo Smith Kline	6286
3	Sun Pharma	67	10	Eli Lilly	4300
4	Cipla	51	25	Lundbeck	615
5	Lupin	50	50	Watson	97

Source: Government of India, *Annual Report 2011-12,* in *www.pharmaceuticals.gov.in*

R and D spends of Indian pharmaceutical firms are not very impressive when examined under the global scanner, specifically for an ambitious country aspiring to take up a respectable slot in the world market. R and D intensity measured as investment in R and D as a ratio of sales turnover is now hovering around 5 and 6 percent needs to boosted up to reach the international levels of 18 to 20 percent in the long run and should be aimed to touch at least 9 percent in the next couple of years to achieve the goals set in *Pharma Vision 2020* of Government of India. International observers of IPI, however, are optimistic that with 160, 348 researchers and more than 1200 patents and R and D spends touching $23 billion is India is poised for an appreciable growth in the next couple of years. (Nair, 2013)

There is a general decline in optimism in the R&D spends in industrial research institutes and companies whose interest is flattening out. In a sample of 107 companies which included healthcare and pharmaceuticals sector as well, were sceptical towards any outcomes away from status quo. Indian companies which formed the third largest sample of respondents after Germany and China, is a moot point (*Research-Technology Management,* February 2014).

Conclusion

Indian Pharmaceutical Industry has grown into a global pharma hub in terms of volumes beginning with a modest start of mere $1.5 million industry to $25 billion with a compounded annual growth rate of 18 percent in the last quin-quennium. India has a greater opportunity to take part in the enlarged share of global generic market, particularly the US market as a result of patent expiration ("patent cliff") of major drugs in the next six to seven years amounting to an estimated $450 billion dollars of the so-called block buster drugs alone. However, accomplishing this daunting task depends much on how the Indian pharmaceutical firms are going synergise innovation capabilities with the marketing capabilities in a world of stringent competition with declining margins.

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The Perception of and Adaptation Strategies to Climate Change in Ethiopia: The Case of Rice Producers in Fogera Woreda, Amhara Region

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Abstract

The ongoing climate change is threatening the production and productivity of agricultural outputs, especially rice, affecting the livelihood of both rural and nearby urban dwellers in rice producing areas of Ethiopia. This study examined the perception and adaptation strategies of rice producers to climate change in Fogera woreda, Amhara Regional State, Ethiopia. The Heckman probit and multinomial logit (MNL) models were used to examine the determinants of adaptation to climate change. Results from the descriptive analyses indicated that the distribution of most of the socio-economic, farm and institutional characteristics were similar across the surveyed kebele. The farmers' perceptions of climate change were found to be in line with the statistical records in meteorological stations: 85.2% and 41% of them noticed the increasing temperature and the declining precipitation, respectively. Lack of improved crop varieties, lack of appropriate knowledge, financial constraints and irregularities of extension services were the most important and frequently raised impeding factors to adapt to the prevailing climate change and variability. The results of the Heckman probit and multinomial logit models showed that age of the household head, gender of the household head, farming experience, income, access to credit, livestock ownership, access to water for irrigation, tenure status, access to extension were the main factors that increase adaptive capacity. Hence, the findings call for active involvement of the government in promoting planned adaptation strategies; and designing policies to improve the adaptive capacity of farmers by easing the constraints.

Keywords: Climate Change, Perception, Adaptation, Fogera Woreda

Social Media Use for Travel Purposes: A Cross Cultural Comparison between Portugal and the United Kingdom

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Abstract

Social media has had an impact on every industry across the world and travel is no exception. Undeniably, social media plays an important role in travelers' experience and is one of the most powerful forces driving travel planning and decision making. Before the trip, travelers use social media to search for ideas on where to go, information on accommodation options, excursions and other leisure activities. During the trip, travelers use of social media consists in finding holiday related information. After the trip, travelers use social media to post information regarding their trip through reviews, comments, photos or pictures. Using data collected from an online questionnaire, this paper explores the use of social media during all phases of a travel trip (before, during and after) and compares the differences between United Kingdom and Portuguese residents through a cross-cultural approach. The results revealed that although travelers from both countries use social media essentially before travelling, there are some differences regarding the use before and after traveling. Therefore, this study provides useful insights for travel marketers to better understand the use of social media during all phases of the travel planning process and adapt social media strategies to country specific situations.

Keywords: Cross Cultural, Social Media, Travel

Introduction

As many other products and services, travelers need to search for information to make decisions, such as which destination, airline company or hotel to choose. More, compared to other services or products, travel normally requires more information processing before making a decision, because the purchase of travel products is considered to be highly risky (Huang, Chou, & Lin, 2010). Indeed, to consume tourism products, individuals must leave their daily environment and move to a geographical different place (Werthner & Ricci, 2004) and when making travel decisions, only descriptions are available (Werthner & Klein, 1999). On the other hand, consumers cannot try travel products/services before purchasing, making it difficult to evaluate the value for money before the actual experience (Kim, Qu, & Kim, 2009). In this context, information search decreases uncertainty associated with travel, enhancing the quality of tourists' trips (Fodness & Murray, 1997).

In the past 15 years, the Internet has revolutionized the way travelers search for information (Arsal, Backman, & Baldwin, 2008; Engel, Blackwell, & Miniard, 1995). In particular, travel related social media websites have gained popularity not only for travelers' search for information (Xiang & Gretzel, 2010) but also to post information regarding their trips, through comments, photos or pictures (Parra-López, Gutiérrez-Taño, Díaz-Armas, & Bulchand-Gidumal, 2012). Different statistics evidence the importance of social media in the travel context. PhocusWright, one of the leading travel industry research firms, found that unique monthly visitors to social travel sites increased 34% between the first half of 2008 and the last half of 2009 (Fairlie, 2010). According to a study conducted by ComScore (2007), 84% of travel review users reported that the reviews had a significant influence on their purchase decisions.

Given the increasing usage of social media for travel purposes, literature on this matter has been increasing. Popular topics have been travelers' motivation to use social media (Chung & Buhalis, 2008a; Gretzel & Yoo, 2008; Parra-López et al., 2012) and the impact of social media on travel decisions (Chung & Buhalis, 2008a; Sparks & Browning, 2011; Yoo & Gretzel, 2012). More recently, literature reviews on social media in tourism and hospitality have been published (Leung, Law, van Hoof, & Buhalis, 2013; Zeng & Gerritsen, 2014).

Although an increasing body of published literature is emerging, cross cultural studies addressing social media in the travel context are still scarce. Tourism's international nature should generate more attention for cross-cultural research (Dimanche, 1994). To the best of knowledge, only one study has examined the impact of national culture on travelers' social media use. In Gretzel, Kang, and Lee (2008) study, the authors examined consumer generated media adoption in Germany, China, United Kingdom (UK) and the United States of America (USA). Their findings suggest that national culture is one of the factors that explain the different rates of adoption observed in these four countries. However, the study used a qualitative approach based on secondary data. The authors themselves call out for empirical research addressing this topic. More recently Gretzel, Fesenmaier, Lee, and Tussyadiah (2011) suggested carrying out empirical research to examine the differences regarding the creation of travel related content between different countries.

This paper contributes to tourism literature by comparing the use of social media for travel purposes between two countries, Portugal and the UK. Further, since past studies have evidenced that national culture influences tourist behavior and the way they search for travel information (e.g. Gursoy & Terry Umbreit, 2004; Pizam & Jeong, 1996), this paper investigates the link between the cultural characteristics of the country and the use of social media for travel purposes based on Hofstede, Hofstede, and Minkov (2010) cultural dimensions framework.

Literature Review

Cultural Dimensions

A considerable amount of cross cultural studies is grounded on Hofstede's cultural dimensions. Indeed, this framework is considered to be the most comprehensive national cultural framework in cross-cultural studies (Hsu, Woodside, & Marshall, 2013). In Hofstede's (1980) original work, country cultures were categorized into four groups according to: Power Distance (PDI) Individualism versus Collectivism (IDV), Masculinity versus Femininity (MAS), Uncertainty Avoidance (UAI). However, with the publication of *Cultures and Organizations* (Hofstede et al., 2010) two more dimensions were added: Pragmatic versus Normative (PRA) and Indulgence versus Restraint (IND). Table 1 lists these dimensions with a brief description of each dimension.

Table 1. Cultural Dimensions

Dimension	Description
Power Distance	Expresses the degree to which the less powerful members of a society accept and expect that power is distributed unequally. People in societies exhibiting a large degree of power distance accept a hierarchical order in which everybody has a place and which needs no further justification. In societies with low power distance, people strive to equalize the distribution of power and demand justification for inequalities of power.
Individualism versus Collectivism	Preference for a loosely-knit social framework in which individuals are expected to take care of only themselves and their immediate families. Its opposite, collectivism, represents a preference for a tightly-knit framework in society in which individuals can expect their relatives or members of a particular in-group to look after them in exchange for unquestioning loyalty.
Masculinity versus Femininity	The masculinity side of this dimension represents a preference in society for achievement, heroism, assertiveness and material rewards for success. Society at large is more competitive. Its opposite, femininity, stands for a preference for cooperation, modesty, caring for the weak and quality of life.
Uncertainty Avoidance	The uncertainty avoidance dimension expresses the degree to which the members of a society feel uncomfortable with uncertainty and ambiguity. The fundamental issue here is how a society deals with the fact that the future can never be known: should we try to control the future or just let it happen? Countries exhibiting strong UAI maintain rigid codes of belief and behavior and are intolerant of unorthodox behavior and ideas. Weak UAI societies maintain a more relaxed attitude in which practice counts more than principles.
Pragmatic versus Normative	In societies with a pragmatic orientation, most people don't have a need to explain everything, as they believe that it is impossible to understand fully the complexity of life. People believe that truth depends very much on situation, context and time. They show an ability to adapt traditions easily to changed conditions, a strong propensity to save and invest thriftiness and perseverance in achieving results. In societies with a normative orientation most people have a strong desire to explain as much as possible and have a strong concern with establishing the absolute truth; they are normative in their thinking.
Indulgence versus Restraint	Indulgence stands for a society that allows relatively free gratification of basic and natural human drives related to enjoying life and having fun. Restraint stands for a society that suppresses gratification of needs and regulates it by means of strict social norms.

Portugal and the UK represent nearly reverse positions on most of these cultural dimensions, as shown in Figure 1. For instance, Portugal is high in uncertainty and low in individualism, while in the UK it is the opposite. Research addressing national culture comparisons typically include countries representing different levels of one or more cultural dimensions (Litvin, Crotts, & Hefner, 2004).
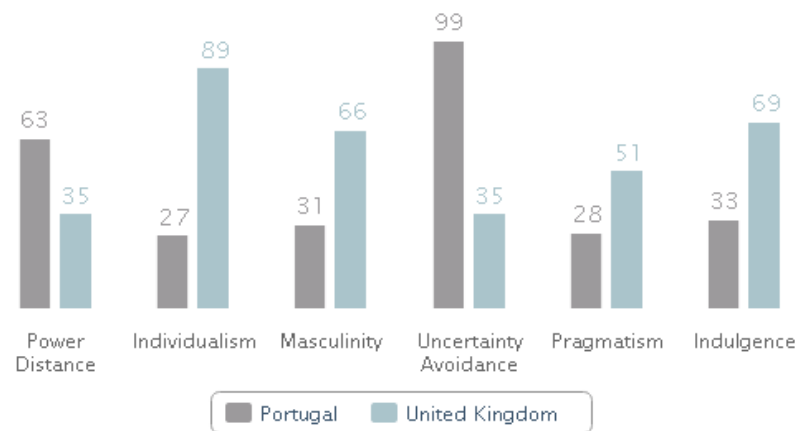
Fig. 1 - Cultural Index Scores in Portugal and United Kingdom
Source: http://geert-hofstede.com/ accessed March 3rd, 2014

Some examples of applications of Hofestede's dimensions in the travel and tourism field include examining the influence of culture on tourist's behavior (e.g. Litvin et al., 2004), on consumer's evaluation of travel services (e.g. Crotts & Erdmann, 2000) and on student's travel preferences (Sakakida, Cole, & Card, 2004). All of these studies have supported that national culture influences individuals' behavior. However, as aforementioned, cross cultural research addressing social media use in the travel context is scarce.

Social Media in Tourism and Travel

The use of social media for travel related purposes occurs before, during and after the trip. Before the trip, travelers search for ideas on where to go, information on accommodation options, excursions and other leisure activities (Cox, Burgess, Sellitto, & Buultjens, 2009; Fotis, Buhalis, & Rossides, 2012). Cox et al. (2009) found that social media are predominantly used during this stage. During the trip, travelers use of social media for travel purposes consists in finding holiday related information (Fotis et al., 2012). During these stages, travel reviews play an important role in the trip planning process, by providing ideas, reducing risk and making it easier to imagine what places will be like (Gretzel & Yoo, 2008). Interestingly, a higher percentage of travelers turn to user generated content (UGC) when visiting a destination for the first time, as well as visiting an international destination (Simms, 2012), supporting the important role social media plays in reducing risk. After the trip, travelers use social media to post information regarding their trip through comments, photos or pictures (Parra-López et al., 2012).

Travelers find motivation to use social media for travel purposes in the perceived functional (informational) benefits that social media provide (e.g. "social media tools enable me to keep up to date with the tourist sites" and "social media tools give me the possibility to exchange information about tourist sites") (Parra-López et al., 2012). In fact, Chung and Buhalis (2008a) report that information acquisition was the most important factor influencing travelers to participate in online travel communities. However, other studies have shown that reading travel reviews added fun to the trip planning process, made travel planning more enjoyable and made travelers feel more excited about travelling (Gretzel & Yoo, 2008; Gretzel, Yoo, & Purifoy, 2007). Chung and Buhalis (2008b) found that users of online travel communities (e.g. Tripadvisor.com, VirtualTourist.com) participated in the online community activities not only for the informational benefits, but also for the hedonic benefits (i.e. "Having fun with contents", "Entertainment" and "To be amused by members"). In a different study, hedonic needs were pointed as an important predictor for the level of participation in an online travel community (Wang & Fesenmaier, 2004). More recently, the positive relationship between the perceived hedonic benefits and motivation for using social media for travel purposes was confirmed by Parra-López et al. (2012). Focusing on the after trip phase, Yoo and Gretzel (2011) found that enjoyment is a driver of travel content generated media creation.

This empirical evidence demonstrates that individuals use travel related social media not only for information purposes but also because they consider its use enjoyable. Web 2.0 has made information search more personalized, active and interactive, which contributes to its hedonic value (Gretzel, 2012).

Shao (2009) suggests that individuals deal with UGC in three ways: by consuming, by participating, and by producing. Consuming refers to the individuals who only read, or view but never participate. Participating includes both user-to-user interaction and user-to-content interaction (such as ranking the content, adding to playlists, sharing with others, posting comments, etc.). Producing encompasses creation and publication of one's personal contents, such as text, images, audio, and video. Most travelers are just consumers or participators (Yoo & Gretzel, 2011). Pan and Crotts (2012) report that travel blogs and social media sites have long recognized that there are far more people consuming information than generating it. Indeed, Yoo and Gretzel (2011) found that only 17% of the surveyed online travelers that use travel related consumer generated media have ever posted travel materials online.

Despite these evidences there is a lack of investigation exploring how cultural differences affect the production, participation and consumption of travel related information on social media websites.

Methodology

Sample and Procedure

A convenience sampling technique was employed to collect data from Portugal and the UK. The choice of the countries was based on the differences between the two countries that, according to the Hofstede Centre data, are positioned in opposite positions in several of Hofstede's cultural dimensions, as shown in figure 1. Thus, these countries were considered relevant for conducting a comparison to evaluate the influence of the cultural characteristics on social media use for travel purposes.

E-mails were sent to International and Portuguese mailing-lists. Respondents residing in countries other than Portugal and the UK and those who did not use social media for travel purposes were discarded. The aim was to collect the same number of responses from each country. Yet, since the number of responses from Portugal was higher, a random sample procedure was employed to extract 83 responses from Portuguese respondents.

Measures

The questionnaire was originally written in English and proof read by a native English speaking lecturer. Corrections and revisions were made according to her suggestions. To have the questionnaire available in both English and Portuguese, the questionnaire was translated to Portuguese by a Portuguese native speaker, but proficient in the English language. The accuracy of the translation was done by the authors and minor adjustments were made to guarantee that both questionnaires had the same meaning.

The questionnaire was divided into four main sections. At the beginning of the questionnaire, respondents were also asked to recall their last trips and select social media websites that they had used to search for travel information. This was a screening question to assure that all respondents used social media for travel purposes.

In the second section, questions pertaining respondents' travel-related behavior were asked. Respondents were asked to recall their trips taken within the last 12 months to answer how many domestic and international trips were taken during that period. The first section also had a question on the number of times respondents had purchased travel online. The third part of the questionnaire assessed the respondents' use of social media for travel purposes and their level of interest and enjoyment with these websites. Social media use was examined with new measures, but based on literature that has shown that individuals deal with social media by consuming and creating, before, during and after the trip (Cox et al., 2009; Parra-López et al., 2012; Shao, 2009). A five point Likert-type scale was applied, with 1 being "Never" and 5 being "Always". Perceived enjoyment with social media was assessed adapting items used by Lee, Cheung, and Chen (2005), Moon and Kim (2001) and (Verhoef & Langerak, 2001) with a five point Liker scale, with 1 being "Strongly Disagree" and 5 being "Strongly Agree". Interest in social media was measured with items developed by McQuarrie and Munson (1992), with a five point differential semantic scale. As opening paragraph was included at the beginning of this section to provide participants with an overview of what was considered social media.

Finally, the last part of the questionnaire contained questions regarding respondents' demographic characteristics, namely age, gender and education level.

Results

The demographic profile of the respondents by country is presented in Table 2. The age group with the most significant number of responses, in both countries, was the age group 18-29. The sample seems to be composed by highly educated individuals, with more than 90% in both countries having at least a college degree. Approximately 39% of the British have a Doctoral degree, compared to 15.7% of the Portuguese. In terms of gender, in the Portuguese sample there is a slight skew towards a higher proportion of female participants (71.1%).

Table 2. Profile of Respondents

Characteristic	Frequency (%)	
	Portuguese	British
Age		
18-29	30 (36.1%)	27 (32.5)
30-39	24 (28.9%)	18 (21.7%)
40-49	18 (21.7%)	14 (16.9%)
50-59	10 (12%)	13 (15.7%)
Over 60	1 (1.2%)	11 (13.3%)
Education		
High School or less	7 (8.4%)	2 (2.4%)
College degree	32 (38.6%)	10 (12%)
Master Degree	31 (37.3%)	39 (47%)
Doctoral Degree	13 (15.7%)	32 (38.6%)
Gender		
Male	24 (28.9%)	36 (43.4%)
Female	59 (71.1%)	47 (56.6%)

The chi square values and significance levels reported in the last column of Table 2 demonstrate that while there were no significantly differences in the number of domestic trips between travelers from both countries, there were differences in the number of international trips. Over 40% of the British had taken more than 4 international trips in the past year, while in Portugal only 7.2% had done so. Another difference between the two countries regards the number of travel purchases online. It was observed that British tend to purchase travel online more often than the Portuguese. In fact, it should be noted that all of the British respondents had already purchased travel online at least once, while in the Portuguese sample, 21.7% had never purchased travel online. According to data from Eurostat (2013), 71% of individuals from the UK have bought goods or services over the Internet, while in Portugal the percentage only reaches 15%.

Table 2. Travel Behaviors

Characteristic	Frequency (%)		Chi-Square Value (Significance Level)
	Portuguese	British	
Number of domestic trips in last year			
0	1 (1.2%)	8 (9.6%)	5.785
1 - 3 times	39 (47%)	36 (43.4%)	(0.12)
4- 6 times	18 (21.7%)	17 (20.5%)	
More than 7	25(30.1%)	22 (26.5%)	
Number of International trips in last year			
0	29 (34.9%)	4 (4.8%)	
1 - 3 times	48 (57.8%)	44 (53%)	37.785*
4- 6 times	4 (4.8%)	19 (22.9%)	(0.00)
More than 7	2 (2.4%)	16 (19.3%)	
How many times travel purchased online			
Never	18 (21.7%)	0 (0%)	
1 – 3 times	15 (18.1%)	5 (6%)	43.461*
4-7 times	18 (21.7%)	10 (12%)	(0.00)
8-10 times	8 (9.6%)	5 (6%)	
More than 10 times	24 (28.9%)	63 (76%)	

As can be observed in table 3, Tripadvisor is ranked as the most popular social media website that respondents from both countries use for travel purposes. In the UK, Lonely Planet was the second most popular social media website (38.6%), followed by Google + (24.1%), while in Portugal, the second most popular website was Google + (39.8%), followed by Facebook (38.6%).

Table 3. Social Media Websites used for travel purposes

	Social Media Use	
	Frequency (%)	
	Portuguese	**British**
Facebook	32 (38.6%)	16 (19.3%)
Flickr	2 (2.4%)	3 (3.6%)
Google +	33 (39.8%)	20 (24.1%)
Holiday Check	7 (8.4%)	4 (4.8%)
Lonely Planet	17 (20.5%)	32 (38.6%)
Pinterest	2 (2.4%)	2 (2.4%)
TravBuddy	3 (3.6%)	0
Tripit	2 (2.4%)	3 (3.6%)
Tripadvisor	45 (54.2%)	71 (85.5%)
Tripsay	2 (2.4%)	0
Twitter	4 (4.8%)	4 (4.8%)
Tripwolf	0	1 (1.2%)
Virtual Tour	6 (7.2%)	4 (4.8%)
Yahoo!Travel	4 (4.8%)	7 (8.4%)
Youtube	13 (15.7%)	11 (13.3%)
Other. Which ones?	12 (14.5%)	16 (19.3%)

Note: Since respondents were able to choose more than one website, the sum of N will not add up to 83 nor will the percentages add up to 100%.

Regarding respondents' use of social media table 4 shows the mean of the items observed in both countries.

Table 4. Mann-Whitney tests for country comparison of social media use

	Mean (standard deviation)		U-value	Z-value	p-value
	Portugal	UK			
Consumption of Social Media **Before travelling…** CSM1 - I read hotel reviews from other travelers.	3.77 (1.05)	3.9 (1.02)	3211.500	-0.789	0.430
CSM2 - I searched for travel information on social media websites.	3.3 (1.17)	2.86 (1.32)	2759.000	-2.272	0.023*
CSM3 - I looked at activity/attractions reviews of other travelers.	3.53 (1.12)	3.23 (1.09)	2847.500	-2.010	0.044*
CSM4 - I read other travelers' experiences and tips.	3.54 (1.07)	3.42 (0.99)	3062.000	-1.294	.196
While travelling… CSM5- I search for travel information on social media websites (for example, things to do or where to eat)	3.06 (1.09)	2.52 (1.26)	2551.500	-2.964	0.003*
Creation of Social Media Content **While traveling…** CRSM1 - I check in to the location I am at/update my location on social media (for example, on Foursquare, Facebook)	2.04 (1.2)	1.94 (1.09)	3348.500	-0.332	0.740
* Significant at the 0.05 level					

Table 4. Mann-Whitney tests for country comparison of social media use (Continued)

	Mean (standard deviation)		U-value	Z-value	p-value
	Portugal	UK			
Creation of Social Media Content **After travelling...** CRSM2 - I write hotel reviews on social media websites.	1.99 (1.11)	2.34 (1.28)	3291.500	-0.522	0.602
CRSM3- I post photos on social media websites.	2.18 (1.28)	1.69 (0.88)	3170.500	-0.924	0.355
CRSM4- I write reviews of activities/attractions on social media websites.	1.95(1.17)	1.4 (0.75)	3125.500	-1.125	0.261
CRSM5 - I upload videos on social media websites	1.54 (0.95)	1.4 (0.75)	3247.500	-0.798	0.425
CRSM6- I write reviews of the place and/or monuments I visited on social media websites.	2.06 (1.13)	1.64 (0.82)	2777.000	-2.325	0.020*

* Significant at the 0.05 level

By observing Table 4, it is clear that in both countries social media is predominantly used before travelling and that most social media users are consumers rather than producers, supporting the results obtained in earlier studies (e.g. Cox et al., 2009; Pan & Crotts, 2012; Yoo & Gretzel, 2011). Before travelling, the most important activity in both countries is reading hotel reviews.

Normality tests were undertaken and revealed that the distribution of the scores of the social media variables was not normally distributed. Therefore, the non-parametric Mann-Whitney test, which is equivalent to the parametric t-test of independent samples, was used to test for differences between the two countries. The results are shown in table 4.

Regarding social media consumption, as the Mann-Whitney results indicate, there is enough evidence to conclude that there are significant differences between the two countries in 3 out of the 5 items (SMC2, SMC3 and SMC5). Portuguese respondents tend to search for more travel information than the British, before and while travelling.

Portugal is high on uncertainty avoidance, which deals with a society's tolerance for uncertainty and ambiguity. It indicates to what extent a culture programs its members to feel either uncomfortable or comfortable in unknown different from usual situations. This might explain Portugal's higher social media consumption levels, to minimize the likelihood of such situations. Moreover, in collectivist cultures, such as Portugal, group values and the opinions of others are considered to be more important (Gretzel et al., 2008).

In relation to social media creation, the only significant difference between the 2 countries is regarding Item CRSM 6 "I write reviews of the place and/or monuments I visited on social media websites", which is higher in the Portuguese sample. Portugal is high on collectivism and as Gretzel et al. (2008) point out, social media websites are more likely to be used in collectivist cultures, since they foster interpersonal exchanges. The UK is a very individualist country, in which individuals are expected to look after themselves. This may explain their less willing nature to help others by writing reviews.

Portugal, being low in masculinity, has more cooperative and caring values. More, in societies with a normative orientation such as Portugal, most people have a strong desire to explain as much as possible.

The results given in Table 5 indicate that social media users in both countries consider that using social media for travel purposes can be moderately fun and enjoyable. Web 2.0 has made information search more personalized, active and interactive, which contributes to its hedonic value (Gretzel, 2012). In most of the perceived enjoyment items, Portugal has higher values, but the only significant difference is regarding the first item "Using social media for travel purposes is enjoyable" (U=2782.500; Z=-2.299; p<0.05).

Regarding interest in social media, the results indicate that Portuguese social media users find social media more interesting than the British, with significant differences in items SMI3, SMI4 and SMI5. These results may be as a consequence of Portuguese cultural characteristics. Being a more friendly culture, scoring low on masculinity, individualism and pragmatism and high in uncertainty avoidance, the Portuguese see the potential social interaction provided by this type of websites and enjoyable, allowing them to exchange information and feel like they can be useful to aid others in their search for travel information and recommendations

Table 5. Mann-Whitney tests for country comparison of Perceived Enjoyment and Interest in Social Media

	Mean (standard deviation)		U-value	Z-value	p-value
	Portugal	UK			
Perceived Enjoyment					
PPSM1-Using social media for travel purposes is enjoyable.	3.47 (0.77)	3.13 (0.99)	2782.500	-2.299	0.021*
PPSM2-Using social media websites for travel purposes is fun.	3.29 (0.79)	3.05 (0.94)	3026.000	-1.465	0.143
PPSM3-Using social media websites for travel purposes stimulates my curiosity.	3.27 (0.93)	3.17 (1.05)	3248.000	-0.536	0.592
PPSM4- I consider the use of social media for travel purposes a big hassle. (R)	2.39 (0.91)	2.58 (0.96)	3027.500	-1.423	0.155
PPSM5 – When interacting with social media for travel purposes I do not realize the time elapsed.	3.13 (1.05)	3.05 (0.96)	3272.000	-0.586	0.558
Interest in Social Media Social Media is…. SMI1 – Unimportant/important					
SMI2- Irrelevant/relevant	3.76 (0.88)	3.58 (1.07)	3178.500	-0.903	0.367
SMI3 - Means nothing to me/means a lot to me	3.71 (0.93)	3.6 (1.08)	3322.000	-0.416	0.678
SMI4 – Unexciting/Exciting	3.66 (1.07)	3.02 (1.18)	2381.500	-3.543	0.000*
SMI5 -Doesn't matter to me/Matters to me	3.52 (0.92)	3.1 (1.14)	2806.000	-2.155	0.031*
SMI6 - Boring…Interesting	3.38 (0.93)	2.9 (1.18)	2561.500	-2.975	0.003*
SMI7 –Useless…Useful	3.51 (0.98)	3.18 (1.17)	2971.000	-1.590	0.112
	3.77 (0.9)	3.58 (1.1)	3180.500	-0.899	0.369

* Significant at the 0.05 level

Conclusions and Implications

This study provides useful insights to travel marketers and providers on the use of social media. First of all, considering the use of social media in both countries, the results demonstrate that social media is used during all stages of the travel planning process: before, during and after the trip. However, it is mostly used before the trip. Since reading hotel reviews is the most important activity of social media use before travelling, hotel managers should pay close attention to reviews of their hotel and respond to both negative and positive reviews. In this way, travelers reading reviews can see managers' responses and will have a more favorable attitude.

In both countries the use of social media before traveling is high, yet the creation of travel content is low, echoing the conclusions of other studies (e.g. Cox et al., 2009; Hofstede et al., 2010; Pan & Crotts, 2012; Yoo & Gretzel, 2011). The creation of travel related content is paramount for the success of travel social media websites. Therefore travel providers and marketers need to create strategies to encourage travelers to create content. Since the main motivations for travel content creation are altruistic sharing, enjoyment and documentation of personal experiences (Gretzel et al., 2011) strategies should focus on these aspects. For example, by reminding travelers how their experiences will help others or by creating online platforms that are entertaining and where the travel information provided can be stored in a fun and unique way (e.g. by creating a video with pictures posted or creating a virtual trip diary with content created).

Although both countries have similarities on the use of social media for travel purposes, there are some significant differences that in this study are explained based on culture. While more research, in different countries, is needed to confirm these conclusions, it seems logical to expect these relationships. For example, Portuguese travelers, which are high on uncertainty avoidance, tend to use social media websites more than the English before traveling. Therefore, travel marketers and providers aiming to attract travelers high on uncertainty avoidance need to pay close attention to their social media strategies in those countries, as they will be more likely to use social media to search for travel information. Countries higher in femininity and collectivism also seem more likely to create content. The practical implication of this study is that travel providers and Destination Marketing Organizations (DMOs) need to be aware that tourists from these countries will be more likely to create content about their travel experience. Therefore, they should adapt some offerings according to the origin of the traveler. They can provide incentives for travelers from specific countries to visit certain attractions, expecting that they will share their experiences and influence others to visit those attractions.

The results of the current study are important to countries, as they enable them to adjust their online strategies that may be country specific situations.

Limitations and Future Research

One of the limitations of this study is that a convenience sample was used and, therefore, generalisations of the results must be made with caution. On the other hand, even though the statistical procedures carried out can be conducted on small samples, a bigger sample would be desirable.

Another limitation was that it only compared the use of social media between two countries. Future research should replicate this study in other countries with similar cultural scores as Portugal and the UK to compare results. Indeed, further research is necessary to provide increased confidence regarding the generalizability of the results and to further contribute to the influence of national culture on social media use for travel purposes.

Since enjoyment has been found to be a driver of travel content generated media creation (Yoo & Gretzel, 2011), future research could examine this association in both samples. Future research could also investigate the relationship between social media interest with social media consumption and creation.

Finally, research on how to take advantage of cultural differences to maximize the impact and effectiveness of travel related social media websites would also be an interesting research path.

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Conceptualizing Destination Image and Effect on Visitors' Future Intentions

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Abstract

The literature on destination image spanned over three decades. Despite this long period of knowledge accumulation, there is not yet a generally accepted measurement for destination image. This paper seeks to contribute to the literature by analyzing more comprehensively the underlying structure of destination image and to investigate the effect of destination image on visitors' future intentions of a destination. An emerging tourism destination in Nigeria (Cross River State) was used as the study area. Random sample of 235 onsite visitors were recruited for the study. A well structured and written questionnaire containing 35 destination image attributes was used to elicit data for the study. Principal factor analysis and regression analysis were utilized to identify attributes that underpins destination image construct structure. Factor analysis produced six dimensions: destination quality of life, natural attractions & facilities, quality of public services, destination product quality and education, community hospitality and security and safety. The result also shows that destination image has direct significant relationship with visitor's future intentions. Specifically, two destination image dimensions (community hospitality and ambience and natural attractions and facilities) predicted visitors' future intentions. The result will influence the formulation of destination product development and branding strategy which is necessary to create and grow the expected number of arrivals.

Keywords: Tourism Destination Image, Destination Attractiveness, Future Intentions, Visitor Attraction, Social Construction, Destination Attributes

Introduction

The need to understand the nature and impact of destination image on visitor's and resident's attitude has received so much attention from researchers and tourism practitioners because of its strategic importance in tourism businesses and destination arrivals. Destination image has been suggested as one of the most important factors that influence visitors flow (Vaughan, 2007). The literature on destination image has spanned for over three decades. Despite this long period of knowledge accumulation, there is not yet a generally accepted measurement for destination image. According to Fakeye & Crompton (1991) as cited by Vaughan (2007), "destinations with positive image are thought more likely to prosper while those with negative image may never prosper". Destination marketing managers are still grappling with the problem of determining which set of destination tourism image (TDI) dimensions are most effective in growing tourist arrivals. Some destinations have spent huge sums of money in product development and packaging strategies that have not impacted significantly on visitors' arrivals. To provide answer to the above managerial problem, it is imperative to determine factors or elements of tourist destination that create meaningful impressions and that influence visitors' arrival. This paper seeks to contribute to the literature by analyzing more comprehensively the underlying structure of destination tourism image (TDI) and the effect of destination image on visitors' future intentions of a destination.

This paper is divided into 5 sections. There is a brief review of academic literature on tourist destination image and growth in the conceptual measurement of destination image. This is followed by detailed research methodology, results of data analysis and interpretation. The results are then presented in terms of cognitive evaluation of Cross River State (destination image index), critical destination image factors affecting behavioural intentions (repeat visit). The discussion section describes the findings and strategic implications of findings.

Literature review

Destination Tourism Image and Importance

The Oxford Advanced Learner's Dictionary defines destination image as "an impression that a person, an organization or a product gives to the public and/or a mental picture that you have of what something

is like or looks like" (Hornby, 2011: 748). Destination is a mental image formed by exposure to destination attributes ((Bagoglu, 1999; Baloglu & McCleary, 1999) and Gallarza, Saura & Garcia, 2002). Gunn (1988) as cited by Vaughan (2007) and Cho (2008) assert that image is formed in two phases: organic phase and induced phase. Later Fakeye and Crompton (1991) added the third phase, which is referred to as the complex phase. The organic image is formed as a result of exposure to various information sources such as news reports, magazines, films, documentaries, friends and relatives. The induced image is the image formed when the tourist decide to carry out information search from channels, such as visitor information centers, brochures, travel agents, etc. The complex image is a product of post consumption experience. The image at this stage undergoes three outcomes: it is modify, correct or remove depending on whether elements or impressions already gathered from the two previous stages about the destination are consistent or inconsistent with the actual trip experiences. If consistent, the image is reinforced. On the other hand, if the impression is inconsistent, the image is modified or removed. Cooper, Fletcher, Fyall, Gilbert & Wanhill (1998) drew from (WTO) that defines image as ideas, conceptions held individually or collectively of the destination. The complex image level was used for his study- image formed by visitors during his or her stay in the destination visited.

Vaughan (2007) summarizes it by stating that the literature on TDI can be reduced into three perspectives: image as a composite construct (that is the sum of beliefs, ideas, and impressions a person has about a destination), image as an attitudinal construct (this consist the physical traits, affects and emotional response to destination attributes) and image as a societal concept (the social and political environment of business). The importance of imagery cannot be overemphasized as tourists make their decisions based on these images and information before selecting a destination to visit (Mohan, 2010). An understanding of TDI is critical as it influences tourist preferences for destination, motivation for choice of destination, and by extension purchase behaviour (Cooper, Fletcher, Fyall, Gilbert & Wanhill, 1998). They further observed that attitudes and behaviour are formed on the basis of an individual tourist's derived image which are not easily changed or eroded except by the introduction of a new idea, information or experience.

Development of Measurement Scale for Tourism Destination Image (TDI)

Research on destination image started about four decades ago following the work of Hunt in 1971 (Mohan, 2010). Since then extensive research has continued on the phenomenon (Echtner & Ritchie, 1991 and Fakeye & Crompton, 1991). However, it has been observed that there is still some problem with the conceptual development and measurement of tourism destination image and attractiveness (Fronchot & Kreziak, 2008). The lack of conceptual framework regarding the notion of tourism destination image (TDI) is still an area of concern to date in view of the fact that it is widely acclaimed to be a critical element in tourist visitation (Mohan, 2010; Fronchot & Kreziak, 20080). Unlike TDI, concepts in tourism research such as resident perception and attitude have standardized scale of measurement (Viviers & Slabbert, 2012; Delamere, Wankel & Hinch, 2001).

Image is influenced by the characteristics of a destination, exposure to information received about the destination, personal factors such as motivation and sociodemographic characteristics and previous experience (Bagoglu, 1999; Baloglu & McCleary, 1999 and Gallarza et al, 2002). The most remarkable and ground breaking attempt to solve the problem of identifying elements of tourism destination image was by Beerlie & Martin (2004) who from extensive literature review generated a list of variables which could potentially be used as measurement instrument. The elements include: natural resource; tourist, leisure and recreation, natural environment; general infrastructure, cultural, history and arts; social environment; tourist infrastructure; politics and economics and atmosphere of place.

There are recent attempts to re-conceptualize tourism destination image. Pikes (2002) reviewed 142 papers on destination attractiveness which highlighted major issues confronting researchers in the field. Mohan (2010) in line with Pikes 92002) asserted that authors are not in agreement on what constitutes a generally acceptable measurement scales for measuring TDI. According to him, this is because of the lack of agreement in the various submissions by these authors. The scales produced by researchers lack homogeneity with respect to the attributes which define an individual's perceptual image: criticism of the attributes list, absence of an acceptable theory to replace the multi attributes models, and difficulty in measuring consumers overall perceptions of a destination, the absence of validity and reliability of scales used in measuring destination and attractiveness casting doubt on their psychometric properties, etc. This study therefore seeks to contribute to the development of TDI measurement scale that will overcome the weaknesses observed in some previous studies.

Conceptual Framework and Hypothesis Testing

Frochot & Kreziak (2008) found the following themes in the study of TDI: mountain authenticity, services at the resort, skiing, nonski snow activities, conviviality, and challenge. Mohan (2010) investigated the impact that destination image has on sport tourists' decision to travel using linear regression. He found that the significant image dimensions were weather, safety, cost and hospitality.

Buhelis (2000) proposed and conceptualized image as predictor of quality and perceived valued and found a significant relationship which in turn affect tourist satisfaction and behaviour intentions. Navratil, Picha, Naratilova, Svec & Dolezalov (2012) using an exploratory approach found that the image of a tourist destination is multilateral. He found that the cognitive appreciation of water, natural attractions, and cultura-historic were predictors of tourist behavioural intentions. Edwards, Griffin, Hayllar, Dickson, Scheinsberg (2009) in an Australian study conceptualized destination image as city environment, city experience, large attractions, services and food services. Images are said to have an impact upon the formation of service quality evaluation, customer's satisfaction and future recommendations (Bigne, Sanchez & Sanchez, 2001and Pike 2002). Mohan (2010) asserts that the importance of destination image in consumer decision making has long received universal acceptance. This is because it influences tourist perception and consequent behaviour and destination choice. Vaughan (2007) also found that respondents were significantly different in their perception of the image of Romania as a result of place of residence of respondents (Munich, Oporto, Leon and Bournemouth). In view of the above we therefore postulate that:

H_1: There is no direct significant relationship between destination image and visitor behavioural intentions

H_2: There is no significant difference in the perceived tourism destination image of visitors based on place of residence.

Research Methodology

Areas of Study

Cross River State was used for this study. It is an emerging destination. The destination is richly endowed with exotic tourism sites which are currently being enhanced to 'visitor readiness state'. There are 85 potential tourist sites (16 nature-based, 42 historical & cultural, 16 recreational and 11 others (industrial, educational, religious based, etc.)). Out of these numbers, 32 sites were classified as visitor ready (sites designated for tourism business with basic ancillary tourism facilities in situ), 50 sites were classified as semi visitor ready (sites designated for tourism, have limited activities because of absence of basic tourist facilities), and 3 sites were classified as not visitor ready (sites designated for tourism business with little or no tourist activities because of non enhancement for touristic use). The destination has 344 accommodation establishments (194 hotels, 105 guest houses, 33 lodges, 8 resorts and 4 motels). Total numbers of rooms available are 5,015. Total number of food and beverage outlets is 3,223. A total of 386,404 visitors visited tourist sites in the second half of 2012. A total of 467, 852 visitors attended special events at the same period. The destination had a total of 356,188 guest nights and 18.6% average room occupancy. See CRSTB Statistical Report (2012) for details.

Sample Size and Sampling Procedure

Statistical estimation using Taro Yamene Formular (Yamene, 1967) produced a sample size of 367. This number was drawn from the total number of visitors to Calabar in the past one year. Eight visitor ready sites in Calabar were used for the study (National Museum, Tinapa Leisure Resort, Cultural Center, Botanical Garden, Pandrillus Wildlife Conservation Center, Cercopan Wildlife conservation Center, Millenium Park, and Resort). Systematic sampling design was used for drawing subjects into the sample. The sample units were drawn from the population of visitors by contacting every five visitor in the event arena. The study was limited to Calabar Tourism Cluster because it is the major entry point into the state by air and sea.

Instrumentation

A well structured written questionnaire was designed and used in data collection. The content of the instrument drew heavily from the works of Mohan (2010) and Navratil et al. (2012). The instrument was partitioned into three parts. Part one had four items on demographics of respondent (age, gender, education, place of residence). The second part contained questions on destination attributes. A total of 35 items represented specific destination attributes. Respondents were asked to rate their perception of

the destination image forming attributes on a five point Likert scale (1= very poor and 5= very good) . Part three of the instrument measured visitor's tendency to repeat visit (behavioural intentions). Future intention was treated as one item construct (tendency to repeat visit to destination). It was measured on a five point Likert scale with 1= strongly disagreed and 5= strongly agreed. In all this, measurement scale seeks to measure the perceived image of the study area (*Destination Cross River*) and element of the destination image that significantly predicts visitors' behavioural intentions.

Data Collection Method

The data used for this study was collected as part of a larger study conducted by the Cross River State Tourism Bureau 2012. The entire research was coordinated by the author. The questionnaire was self administered on on-site visitors in eight visitor attractions (only same day and overnight visitors were considered). Staff of the Department of Research and volunteer research staff from Sustainable Tourism Initiative (NGO) were engaged as field staff and enumerators. The questionnaire was served on every five visitors entering a tourist site. The next visitor was contacted where the fifth conduct results in a non response. Completed questionnaires were collected before the visitor leaves the tourist site.

Validity Test and Reliability Tests

Validity of the instrument was achieved by undertaking two activities. First five experts in the field of destination management were presented with the instrument for consideration (The Economic Adviser to the State Governor, Marketing General Manager (Tourism Bureau), Unical Hotel Manager, Managing Director (Tourism Bureau). Their inputs were most significant in framing the words of questionnaire items for better understanding. Reliability analysis was based on the test of internal consistency that was done before exploratory factor analysis was carried out (Field, 2005). Correlation matrix was used as a preliminary means of assessing the presence of multi-collinearity. Value of inter-item correlation must not be very large ($r = 0.8$ to 0.9) and values below 0.3 were not accepted. Cronbach's α alpha reliability test was done to measure the internal consistency of the 35 items . The acceptable lower limit could be as low as 0.5 (Field, 2005). At the preliminary stage, reliability test of the 35 destination image items was done and any items below 0.5 were deleted. All items with $\alpha \geq 0.5$ were then subjected to factor analysis using Principal Component analysis (PCA) with Varimax rotation to identify the underlying structure of the construct (tourism destination image). For appropriateness of data for factor analysis, Kaiser-Meyer-Olkin (KMO) measure of sample adequacy must not be less than 0.5. Bartlett's test of spherecity test shows that there is some relationship between the variables (A significant test tells us that the R- matrix is not an identity matrix and therefore appropriate for factor analysis). Extraction and retention of factors was based on factor loading of 0.3 and eigenvalue greater one.

Data Analysis

SPSS Window 16.0 was used for organization of data in this study. Descriptive statistics such as frequency distribution analysis was used to capture the demographics of visitors to the destination. Simple average was used in calculating the perceived tourism destination image dimensions. This was helpful in calibrating and interpreting the tourism destination image index. Leven& Pubin (1991) calibrated destination image in three zones: Good= 3.6-5 point, Fair = 2.6- 3.5 point and Poor = 1-2.5 points. Multiple regression models were used in testing the statistical relationship between perceived destination image and repeat visit in hypothesis one. The second hypothesis was tested using t test to find if there is any significance in the perceived tourism destination image dimensions of domestic and international visitors

Research Results and Findings

Profile of Respondents

Out of a sample of 367 visitors who were served the questionnaire, only 235 copies of the questionnaire were returned and found fit for data analysis. This represented 64% questionnaire response rate. The sample comprises 16% foreigners and 84% Nigerians. The respondents were aged between 22 to 50 years. Most of the respondents were professionals and self employed people. And most of them visited the destination in the company of family members or friends.

Table 1: Principal Component Factor Analysis Using Varimax Rotation On Destination Image Attributes

Item	Individual item mean	Factor loading	Communalities	Composite Reliability (x)	Item reliability (x)
Destination quality of life					
X:19: Clean water	3.13	.790	.686	.876	.855
X15:Receational parks	3.22	.748	.645		.851
X13:Cultural experience	3.41	.722	.605		.861
X18: Existing business opportunity	2.35	.687	.563		.866
X11: Weather and pleasant climate	3.12	.667	.536		.860
X9: Cuisine an drinks	2.87	.650	.477		.864
X17: Reasonable pricing	2.56	.612	.529		.862
X16: Ease to use facilities	2.51	.591	.635		.856
Natural attractions and facilities					
X8: Beautiful beaches	2.47	.720	.566	.725	.638
X5: Attractive animals and games	2.14	.674	.526		.643
X10 : Deep sea fishing	1.13	.635	.459		.695
X4: Uncrowded and unspoiled parks	2.71	.592	..573		.679
X14:Modern equipment & facilities	2.65	.589	.699		.856
X12: Well equipped information centers	2.49	.575	.654		.857
X7:Adequate and safe facilities	3.06	.485	.521		.864
Quality of public service					
S 5. Custom and immigration services at airport	1.67	.770	.616	.790	.746
S8: Quality of guides	2.15	.693	.561		.756
S6:Police services	2.27	.644	.518		.748
S9: Knowledge of foreign language	2.00	.638	.554		.759
S 7: Access to local transport	2.40	.630	5.13		.754
S4: Medical and health services	2.12	.466	.467		.784
Destination product quality& education					
S14: Availability of shopping facilities	2.05	.719	.547	.724	.666
S15:Accessibility of attractions	2.04	.712	.616		.658
S16: Visitor education at attractions	2.13	.709	.626		.650
S11:Quality of lodges	2.06	.664	.581		.665
S13:Provision of children facilities	1.82	.557	.459		.694
S12:Quality of restaurants	2.16	.510	.374		.802
Community hospitality and ambience					
X3:Attractive and appealing environment	3.93	.728	.583.	.716	.630
X2:Hospitality of service providers	4.03	.686	.550		.645
X1:Enjoyed the whole experience	4.04	.605	.479		.656
X6:Responsive staff	2.88	.565	.558		.693
Communication and security					
S2:Personal safety	1.99	.718	.603	.690	.571
S3:Telecom services	2.16	.677	.467		.620
S1: Convenient airport	1.67	.520	.566		.640
S10:Friendliness of locals	2.07	.458	.504		.670

Factor Analysis

Preliminary reliability test with Cronbach's alpha test yielded values of α between 0.856 to 0.873 and the values in the correlation matrix were not very large (0.3 to 0.6) as to cause error or unreliable measures as they were within acceptable limits (critical level= 0.8 to 0.9). This was to ensure the internal consistency of the items that were used to measure the destination image dimensions. Secondly it was intended to rule out initial problems of multi-collinearity. PCA was done to determine the underlying structure of destination image attributes. KMO value was 0.850 which was greater than the bench mark of 0.5. The value of Bartlett's sphericity test was ($\chi2$=.00337, df= 595, p = 0.000). On the basis of this statistics, the data was deemed suitable for factor analysis. All the 35 items were used for factor analysis. With eigenvalue greater than 1, six dimensions of destination image were produced. The six dimensions

had a total variance of 55.52% which was good enough. The eigenvalue range between 1.07 to 7.22. The entire factor loaded at values above 0.3. A careful examination of the items loaded in each of the dimensions guided us in renaming the factors/dimensions. See details in table 1. Factor one loaded 8 items and was named *destination quality of life*. This dimension had a composite reliability test value of 0.876. Factor two loaded 7 items and was named *natural attractions & facilities*. This dimension had a composite reliability test value of 0.725. Factor three loaded 6 items and was named *quality of service providers*. This dimension had a composite reliability test value of 0.790. Factor four loaded 6 items and was named *destination product quality and education*. This dimension had a composite reliability test value of 0.724. Factor five loaded 4 items and was named *community hospitality and* ambience. This dimension had a composite reliability test value of 0.716. Factor six loaded 4 items and was named *communication and security*. This dimension had a composite reliability test value of 0.690.

Tourism Destination Image Index of Cross River State

This study also produced an additive destination index which will help in the comprehension of the constructs (Fakeye and Crompton, 1991 and Bagoglu and MCcleary, 1999). The six attributes produced by PCA were used to create a destination image index for Cross River State (see table 2). The perceived image of the destination was determined on the basis of each of the six image dimensions. This was done by computing the mean of each of the TDI dimensions. Interpretation of the destination image was done in line with (Leven &Pubin, 1991) as cited by Mohan (2010).

Table 2: Tourism Destination Image Index of Destination Cross River

TDI Dimensions	N	Range	TDI of Nigerians	TDI of Foreigners	Image Rating
Destination quality of life	235	4.00	3.037	1.997	Fair
Natural attractions & facilities	235	4.00	2.201	1.618	Poor
Quality of public services	235	4.00	2.081	2.171	Poor
Destination product quality& education	235	4.00	2.085	1.75	Poor
Community hospitality and ambience	235	4.00	3.781	3.223	Good
Communication and Security	235	4.00	1.935	2.171	Poor

Overall, the image of the destination is not good enough. The result of the analysis indicates that the TDI index portrays the state as having a not very good image. Out of the six TDI dimensions only one dimension was scored good (hospitality of community and ambience was rated 3.70 on the TDI index). Destination quality of life was scored fair on the TDI index (2.87) and the other destination image dimensions were scored poor (<2.5) on the TDI index. Descriptively it was found that there were differences in the perceived image of the destination based on place of residence of tourist (domestic and international tourist). The domestic tourists had higher perceived TDI on four image dimensions of the destination: destination quality of life (domestic =3.037 and international =1.997); natural attractions and facilities (domestic= 2.201 and international =1.618); destination product quality and education (domestic =2.085 and international=1.75); community hospitality & ambience (domestic=3.781and international=1.75), while international tourist had higher perceived TDI on two image dimensions: quality of public services (domestic=2.081 and international=2.171)and communication & security (domestic=1.935 and international=2.171). See table 2 for details.

Hypothesis Testing

Visitor Type and Perceived Image of Tourist Destination Dimensions: To determine if there is a significant difference in the perceived image of the destination by domestic and international tourists, each TDI image dimension was tested for equality of means using independent t test. The result shows that the perceived image of four of the TDI dimensions were significantly different (destination quality of life: t= 4.379, p=0.000; natural attractions and facilities: t=2.299, p < 0.05: quality of public services: t= -0.519, p > 0.05; product quality and education: t=2.317, p < 0.05; community hospitality and ambience: t=3.787, p=0.001). Two TDI dimension did not show significant difference in the perceived TDI (quality of public services: t=-0.519, p > 0.05 and communication and security: t=-1.717, p > 0.05). See table 3 for details.

Table 3: Influence of Tourist Type on Perceived Image of Destination

	T-test for Equality of Means						
				Mean Differenc e	Std. Error Difference	95% Confidence Interval of the Difference	
	T	Df	Sig. (2-tailed)			Lower	Upper
Destination quality of life	4.379	233	.000	1.04073	.23769	.57244	1.50901
Natural attractions & facilities	2.299	233	.022	.58209	.25315	.08332	1.08085
Quality of public services	-.519	233	.604	-.09017	.17376	-.43251	.25216
Destination product quality and education	2.137	233	.034	.33460	.15660	.02607	.64313
Community hospitality and ambience	3.287	233	.001	.55804	.16979	.22353	.89255
Communication and security	-1.717	233	.087	-.23577	.13728	-.50624	.03469

Effect of Tourism Destination Image and Visitors' Future Intentions: Regression analysis was used to test the effect of destination image on visitors' future intentions and to specifically determine the image dimensions which predict visitors' future intentions. The overall model shows that there is a positive and significant relationship between destination image and repeat visit (R^2= 53.5%, F=43.771, p =0.000). This means that over fifty percent of the change in the dependent variable is accounted for by variation in the destination image attributes. This indicates that the null hypothesis should be rejected. The value of R^2 shows that the model has a reasonable good fit to predict the criterion variable. The value of Durbin Watson (2.127) was within normal range and so any autocorrelation problem was ruled out in the model fit   test. See table 4 for details.

Table 4: Relationship Between Destination Image And Future Intentions

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	123.650	6	20.608	43.771	.000[a]
	Residual	107.346	228	.471		
	Total	230.996	234			

Model 1: R^2=53.5%, DW=2.127

The effect of each of the tourism destination image dimensions on behavioural intentions was measured using multiple regression analysis. The analysis shows that natural attraction and facilities (p < 0.05 , t= -2,52, b = -0.096) and community hospitality and ambience (p = 0.000, t= 13.076, b = 0.777) predicted repeat visit. The other four dimensions did not predict repeat visit (p > 0.05).Community hospitality and ambience had positive regression coefficients, while natural attractions and facilities had negative regression coefficient. Community hospitality and ambience has more impact on visitors' future intention to visit the destination (b=0.777) than natural attractions and facilities (b=0.096). No collinearity problem was observed as VIF values were within acceptable limit. See table 5 for detail.

Table 5: Effect of Tourism Destination Image on Visitors Future Intentions

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	1.568	.244		6.417	.000		
Destination quality of life	.006	.040	.009	.152	.879	.645	1.551
Natural attractions & facilities	-.096	.037	-.139	-2.552	.011	.690	1.448
Quality of public services	.007	.059	.007	.120	.905	.608	1.645
Destination product quality and education	-.053	.058	-.047	-.915	.361	.759	1.318
Community hospitality and ambience	.777	.059	.765	13.076	.000	.595	1.681
Communication and security	-.080	.075	-.063	-1.062	.289	.589	1.698

a. Dependent Variable: Repeat visit

Discussion of Findings and Managerial Implications

The result of factor analysis produced six tourism destination image dimensions or elements: Destination quality of life, natural attractions & facilities, quality of public services, destination product quality and education, community hospitality and communication and security. Unlike some previous works on this subject studied by Pike (2002), the principles of validity and reliability were taken into consideration in deciding the perception items that were factor loaded. The major contribution of this study to literature is the use of TDI index developed in this study to determine the TDI dimensions that are predictors of visitors' future intentions. The six TDI dimensions produced covered most of the elements that were earlier suggested by Beerlie and Martin (2004) and Mohan (2010), but differ from it because of the processes that the authors deployed. Unlike other studies that simply outlined single attributes, this study produced conceptualized TDI as a construct that has six dimensions. The TDI index revealed that visitors' perceived image of the destination is somewhat poor. That tourist differ in their perceptions of a destination image: domestic tourists have a slightly higher perceived TDI than international tourists. The implication is that target marketing should be implored to accommodate varying perceptions of the two market segments in generating repeat visits.

The result of the analysis shows that tourism destination image significantly influence visitors' repeat visit. Out of six TDI dimensions generated through PCA only two were found to predict repeat visit: community hospitality and ambience and natural attractions and facilities. The other dimensions were omitted from the model because their significance is greater than 0.05 and so do not make significant contribution in the explanation or prediction of repeat visit to tourist destinations. The significant dimensions in this study contained some of the attributes that were found significant in some previous studies (Bigne, Sanchez & Sanchez, 2001; Edward et al. 2009; Navratil, Picha, Naratilova, Svec & Dolezalov, 2012). The negative regression coefficient obtained in natural attractions and facilities may be associated with the lack of effective product positioning and brand association of the destination nature based products and faclities (Cross River State). The two predictors of tourist future intentions should be used as the basis for product strategy formulation and marketing. Effort should be intensified to upgrade the tourism components that are responsible for community hospitality and ambience and enhancement of natural attractions and facilities. To increase arrivals which will in turn move upward; the destination room occupancy, the destination nature based products; environmental attractiveness and hospitality of industry operators should be improved and used as the destination unique selling proposition.

Conclusion

The dimensions produced in this study have highlighted the elements that should be used to represent and measure destination image. This answers the 'what it is made up of and what it is not' question. The results show that destination image follows six underlying structure, and that not all the social constructions and operation of tourism managers in a destination significantly influence visitor's behavioural intention. The dimensions that predicted future intentions are critical in the planning and development of destination products and marketing. Destination competitiveness is based on the tourist flow and repeat visits. Repeat visit is important in marketing because of the belief that it is cheaper and

more profitable to serve a repeat visitor than a first timer. Generally, the destination's image of the study area is poor as inferred from the very low scores of items rating. To positively improve the destination image and to maximize the benefit of increasing tourist flow through repeat visitation, the destination managers need to formulate new tourism development strategy for promoting community hospitality and ambience and enhancing the visitor readiness of natural attractions and facilities in the destination. The study supports the view that, tourism destination image is an individual's subjective and objective evaluation of designated features of a location which is stored in memory and used in taking decision concerning the future consumption of the location by potential and prospective tourists.

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Increasing Labor Productivity by Youth Employment in Turkey

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Abstract

Youth has an important role in the development of countries. Yet, youth unemployment issue is a serious problem both for developed and developing countries. Likewise Turkey has a considerable number of youth population in working age and thus youth unemployment issue constitutes a major problem. Despite some economic growth in Turkey, in recent years, the youth unemployment rates of Turkey have been nearly twice the level of the overall unemployment rates. For example, in 2013, the overall unemployment rate was 9.7%, while the youth unemployment rate stood at %18.7. This shows that there is a serious youth unemployment problem to be solved in Turkey. Turkey tries to solve the issue by some active and passive employment measures, however; most of the time employment policies are not as efficient as anticipated in resolving the issue. The aim of this study is to analyze the youth employment policy of Turkey and provide some effective measures to reduce youth unemployment to a considerable level or to increase youth employment productively.This study will have important contribution to solve youth employment problem in Turkey. Then, there will be some active and passive policy recommendations in solving the problem.

Keywords: Youth Unemployment, Productivity, Labor Productivity, labor Market.

Introduction

Young population owned by our country necessitates showing great effort in the sense of employment relations as well as having an advantage. Young population of our country entails opening of new employment areas. Failing to find job for new population involved in labor every year soar the number of the unemployed.

Youth unemployment issue is not only leading problem for Turkey, it is also one of the leading economic problem of many other developed and developing countries

One of the inessential and important elements of macro-economy is productivity. Productivity concept shows variability depending on the factors such as production, wage, investment, unemployment, notably employment.

Increasing productivity in enterprises gives competition power, provides economic growth of country, increases GDP and ensures social welfare.

In a research carried out for the period of 1970- 1991 aimed at explanation of relations among productivity, employment and wages in the industrial enterprises that make production, it was disclosed that productivity and employment showed a weak correlation between 1970- 1978. Increase was observed for both variables. Following crisis 1979, employment and productivity displayed increase together during 19802s till 1990. While the increase of 1% in productivity in 1979 created increase of 0,3 % in employment, brought increase of 0,9% in 1989. (Şenesen, Erol, 1995: 59-60)

In a research made across Turkey, it was revealed that both flexibility of value added to employment and the share of employment in growth was low. This weak connection between growth and employment has shown itself between production increase and employment as well similarly. (Saraçoğlu and Suiçmez, 2006, TUSIAD and DPT, 2005).

According to the information compiled from data of Statistical Office of the European Communities (Eurostat) and Turkish Statistical Institute (TUIK), while Turkey has a better position than 23 EU member countries for youth unemployment, being most significant problems of EU countries as well with 18,7 % in 2013, youth unemployment rate of EU countries realized 23,5%, become at 24% level for Euro regions. While top of list for youth unemployment is occupied by Greece with 59% and Spain with

55,7%, these countries are followed by Croatia, the newest member of EU with 49,9%, by Italy with 40%, by Greek Populated Southern Part of Cyprus with 38,7 and by Portugal with 37,7%. The countries where youth unemployment covering age below 25 is the lowest are Germany with 7,9%, Austria with 9,7%, the Netherlands with 11% and Denmark with 13%. (http://www.trthaber.com, [March_3, 2014]).

Compared with EU countries having an older population and whose population at working age decreases, in order for becoming opportunity window of young population we have, good education and employment of this young population would increase labor productivity.

The aim of this study is to open the youth employment seen as a current issue in our country up for discussion. In addition, other objective is to develop solution proposals for increasing youth employment.

Methods: Analyzing the Statistical Database

Youth Employment in Turkey

Employment means that active population is employed in return for wage. (Köklü, 1973: 68). Although definition of youth shows difference from one country to another one on the basis of cultural, institutional and political factors, lower limit in industrialized countries in general corresponds to the age that age of compulsory education ends. International Labor Organization (ILO) conducting studies on working life at international area and United Unions (UN) recognize the population between age intervals 15-24 as "young population" and describe the unemployed within this group "as "youth unemployed". Generally accepted age interval in terms of young population is age 15-24 in Turkey too. (Turkish Labor Agency, 2012:46)

Such in many countries of the World, youth employment is among leading issues of our country as well. According to data of Turkish Statistical Institute (TUİK), the population at age group 15-24 is 11 million and 563 thousand persons as of 2013, 4 million and 584 thousand out of this has taken part in labor market. 3 million and 727 thousand of the population at age group 15-24 was employed in the same year. 857 thousand youth remained unemployed the same year. Young population owned by our country and failing to opening new employment areas cause that youth remains unemployed. Youth unemployment is close to twice of general unemployment in Turkey.

Table 1. Youth (15-24) Employment Situation in Turkey between 2004- 2013

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Civilian non-institutional population (thousand)	66.379	67.227	68.066	68.901	69.724	70.542	71.343	72.376	73.604	74.457
Civilian non-institutional population (thousand),(age 15+)	47.544	48.358	49.174	49.994	50.772	51.686	52.541	53.593	54.724	55.608
Population between age 15 – 24 (Bin)	11.840	11.757	11.670	11.583	11.490	11.513	11.548	11.534	11.574	11.563
Labor (thousand)	4.474	4.436	4.365	4.364	4.381	4.454	4.426	4.529	4.422	4.584
employed (thousand)	3.554	3.554	3.533	3.493	3.484	3.328	3.465	3.697	3.647	3.727
Unemployed(thousand)	919	881	832	871	897	1.126	961	832	775	857
Rate of participation in labor (%)	37.8	37.7	37.4	37.7	38.1	38.7	38.3	39.3	38.2	39.6
Employment rate (%)	30	30.2	30.3	30.2	30.3	28.9	30	32.1	31.5	32.2
Unemployment rate (%)	20.6	19.9	19.1	20	20.5	25.3	21.7	18.4	17.5	18.7

Source: TÜİK (2013), www.tuik.gov.tr/PreIstatistikTablo.do?istab_id=1181

Compared to last 3 years to former years, while unemployment rates for youth have declined, employment rates have soared.   With the crisis 2008-2009, youth unemployment rate in Turkey has reached top point, employment rate has also decreased.   Youth unemployment rate started to drop and employment rate has begun to go upward after 2009.

Table 2. Youth (15-24) Employment and Unemployment Rates in Turkey between 2004- 2013
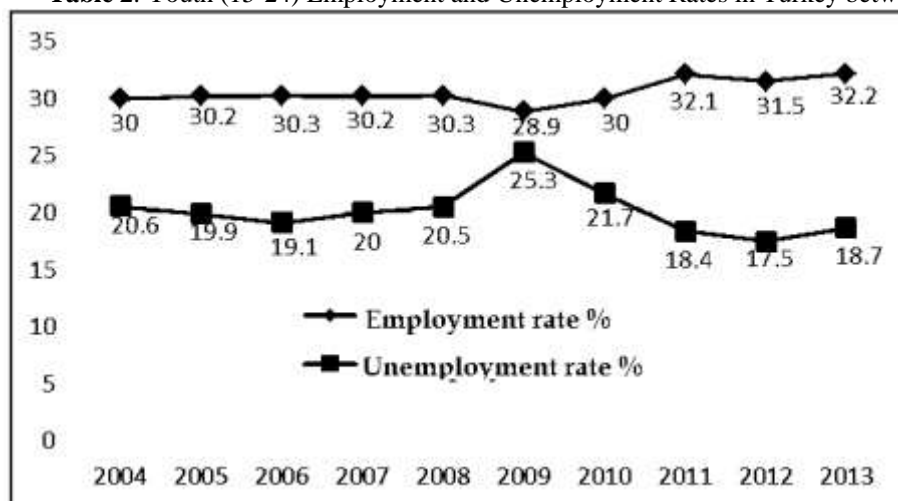
Source: TÜİK (2013), *www.tuik.gov.tr/PreIstatistikTablo.do?istab_id=1181*

Increase of 80 thousand persons was seen in 2013 and while employment rate of youth was 31,5% in 2012, it became 32,2% in 2013. In the same period, 162 thousand youth involved in labor and rate of participation in labor of youth increased 1,4 point.

When general unemployment rates are looked at, it is seen that young population is more fragile. Unemployment rate has increased 18,% for young population. Unemployment rate stepped up 1,2 point in 2013 compared to 2012, rose to 21,2% in cities, to 26,8 % for urban young women.

Table 3. Variance of youth (15-24) labor in 2013 compared to former year in Turkey

	Variance of 2013
Civilian non-institutional population (thousand)	853
Civilian non-institutional population (thousand), (age 15+)	884
Population between age 15 – 24 (thousand)	-11
Labor (thousand)	162
Employed (thousand)	80
Unemployed (thousand)	82
Rate of participation in labor (%)	1,4
Employment rate (%)	0,7
Unemployment rate (%)	1,2

Source: TÜİK (2013), *www.tuik.gov.tr/PreIstatistikTablo.do?istab_id=1181*

Considering employment rates of last two years, it is seen that employment rate of young women is around half of that of men.

Rising up to two fold of adult unemployment of youth unemployment regardless of being man or woman shows that sufficient policies are not applied in Turkey in order to decrease youth unemployment. From this environment emerging, young women are affected more negatively form the point of youth. In order to lower unemployment of youth and especially young women, designing special policies would be appropriate.

Table 3. Distribution of non-institutional population by gender, 2012-2013

	Age group 15-24	Non-institutional population	Labor	The employed	The unemployed	Population not involved in labor	Rate of participation in labor (%)	Unemployment rate (%)	Employment rate (%)
2012	Young	11 574	4 422	3 647	775	7 152	38,2	17,5	315
	man	5 730	2 910	2 435	474	2 820	50,8	16,3	42.5
	woman	5 845	1 512	1 212	301	4 332	25,9	19,9	26.1
2013	young	11.563	4.584	3.727	857	6.979	39.6	18.7	32.2
	man	5.744	2.981	2.476	506	2.763	51.9	17.0	43.1
	woman	5.819	1.603	1.252	351	4.216	27.5	21.9	21.5

Source: TUİK, Household Labor Force Survey

Today, graduated form a higher education institution does not provide a guarantee for employment to that person. Under these circumstances, Turkey has to seek new exit ways for solution of youth labor unemployment. New systems should be constituted particularly for increasing employability of university graduates.

In our country having young population average, inclusion of youth in labor market every passing day forms an upward pressure on unemployment. (Turkish Labor Agency, September-November-December 2013, 3I in Employment, page:40)

When it is scrutinized in general, many factors causing youth unemployment are available. Some of these are reasons at macro scale that interest country economy directly, some are micro scale reasons emanated from their own characteristics of youth. Regardless of its reason, youth unemployment has crucial economic, social and psychological results. (Murat and Şahin, 2011: 27).

The following table explain reasons of highness of youth unemployment from supply and demand perspective;

Table 4. Reasons of highness of youth unemployment from supply and demand perspective;

Reason of highness of youth unemployment	Demand perspective	Supply perspective
Current jobs	A job scarcity for youth exists due to economic conditions	There are many empty job positions with low level
Wages	Minimum wages and other tough arrangements decrease the number of low level jobs	Youth have unrealistic wage demands
Mobility	Short term temporary jobs constitute foundation of high unemployment rate.	Young workers have higher mobility
Attitudes	Youth desire a job having future. Employer discrimination decrease young labor demand.	At prevailing wage level, Youth prefer spare time
Qualifications	Qualifications are gained during working	Deficiency of education and experience exists for youth
Fast increase of youth population	Labor market produces many new jobs for youth.	Reason for youth unemployment is arisen from fast increase of young population.

Source: Naci GÜNDOĞAN, youth unemployment and youth employment policies applied in the EU member countries, Ankara University SBF Journal,54-(1) ,National Library, Ankara, 1999, p.68

Unemployment has become the biggest fear of all youth, today. Youth who fail to get into university following graduating from higher school or not finding job after graduating from university live out their life in internet cafe, coffee shops and pavements.

Unemployment is a subject matter having social costs undertaken by everyone ultimately as much as the damages given to individual and the close environment of individual. It is frequently observed that unemployment increases crime committing trends and bad habits such as idleness, alcohol, drug for youth. (Kocatepe and Özlem, 2005:1).

Today, only economic growth is not sufficient for enduring young population employment. Therefore, labor market reforms, efficient benefiting from employment creating feature of new technologies, labor market reforms, supporting entrepreneurship, efficient application of active labor market policies as well as employment friendly growth are needed.

Solution Proposals to Provide Youth Employment

The biggest advantage of Turkey for EU is young population, but it is also possible that this turns into a disadvantage. Turkey has to gain competitive contemporary skills to its young population. In Turkey, high school graduates close to two million take university exam every year. 70% of these youth are high school graduates and these youth have not vocational skills. (Ercan: 26-27).

Solution proposals for the increase of employment and elimination of the problems on youth employment in our country having a young population:

- ✓ National Employment policies to increase youth employment should be formed and implemented.
- ✓ Selection of high school or university by youth; the awareness on preference of suitable professions by youth should be raised. Everyone should not become doctor, engineer, attorney or economist necessarily. Our youth should be directed correctly on selection of department and school. They should be oriented to study according to their verbal and mathematical intelligence. Parents should attach importance to thoughts of youth on this matter. It should be ensured that youth benefits from guidance service or consultancy of job and profession.

- ✓ Giving necessary importance to technical schools and supporting employers; the importance of technical schools should be comprehended. Apprenticeship possibilities of technical schools should be increased. It should be addressed on the reality that as the number, function, prestige of technical high school increase, the youth graduated from these schools turn to the engineers, talented personnel our country needs. Then, a serious system to meet qualified personnel need at secondary and higher education should be established. Vocational high schools and vocational courses opened with this purpose should be considered important and the related studies should be supported. (TATAR, 2006: 90)

- ✓ Social burdens on enterprises should be lightened; these burdens should be pulled to a level allowing realization of competition and employment creating targets and dealt with an approach whose incentive side outweigh. (UYAR BOZDAĞLIOĞLU: 63).

- ✓ To the workplaces that employ the youth who continue to vocational high school or apprenticeship training centre, the incentives and easiness such as tax reduction, insurance premium discount and drawing loan, etc. should be recognized.

- ✓ Offering consultancy services to graduate youth; non-development of the career consultancy services that will able to present correct information on current state and the future of labor market to the youth in schools prevents youth from reaching healthy employment conditions. Today, the youth who has studied and have had a profession is in a position not knowing what to do like a fish out of water. The units that which will lead the way to the youth graduated from university should be developed. Job consultancy services should be improved. An efficient system that will give information on labor market, introduce jobs and workplaces, help to choose the most suitable job to them, meet employer with youth unemployed should be founded for youth. In this regard, Job and Profession Consultancy Services rendered within Provincial Directorates of Labor and Job Agency should be made more efficient. Job and Profession Consultancy Centres should be established in Universities, Small Industrial Areas and Organized Industrial Zones for the purpose of their selection of most appropriate profession by considering needs of labor market and interests and talents of persons and personal and physical features and these consultancy services should be continued efficiently.

✓ Development of relations between school and labor market; one of the most leading issues of our country is that employment and vocational training relation is not strong enough. Those who seek job at one side, those who seek worker at other side. It is reality that qualifications of job seekers and the qualifications required by vacant jobs do not overlap. (ÇSGB:57).

No efficient relation between employment and training is available in Turkey. This situation causes imbalance of labor supply and demand, so unemployment. Difficulties are experienced in supply of intermediate staff for the areas that economy needs. Related reasons are that vocational training could not be given in the direction of labor market's needs and employers fail to find labor having the qualification they demand. In addition failing to reflect fully on labor market of labor qualifications demanded by employers is another factor playing role in emergence of unemployment .(SAYIN, 2011: 49).

In order to increase youth employment, relations between school and labor market should be strengthened. Today, business world is not satisfied from education level, basic and social skills of youth. Education programs do not coincide with the needs of enterprises. Schools and education programs could not follow changing market needs and technology. Not reaching sufficiently to practical training and apprenticeship possibilities of youth in the course education and not meeting market needs completely increase the number of jobless graduates more. In this case, special conditions are sought for recruitment and employers behave more selective. For finding job, only having a diploma becomes insufficient. Education system should renew itself continuously in a way to respond requirements of labor market at each stage.

School and education programs should monitor changing market needs, technology and values. Likewise, it should be ensured that youth access practical training and apprenticeship opportunities during their education adequately. (Kenar, 2011: 11).

As conformance with the change happened in science and technology is not only possible with the knowledge learned only in school terms, renewing and continuous developing themselves of youth is possible through life-long learning. Life- long learning is all training and learning activities out of formal and non-formal education and the learning by means of formal and non-formal learning. Life- long learning from the point of employment is learning activities that individuals realize throughout their life with the intent of developing skills and qualifications for employment. It is inevitable to spread training and learning to all life. Contrary to former period, today completing higher education has lost its feature relating to being only condition of employment. Now, a process that individuals request learning during all life period has started. (Directorate General of Turkish Labor Agency, January-February-March 2013, 3I in Employment, page:56)

Results

Getting and using information, rearing themselves well to create difference, developing themselves without a break have become necessary for youth in order for success in business life. In other words, lifetime job guarantee depends on lifetime learning skill.

✓ Increase of the institutional capacity and strengthening the budget of Turkish Labor Agency, public employment institution are needed. For unemployed youth who could not benefit from education possibilities, skill and profession programs should be developed.

✓ Turkish Labor Agency sustain concentrating on vocational development, acquisition and rearing trainings that will serve young unemployed return to labor market in short time by means of Unemployment Insurance Fund becoming most important financing source of treasury.

✓ In regions where youth unemployment is extensive, investments should be increased,

✓ Youth entrepreneurship and SMEs should be supported,

✓ Improvement of wages and social rights; youth is the most active and liveliest part of a society. Youth are more dynamic and open to development. Therefore, youth have a great labor and energy potential. This situation has urged employer to benefit from energy of these youth more. The matters that youth should pay attention to be permanent in their workplaces they work;

✓ Daily working time not exceeding 8 hours

✓ Not giving salary below minimum wage and making payment in time

✓ Existence of weekend holiday

✓ Allowing for annual leaves,

✓ Sufficient conditions for services related matters

   ✓ Insured working of employees

   ✓ Taking measures to prevent conflict, incompatibility, etc. between former employee and new employee,

   ✓ Giving importance to institutionalization by enterprises,

   ✓ Paying fully in time of all kinds of wages and social rights of youth working by employers, in these cases, youth would stay in their enterprises.

Finally, to form an employment friendly labor market, both employer and the section who looks for job should fulfil the responsibilities they have undertaken.

Conclusion

Unemployment is a serious economic issue. The share of youth who undertake important role for development of their countries in total population is high in Turkey. In period 2004-2013, a significant increase was observed in the population size of youth employment. However this is not enough.

Today, youth employment is one of leading issues of Turkey. But, mostly employment policies applied are not regarded enough for diminishing youth unemployment. From this aspect, active and passive policies should be developed within the framework of proposals.

It should be focused on how participation of youth in labor should be increased in medium and long term; youth focused employment policies should be developed with social content and as special employment policies.

Developing solution proposals that target youth in order to compete with the troubles that youth unemployment creates on youth and society is of vital importance to ensure taking social welfare and future under guarantee.

It is seen that skill mismatch, inadequacy of vocational and technical education in our country constitutes obstacle for youth employment. In order to increase youth employment, relations between school and labor market should be strengthened. Education system should renew itself permanently in a way to respond the needs of labor market at every stage.

Schools and education programs should monitor changing labor market needs and developing technology. Practical training and apprenticeship possibilities should be provided sufficiently to youth during their school term. Helping for choosing the most suitable profession for the individuals at primary and secondary school age, building the future of our country has great importance when our young population structure is taken into consideration. In order for giving vocational training according to needs, rearing qualified labor for areas needed in labor market, youth should be oriented and urged to go to vocational schools they could find job easily in the future.

As compliance with the change occurred in science and technology is not probable only with the knowledge learned in school terms, renewing and developing themselves continuously of youth become possible with life-long learning.

As a result of all these efforts, youth unemployment will be reduced to reliable levels and youth employment would soar in Turkey.

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Cost Management Practices in the Hospitality Industry: The Case of the Turkish Hotel Industry

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Abstract

At the last decades, tourism industry has became one of the rapid growing industries in the world. On the other hand, it is well known that hospitality organizations amongst the key elements of the hospitality industry. Nowadays hospitality organizations should manage financial resources at optimum level to survive and for reaching their goals. From this point of view, it is clear that managers need cost management tools to make the right decisions. In this paper, it is aimed that which cost management tools are being used by the hospitality organizations. For gathering data it is planned to use structured questionnaire. Thus, it is going to be revealed that which cost management tools are being used by hospitality organizations. Conclusions will shed light on hospitality organizations and contribution will be made to the related literature.

Keywords: Cost Management, Hospitality Industry, Turkey

Introduction

Tourism industry is one of the rapid growing industries around the globe. The boom of mass tourism at the twentieth century becomes widespread with the alternative toursim attendance. Accoring to the WTO (World Tourism Organization) numbers 1.085.000.000 people attended international tourism activities at 2013 (http://mkt.unwto.org/en/barometer). In this context, one can see the importance of tourism industry. At the last decades tourism is also one of the rapid growing industries in Turkey also.

The conditions today forcing touristic destinations and tourism enterprises for challenging. This competition pressure affecting the choices and activities of the enterprises. Thus, the importance of utilizing the resources more efficent and effective becomes increased. Therefore enterprises should more emphasis on cost management systems.

There is little research identifying the utilization of cost management systems among hotels. However, most of these papers shed light the situation for the outgoing countries like United Kingdom, Scandinavia and USA. (Makrigiannakis & Soteriades, 2007). There are limited number of studies about the case of Turkish hospitality industry related to cost management issues. Exhibiting the cost management systems used by hotels could give information not only about the industry but also shed light to further studies. Thus, one can understand the constitution of the industry and could face the changes. The purpose of this study is to determine the traditonal and contemporary cost management systems utilizing by Turkish hotel enterprises.

Literature Review

Strategic management emerged in the late 80's and it is one of the new techniqes and approaches related to cost management. Firstly it was implemented systematically in UK (Bromwich, 1990, 1992; Bromwich ve Bhimani, 1989). One of the distinguishing feature is adoptable to exterior conditions. Bromwich and Bhimani (1989) proposed cost management has relationships with the factors of the of the outer enterprise. Their approach has strategic dimensions for its long scale and widespread paradigm. Therefore, one can suggest strategic cost accounting has an important potential for applying accounting to managerial issues (Rosslender & Hart, 2003).

According to Hopper (2000) it is not possible to understand cost management without emphasis on political, cultural and economical differences of the countries. However there are plenty of cost management studies it is crucial to investigate for the different cultural and economical structures. (Luther & Longden, 2001). Therefore, idiosynchratic characteristics of the industries should be realized.

Hospitality industry has some idiosynchratic characterists like instability of the sales and high fixed costs. According to Harris and Brown (1998) these two characteristics points that industry is market oriented. Kotas (1999) suggests that high dependency to the market indicates dependency to the demand. This situation leads all serious problems and potential solutions could not be solved by cost or production issues. Best way to find solution is yield side of the industry. According to Kotas, in order to use 'traditional' cost management tools which constructed with production based enterprises, yield accounting should be performed (Makrigiannakis & Soteriades, 2007).

Hence 80's there are many cost management systems started using by the various industries. The most contribution comes from activity based systems (activity- based management, costing and budgeting), strategic cost accounting and balanced scorecard. These systems designed for boosting modern technology and management processes (total quality management and just-in-time manufacturing) and being compatible around the globe (Abdel-Kader & Luther, 2006).

Traditional management accounting practices, such as cost variance analysis and profit-based performance measures, focus on concerns internal to the organization and are financially-oriented. In contrast, more contemporary management accounting techniques combine both financial and non-financial information and take an explicit strategic focus. This can be seen, for example, in the design of activity-based costing, contemporary performance measurement systems and benchmarking techniques. (Chenhall & Langfield-Smith, 1998).

Hitherto important studies related to cost management at hotels could be catogorized as follows; strategic management accounting (Collier & Gregory, 1995), structure of cost accounting system (Brignall et al. 1991; Brignall, 1997), importance of information and accounting techniques of hotels (Schmidgall & Damatio, 1990), using cost accounting information (Mia & Pattier, 2001), activity-based costing of customer profitability analysis (None & Griffin, 1997; 1999), roles and participation controllers at hotel management (Pickup, 1985; Subramaniam, McManus & Mia, 2002), relationships between managerial accounting and managing the company (Mongiello & Harris, 2006), pricing and cost accounting relations (Pellinen, 2003), acceptance and utilizing of USALI in the hospitality industry (Kwansa & Schmidgall, 1999) and spesifications and utilization of budgeting systems (Sharma, 2002; Makrigiannakis & Soteriades, 2007).

According to the related literature factors affecting cost management systems formed by contingency theory. With reference to this variables like being in a highly competitive environment (Tayles & Walley, 1997), communication, coordination and delegating (Luft & Shields, 2003) and business strategies and market-oriented (Cadez & Guilding, 2008) affecting cost management systems of global enterprises. Pavlatos and Paggios (2009) state that more hotel enterprises are utilizing cost management systems for decision making.

General Information about Cost Management

However cost management concept being started using from the beginning of the 90's, scarcely there is no common and clear definition. There are ongoing differances about the definiton of cost management. In the light of these concepts, cost management systems are being used for cost indicators and peformance evaulation. Cost management could be defined as; 'improving and using cost management information within a value chain'. From a different point of view cost management could be defined as; 'determining the goods cost accurately, improving the processes, preventing wastages, identifying cost factors, planning and controlling the activities and developing strategies'. In summary, cost management definition could be; " organizing the enterprising processes and activities in order to manage costs'(Sevim, 2013).

The main goal of any cost management system is to offer timely, accurate, reliable and convenient information for the management. By using this cost information resources could be used efficient and productive in order to produce goods or sevices. Furthermore, competitive side of the enterprise could be improved by cost and profitability.

In other words, the main goal of cost management information system is 'to supply information to the managers in order to compete at the world market within cost, time and performance dimensions'.Within this context, not only the financial issues but also the non-financial subjects are included in cost management information system. Some aims of cost management could be listed as follows (Sevim, 2013):

- • Costing the goods as far as possible by the cost factors.
- • Evaluating the life cycle performance of goods or services.

- • Realizing and evaluating the process and activities accurately.
- • Determining the efficiency and productivity of the activities.
- • Controlling and managing costs.
- • Facilitating performance evaluation.
- • Supporting for performing organizational strategies.

Cost Management Systems

The accounting information system within an organization has two major subsystems: a financial accounting system and a cost management accounting system. One of the major differences between the two systems is the targeted user. Financial accounting is devoted to providing information for external users, including investors, creditors (e.g., banks and suppliers), and government agencies. These external users find the information helpful in making decisions to buy or sell shares of stock, buy bonds, issue loans and regulatory acts, and in making other financial decisions. Because the information needs of this group of external users are so diverse and the information must be so highly reliable, the financial accounting system is designed in accordance with clearly defined accounting rules and formats, or generally accepted accounting principles (GAAP). Cost management produces information for internal users. Specifically, cost management identifies, collects, measures, classifies, and reports information that is useful to managers for determining the cost of products, customers, and suppliers, and other relevant objects and for planning, controlling, making continuous improvements, and decision making (Hansen & Mowen, 2006).

Cost management has a much broader focus than that found in traditional costing systems. It is not only concerned with how much something costs but also with the factors that drive costs, such as cycle time, quality, and process productivity. Thus, cost management requires a deep understanding of a firm's cost structure. Managers must be able to determine the long- and short-run costs of activities and processes as well as the costs of goods, services, customers, suppliers, and other objects of interest. Causes of these costs are also carefully studied (Hansen & Mowen, 2006). Bu amaçla maliyet yönetiminde pek çok sistem kullanılmaktadır. Maliyet yönetiminde kullanılan sistemleri işletmelerin maliyet ile ilgili değişkenleri amaçlarına uygun bir biçimde yönetebilmelerini sağlamaktadır.

Hotel enterprises that are part of a service industry could utilize cost management systems in order to reach their goals. Some of the cost management systems that hotels could utilize are listed as follows:

Activity-Based Costing: Activity-Based Costing (ABC) is a cost accounting system that focuses on an organization's activities and collects costs on the basis of the underlying nature and extent of those activities. ABC focuses on attaching costs to products and services based on the activities conducted to produce, perform, distribute, and support those products and services (Kinney & Raiborn, s. 124). ABC system first traces overhead costs to and then to products and other cost objects. The underlying assumption is that activities consume resources, and products and other cost objects consume activities. An ABC system boasts the potential of generating more accurate product costs than functional-based costing system (Guan, Hansen & Mowen, 2009).

Activity-Based Budgeting: Activity-based budgeting is an outgrowth of activity-based costing (ABC), which is similar to zero-based budgeting. This budget type accounts for how staff members allocate their effort among activities. Once the full cost of each activity has been calculated, drivers can be established that link support activities to the primary activities of the organization. By developing a comprehensive activity-based budget executives are able to create a clear nexus between workload and costs. Once developed, executives and managers can exercise control in several ways: 1) assign personnel based upon a demonstrated need, 2) expand or contract personnel proportionately as the need changes, 3) uncover waste and hidden costs, 4) view which activities are most and least expensive, thus subjecting them review, 5) assess the full efficiency of the organization, 6) identify places to cut spending, 7) establish a cost baseline that may be influenced through process or technology changes that reduce effort requirements for the activity and perhaps most importantly 8) argue from an informed, objective position in favor of the organization's budget (Shane, 2005).

Life Cycle Costing: Life Cycle Costing (LCC) is a technique to get the whole cost of production. It is a special approach that examines all the parts of the cost. It is used to produce a spend profile of the goods or service over its all life-span. The results of an LCC analysis is used to help managers in the decision-making process. The LCC analysis see projects further into the future. It is very valuable as a comparative tool when long term investment in some goods is considered (Vogl, 2014).

Target Costing: In the accounting literature, target costing has been introduced as a strategic management accounting system for the management of product costs (Ewert and Ernst, 1999). It is a costing system to manage a firm's future profits by explicitly including target costs in the product develeopment process (Cooper and Slagmulder, 1999). Central to the target costing is 'reverse costing', in which an estimation of the attainable selling price and the required profit margin are used to determine the allowable cost for a new product (Deker and Smidt, 2003).

Benchmarking: Competitive-cost benchmarking is an action-oriented tool that enables companies to quantify how their performance and costs compared against competitors, understand why their performance and costs are different, and apply that insight to strengthen competitive responses and implement proactive plans. Benchmarking, by definition, goes beyond competitive-cost analysis, which is often a staff exercise without a structured follow-up implementation program; its goal reaches beyond simple competitor emulation. In this article, emphasis is placed on how commodity product benchmarking is performed and the bottom-line and strategy improvements that can be gained as a result. (Markin, 1992).

Balanced Scorecard: The balanced scorecard is a strategic-based performance management system that typically identifies objectives and measures for four different perspectives; the financial perspective, the customer perspective, the process perspective, and the learning and growth perspective (Kaplan & Norton, 1996). The objectives and measures of the four perspectives are linked by a series of cause-and-effect hypotheses. This produces a testable strategy that provides strategic feedback to managers. Alignment with the strategy expressed by the balanced scorecard is achieved by communication, incentives, and allocation of resources to support the strategic initiatives (Guan, Hansen & Mowen, 2009).

Value Chain Analysis: Value chain analysis (VCA) is described as a technique that can play an important role in the management of supply chain relationships. VCA is used to analyze, coordinate and optimize linkages between activities in the value chain, by focusing on the interdependence between these activities. A value chain is defined as; the linked set of value-creating activities all the way from basic raw material sources for component suppliers through the ultimate end-use product delivered into the final customer's hands. (Dekker, 2003).

Transfer Pricing: The transfer pricing issue is typically portrayed as a problem of finding the price or pricing schedule that comes closest to inducing an efficient level of trade between two divisions of a firm The optimal design of a transfer pricing policy is a solution to a mechanism design program, which seeks to induce information revelation at the lowest possible cost-that is, with minimal allocational distortions (Holmstrom and Tirole, 1991).

Kaizen Costing: Kaizen costing is a new costing system that utilizing by Japanese companies (Monden ve Lee, 1993: 22). Target costing is an effective system at the design of the product. On the hand kaizen costing is specifically utilized byhigh technological companies in order to cut costs. Kaizen costing is a process that firstly a target cost is determined and then production methods improved in order to achieve that costing goal. (Turk, 1999).

Analysis of Cost Management Practices at the Turkish Hotel Industry

When evaluating the institutionalism of the Turkish hotel companies, one can say that using accounting information systems and cost management systems are more widespread at chain hotels than the independent ones. Nevertheless, at the last decade both chain and independent hotels are more familiar with cost management systems in order to support strategic goals. By better understanding of the contemporary cost management philosophy hotel companies –like the other companies- change their paradigm and traditional systems are becoming lesser while contemporary systems becomes more popular.

Contemporary cost management systems have more contribution for cost information and decision support in order to achieve companies' goals.

Before the changing period of the companies it was feasable to focus on standardized and detailed methods. Nowadays within the rapid changing environment companies should be more dynamic, customer and market oriented. Therefore, hotel companies should improve their cost management systems in order to facilitate strategic management. Nowadays only financial information are inadequate for decision making. Within this context, non-financial critical success factors gain importance.

Managing costs at the hotel companies are highly important like the other companies. Cutting costs, planning and control is critical for hotel companies. For achieving competence, profitability, raising service quality, focusing at market and continious improvement strategic cost management is becoming crucial for the enterprises. Strategic cost management is focusing on these success factors. Likewise the other part of the world hotel companies in Turkey need strategic cost management in order to survive, efficient and productive. One can say the hotel companies in Turkey have to utilize contemporary cost management systems in order to reach their goals.

Methodology

The aim of this paper is to investigate the situation about using cost management techniques by Turkish hotel enterprises. For achieving this aim, questionnaire techniqe is used for gathering data. Questionnaire form has three parts. At the first part of the form there are demographic questions about hotels (e.g. hotel status, ownership, type of service). By gathering demographic data one can acquire knowledge about the situation of hotels. The second part of the form consists questions about the utilization of traditional and contemporary cost management techniques. This part includes two main questions; first one is about using traditional techniques (e.g. break-even analysis, standart costs, financial analysis etc.) and the second one is about using contemporary cost management techniques (activity-based costing, life cycle costing, target costing, value chain analysis etc.) The third part of the form includes statements about the efficiency of contemporary techniques on some managerial issues. A five point Likert scale was used for all statements. The scale was anchored from 1 (totally disagree) to 5 (totally agree) representing two spectrums.

Data gathering was held on April 2014. Only 4 and 5 star hotels included at the research. It is assumed that cost management techniques are more common for that scaled hotels. IBM SPSS Version 20 is was used to analyze data. A number of preliminary analyses were completed to ensure internal consistency and validity of the constructs. Descriptive analyses of the hotels were utilized for gathering hotel data. By gathering data one could understand the whole picture about the cost management issues of the Turkish hotel industry.

Findings

After gathering data it could be possible to analyse the results. Firstly, the demographic data were investigated. According to the related data 52.4% of the hotels were independent while 47.6% were a part of a hotel chain. When the sample companies were classifed by status, 66.7% have 5 stars whereas 33.3% were 4 stars. As indicated by the respondents of our survey 81% of the hotels are running whole year and 19% of them working on seasonal basis. 76.2% of the sample hotels have all-inclusive service and 23.8% are serving fullboard.

However this paper is focusing on contemporary cost management tools, it is important to investigate the situation about traditional costing tools. According to the findings the most well-known and preferred technique is budgeting by 100%. The other two most common ones are financial analysis (81%) and investment profitability (76.2%). The other traditional techniques are utilized less than 50%. In order to give information the other techniques are respectively; standart costing (42.9%), break-even analysis (38.1%), variation analysis (23.8%), product/service profitability (14.3%) and evaluating decision alternatives (14.3%).

According to the findings only 38.1% of the hotels are familiar with modern cost management techniques. One can argue that modern techniques are not well known or welcomed by the hotel managers. After getting know about the utilization of the new tools, it is possible to investigate the perceptions of the hotel managers about the cost management tools. Respondents were asked if they are utilizing modern cost management tools which one(s) they prefer amongst them. After running analyses light could shed to the situation. The results could be summarized as follows; activity-based costing (9.5%), target costing (4.8%), benchmarking (19%), balanced scorecard (4.8%), value chain analysis (9.5%), kaizen costing (4.8%) and total quality costs (14.3%). On the other hand, none of the respondents states that they are utilizing activity-based budgeting, life cycle costing, backflush costing and transfer pricing. Managers could be unfamiliar with these tools or they do not prefer them. It is not asked why one tool is not prefered.

At the last part of the questionnaire form there are statements about the relationship between cost management tools and some managerial issues. Respondents were asked the degree of agreement about this relationship. These statements are for evaluating the perceptions of the respondents.

Conclusion and Suggestions

The present study investigates the cost management implementations of the Turkish hotel industry. For achieving this aim firstly literature has explored. Secondly, cost management systems set forth. The following part of the paper includes an empirical research. By carrying out the research it could be possible to 'take photo' of the cost management practices of the Turkish hotel industry. The majority of the hotels that participated in this study are 5 star hotels, running whole year and serving all-inclusive system. Nearly, half of the hotels participated in this study are independent or vice versa (part of a chain).

All of the respondent hotels of this study are utilizing budgeting as a traditional system. Most of the hotels employ financial analysis and investment profitability. On the other hand, other traditional cost management systems are utilizing by just a few hotels. These findings show that hotels are familiar with some well known cost management systems but not with others. Standart costing, break-even analysis, variation analysis, product/service profitability and evaluating decision alternatives are not utilized widespread by the hotels in Turkey.

The research findings show that less than half of the respondent hotels utilizing contemporary cost management systems. Amongst these hotels utilizing level of the systems are considerably low. Furthermore, activity-based budgeting, life cycle costing, backflush costing and transfer pricing are not utilized by any respondent hotel companies.

The respondents of the study that utilizing contemporary cost management systems thought that by using these systems their hotels benefit from several issues. These issues are; profitability, productivity, sustainability, budgeting, calculating goods/services cost accurately, pricing, evaluating process and activities, performance evaluation and competitiveness. The findings of this study have several theoretical and practical implications. Hotel enterprises could utilize cost management systems in order to survive and to reach their goals.

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A Probe into Eco-Tourism in Beautiful Qingdao from an Ecological Civilization Perspective

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Abstract

The sustainable development of tourism in Qingdao must be built on the basis of the premise of synchronous development of ecological civilization. Ecological civilization is the core content of the Beautiful Qingdao Policy. Developing strategies for ecological tourism must be developed on the premise of ecological civilization construction. Considering the Beautiful Qingdao Policy as the breakthrough point, this paper discussed the ecological civilization era demands and attractive characteristics of tourism in Qingdao, and further, analyzed development situation of eco-tourism in the Beautiful Qingdao Policy, elaborated the basic precondition and condition of exploiting ecological tourism under the perspective of ecological civilization. Thus the proactive, guiding countermeasures and suggestions can be drawn for the ecological tourism industry development under the whole planning of the Beautiful Qingdao Policy. Based on the theory of ecological civilization and reference to relevant academic research results, this paper studies the ecological tourism development in Qingdao, in order to obtain ecological tourism development innovation model in the context of ecological civilization.

Keywords: Ecological Civilization, Beautiful Qingdao Policy, Ecotourism Characteristics, The Sustainable Development Of Tourism, Eco-Tourism

Ecological Civilization: An Essential Product during the Development of the Time

The word 'ecology' stems from Old Greek, the original meaning of which was house and family. While since the 1850s, it has been given modern meaning, mainly involving in the intermingled and complicated relationship among various systems in nature. Also, it relates to the mutual links and the existing state among different organisms as well as among organisms and environment, that is, the natural ecology. Natural ecology lives up to the laws of development of a self-sustaining. Meanwhile civilization is the achievement of man's cultural development, the combination of material and spiritual achievements during the process of human's transforming the world, and it's also a sign of our society's development. A quotation from the book"The I Ching"is 'a dragon in the farmland, a civilization around the global land'. When Kong Yingda of Tang Dynasty annotated "The Book of History", he defined the 'civilization' as ruling the whole world and illuminating every corner. The former means transforming the nature, which belongs to the material civilization, while the latter means removing ignorance, which belongs to the spiritual civilization. 'Civilization' means the advancement and civilized state of human society.

Human civilization has gone through three stages. The first stage is primitive civilization. During the Stone Age, people could only survive by depending on collective efforts. And the activities of material production were simply gathering, fishing and hunting, which lasted for over 1,000,000 years. The second stage is agricultural civilization. The appearance of the ironware dramatically improved human's capability of transforming the nature, which lasted for around 10,000 years. And the third stage is industrial civilization. The British industrial revolution of 18th century turned a new leaf of human's modern life, for which lasted over 300 years. Analyzing from elements, the main body of the civilization is man, which is shown by their process of transforming the nature and reflecting on themselves, such as material civilization and spiritual civilization. While analyzing from time, civilization has a characteristics of stage, such as the agricultural civilization and the industrial civilization.

The 300-year-industrial civilization is characterized by man's conquering the nature. The development of the global industrialization has made the culture of conquering the nature goes to extremes. A series of globally ecological crisis show that the earth is no longer capable of supporting the sustainable development of the industrial civilization. Therefore we now have an urgent need to invent a new form of civilization to sustain human's existence and that is what we called ecological civilization. If we

describe agricultural civilization as 'yellow civilization' and industrial civilization as 'black civilization', then the ecological civilization belongs to the 'green civilization'.

Ecological civilization refers to the sum of material and spiritual achievements human being obtained by following the objective law of a harmonious development of man, nature and society. Also it refers to the cultural and ethnic formation which is aimed at promoting the harmonious coexistence between human and nature, different individuals and also between human and society, and aimed at contributing to the virtuous circle, integrated development and the continuous prosperity. It'll radically transform man's social formation. Therefore, generally speaking, ecological civilization is people make great efforts to put the nature and man into harmony and the total positive achievement they have obtained during their activities of transforming nature, thus benefiting themselves.

Observing its structure, we can see that the ecological civilization at first includes a strong notion of ecological civilization, which requires us to get rid of the anthropocentrism, which means man cannot regard nature as a target to conquer and rob, instead they need to treat themselves as an essential part of the natural world and setting up the idea of harmonious coexistence between human and nature. Secondly, ecological civilization includes a series of organization and systems intended to contribute to the resource conserving and the environmental protection as well as the construction. Meanwhile, ecological civilization also includes the ecologically practical activity people take part in under the guidance of the idea of ecological civilization and the construction of the ecological system.

Ecological civilization is a higher stage during the development of agricultural civilization and industrial civilization, and, it can balance the relationship between human and nature. The material civilization, a branch of the notion of ecological civilization, will be aimed at eliminating the threat economic activities do to the stability and harmony of nature itself and gradually forming a mode of production, mode of living and mode of consumption that can coordinate with the ecology. Another branch of this notion is the spiritual civilization, which advocates respecting nature, cognizing the nature's value and establishing a comprehensive development of culture and atmosphere thereby transforming human's excessive emphasis on material. Also, there lies political civilization, it values the diversity of interest and demand, concentrate on the balance of various relations and avoids the ecological destruction caused by uneven resource distribution, conflicts among people and the abuse of power. Ecological civilization is a big leap in the process of civilization, and it'll lead people on the way to drop the hedonism formed in the industrial civilization and rid the tragedy of destruction to both ecology and man.

Beautiful Qingdao

The Definition Of Beautiful Qingdao

As the 18th CPC National Congress puts it, China needs to push forward the construction of ecological civilization and struggles to build a beautiful China. Ecological civilization is actually the elimination of the farming civilization and industrial civilization, and it's also a newly cultural ecology ethics between human and nature, different individuals and at the same time between human and society. Ecological civilization is the topmost formation of human civilization.

The idea of 'beautiful China' is aimed at encouraging people to conserve the resources and choose the most essential precaution and the clearest thought to take their initiative and deal with the work of resource conversing. Both history and resource are enlightening on the importance of conserving the resource and protecting our environment. Therefore the term 'beautiful Qingdao 'also means conserving resources, protecting the ecology ,beautifying Qingdao ,carrying humane care along with building Qingdao into a poetic habitat, which is a piece of land where you can feel life and beauty in every corner of the city.

The core value of 'beautiful Qingdao' is to promote the civilization construction and to protect the ecological environment. Especially because of the fact that Qingdao is a typical representative costal tourism city, we can study the evolution of Qingdao's marine tourism from its external environment and the tourism of itself. And also from the characteristics of marine tourism resources and the formation of the tourism market, we can comprehend its position among our country's tourism industries and its heavy burden it's now undertaking. We need to pay great emphasis on the construction of the ecological civilization and concentrate much on advancing the beautifying construction of Qingdao, by which we can realize the object of continuous development and leave our generation a piece of wonderful homeland where a blue sky ,green land and clear water exist.

The Characteristics of Beautiful Qingdao

Aesthetics

It is much appropriate for us to use the relationship of aesthetics to understand the aesthetic feeling which is inspired by nature's magnificence, beauty, peace and elegance. Only by the comprehensive development of the human's society can man own the ability to find and create more beauty of the natural world, the beauty of which will be closely combined with man's life. Nowadays, with our modern science technology gaining an unprecedentedly high level, we human being has obtained much more freedom from the environment. Therefore, our capability of judging the aesthetics of nature will grow increasingly mature, at the same time, the even advanced aesthetic activities that are created on the basis of highly reasonable understanding towards the nature's ecological environment can also get plentiful improvement. Therefore, it is the very time when human being can realize that they are the products in the evolution of the nature and they just belong to a part of the whole nature.

Since the human being entered the era of civilization, their productivity has developed dramatically, which left average people some free time after they spent much labor time to feed the whole family. Also thanks to the polarization of different classes and the development of social work, they brought a number of lazy classes and mental workers into society. Under such kind of circumstances, man continued admiring not only the beauty of their instruments and farmlands, but also the beauty of the sun, moon, stars and wild flowers. Needless to say, some high officials and men of letters would also revel in visiting places of interest, planting flowers and expressing their feelings through nature. Natural scenery thus becomes a target people use to judge the beauty.

It is the charming sightseeing of hills and seas, various styles of buildings from different countries, the folk show from a long history as well as different kinds of leisure vocation service that constitute the aesthetics of the beautiful Qingdao.

Various kinds of sightseeing of Qingdao add beauty to each other, the value of which is very high. Its vast sky, blue sea, green trees and red tiles all combined with each other, which is rarely seen nationwide and can even equal seashores of Hawaii in the U.S. and Sydney in Australia. And its distinguished features are the tourism products such as Badaguan Scenic Spot, Fish Park, Mountain Laoshan, cherry sightseeing, May 4th Square etc. Therefore, the seaside zone in the southern city is the foundation for the development of Qingdao's tourism industry, characterized by its large amounts of sightseeing, dense distribution, high reputation and its complete functions, it is the central representative of this city's sightseeing, urban landscape and the religious culture and the very place for a visitor.

Acting as a concrete formation of material, the distinctive sightseeing of beautiful Qingdao is an undeniable objective existence; meanwhile, it has become a target of aesthetics for its ability to establish direct links with human being.

Ecological Character

Ecological character is the feature of sustainable significance of beautiful Qingdao. The beautiful Qingdao landscape, as the tourism resources, is the natural and cultural landscape formed by the long-term interaction and mutual influence between the human and natural environment. The forming process of this kind of landscape is invariably the continuous running process of human and geographical environment. When people master the law of nature, follow the principle of ecology, and the relationship between human and nature is harmony, nature will give people with grace, promoting the development of social economy. Otherwise, it will be punished by nature. Through repeated bouts with natural environment, the human gradually understand and master the law of nature. Therefore, the beautiful Qingdao landscape, is the harmonious cultural landscape created by human and nature.

Although the development of ecological tourism products are not up to the standard of ecological tourism, however, the tourism of beautiful Qingdao essentially belongs to ecological tourism.

Ecotourism is a part of general tourism activities and it is in essence a kind of green tourism, including educational function, the concept of sustainable development and moral requirements of tourism experiences. The core characteristics of ecological tourism is that animals and plant and ecological environment become the protagonist, but the human recedes or the customer is not God, unless under such condition that human has no impact on the natural environment. To achieve harmony between man and nature is the essence of ecological tourism, for the following reasons: First, for tourists, ecological tourism focuses on tourist education and advocate harmony and unity of the human and nature. Education is one of the most important objectives of ecotourism. Second, for the travel agency and the tour guide,

they should strictly abide by the principles of ecotourism, formulate reasonable routes. Tourism activities are all based on the understanding and protection of local resources .Third, for the hotel and inn, they should pay attention to the harmony and unity of architecture, food and ecology and attract the attention of local residents for the construction and management. Fourth, for the managers of protection, they should make reasonable plans about all facilities in the scenic spots, increase the humane care, construct education facilities, perfect interpretation and indicator system construction, take the ecological tourism as an important part of the protected area management plans, give real-time monitoring and construct demonstration area of the ecological tourism. [1]

Ecotourism emphasizes the absolute protection. In fact, in our country, "ecological tourism of absolute meaning" are still very scarce, the often mentioned "ecotourism" are usually doped the concept of many ecological tourism and ecological leisure. The focus of tourism development in nature reserves is only such kind of products, especially the ecological leisure products based on good ecological basis. Nature reserve should not be limited to the low level and extensive management tourism products, but should pay attention to ecological tourism products which include the intensive management, protection and education together. All of these are the important connotation of the beauty of Qingdao and in this sense, ecological beauty is particularly prominent in Qingdao.

Environmental Protection (Harmony)

Beautiful Qingdao and ecological tourism has the natural consistency and the essence of beautiful Qingdao is ecological tourism, therefore, environmental protection has become one of the prominent features of the beauty of Qingdao.

In 1996,the World Conservation Union (IUCN) defined the ecotourism as "ecotourism is a responsible tourism behavior in certain natural areas to enjoy and appreciate the history and existing natural and cultural landscape, and this behavior should be carried out under such conditions which are without interference of natural areas, the protection of the ecological environment, reducing the negative impact of tourism and providing beneficial social and economic activities for the local situation." [2] And despite the fact that it has been a very long time since the slogan of the ecological tourism shouted, it is severely underachieved and also cannot be called ecological tourism, because there is no unification of sightseeing and environment. Main reasons are the following:

(1) The economy first, regardless of ecology. In order to provide more convenient traffic lines, service facilities and other infrastructure, some ecological tourism areas occupy green fields, damage vegetation in different degrees, making the ecological index decline. Driven by economic interests, some tour operators turn their backs on scenic requirements of the ecological environment protection, construct all kinds of tourist facilities, resulting in a very bad effect on the local ecological environment.

(2) Lack of the ecological awareness. Although the word ecotourism is familiar to the public, but in the process of tourism, tourists are still more or less showed some behavior, which can not reach the requirements of ecological tourism.

(3) The public participation is not enough. During ecotourism development process, operators and government are often planning and constructing, but the will and interest of local residents are usually ignored. In addition, the folk organizations of ecological tourism are also few, which can not play a very good role in spreading the awareness of ecological tourism.

With the demand ecological tourism and the awareness of tourists ecological, the concept of ecotourism will gradually become more familiar to people, the demand of the development of beautiful Qingdao for ecotourism will continue to grow.

The Present Situation of Qingdao Ecological Tourism Resources

The most important ecological tourism resources in Qingdao are divided into three ecological systems: the coastal ecological resources, wetland ecological resources and ecological island resources.

First look at the coastal ecological resources. Qingdao seaside scenic area gives priority to Jiaozhou Bay coastal beach with wings, focuses on Gold Coast tourism line, leading the development of scenic spots in the urban areas and bounded by the natural forming Gulf, it is divided into Qingdao Bay, Huiquan Bay scenic area, Taiping Bay scenic area and Fushan Bay scenic area.

The development of Qingdao resort industry can be said to have advantaged conditions. First of all, a pleasant climate, beautiful seaside scenery, relatively thick cultural deposits and the long-time formed and quiet relaxed life attitude of the residents, make Qingdao become the natural tourist resort. As the

old tourism city, Qingdao has good infrastructure and many nursing institutions. And it not only has the National Tourism Resort, but in early period occupied by Germany, Qingdao has become a well-known holiday resort with a long history of holiday industry development. But the coastal ecological resources protection is not optimistic. The beach is a precious and rare coastal tourism resource. The beach is rarely occupied for construction lands internationally, but Qingdao seems to have the tradition of occupying beach to build shipyards. Years ago, Beihai Shipyard was built on the beach, which completely destroyed "Yan Island Autumn Tide", one of the "Ten Views of Qingdao". The feat of making ships on beach became the laughing stock of the history, and the relocation of the shipyard paid a heavy price. We should take warning from the lessons in this respect.

Secondly, analyze the wetland ecological resources. Wetland has the function of keeping the diversity of the nature, which can not be replaced by any other ecosystem; in addition, there are many emergent aquatic plants, floating and submerged plants in wetlands. The plants can enrich metals and some harmful substances in the organization and many of them can also be involved in the detoxification process, absorbing, metabolizing, decomposing, accumulating the pollutants and purifying the water, and plays an role of the degrading environmental contamination. As the kidney can help the body excrete waste and maintain metabolism, the importance of wetlands for earth is obvious.

Wetland is an important ecological system and tourism resources, wetlands in Qingdao are mainly coastal wetland and river wetland. Coastal wetland has an important role in filtrating and purifying the land sources pollutants before it enters the sea, at the same time, it is also an important habitat for marine resident and migratory birds. At present, the main threat is man-made pollution and reclamation act, which results in the wetland scale shrinking, pollution exceeding self-purifying ability of wetland, severely destructing the ecosystem; Qingdao is the necessary way which must be passed for migratory birds in Asia Pacific region, and is one of the three major routes for migratory birds internationally, wetland of Qingdao has special geographical location, which many birds pass by and stay for the winter. Lake wetland is mainly distributed in Dagu River Basin, which is an important habitat for terrestrial resident and migratory birds and the important natural system of the city water purification. At present the main threat facing is the landfill and development by human, including golf construction project of high pollution and real estate development, which has seriously threatened the safety of the city drinking water and destructed the biological diversity.

Thirdly, analyze island ecological resources. Qingdao is rich in ocean tourism resources. The mainland coastline is 719 long, distributing hill bedrock coast, mountain bay silty sand coast and bedrock silt-sandy coast, etc. The headland and the bay are interphase, which have a high value of appreciation and leisure; the islands are scattered all along coastline like stars in the sky, the channels are unobstructed, non - frozen and non - silt. There are endless sandy beaches distributed along the coastal zone off the coast; there are the limitless variety of and a great number of the marine creatures. The ocean resort is obviously advantageous, and it is the advantage of Qingdao tourism resources.

There are 70 uninhabited islands, 11 inhabited islands, and 49 bays in Qingdao. The area and scale of the inhabited islands are very small. The ecological environment of the islands is relatively independent and extremely vulnerable, the environmental capacity of them is very small, and they are also the main station for the marine migratory birds and the important habitat for marine resident birds.

The Basic Premise and Countermeasures of Eco-Tourism from the Perspective of Ecological Civilization

At present, the "ecological civilization" becomes a topic of public discussion, "eco-tourism" has also become a concerned focus in the tourism industry. In recent years, visitors flocked to the scenic area and caused various degree' ecological damage. Management and maintenance of the area could not be difficult to compensate for the expansion of ecological damage.

Tourism eco-civilization emphasizes that the object of tourism and tourists are no longer the relationship of commodity exchange, pays attention to equality between the object of the natural landscape and tourism, natural landscape is not only the material world, there is also the human spirit and emotion accumulation in it.

The Basic Premise

Disposal of Tourism Waste

Tourism waste is an extremely important subject for scientific research for tourism. Many advanced countries have a Garbage Research Institute, build and recycle industrial waste, closely coordinate with the environmental protection industry, and has become an important economic enterprises. Waste disposal in tourism scenic spots should be based on the law. Tourists should be virtuous and self-respect to create a truly good rest entertainment environment.

This issue need to cause the attention of the whole society, but basically, need to be established *The waste disposal Act*, violation or breach of the law shall be punished. Otherwise, to protect tourism environment of scenic spot would be a very difficult thing.

First, it is necessary to make tourists civilized and ecological. China tourists civilization quality have improved a lot, but there are still many problems not to be ignored, such as spitting, throwing, loud noise, indecent behavior, pick flowers, and so on. The public lack of protective consciousness of cultural relics and environment, and destroy the scenic environment on purpose.

On the Web, "Chinese style of crossing roads is criticized in recent days, Chinese style flowers is also not good". The Zhongshan Park is a good place to admire flowers, with tulips、cherry、peach and forsythia blossoming, attracts many citizens to admire. But some visitors take photos in the flower beds, fold the flowers and have other uncivilized behaviors, the flowers turn into "wounded flowers". This phenomenon of "China type flowers" is exposed by the netizen "Aofan laoyao" in the online and satirized by satirize.

At the same time, the reporter investigates in Zhongshan Park and finds that: some people fold willow to make cap, beautiful tulips have fallen under many people's feet, purple cabbage flower is a mess, flower visitors of the uncivilized behavior does not in the minority, even if the staff dissuade at the scene, there are still so many people persisting in their old ways[3] which can associate "the universal phenomenon of sputum culture". In the Zhongshan Park Lake, we also can see plastic bags, cigarette butts, mineral water bottles, and floating phlegm on the water. It may not retain the habit of spitting for Sustainable development for the charm of Qingdao .Civilization is to develop, need to start from the minor, get rid of bad habits.

Second, build quality service in ecological scenic spot. Undeniable, sometimes visitors' indecent behaviors are caused by inconvenience. For example, fewer free garbage bag, scarcer public toilets and rubbish bins, unreasonable distribution. Therefore, visitors dispose the waste just as "The heavenly maids scatter blossoms". Scenic quality services should include tourist routes, clear and specific position mark, standard tour guide language, self-contained facilities and thoughtful service .When the writer studies in Laoshan, found the staff remind and warned people to throw garbage, and this is the advocated approach.

Tourism Toilets

Tourism toilet, just like tourism waste, is also a great problem. A lot of travel books or papers at home omitted some contents about regarding it as a science to study, and writing it into the professional theory. At present, Wu Guangxiao's"Tourism Commodity Development Practice "[4] discusses this problem.

In many countries, many person with breadth of vision think that, toilet is equivalent to a symbol of national civilization. Whether a country is civilized country or not, you can just judge its science and culture research on toilet, and even the development of a "toilet culture". In 1988 February, 220 representatives of 10 countries held a "toilet culture of Science International Conference in Tokyo" .It is in this Congress clearly put forward the slogan: "Toilet is a symbol of a nation. The inside of the toilet has the scientific, cultural,"research development.

Japan has also set up a "National science and culture association of public toilets, set in November 11th each year for the Japanese "toilet culture festival", the country must clean the toilet inside out before the holiday. Japanese practice plays an exemplary role in the world. Many European countries television, broadcast, newspaper reporters went to Japan to do special interview on "toilet culture". Japan Keio University emeritus professor Nishioka Hideo led the "toilet culture tour" to study Western European toilet situation and scientific management methods in Europe's six largest city, held academic discussion and communication modernization research toilet with the local authorities. We really should learn from Japan and Western countries.

A friend once said: "If China makes a fundamental improvement about toilet, Chinese'appeal is not inferior to a Terracotta Army in Xi'an!" [5] Visible, toilet culture not only can change a state and national spirit, but also can bring huge economic benefits.

Tourism toilets can enhance the new image of scenic spot. Qingdao has less the toilet, a few people or units are not active to provide convenience for visitors, which is extremely inconsistent to beautiful Qingdao. In a word, the following measures , such as: in situ purification, water saving, portable, user-friendly design, beautiful and elegant, moderate amount, reasonable distribution , the toilet is arranged in a small landscape, especially in the scenic area, construction of health and localization of the toilet, are very critical.

Countermeasure Research

Protection First, Development Second

The sewage capacity of inhabited island is weak. The traditional island sewage system is making use of its natural way, that is septic effect, which needs the process of fermentation, the harmless treatment, system treating for planting. If the sewage plants are constructed, the waste and the pollution is too large, all of which will result in exceeding the purification capacity and destroying the ecological environment. Therefore, tourism should be controlled, limit the large-scale emissions, control the number and capacity of the environment. Ecological tourism, bypass ornamental, Nongjiale tourism should be advocated. For example, Changmenyan Island, facing Mountain Lao across the sea, is the only way through which the West Pacific migratory birds pass. And it does not have the conditions to develop but should be protected. Jiaodong Sea Avenue, which was initially called the Yingbin Avenue, has a promoting effect on the economy. However, it is too close from the sea, destroying the coastal landscape and blocking the demands of visitors' closing to the sea. Moreover, the protection of coastal beach is not considered, the forest park is destructed, especially the black pine forest. In fact, there is 204 National Highway in the vicinity, and then repairing the Binhai Avenue is really failing.

In view of the relatively fragile ecological resources of Qingdao, developing uninhabited islands should be prohibited, which can protected them from damage.

Stop Damaging to the Wild and Non-Wild Animals

A period of time ago, there was a not-wearing fur fashion spread from Beijing, its content including not hurting the animals and strengthening the protection of animals, which is a kind of ecological protection action. "The traditional concept of Hani is that the wild animal can not be harmed, any people who harm wild animals will have disaster". [6] The Germans' ecological view is: "the sale of wild animals and plants and the tourism souvenirs made of the wild animals and plants should not be seen in the scenic area, the food made of wild animals and plants should not be found in the restaurant." [7]

Protecting environment means protecting creatures, such as the wild and non-wild animals (such as magpies, turtledoves, etc) in Qingdao and holding high the banner of the ecological civilization in the Qingdao ecological environment.

Along with the progress of human civilization and the development of industrialization, it is worthwhile to note that any kind of non-rational behavior can cause terrible damage and even irreversible impact to human environment. Therefore, protecting the delicate ecological balance has become an important part of the sustainable human development. Pay attention to the protection of biological diversity, only in this way; the living environment of human can be stable. In this sense, protecting animals in the environment is protecting ourselves. For example, the magpie and the sparrow are important members of the nature, occupying an important position in the strategy of maintaining biodiversity. They are round the clock to kill pests, control rodent and transmit plant seeds and at a higher level of the food chain. They serve as important biological resources, their roles in regulating the natural ecosystem can not be ignored. Protecting the birds resources well has the important meaning to improve the natural environment, develop scientific research and economy, construct socialist spiritual civilization. In recent years, the phenomenon of capturing magpie and doves to profit still happen in many places of Mountain Lao and Mountain Fu. Thus protecting birds and forest ecosystem has been imminent, and protecting animal and plant environment is protecting our own survival nature environment.

The Establishment of Ecological and Eco Protection Fund Committee

Mountain Lao, as Qingdao famous scenic spot, not only at the same time has the beauty of strange peaks, peculiar caves, weirdly-shaped stones, dense forest, magnificent waterfalls and floating clouds, but also is worldly well-known for "Mountain and Sea Wonders", and has long been known in the saying "Although the cloud of Mountain Tai is high, it is not higher than that of Mountain Lao in East Sea." Mountain Lao is the organic combination of the natural ecology and humanistic ecology, and is the cultural heritage and historical context. However, the so-called experts which were invited to Mountain Lao changed "Nine Water" to "Nine Springs and Eighteen Pools", which lost its beauty. This action was done without being fully demonstrated by Tourism Bureau and tourism planning departments and used damaging the ecology and containing the hypertoxic impervious materials, which resulted in the heavy destruction of ecology, the former XianTai fish and the frogs totally disappeared, and it can not be said this is a catastrophe to the natural ecology and human ecology of Mountain Lao. Therefore,to reform the scenic spots must have sufficient proof.

It is necessary to establish the ecological protection fund, which aims to make full use of market resources, raise funds through various channels and build platform for Qingdao ecological protection and construction, establish a long-term mechanism of ecological protection to promote greater achievement in ecological construction

Improve the Ecology Consciousness and Quality

Disseminating ecological knowledge and improving the modern ecological consciousness of the nation, is the key to realize the ecological modernization. As long as there are scientific plans, it is possible to achieve win-win situation of modernization and the natural environment. Therefore, diverse forms of ecological science lectures should be held regularly or non periodically, to cultivate the people' love and consciousness of protecting environment. The basic knowledge of environmental protection education should be developed in schools at all levels. Add some facilities of ecological construction propaganda in all public places. Organize and publicize education activities to widely propagate green industry, green consumption, ecological city, ecological environment and other science knowledge relevant to ecological construction, and publicize advanced type on ecological construction by using radio, television, newspapers and other news media. In view of some people's behavior of damaging the ecology for personal gain and the destructive force caused by some leaders beyond the ordinary people, the supervision of the news media and the public opinion should be strengthened to expose and stop all illegal destruction to ecological environment.

Conclusion

Along with the development of human society, the pain of the earth is becoming more and more serious, and the scar is getting deeper and deeper. Once birds sound, flowers fragrance and green trees, have become the pet in the specified region; various rare fowls and strange animals, flowers and birds, flying insects have extinced or survived in the cage as "live specimen" waiting to "die in their beds"; the original scenery in various aspects of natural zone has been limited in the few nature reserves... When people are complacent in the increasing material wealth plundered from the nature, they are not aware that the nature is opening its relentless web for revenge, as Engels'e farsighted advice: "do not overly intoxicated with our victory to the nature, for each victory, nature will take revenge on us". [8]

The development of human history has repeatedly proved Engels' true saying. Since the industrial civilization, humans have been thinking that they can change nature and thinking that men can conquer nature, even have proudly put themselves "hegemony" status in the earth, have been egocentric when considering anything. With the "population explosion", in order to support more people, people are resorting to deforestation, overgrazing, excessive exploitation of groundwater resources and means, etc. to grab more things from the nature, however, they have got the opposite result, for excessive development activities have led to the changes of ecological environment, the giving of the nature to the human society is becoming less and less, this is one of the most vivid reflect on the contradictory relationship between human society and the natural ecological environment. [9]

In fact, after the human conquered the nature, earthquake, tsunami, avian influenza and sandstorm and so forth are all nature's revenges to the human, and it also can not say that they have direct and indirect relationships with global warming.

The proposal of the beautiful Qingdao reflects the requirements of the times, the development of ecological tourism caters to the need for people to travel. Beautiful Qingdao eco-tourism development represents one of the coastal tourist city models, and has the typical significance of reality. Ecological

effects of beautiful Qingdao even determines the direction of the city's development and function, and puts forward special requirements to the municipal facilities, further promotes the development of the city and commercial prosperity, which not only greatly has accelerated the ecological tourism re-development and the process of modernization, but also has triggered a benign development sequence.

In accordance with the requirements of the development of the beautiful Qingdao, the theme connotation "red bricks green trees, greenish sea and blue sky" should be further enriched and the brand system should be improved. Actively carry out tourism festival activities, deeply explore Qingdao historical and cultural resources, widely publicize ecological civilization, enhance the identity and attraction of beautiful Qingdao. Base on the principle of environmental protection and energy saving, pay attention to the comprehensive management of scenic spots, improve the environment, public facilities and manage all kinds of tourism related elements, create beautiful eco tourism industry in Qingdao, just as the German poet Holderlin's famous saying: "People, should be inhabiting the earth poetically".

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Development of Hunting Tourism in Adıyaman (2004-2013)

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Abstract

Changes in the tendency of attending to tourism activities are seen in the parallel of changes in the developments of the world. A trend which changes from traditional sea side tourism to other types of tourism is now in agenda in the tourism understanding. In our country, "sea-sand-sun" tourism is generally in the foreground. In recent years, the other types of tourism have been drawing attention as well. Hunting tourism is one of them. Hunting tourism has developed in many countries rapidly and been an important source of foreign currency. Our country has important hunt and hunting potential thanks to its geographical location, climate and the other features. Important developments, which can be appreciated in hunting tourism, are seen in Adıyaman as well. In this study, 10-year-development of hunting tourism in Adıyaman is put forth using the data obtained from The Regional Directorate of Water Works and Forestry.

Keywords: Tourism, Hunting Tourism, Adiyaman.

Introduction

In the globalized world, tourism has been one of the most favourite sectors for countries because of its various positive effects that it emerges. It is expected that this will be reinforced in following years thanks to its increasing volume. World Tourism Organization (UNWTO) assumes that in the year of 2020, almost 1.4 billion people, and 1.8 billion people will attend the tourism activities in 2030. In addition to this, more than 1.5 trillion dollars will be gained. (UNWTO 2014).

With this feature, the sector has an essential importance, especially in developing countries. The feature of making economic contribution like creating income and employment opportunities, removing the imbalances between the regions and the balance of payments deficits increases the importance of the sector.

In this context, tourism is regarded as a power and foreign currency financing which speeds up the development process by the developing countries. These countries do studies so as to improve and diversify touristic product range by producing various politics. (Şafak 2003b).

All kinds of spending in tourism sector bring about mobility and vitality in the economy and affect economies of countries in different ways. In the parallel of the world's fast, economical, political and technological developments, a significant change in the consumption patterns for the tourism is observed.

In recent years, the changes in the consumption patterns of people involved in mass tourism, the tourism industry gives direction product diversification efforts. Tourism product, known as the classic sea, sand and sun tourism triad of different types of alternative emerges. Tourists in these areas, with special attention to changing demand and to take share in the most important investments are made with a variety of races. In this context, emerging tourism industry to create a variety of products, meaning hunting tourism is one of the studies. Hunting tourism is the activity that purposes offering wild life sources to the native and foreign hunters' usage. Thanks to this; country tourism, local and national economy will be contributed. Some countries get foreign currency in large numbers and they can decrease the current account deficit by means of hunting tourism.

Hunting tourism is the different way of tourism and the activity that hunters do in order to hunting purposes within the fixed principals. Hunters not only possess souvenirs such as horn, tooth, fur, etc., but also they see and know different cultures and places thanks to hunting tourism.

Practices of hunting tourism are effective in derivation of tourism actions and equal distribution of social economic development by means of spreading the tourism actions to the whole country and the year.

Hunting tourism is the subject if the level of income and welfare of people in rural areas improves, imbalances are got rid of and products which are produced in the area.

In our country, hunting tourism activities started in the year of 1977 with the hunting of wild boar. In 1981, wild coat was got coverage for hunting tourism and, in 1984 native hunters started to hunting as well for hunting tourism.

Hunting tourism activities started in Adıyaman in 2004. Having limited industry, agriculture and livestock income, Adıyaman is one of the having lowest income cities. It is in the 65th row in the Arrangement of Social-Economic Development. (DPT 2003). Tourism industry will be effective in diminishing this situation. Mentioning about hunting tourism' significant and effectiveness in Adıyaman is very important.

Adıyaman is a culture and tourism city that has been a center for a lot of civilizations and it is one of the first settlements of human history. It is located in the west of South-east Anatolian Region. Malatya is to the North; Atatürk's Dam and Diyarbakır are to the East; Kahramanmaraş is to the West; Şanlıurfa and again Atatürk's Dam are to the South.

Adıyaman has a rich composition as historical, cultural and nature sources. There are 81 archaeological protected areas, 4 natural protected areas and natural sources (www.adiyaman.gov.tr). These values make the region as a final point for the potentials.

Malatya Mountains, which are extensions of Taurus Mountains, are located to the North of the city. The altitude of the mountains is above 2500 meters. To the south, the elevation lessens and lowland areas are seen much. The provinces of Çelikhan, Tut, Sincik and Gerger are hilly. The city center, Besni and Kahta provinces are hilly to the North but lowland to the South. Samsat province has the plainest areas of the city. Having these geographical features, Adıyaman creates a great potential for wild life thanks to climatic features. Adıyaman takes the leadership in hunting tourism owing to population of wild goat and decreasing wild coat hunting quota every passing year. For these reasons, Adıyaman has picked for the searching areas.

In this study, former studies that related to hunting tourism have been examined. With this purpose, the development of hunting tourism in Turkey has been introduced and then data related to Adıyaman have been evaluated. The data from the department of National Parks in the Ministry of Environment and Forestry has been benefited widely. Especially, the necessary data, which reveals the information about the structure of Adıyaman's hunting tourism, have been obtained by talking to authorities from Provincial Directorate of Ministry of Forestry and Water Works Nature Conversation and the Bureau of Nation Parks in Adıyaman. Besides, various organizations' data sources have been evaluated.

Hunting Tourism

In recent years, hunting tourism have been developing rapidly and becoming an important currency source all around the world. Wealthy hunters from some countries prefer hunting to satisfy their hunting emotions and experience adventure in other countries. Being aware of this situation, countries open their hunting grounds to meet the demands of foreign hunters and get currency income.

Spain is the first country in getting the highest income from hunting tourism with 6 billion dollars. The other leading countries are Germany (150 million dollars), France (90 million dollars), and Hungary (25 million dollar). Republic of South Africa gets 500 million dollars in a year. 58 thousand deer and 1 million 200 thousand roe deer are hunted in Germany, which has habitat of deer and roe deer, in a year (Newspaper of *Milliyet,* 2008).

Various researches that examine the relation between hunting tourism and hunting and wild life have been done (Yıldırım 1994; Iğırcık 2000; Şafak 2003a; Şafak 2004a; Hafızoğulları 2006; Kuter 2007; Kantarlı 2007; Küçükosmanoğlu ve Arslangündoğdu 2009; Sarı ve Çakıcıoğlu 2010).

Hunting animals usually live in forest and near the forest. These areas are open for hunting tourism because of ground games' excessive breeding in protected hunting areas. Thus, wild goats in Antalya Düzlerçamı and ground games in hunting grounds of other regions have been in the service of hunting tourism since 1984. Therefore, the importance of hunting tourism in providing important contribution to the city and country economy emerges.

The sustainability of wild life sources ensures by allowing the hunting ground games which has reached the adequate population thanks to hunting tourism. It also helps in creating appropriate conditions for the animals to protect, care and breed them. Natural sources can be used as tourism purposes as hunting is executed without harming the natural life (Kozak et al, 2010). Therefore, rural development is supported by ensuring the rural people to get benefit from added-values coming from the presence of the wild life sources.

The tourists who take participate in hunting tourism are inclined to spending. That's why they spend lots of money in shopping. Village houses are in hunters' service in some residents. Produced productions, food cooked by villagers and accommodation fees are important incomes for the region.

With a general evaluation, the following data are revealed: the average income for per person is $ 750. In golf tourism the income is 35 times more and 4 times more in congress tourism. This rate is 8-30 times in wild goat hunting; 4-6 times in wild boar; 20-30 times in red deer and at least 70 times in wild sheep. The income from the 1100 hunted ground games is about 5 million USA dollars in 2010 (www.milliparklar.gov.tr).

Hunting tourism brings more income for per person when it is compared with the other tourism kinds. While a normal tourist spends $ 750, the spending for hunting tourism is almost $ 2000 for per tourist. In some situations, this amount can reach $10000-20000 (www.milliparklar.gov.tr). For instance, the amount paid for a-five-day hunting tourism is $15000 for per person (Umar 1993). In a study, which the potential of hunting tourism in Akseki (Antalya) was examined, Akseki was revealed as it had the 2 most popular hunting grounds of wild goat by specifying that 8 out of 18 hunting grounds were located in Antalya. It is stated that the %20 of tourists coming to Turkey for hunting tourism prefer the region of Akseki, and tourists spend $4000 for only hunting, but the sum of the spending is between $10000-20000 (Hadimli and Çetin, 2008).

The important part of income obtained from hunting tourism is transferred to region as contributions for the protection of wild life and animals. Thanks to this participator approach, it is purposed that both rural development gets help and villagers are effective in securing wild life directly.

The precondition for development hunting tourism in Turkey is shown as development of hunting ground system. Hunting tourism provides hunters to come the hunting grounds as individual or group. In hunting tourism, consumer must buy the product by himself where it is produced. In other words, it is impossible for the product to be sent by any other means of distribution channels. In this context, the business, which accepts native or foreign hunters, realizes a foreign exchange in the terms of payment balances within the boundaries of the country without enduring expenses such as transportation (Şafak, 2004b).

A regulatory has been made about hunting grounds. The law of the land hunting predicts cooperation between the village legal entities, which are managed by Ministry of Environment and Forestry, and village municipalities to organize hunting, preservation, breeding, maintenance and hunting tourism. Thanks to this, the participation of the local people to get benefit from wild life sources will be ensured and rural employment will increase. Sample hunting grounds are aimed to be generalized throughout the country and run by giving to private sector (DPT OIK, 2007).

As it is understood here, hunting tourism has a great effect on diversifying the tourism activities, generalizing the tourism actions throughout the country and the year, and spreading the social-economic development in equality.

Practices of Hunting Tourism in Turkey

The activities of hunting tourism in Turkey are waged by Ministry of Forestry and Water Works, General Directorate of Nature Conservation and National Parks within laws, regulations, Central Hunting Commission's provisions, and international treaties.

All the actions, held in the scope of hunting tourism in Turkey, are determined by the commission including every hunting year (starting from 1st April till the end of 31st March of following year). In these decisions, are there the species to be allowed to hunt, the grounds to be allowed to hunt, hunting dates, hunting principals, the procedure and ways of hunting that are prohibited. The decisions are in www.milliparklar.gov.tr web site. All the hunting organizations, done in the scope of hunting tourism, are held with the accompaniment of the Ministry personnel.

The first hunting tourism practice in our country started with hunting of wild boar in the 1977-1978 hunting season after foreign hunters' hunting lots of ground game unregulated and without fee in 1950s.

Advance pricing has been started and the prices have been determined by considering following criteria: the cities' being priority in development in the hunting years of 2005-2006 and 2006-2007; infrastructure facilities, and the opening of hunting tourism for the first time.

Our country has an appropriate location for the development of hunting tourism in the aspect of its geography, climate, flora, and wild life. In this extent, hunting tourism is done in many parts of our country. In a study, held in the province of Bolu, it was examined that how the nature and cultural

diversity affected the tourism by saying the potential of the tourism caused a positive conclusion for the hunters who participated in tourism actions. It has stated that there are bushy flora in development thanks to climate and topographic structure, beautiful views and resorts by the lakes, many kinds of ground games, which makes the city a good place for hunting tourism opportunities (Özcan, 2005). It has been determined that Lakes Region has a potential in creating an important touristic destination for hunting tourism (Öztaş and Karabulut, 2007). Besides, the mountains in Black Sea Region are determined to have a potential in the aspect of hunting tourism (Yeşiltas et al, 2009).

In Turkey, approximately 34 million hectares of land creates an appropriate area for big mammals to live in. There are 2.5 million of hectares for red deer, 7.5 million of hectares for roe, 2.5 million of hectares for follow deer, 1.5 million of hectares for chamois, 3.5 million of hectares for wild goat, 0.5 million of hectares for Anatolian wild sheep, 1 million of hectare for gazelle, 15 million of hectares for wild boar. In our country, the density of the big mammal game animal is under where it should be when it is compared with the other countries' population of the game animals and the capacity of habitats. The number of the big mammal game animal must be 1.750.000 when the target density is reached, however the number is about 300.000-350.000 in our country. (Kantarlı, 2007). Therefore, it is clear that the wild life sources are not got benefited enough in the country.

In recent years, the new regulations have been made to develop hunting tourism. For this purpose, hunting grounds are identified belonging to general, private, and government. The hunting grounds that are to open for hunting tourism are identified and declared by the Ministry of Forestry (National Parks, Game and Wildlife General Directorate) considering ground game potential of our country. Foreign tourist hunters can hunt with the permission given by Hunting Tourism Permit that is given to Group A Travel Agencies by Forestry Ministry. Besides, foreign tourist hunters can hunt the spices, bred and set free only in the special hunting grounds registered by Ministry of the General Directorate of National Parks and Wild Life.

Among the big game animals, bear, chamois, wild goat, wild boar, lynx, wolf, jackal, and fox are presented to native and foreign hunters for a fee. The other hunts' being hunted by foreign hunters is possible only in private hunting grounds. Foreign hunters aren't allowed to hunt the game animals except for the other animals stated above unless in private hunting grounds.

Hunting Tourism in Adiyaman

In recent years, Adıyaman has been getting more shares from increasing tourism income according to developments in sector. On the other hand, it seems insufficient if we consider the values it has. Adıyaman has the potential to exceed this and to increase the its share in the sector. The development of the tourism is up to the diversity of the tourism supply. Especially in recent years, different demands from the ones in tourism activities are the outcomes of the diversity of tourism supply. The development in hunting tourism and bird watching is the indicator of diversifying the tourism in Adıyaman. Considering these, Adıyaman has been registered as brand city with other 15 cities by The Ministry of Culture and Tourism (The Ministry of Culture and Tourism, 2007).

9 thematic areas have been identified in the study of "Strategies of Turkey's Tourism 2023" prepared by The Ministry of Culture and Tourism. The cities of Adıyaman, Gaziantep, and Kilis, which are in the Region of TRC1 determined as "GAP Culture and Tourism Development Region, are in one of these Regions. The development of culture tourism, health tourism, youth tourism, eco-tourism, hiking, water sports, bird watching, and congress tourism is aimed (The Ministry of Culture and Tourism, 2007). So, the rural tourism is also one of the subjects to be suggested among the tourism kinds in coming years. In this context, the appropriate regions exist for hunting tourism, gastronomy tourism, hiking and nature walking, paragliding, bicycle tours, angling, safari, water sports, camping, and caravan tourism (İpekyolu Kalkınma Ajansı, 2011). However, all these wait to be apprised.

Adıyaman is one of the most suitable cities for hunting tourism as its geographical structure, climate, flora and wild life. A huge movement takes place thanks to regulations made in recent years. The number of wild goat seems to increase thanks to conscious protections every passing year. Adıyaman is thought to reach a great potential in wild goat population in coming years, which will increase the number of wild goat to be hunted.

Regions of Mount Şengil-Hisar, Mount Bezar, Mount Hallof (Yarlıca), Mount Akdağ, Mount Zivar, Çetirge, Koru and Mount Ulubaba are determined as wild goat hunting regions (Figure 1).
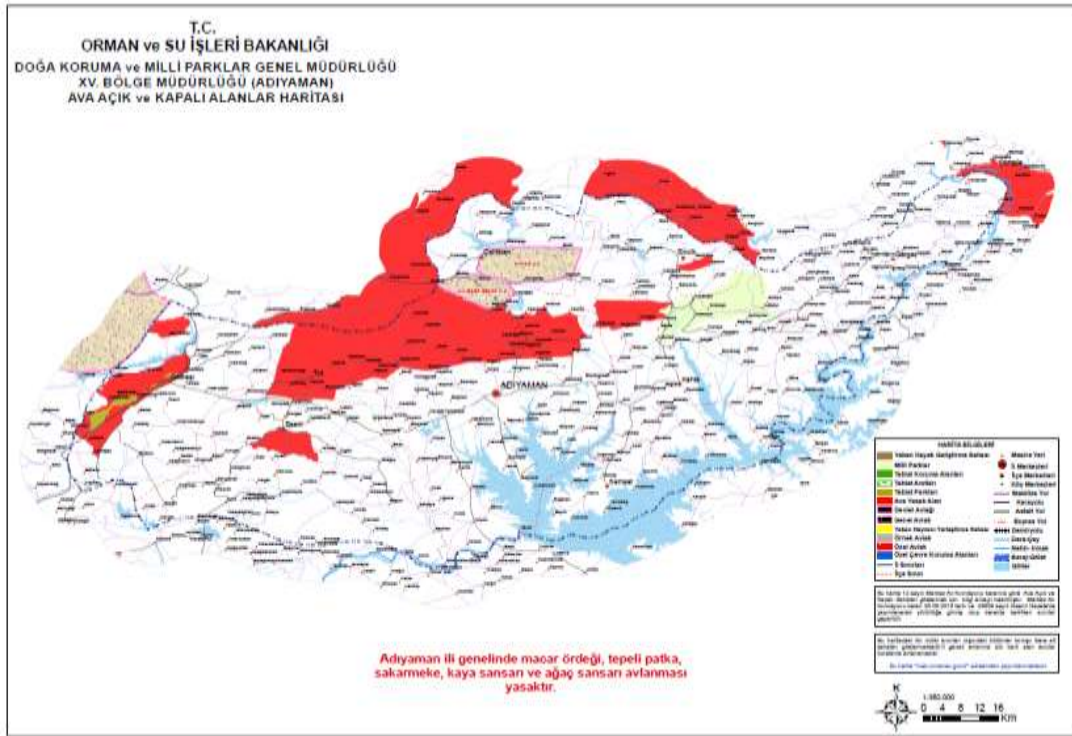
Fig. 1. Open and closed areas for hunting in Adıyaman.
Source: http://mak.ormansu.gov.tr/download/Adiyaman.pdf (2014)

This areas are well known by the foreign tourists. Besides, hunting quotas have been determined (Table 1). According to data obtained from Provincial Directorate of Ministry of Forestry and Water Works of Adıyaman, there are 13 native and 47 foreign hunters for the 2011-2012 hunting season (Provincial Directorate of Ministry of Forestry and Water Works. of Adıyaman, 2014). It seems that, the foreign hunters are the almost 80% of total hunters. It's determined that the foreign hunters are from mostly the USA and Germany, then Austria, Denmark, Netherland, Russia, Mexico and France. The region attracts foreign hunters.

Table 1. The regions, allowed for organizations of wild goat and quotas 2013-2014

Hunting Areas	Foreign Hunters	Native Hunters	Civil Servant Diplomat	Total Quota
Hisar-Şengil Dağı	2	1		3
Hallof-Yarlıca Dağı	2			2
Akdağ	3	3		6
Ulubaba Dağı-Bezar Dağı	3	2		5
Şahkulu	1			1
Meydan	1			1
Zivar Dağı	3	3		6
Çetirge Dağı	2	1		3
TOTAL	17	10		27

Source: (www.milliparklar.gov.tr 2014)

Hunting of crossbred wild goat takes place in Adıyaman addition to wild goat hunting (Table 2). Crossbred wild goat is the product of special race goat and wild goat. There is no such an application throughout the country except for Adıyaman. Therefore, this application makes Adıyaman have an important income from hunting tourism.

Table 2. The areas, allowed to hunting organizations and quotas of Crossbred Wild Goat* in Adıyaman 2013-2014

Hunting Areas	Foreign Hunters	Native Hunters	Civil Servant Diplomat	Total Quota
Hallof-Yarlıca Dağı	1	1		2
Çetirge Dağı	1			1
Ulubaba Dağı-Bezar Dağı	1			1
Olgunlar-Kemal Dağı	1	1		2
Zivar Dağı	1			1
Koru	1	1		2
TOTAL	6	3		9

Source: (www.milliparklar.gov.tr 2014)
Crossbred Wild Goat: the product of special race goat and wild goat.

The existence of wild goat in Adıyaman was recorded in 2002 for the first time and the number of the animals was 200. However, thanks to active protection and specifying the habitats has increased the number. It is 3273 for the 2013-2014 hunting season (Provincial Directorate of Ministry of Forestry and Water Works of Adıyaman, 2011). Therefore, the number of the population has risen more than 15 times in a decade (Table 3). The quota for wild goat is 27 and for crossbred wild goat is 9 in 2013-2014 hunting season. The total quota for wild goat is 338 throughout the country. Adıyaman seems to have an important potential for hunting tourism when these figures are compared.

The hunting tourism activities started in Adıyaman in 2004. Important developments for hunting tourism have come out after 4 wild goat's being hunted in 2004 (Table 3). The number of the wild goat, allocated hunting quota, increased in a significant rate except for the year 2009. The most important reason for the increase is the rising of the number of wild goat in protection. The number of the wild goat for the hunting has increased for more than 9 times since the first hunting tourism activities started.

Table 3. The hunting tourism potential and income of Adıyaman.

Years	Wild Goat (Number)	Hunting Quota (Number)	Selling Price (TL)	Total Amount (TL)	Share of Ministry (TL)	Share of the village (TL)
2004	200	4	2100	8.400	4.620	3.780
2005	350	8	2500	20.000	11.000	9.000
2006	600	12	3125	37.500	20.625	16.875
2007	850	14	3750	52.500	28.875	23.625
2008	1130	21	4375	91875	50.531	41.344
2009	1450	16	5625	90.000	49.500	40.500
2010	1850	33	6125	202.125	111.169	90.956
2011	2220	53	5100	270.300	121.635	148.665
2012	3191	40	4000	160.000	64.000	96.000
2013	3273	36	4000	144.000	57.600	86.400

Source: Calculated from Provincial Directorate of Ministry of Forestry and Water Works of Adıyaman (2014)

The hunting tourism income is seen to raise in parallel of increasing number of hunting wild goat in Adıyaman (Table 3). The total income, which was 8400 TL in 2004, has increased by 270.300 TL in 2011. The 45% of this income is transferred to village legal entities, living in the hunting areas, according to legislation. The rate has increased 60 % for Adıyaman with the last regulations (www.milliparklar.gov.tr , 2014). These figures show that Adıyaman is the second important hunting tourism centre after Antalya. As it is understood from Table 3, the share for village legal entities shows a great increase in parallel of total hunting income. Decline in income of hunting tourism in the parallel of decline in hunting quota has been seen for the last two years. The Regional Directorate of Water Works and Forestry in Adıyaman colligates this to decreasing numbers of the old wild goats.

Experienced hunters and villagers' being included to inventory works for a fee and the transferring of income, obtained from hunting tourism, to village legal entities supply positive contribution. With this application, contribution of local people and our hunters to get benefit from wild life sources and rural development is aimed (Kantarlı 2007). Another example for this was put forward in a study done in Isparta. A project which was requested by General Directorate of Nature Conservation and National Parks mentions about bringing in sources of hunt and wild life in Sütçüler(Isparta). In this project, it was

calculated that there would be an income of 85000 TL for the local people after the area had been opened for hunting and eco-tourism (Oğurlu, 2008)

Hunting tourism activities start in August and finishes in March in Adıyaman. Wild goats that are older than 8 years old are hunted. In Adıyaman, culture tourism activities are common, so tourism season starts in April and ends in October. Hunting tourism's being held between August and March will help to eliminate the some disadvantages caused by tourism's seasonal feature. This will be realized by means of wild life population's increasing. The income, obtained from the tourism, raises income firstly in accommodation, travel business and the other sub-industries that weld for the tourism. In a study, done for our country, it is determined that the coefficient multiplier of tourism sector is between 2 and 4.63 (Barutçugil, 1986). Therefore, it is clear that the investments made for the sector create a 3-4 times income.

Besides, local products, which has difficulty in reaching the market, are marketed in the very region they are produced and this is another way of increasing the income. In addition to this, empty lands and grasslands can be used as camping and caravan area thanks to hunting tourism. In this context, marginal agricultural areas are available (Şafak, 2003).

Conclusion

Rises of societies' income and conveniences made by technology rebound the tourism demand positively. Especially, people living in developed countries and big cities need to get rid of the stress in natural areas and experience adventure, which makes different tourism demands.

Nowadays, tourism sector has reached almost one trillion dollars thanks to meeting this demand. Especially, tourism sector has a great role in helping the countries which have insufficient industry but developed in agriculture to reach a development level. Hunting tourism, diversity of the tourism industry in terms of supply, helps under developed regions for their improvement every passing day.

Hunting tourism is a kind of tourism which allows getting advantages from rural areas' environment and helps rural people to get extra income by being independent from traditional tourism and using wild life's sources. In addition to this, hunting tourism income clears off countries' economies. A tourist spends about 750 dollars while the spending for hunting tourism is between 10000-20000 dollars. That's why hunting tourism has become a phenomenon that should be discussed.

The number of tourists coming to Turkey is above 30 million, but the ones coming for hunting tourism is only in four digits, which shows something should be done. For example, private hunting grounds businesses should be founded and improved for evaluating this potential. In recent years, setting up private and sample hunting grounds for hunting tourism except for government hunting grounds have been a positive progress. Wealthy hunters' demands increase in this sector. In this context, it is oblige to do necessary studies to develop the promising potential of our country's hunting and wild life. When all these happen, our country will be successful to compete with its rivals.

In this study, the potential of hunting tourism in Adıyaman has examined. Adıyaman is one of the most suitable city for hunting tourism with its many features. Wild goat and crossbred wild goat hunting is done in Adıyaman.

Wild goat hunting areas have been determined in Adıyaman as following: Mount Şengil-Hisar, Mount Bezar, Mount Hallof (Yarlıca), Akdağ, Mount Zivar, Çetirge, Koru and Mount Ulubaba. With this aspect, the region is the centre of attraction for foreign hunters. It's determined that the foreign hunters are from mostly the USA and Germany, then Austria, Denmark, Netherland, Russia, Mexico and France.

The tourism actions are between April and October in Adıyaman. Hunting tourism's being held between August and March will help to eliminate the some disadvantages caused by tourism's seasonal feature.

The existence of wild goat in Adıyaman was recorded in 2002 for the first time and the number of the animals was 200. However, thanks to active protection and specifying the habitats has increased the number. Today, the number is more than ten times and it has reached 3273. The quota for wild goat is 27 and for crossbred wild goat is 9 in 2013-2014 hunting season. The total quota for wild goat is 338 throughout the country. Adıyaman seems to have an important potential for hunting tourism when these figures are compared.

The hunting tourism activities started in Adıyaman in 2004. Important developments for hunting tourism have come out after 4 wild goat's being hunted in 2004. The most important reason for the increase is the rising of the number of wild goat in protection. The number of the wild goat for the hunting has

increased for more than 9 times since the first hunting tourism activities started. Besides, hunting of crossbred wild goat takes place in Adıyaman addition to wild goat hunting. There is no such an application throughout the country except for Adıyaman, and this makes Adıyaman have an important income from hunting tourism.

The total income, which was 8400 TL in 2004, has increased by 144.000 TL in 2013. The 60 % of this income is transferred to village legal entities, living in the hunting areas, according to legislation. The more tourism is developed, the more tourism income is increased. Destiny of Adıyaman, whose development level is one of the lowest, will able to change thanks to this increased income. In addition to this, migration of the rural people to other regions will be blocked.

The following suggestions can be taken into account for hunting tourism:

Hunting of wildlife should be given sufficient importance in our country. For this purpose, the precautions must be taken to increase animal population.

Illegal hunting must be prevented.

Regulations that meet hunter tourists' demands should be done, especially accommodation and transportation problems should be eliminated.

The potential of our hunting tourism should be introduced in international market.

The hunting quota of foreign hunters should be increased in an uncritical way for species' existence.

As a result, Adıyaman is the second most important hunting tourism centre after Antalya; however Adıyaman should take necessary precautions for being "A Destination Centre in Hunting Tourism"

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The Effect of Moral Appeals on Consumers' Attitudes: The Case of Digital Piracy

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Abstract

Before an economic model was conceived for the Internet, Nicholas Negroponte prophesied the digitization of all multimedia, ultimately predicting the vast economies of scale the new distribution medium would bring. More striking, however, is his prediction that distributors would become less and less valuable in the digital world. Content creators would connect directly with audiences and establish their own revenue streams, leaving large media companies scrambling to protect their centralized empires. Today, these empires struggle with securing the revenues from copyrighted media which now costs pennies to distribute and is extremely vulnerable to theft. One strategy to prevent what has been termed "digital piracy" is an appeal to moral sensibility. Prior research presents conflicting results on the effectiveness of such moral appeals. Hence, the current study aims to provide insight into the effects of moral appeals on consumers' attitudes toward digital piracy. A multiple methods research approach is used to combine in-depth interviews with a survey of college students from a major southeastern university. Results suggest that consumers measure digital piracy in two ways: on a moral spectrum and a tolerance spectrum. To help explain their attitude toward digital piracy, two constructs—evaluation of harm and group accountability—are proposed and compared to neutralization theory and theory of planned behavior, respectively. Quantitative analyses reveal curvilinear relationships between attitudes toward digital piracy and both constructs. Together, findings suggest that moral appeals are not effective in promoting adverse attitudes toward digital piracy.

Keywords: Digital Piracy, Moral Appeals, Neutralization Theory, Theory of Planned Behavior

Supplier Selection and Lot-Sizing Optimization Problem under Changing Demand

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The article is devoted to the application of mathematical programming to solve the problem of supplier selection and inventory lot-sizing optimization under the changing demand. In this paper, we propose the model of the stochastic multi item problem and lot-sizing optimization under changing demand, which unlike the current setting of this problem provides an optimal solution to the considerable demand uncertainty.

Key words: Logistics Supply, Inventory Lot-Sizing Problem, Stochastic Programming.

Introduction

A typical problem in logistics is to calculate an optimal batch size of delivery, which turns into a non-trivial task when you need to take into account a large number of restrictions: on contractor proposal and consumer demand, on storage capacity, low cost, etc. Hafiz Ullah and Sultana Parveen [6] provided a review of inventory lot-sizing literature. They also classified inventory control models. The choice of a particular model is influenced by the planning horizon, order quantity, frequency of replenishment, nature of demand (continuous, dynamic or stochastic), number of supply chain levels (single, echelon) etc. In the event that the demand is constant, the classical EOQ model (proposed by Harris in 1913) and its various modifications are used to determine the optimal delivery batch size. In 1958 H.M. Wagner and T.M. Whitin provided the first algorithm [7] of the optimal solution with variable demand. They used dynamic programming for a single level lot-sizing problem.

In recent years, many papers have appeared on the application of dynamic and stochastic programming for production and sales planning. In particular, J. Shapiro considered a multi-period dynamic and stochastic resource allocation problem in his monograph [3]. The monograph by D.B. Yudin and E.G. Holstein [4] considered the problem of acquisition and sale strategy under conditions of changing demand for a single product, i.e. single item lot-sizing problem. In [1], a multi-item inventory lot-sizing scenario was proposed, and in [2], the joint application of the classical EOQ model and linear programming methods to solve the acquisition and sale strategy problem under changing demand was handled.

Mathematical Formulation of the Dynamic Problem of Inventory Lot-Sizing and Supplier Selection

In their work[4], Chirawat Woarawichai, Tarathorn Kullpattaranirun and Vichai Rungreunganun developed a mathematical formulation of lot sizing and supplier selection given the size of storage space and budget constraints. The solution of this problem allows to determine the optimal lot size for each supplier and minimize total procurement costs, which include purchasing, transaction and holding costs. It is assumed that the demand is known throughout the planning period. The problem is formalized as a linear programming problem. We consider its mathematical formulation with the following notation.

Indices:

$i \in \{1,\ldots,I\}$ – set of products;

$j \in \{1,\ldots,J\}$ – set of suppliers;

$t \in \{1,\ldots,T\}$ – set of time periods.

Parameters:

$D_{i,t}$ – demand for product i at time t;

$P_{i,j}$ – price of i product offered by supplier j;

H_i – storage costs for i product per period;

O_j – transaction cost for supplier j;

w_i – storage space for product i;

S – total storage space;

B_t – purchasing budget for period t.

Decision variables:

$X_{i,j,t}$ – number of products I ordered from supplier j in

a period of time t;

$Y_{j,t}$ – a variable taking value 1 given an order is made from supplier j in period t, 0 otherwise.

Auxiliary variables:

$R_{i,t}$ – a number of products i carried over from period t to period $t+1$.

We need to calculate variables $X_{i,j,t}$ and $Y_{j,t}$ turning to a minimum the linear form

$$TC = \sum_i \sum_j \sum_t P_{i,j} X_{i,j,t} + \sum_j \sum_t O_j Y_{j,t} + \sum_i \sum_t H_i \left(\sum_{k=1}^{t} \sum_j X_{i,j,k} - \sum_{k=1}^{t} D_{i,k} \right) \to \min;$$

(1)

subject to

$$R_{i,t} = \sum_{k=1}^{t} \sum_j X_{i,j,k} - \sum_{k=1}^{t} D_{i,k} \geq 0, \forall i,t; \tag{2}$$

$$\left(\sum_{k=t}^{T} D_{i,k} \right) Y_{j,t} - X_{i,j,t} \geq 0, \forall i,j,t; \tag{3}$$

$$\sum_i w_i \left(\sum_{k=1}^{t} \sum_j X_{i,j,k} - \sum_{k=1}^{t} D_{i,k} \right) \leq S, \forall t; \tag{4}$$

$$\sum_i \sum_j P_{i,j} X_{i,j,t} \leq B_t, \forall t; \tag{5}$$

$$Y_{j,t} \in \{0,1\}, \forall j,t; \tag{6}$$

$$X_{i,j,t} \geq 0, \forall i,j,t. \tag{7}$$

The objective function is shown in equation (1). It consists of three parts: 1) cost of products, 2) transaction costs for suppliers, and 3) storage cost for remaining products for $t+1$ period.

Constraint (2) indicates that demand restrictions must be made in the period in which they arise: shortage or sending an order back are not acceptable. Constraint (3) implies there are no orders without charging relevant transaction costs. Constraint (4) – is a constraint on storage space. Constraint (5) suggests total cost of purchases for each product can not exceed the budget for the period. Constraint (6) indicates that

$Y_{j,t}$ is a boolean variable with values 0 or 1; constraint (7) denotes that decision variable $X_{i,j,t}$ must take non-negative values.

In general, it's a rather difficult task to find a solution to such models. The interaction between many variables should be taken into account. For example, the stock at the end of the specified time period t is determined by the decisions about purchasing and storaging goods in the period from 1 to T. Therefore, this problem is formalized as a dynamic multi-period linear programming problem and solved by using optimization packages, such as LINGO 12.

Let's consider the example of a numerical solution of this problem.

Example 1. Suppose , a certain company decides to purchase three products A, B and C from three suppliers X, Y and Z over five time periods. It is assumed that the demand for products is known throughout the planning periods. Table 1 shows the demand for three products over five scheduling periods and a budget to buy them for the same period B_t .

Table 1: Demand for three products over five periods $D_{i,t}$ and restrictions on the budget for their purchasing B_t. c.u.

Products	Planning horizon, un.				
	$t = 1$	$t = 2$	$t = 3$	$t = 4$	$t = 5$
A ($i = 1$)	12	15	17	20	13
B ($i = 2$)	20	21	22	23	24
C ($i = 3$)	20	19	18	17	16
Budget, B_t, c.u.	1820	2000	3500	3000	3500

Table 2 represents the price of three products for each of three suppliers X, Y, Z ($P_{i,j}$) and their transaction costs O_j.

Table 2: Price of three types of products for each of three suppliers X, Y, Z ($P_{i,j}$) and their transaction cost (O_j),c.u.

Products	Supplier's price, $P_{i,j}$, , c. u		
	X ($j = 1$)	Y ($j = 2$)	Z ($j = 3$)
A ($i = 1$)	30	33	32
B ($i = 2$)	32	35	30
C ($i = 3$)	45	43	45
Transaction cost, O_j, c. u.	110	80	102

Storage cost for three products A, B, C (H_i) and their storage space w_i are presented in Table 3.

Table 3: Storage cost of three products A, B, C (H_i),c.u. and their storage space (w_i).u.

Data	Products		
	A ($i = 1$)	B ($i = 2$)	C ($i = 3$)
Storage cost, H_i, c. u.	1	2	3
Storage space, w_i, un.	10	40	50

The total storage space S is equal to 200 units. We need to determine the optimal lot size for each vendor and minimize total procurement costs.

The results of solving this problem obtained by optimization package LINGO 12 are shown in Table 4.

Table 4: Order quantity of three products over five periods $X_{i,j,t}$.u.

Products	Order quantity of product i during period t, $X_{i,j,t}$, un.				
	$t = 1$	$t = 2$	$t = 3$	$t = 4$	$t = 5$
A ($i = 1$)	$X_{1,1,1} = 12$	$X_{1,3,2} = 15$	$X_{1,1,3} = 37$	-	$X_{1,3,5} = 13$
B ($i = 2$)	$X_{2,3,1} = 20$	$X_{2,3,2} = 21$	$X_{2,1,3} = 22$	$X_{2,3,4} = 23$	$X_{2,3,5} = 24$
C ($i = 3$)	$X_{3,2,1} = 20$	$X_{3,3,2} = 19$	$X_{3,1,3} = 18$	$X_{3,3,4} = 17$	$X_{3,3,5} = 16$

The total costs for this solution are minimal and amount to TC=10448 c. u.

If we compare the demand data (see Table 1) and order quantity of three products over five periods (see Table 4), we will see that the demand for products B and C is always satisfied in the same period when the demand arises. The demand for the product A is also largely satisfied in the same period when a demand arises, except for the fourth period ($t = 4$). In the third period, the auxiliary variable takes $R_{1,3} =$ 20, i.e. 20 units of the product have been purchased in the 3rd period of time to be used in the 4th period.

Thus, the stockpiling is not feasible under constant demand and constant prices for products, and that was shown by a numerical example of the problem.

Technique for Creating and Optimizing a Stochastic Inventory Model for Lot-Sizing and Supplier Selection

The assumption that the demand for goods is known throughout the planning period is, in our view, unrealistic and narrows the scope of usage of this method in the formulation discussed above. We give a stochastic formulation of the linear programming problem.

The development of linear and mixed integer programming (stochastic programming) is a tempting choice for any kind of planning (operational, tactical or strategic), because the manager is able to analyze mistakes and risks in detail. The basic idea is a simultaneous consideration of a number of unknown future scenarios, each with its probability. Each scenario has its own probability. The model simultaneously determines an *optimal random plan* for each scenario and an optimal plan of preemption, which differs from all   random plans. Optimization involves maximization (or minimizing) of the expected income (expense), where the term "expected" means multiplying income (expenses) of each scenario by their probabilities.

Consider the technique of creating and optimizing the stochastic linear programming model. With this in view, we transform the discussed above numerical example of choosing a supplier and lot-sizing optimization under constant demand into a problem with changing demand, i.e. a problem of stochastic programming.

Example 2. Suppose, a company is a retailer. The company needs a strategy to acquire goods (products) over two periods. Moreover, the number of products purchased in the first period is known:

$$X_{1,1,1} = 12, X_{2,3,1} = 20, X_{3,2,1} = 20.$$

But the impact of a large advertising campaign on the amount of goods that the company will be able to sell and, accordingly, must purchase in the second period, is unknown. The analysis of previous advertising campaigns and marketing personnel intuitive assessment identified three completely different scenarios shown in Table 5.

Table 5 :Sales forecast in the 2nd period ($t = 2$)

Products	Demand, $D_{i,t}$, un.	Probability
Low demand (Scenario 1)		
A ($i = 1$)	$D_{1,2} = 13$	
B ($i = 2$)	$D_{2,2} = 20$	$p_1 = 0,25$
C ($i = 3$)	$D_{3,2} = 16$	
Medium demand (Scenario 2)		
A ($i = 1$)	$D_{1,2} = 17$	
B ($i = 2$)	$D_{2,2} = 20$	$p_2 = 0,5$
C ($i = 3$)	$D_{3,2} = 18$	
High demand (Scenario 3)		
A ($i = 1$)	$D_{1,2} = 18$	
B ($i = 2$)	$D_{2,2} = 20$	$p_3 = 0,25$
C ($i = 3$)	$D_{3,2} = 20$	

The data presented in Table 5 shows the need to create a separate sub-model of linear programming for each of three scenarios in the second period, as well as a separate submodel of linear programming in the first period. Obviously, a submodel of linear programming in the first period should be combined with each of three submodels in the second period and then optimized. We consider a mathematical formulation of this problem.

Using the introduced coefficients and variables, we formulate a stochastic linear programming model.

An individual formulation of the stochastic multi-item supplier selection problem and a lot-sizing optimization under the changing demand for two time periods is as follows:

$$TC = TC_0 + 0,25 \cdot TC_1 + 0,5 \cdot TC_2 + 0,25 \cdot TC_3 \rightarrow \min, \qquad (8)$$

where TC_0 − total purchasing cost for the 1st period ($t = 1$); TC_1 − total purchasing cost for the 2nd period ($t = 2$) under the 1st scenario ($s = 1$); TC_2 − total purchasing cost for the 2nd period ($t = 2$)

under the 2nd scenario ($s = 2$); TC_3 − purchasing total cost for the 2nd period ($t = 2$) under the 3rd scenario ($s = 3$); $p_1 = 0,25, p_2 = 0,5, p_3 = 0,25$ – the probability of realization of the 1st 2nd and 3d scenario respectively.

Each summand of the objective function TC_s (8) is a submodel of the following form:

$$TC_s = \sum_{i=1}^{3}\sum_{j=1}^{3}\sum_{t} P_{i,j}X_{i,j,t} + \sum_{j=1}^{3}\sum_{t} O_j Y_{j,t} + \sum_{i=1}^{3}\sum_{t} H_i \left(\sum_{k=1}^{t}\sum_{j=1}^{3} X_{i,j,k} - \sum_{k=1}^{t} D_{i,k} \right) +$$

$$+ f \cdot \left(\sum_{j=1}^{3}\sum_{t} \left(\min_{j}\{P_{i,j}\}\Delta D_{i,k} \right) \right); \tag{9}$$

subject to

$$R_{i,t} = \sum_{k=1}^{t}\sum_{j=1}^{3} X_{i,j,k} - \sum_{k=1}^{t} D_{i,k} \geq 0, i = 1,2,3; t = 2; \tag{10}$$

$$\left(\sum_{k=1}^{T} D_{i,k} \right) Y_{j,t} - X_{i,j,t} \geq 0, i = 1,2,3; j = 1,2,3; t = 2; \tag{11}$$

$$\sum_{i=1}^{3} w_i \left(\sum_{k=1}^{t}\sum_{j} X_{i,j,k} - \sum_{k=1}^{t} D_{i,k} \right) \leq S, t = 2; \tag{12}$$

$$\sum_{i=1}^{3}\sum_{j=1}^{3} P_{i,j}X_{i,j,t} \leq B_t, t = 2; \tag{13}$$

$$Y_{j,t} \in \{0,1\}, j = 1,2,3; t = 2; \tag{14}$$

$$X_{1,1,1} = 12, X_{2,3,1} = 20, X_{3,2,1} = 20; \tag{15}$$

$$X_{i,j,t} \geq 0, i = 1,2,3; j = 1,2,3; t = 2. \tag{16}$$

Obviously, we have combined three submodels of the dynamic linear programming (9) - (16) in the objective function (8)). The differences between the model (9) - (16) and the above pattern (1) - (7) are : firstly, the planning horizon covers two time periods; secondly, the objective function (9) takes into account shortage costs in the k -th time period, as

$$F_{j,k} = f \cdot \left(\sum_{j=1}^{3}\sum_{t=k} \left(\min_{j}\{P_{i,j}\}\Delta D_{i,k} \right) \right),$$

where f – fine for deficit (coefficient taking into account the increasing cost of goods in case of urgent delivery); $\min_{j}\{P_{i,j}\}$ – cost of goods in case of urgent delivery (if a purchase is carried out at the lowest price); $\Delta D_{i,k} = X_{i,j,k} - D_{i,k}^{\max}$ – shortage of goods in the k-th time period (calculated on the assumption that the demand for goods in the k-th time period is maximum). $D_{i,k}^{\max} = \max_{t}\{D_{i,t}\}$).

Thirdly, we introduce additional constraints for the variables of the model (15), which means the amount of products acquired in the first week $X_{i,j,1}$ is constant. Thus, we actually find an optimal solution for the second planning period, as the solution for the first period is the initial data of the problem.

The numerical solution of this problem is presented in Table 6.

Table 6: Order quantity of three products for two periods $X_{i,j,t}$, un.

Products	Order quantity of product i during period t, $X_{i,j,t}$, un.			
	$t = 1$	$t = 2$		
		Scenario 1	Scenario 2	Scenario 3
A ($i = 1$)	$X_{1,1,1} = 12$	$X_{1,3,2} = 18$	$X_{1,1,2} = 18$	$X_{1,1,2} = 18$
B ($i = 2$)	$X_{2,3,1} = 20$	$X_{2,3,2} = 20$	$X_{2,1,2} = 20$	$X_{2,3,2} = 20$
C ($i = 3$)	$X_{3,2,1} = 20$	$X_{3,2,2} = 19$	$X_{3,2,2} = 19$	$X_{3,2,2} = 20$

The total cost is $TC = 4376{,}125$ c. u.

To analyze the obtained solution, we calculate supplies $I_{i,t}$ in each of two planning periods according to the formula

$$I_{i,t} = R_{i,t} + I_{i,t-1},$$

where $R_{i,t}$ – a number of products I carried over from the period t to the period $t+1$ (i.e. stockpiling in the current period t); $I_{i,t-1}$ – stock of products I stockpiled in the previous period $t-1$.

Inventory calculations for each of the planning periods are presented in table 7.

Table 7: Amount of Stocks $I_{i,t}$, un., for each of the planning periods

Products	Stock of products i during period t, $I_{i,t}$, un.			
	$t = 1$	$t = 2$		
		Scenario 1	Scenario 2	Scenario 3
A ($i = 1$)	$I_{1,1} = 0$	$I_{1,2} = 5$	$I_{1,2} = 1$	$I_{1,2} = 0$
B ($i = 2$)	$I_{2,1} = 0$	$I_{2,2} = 0$	$I_{2,2} = 0$	$I_{2,2} = 0$
C ($i = 3$)	$I_{3,1} = 0$	$I_{3,2} = 3$	$I_{3,2} = 1$	$I_{3,2} = 0$

The data presented in Table 7, confirm the obvious fact that the higher demand uncertainty for the product, the greater stock of goods. In this example, the demand for product B is unchanged $D_{2,1} = D_{2,2} = 20$ un., so its order quantity is constant $X_{2,j,1} = X_{2,j,2} = 20$ un., and the amount of stock is zero. The demand for product A ranges from 13 to 18 units and for product C – from 16 to 20 (see Table 5), therefore you need to stockpile these goods. At the same time, the point is in case of low demand (Scenario 1) the goods should be ordered from suppliers Y and Z; in case of middle demand (scenario 2) – from suppliers X and Y; and in case of high demand (Scenario 3) – from all suppliers X, Y and Z.

Thus, the obtained solutions are not reliable for choosing suppliers, i.e. the values of variables $Y_{j,t}$ are not stable. It is not clear, which of them should be given preference to in case of significant fluctuations of demand in the considered planning period. At the same time, the order quantity for three products in the second period $X_{i,j,2}$ is sufficiently stable. So, by increasing demand, the order quantity of product A remains unchanged, and the order quantity of product C varies from 19 to 20, i.e. by one.

Conclusion

The considered example shows the mathematical model of the stochastic multi-item problem and inventory lot-sizing optimization under changing demand is rather complicated: its optimization does not always lead to a stable solution. But a sustainable solution can be obtained with a rather small shift in the demand, therefore this model can be used to determine the optimal batch size for each vendor, which helps minimize the overall cost of procurement. In our opinion, the research in this area should be continued, in particular, the availability to use simulation modeling to solve the problem should be considered.

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An Economic Analysis of Landfill Gas to Energy Projects in the Island State of Trinidad and Tobago

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Abstract

The topic of Climate Change has become an international issue where anthropogenic greenhouse gas emissions are identified to exacerbate the rate at which the global climate is changing and the rate at which the atmosphere is heating. The greenhouse gas methane is identified to influence climate change in terms of its Global Warming Potential. Landfills globally, regionally and locally emit a relatively large amount of methane into the atmosphere because of improper management. Based on this, this paper, estimates the amount of methane emitted from the three major landfills of Trinidad and Tobago which are the Beetham Landfill, Forres Park Landfill, and Guanapo Landfill using the "*The Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories*" methodology; estimate the potential amount of electricity that can be generated via the implementation of landfill gas to energy projects at each of the landfills; and a cost and benefit analysis using Internal Combustion Engines, Gas Turbines, and Microturbines for each landfill. Estimates revealed that the Beetham, Forres Park, and Guanapo landfills emit significant amounts of methane which can be captured to generate electricity via landfill gas to energy projects. The cost and benefit analysis revealed that for the Beetham and Guanapo landfills, setting up landfill gas to energy projects is feasible but not for the Forres Park landfill and there will be significant reductions in methane and carbon dioxide emissions.

Keywords: Landfill Gas, Renewable Energy, Municipal Solid Waste, Methane

Introduction

Given the current and projected impact that climate change has and could have on countries, climate change has gained attention of almost all the countries in the world and has been put in the front burner of environmental issues as a global issue. Climate change is identified to be caused by global warming which results from emitting anthropogenic greenhouse gases (GHG) into the atmosphere. The Caribbean is expected to be impacted on by increases in atmospheric temperature; increases in incidence of extreme events; increases in sea surface temperature; and decreases in precipitation. One of the main greenhouse gases which contributes to global warming and influences climate change is methane (CH_4), with its major source as landfills that are not properly managed. This research focuses on the context of sustainable waste management and renewable green energy as it relates to the Small Island Developing State (SIDS) such as Trinidad and Tobago. It is recognized that action should be taken to reduce methane emissions from the island because methane has a higher global warming potential of 21 than carbon dioxide of 1, and can also be used as a form of energy. Moreover, in terms of manmade greenhouse gases, methane ranks second and in relation to climate forcing, where it is responsible for more than a third of climate forcing.

Trinidad and Tobago is considered to be a high emitter of GHG in the western hemisphere as a SIDS. The reason for this characterization is due to the fact that Trinidad and Tobago is an energy based economy and 99 percent of electricity on the island is generated from natural gas. According to the "*Second National Communications of Trinidad and Tobago*" (2013), carbon dioxide emissions from the energy sector has increased from 16,806 Gg (Gigagrams) in the year 1990 to 63,455 Gg in 2006. In the industrial processes sector of Trinidad and Tobago, carbon dioxide emissions increased from 5,500 Gg in 1990 to 10,785 Gg in 2008. In the agricultural sector has experienced a decrease in carbon emissions from 19.01 Gg in 1990 to 5.48 in 2005, a decrease in nitrogen oxides from 1.08 Gg in 1990 to 0.31 Gg in 2005, decrease in nitrous oxides from 0.98 Gg in 1990 to 0.83 Gg in 2005, and a decrease in methane emissions from 5.17 Gg in 1990 to 3.57 Gg in 2005. Under the waste sector of Trinidad and Tobago net annual methane emissions from municipal solid waste (MSW) has increased from 15.96 Gg in 1990 to 47.16 Gg in 2008 which is almost three times the estimate of 1990. Focusing on the waste sector of Trinidad and Tobago, especially on MSW which is contained at the three major landfills of the island: the Beetham landfill, the Forres Park landfill and the Guanapo landfill, this paper seeks to determine whether it is it feasible to manage MSW as an economic resource via the use of landfill gas to energy projects for electricity generation in the island state of Trinidad and Tobago. Specifically, the research

determines the quantity of methane emitted from each of these landfills yearly. Once methane estimates are available for each of the landfills, the potential amount of electricity is estimated if the methane emitted is captured and utilized for electricity generation. Finally, a cost and benefit analysis carried out where the cost analysis is used to determine the economic feasibility of implementing landfill gas to energy project at each of the landfill sites using conventional electricity generating technologies. The benefits analysis identifies the major benefits that can accrue if the landfill gas to energy projects is implemented.

Literature Review

Climate Change, "…refers to any change in climate over time, whether due to natural variability or as a result of human activity", (Parry et al. 2007, 871). Anthropogenic GHG emissions are seen as the main driver of climate change. According to Intergovernmental Panel on Climate Change (IPCC), GHGs, "…are those gaseous constituents of the atmosphere, both natural and anthropogenic, that absorb and emit radiation at specific wavelengths within the spectrum of infrared radiation emitted by the Earth's surface, the atmosphere, and clouds", (Parry et al. 2007, 875). The uncontrolled emitting of GHGs causes what is known as the Greenhouse Effect (GHE). The GHE is the heating of the earth's surface. A scientific and complex understanding of this phenomenon according to the IPCC, describes the GHE as where the GHGs absorbs thermal infrared radiation that is radiated by the earth's surface, from the atmosphere itself due to the same gases, and from clouds. The reason for the increases in these GHGs is due to human activities. According to Houghton et al (1995), human activities are the main cause for the changing of the atmospheric concentration and distributions of GHGs and aerosols.

In dealing with Solid Waste Management (SWM), there must be the recognition that the methodologies and actions that will be used to carry out SWM will depend on the country or region in which SWM is needed. Solid waste management is a subset of the environmental problems which exists globally and is also related to other environmental problems such as water pollution, air pollution, and soil contamination which can pose serious health hazards to communities. Solid waste management can be defined as, "…the administration, collection, transportation and treatment of all solid waste", (First Compendium of Environmental Statistics of Trinidad and Tobago 2007, 321). However, according to Joseph (2006) sustainable waste management is the use of different collection and treatment options which include prevention, recycling, energy recovery and environmentally sound land filling of solid waste, involvement of different stakeholders and interaction between the waste system and other systems. Sustainability of waste management is affected by many factors which can fall under the headings of political, socio-economic, and environmental factors, (Agamuthu, et al. 2007).

Methane is generated from open dump sites as well as hygienic landfills which contains organic waste and is produced in landfills in different ways which includes anaerobic methanogenic microorganism, oxidation by aerobic methanotrophic microorganisms in cover soils, lateral migration and internal storage. Methane can be utilized as a source of power when recovered and combusted which will produce carbon dioxide and water. Countries have looked at the feasibility of methane recovery from landfill as a form of sustainable green energy in the form of landfill gas to energy projects. Sustainable green energy can be defined as, "…the energy source, which has zero or minimum environmental impact, as more environmentally benign and more sustainable, and produced from solar, hydro, biomass, wing, geothermal, etc.", (Midilli et al. 2006, 3623). There are many cases where there have been the implementation of landfill gas to energy projects to capture and utilized methane from landfills which has proven to be feasible, (ICLEI 2009; Pierpaoli and Diotallevi 2007; Chiemchaisri, Ayuwat and Putthamilinprateep 2007).

To decide whether to proceed with any project the costs and benefits of the initiative should be identified. Researchers in their quest to determine the economic feasibility of implementing landfill gas to energy projects have recommended and utilized economic costs-benefit analysis to do as such, (Johannessen 1999). In most instances, cost-benefit analysis yielded favorable results where it was identified to the economically feasible to implement a landfill gas to energy project at the landfill under study, (Jaramillo and Matthews 2005; Lee Chong, Matsufuji and Hassan 2005; Yedla and Parikh 2001).

Methodology

Methane Emissions

To estimate the amount of methane emitted from each of the landfills under study the "*The Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories*" methodology was used. The methodology

allows for the estimation of methane emissions from solid waste disposal sites which is based on: the amount of waste deposited in the different categories in solid waste disposal sites; the fraction of degradable organic carbon (DOC) and the amount which actually degrades; and the fraction of methane in landfill gas. The first step in estimating methane emissions from solid waste disposal sites is to estimate the total MSW generated and disposed of in solid waste disposal sites. The quantity of MSW is converted to gigagrams for each of the landfill sites. The second step is to determine the methane correction factors. The default factor of 0.6 is utilized because a methane correction factor for Trinidad and Tobago is not available. The third step is to estimate the methane production rate per unit of waste. In this step the amount of degradeable organic compound at the landfills are estimated using the following equation adapted from "*The Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories*":

$$Percent\ Degradable\ Organic\ Compound = 0.4(A) + 0.17(B) + 0.15(C) \tag{1}$$

where *A* is percentage of municipal solid waste that is paper and textiles; *B* is the percentage of municipal solid waste that is garden waste, park waste or other non-food organic putrescibles; and *C* is the percentage of municipal solid waste that is food waste. It should be noted the original calculations as defined by the Intergovernmental Panel on Climate Change (IPCC) methodology includes estimates for wood and straw, however data pertaining to this type of MSW for the Beetham landfill is not available which may underestimate the degradable organic compound (DOC) being used here. The values of 0.4; 0.17; and 0.15 are default DOC values for major waste streams defined by the IPCC methodology. The values of 0.21 (food); 0.19 (paper), and 0.11 (organics) are adapted from Singh et al. (2009) there they identified that the three landfills contains organic waste in these proportions. Default factors for actual degradable organic content, fraction of carbon released as methane, and carbon to methane conversion ratio of 0.77, 0.5, and 1.33 respectively is used. The final step is to estimate the total net annual methane emissions. In this final step the gross annual methane generation rate, the amount of methane that can be recovered per year, and the net methane generation rate are estimate. The methane oxidization factor is then utilized but is not available for Trinidad and Tobago, therefore a value of 1 used. Then the net annual methane emission is estimated.

Electricity Generation

To estimate the potential amount of electricity that can be generated from captured methane from the landfills under study, the United States Environmental Protection Agency via their Landfill Methane Outreach Program provides conversion factors. It is estimated that 0.778 megawatt (MW) capacity of electricity can be generated from 150 standard cubic feet (scf) per minute of methane from landfill gas. Therefore this conversion factor is applied to the methane emissions estimated. After, the net capacity factor of 85 percent is accounted for which takes into account parasitic losses; the fraction of time the electricity generation system is available for production; and the normal operating load of the system. It is assumed that collection efficiently of methane at the landfill is 95 percent.

Cost and Benefit Analysis

The economic feasibility of implementing the landfill gas to energy projects at each of the landfills under study is done by utilizing the Landfill Gas Energy Cost Model (also known as the LFGcost-Web Model) of the United States Environmental Protection Agency which is used in their Landfill Methane Outreach Program. The LFGcost-Web Model was developed for the Landfill Methane Outreach Program by the United States Environmental Protection Agency to offer a means of an initial economic feasibility in the development of a landfill gas to energy project. The model allows for analysis of 10 various project types which includes a project for electricity generation and includes a host of default inputs which is critical for carrying out the project feasibility analysis over the lifetime period of the project. The landfill gas generation profiles is estimated via this model which is grounded on the characteristics of the landfill under study as well as additional user input data which then produces outputs in various proportion relating to the project type. Most of the country specific data for the use of the LFGcost Web-Model is available, however if data is not available default factors will be used as outlined by the United States Environmental Protection Agency. The output of the model includes but is not limited to the cost of the project such as construction and operation, project finance parameters (where necessary), and economic outputs. The characteristics and input variable of the landfills used in the LFGcost-Web Model are:

- Year landfill opened and year landfill closed or expected to be closed;
- Area of filled with waste for gas extraction;
- Annual average acceptance rate of waste at landfill;
- Electricity generating technology;

- Analysis includes the cost of installing a collection and flaring system;
- Year the landfill gas to energy project will become operational;
- Methane flow rate;
- Annual rainfall;
- Methane content of the landfill gas;
- Efficiency of the landfill gas collection system;
- Whether a loan will be taken for the development of the project or not;
- Discount rate; and
- Price of electricity generation.

The cost analysis of the research uses the LFGcost-Web Model to determine the feasibility of implementing a landfill gas to energy project for electricity generation at each of the landfills. To determine feasibility of the project, the three conventional electricity generating technologies; microturbines, gas turbines and internal combustion engines used in terms of their lifespan which are 10 years, 15 years and 15 years respectively and as well as their cost of implementation.. The internal rate of return, the net present value at year of construction and net present value payback are considered to determine which of these conventional technologies is most feasible to generate electricity at the project site.

In deriving the benefits of the project, the paper estimates the amount of methane mitigated from the implementation of the landfill gas to energy project at the three landfills measured in carbon dioxide equivalents; the amount of carbon dioxide mitigated from the burning of fossil fuels by substituting natural gas for methane, and the amount of electricity that can be generated.

Impact on Health from Landfill Sites

Landfill gas emanating from a landfill is of concern in communities located within close proximity of it. Landfill gases can be carried into communities by surface level winds but can be more prevalent in the early morning period because during this period, surface level winds tend to be calm and the dilution of landfill gas in the atmosphere is at its minimum. Also, landfill gas can migrate via the soil underground which has the potential to enter the homes of persons living nearby, as well as utility corridors. Landfill gases can impact negatively on persons if the landfill itself is producing a level of gas which is harmful, and the gas is migrating to person's home or community. According to the Agency for Toxic Substances and Disease Registry (2001), landfill gas has the ability to travel more than 1,500 feet away from the landfill site. Moreover, a study conducted in 1998 by the New York State Department of Health which look at cancer incidence among persons living close to landfills in New York, United States of America, indicated that from the 38 landfills included in the study, 33 of the landfills showed than landfill gas migrated underground up to 250 feet from the landfill site; for 4 landfills, the landfill gas migrated underground up to 500 feet from the landfill; and for 1 landfill, the landfill gas migrated up to 1,000 feet from the landfill.

Landfill gas may poses explosion hazard but in order for there to be the hazard of explosion the landfill must be producing landfill gas and the gas must contain chemicals which is at a level to generate an explosion; the landfill gas must be able to migrate; and the landfill gas must be contained in a confined space at a level of concentration which has the potential to explode. The landfill gas which has the most potential to explode is methane which must be between the lower explosion limit and upper explosion limit of 5 percent and 15 percent respectfully. These limits are a measure to estimate the percent of a landfill gas contained in the air by volume. There are other landfill gases that are flammable such as hydrogen sulfide, ammonia, and non-methane organic compounds but the probability of explosion from these gases combined or individually are small.

The odors emanating from the landfill has been linked to undesirable health effects relating to nausea and headaches, but when the odor from the landfill is not present or not detectable the health effects fade. Odors coming from a landfill are created by chemical or bacterial processes and can be emitted if the landfill is either open or closed. There is the concern that landfill odors have the potential to cause asthmatic attacks in person who are highly sensitive. Odors coming from landfills may also cause loss of sleep and add to frustration which will ultimately contribute to the level of stress experienced in the family life and the quality of life of the affect persons/households. In the early 1990s, a study was conducted on Fresh Kills Municipal Landfill located in Staten Island, New York, to understand the health risks the landfill poses onto the residents living close to the landfill. The study focused on persons between the ages of 15 to 65 years who suffered from asthma where more than 150 persons where included in the study. The study analyzed the impact that sulfide concentration, odors, and proximity to

the landfill which affected respiratory functions of the persons. The conclusions of the study indicated that days where there are reported odors coming from the landfill, there were an increase in wheezing among persons who are asthmatic living close to the landfill, but the parameters used such as hydrogen sulfide among others were not in high quantities to have a causal effect on health problems of persons.

The main sources of landfill odors are sulfides, ammonia, and non-methane organic compounds. Sulfides from landfill gases can give unpleasant odors which includes hydrogen sulfide dimethyl sulfide, and mercaptans. The type of smell that is given off from these sulfides is of a rotting egg and of the sulfides listed, hydrogen sulfide is emitted at the highest rate as well as concentration. When the odor of hydrogen sulfide reaches a level of 50 parts per billion, it can become very offensive to humans, because humans are exceptionally sensitive to the odor of hydrogen sulfide. In the decomposition of organic waste, another landfill gas which is produced is ammonia. Ammonia occurs naturally in the environment and humans are exposed to it on a daily basis at low levels of concentration. As a result, humans are less sensitive to the odor of ammonia when compared to hydrogen sulfide. It has been recorded than landfill gas contains between 1,000,000 parts per billion to 10,000,000 parts per billion, and the odor threshold for ammonia is between the range 28,000 parts per billion to 50,000 parts per billion. Non-methane organic compounds can also be the cause of odors from landfills such as hydrocarbon and vinyl chloride but these are released from the landfill at very low concentrations and are highly unlikely to pose any form of odor problems to human health.

Application of Landfill Gas to Energy Projects for Electricity Generation

Countries have developed landfill to gas energy projects to aid in the provision of electricity. One example is the Bandeirantes landfill gas to energy project located in the city of São Paulo, Brazil. The purpose of this landfill gas to energy project was in response to environmental issues related to health risks and climate change. The amount of methane emitted from São Paulo in 2004 was estimated to be 950,000 tons. Up to 2007, the Bandeirantes landfill received 7,000 tons of waste daily, and between the period of 1979 and 2007, the landfill received approximately 35 million tons of material. The landfill gas to energy project was developed through the clean development mechanism (CDM) of the Kyoto Protocol. The credits that are earned for the CDM provides the city of São Paulo with revenue to further invest in sustainable development projects. Electricity was started to be generated at the site on January 2004 and had the potential to provide an energy supply to approximately 400,000 inhabitants. The annual generation rate of the Bandeirantes landfill gas to energy project is 170,000 MW per hour, and it has created more than 30 local jobs. For the first crediting period of 2004 to 2010 the amount of GHG emissions reduced was 7.5 million tons CO_2e (Carbon Dioxide Equivalents).

Italy has also utilized landfill gas to energy projects to produce electricity. An electricity generation system which utilizes methane gas was setup in the Cà Asprete landfill which is located in the municipality of Tavullia, Italy in 1998. This plant uses two internal combustion engines in conjunction with two electrical generators which have the capacity to generate 1 MW per hour of power which is expected to operate 7000 hours per year. The plant also has the capability to operate within the minimum biogas lower heat value. The landfill gas is collected via the use of 50 wells that is distributed over 6 embankment lots. This project took approximately 3 years to cover its investment costs from the proceeds. One of the reasons this plant was established was in support of the resolution passed in the early 1990's which supported the Italian national energy plan for the development of renewable energy.

In the country of Thailand, an evaluation was done to determine the landfill gas generation and recovery potential of a dumpsite site located in the Nonthaburi province. The Nonthaburi dumpsite is the largest site in the country, and the amount of solid waste reaching this site per day is estimated to be 843 tons. Moreover, between 2003 and 2006 the amount of waste collected at this dumpsite was estimated to be 1.2 million tons. A major component of waste coming into the dumpsite is food garbage followed in smaller quantities plastics and paper. The environmental impacts of this dumpsite affects nearby residence in the form of leachate and odor problems. The model used to estimated methane emissions from the site is the Landfill Gas Emission Model which is based on first order decay reaction and calculations was based on the composition of landfill gas is made up of 50 percent methane and 50 percent carbon dioxide. The project lifetime was expected to be 15 years, and from calculations the amount of methane emitted from the site would peak at 10.73 x 106 m^3 (meters cubed) at the 5th year and decline at a rate of 8.0 x 106 m^3 per year until the 15th year. Two systems were proposed to utilize landfill gas to generate electricity where the first is to use a large imported engine with capacity of 435 kilowatts (kW) and a local engine with capacity of 100 kW that could generate 1.07 MW per hour of electricity and which could generate electricity for 10 years; and the second system proposed to use

landfill gas at a rate of 7.23 x 106 m³ which would generate electricity at a maximum rate of 1.1 MW per hour using 11 100 kW per hour engines.

Technology Review of Landfill Gas to Energy Projects

In developing the project, the construction and implementation of a Landfill Gas Collection System to capture landfill gas which will be the feedstock of the electricity generating plant to produce electricity is necessary. This will include advance technological applications such as:

- Landfill cells that are coated with an impermeable high-density polyethylene membrane;
- A wastewater treatment plant where water residue is channeled and treated;
- Use of vertical wells to extract landfill gas;
- The use of optimal well spacing to maximize the collection of landfill gas while concurrently keeping costs at a minimum;
- Designing landfill gas headers as a looping system which will allow for the partial or full loss of header function in one direction but the landfill gas system functionality will not be lost; and
- Incorporation of condensate extraction and storage systems which will be placed at strategic points along the gas system.

Not all the landfill gas generated by the landfill will be collected by the collection system. According to the United States Environmental Protection Agency (1997), the collection efficiency of landfill gas collection systems can range from 60 percent to 85 percent. There is the recommendation to use a value of 75 percent collection efficiency as these systems should be designed in such as manner for the collection of at least 75 percent of the landfill gas emitted, (United States Environmental Protection Agency 1997, Ministry of the Environment 2010). However, Huitric et al. (2007) recorded gas collection efficiency of more than 99 percent and outlined a gas collection efficiency of 75 percent as too conservative. Based on the soil cover of the landfill, the collection efficiency of the gas collection system can be determined; for a landfill or parts of the landfill which is covered by daily soil cover and is complemented with a landfill gas collection system, the collection efficiency ranges from 50 percent to 70 percent with a default value of 60 percent; for a landfill or parts of the landfill which is covered with intermediate soil cover and is complemented with a landfill gas collection system the landfill gas collection efficiency ranges from 54 percent to 95 percent with a default value of 75 percent; and for a landfill which has final soil cover or geomembrane cover system, the landfill gas collection efficiency ranges from 90 percent to 99 percent with a default value of 95 percent, (SCS Engineers 2008, Sullivan et al. 2010). Therefore, taking these levels of collection efficiencies into consideration, a level of 95 percent is used in this study in order to account for loss of gas, but to ensure that the collection system is efficient and effective.

In the production of electricity from the utilization of landfill gas, the electricity generating technologies conventionally used are microturbines that can range from 30 kilowatts to 250 kilowatts; internal combustion engines that can range from 100 kilowatts to 3 megawatts; and gas turbines that can range from 800 kilowatts to 10.5 megawatts.

Results and Discussion

Cost Analysis

Utilizing the "*The Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories*" methodology, the amount of methane emissions being generated at each of the landfills was estimated, after which the amount of electricity that can be generated from the capture and utilization of methane emitted was estimated. Following this, the costs of implementing a landfill gas at each of the landfill site was estimated in terms of the electricity generating technology being used. Finally, the benefits of implementing such projects at the different landfill sites were estimated and identified.

Beetham Landfill

Carrying out the necessary estimation and analysis for the Beetham landfill, it was estimated that the sites emits 3.1554 Gg of methane annually. This figure of 3.1554 Gg is converted to tons to arrive at 3,155.4 tons per year. Applying the conversion ratio of 1 ton of methane = 47,281 scf of methane, the amount of methane emitted is 149,190,467.4 scf of methane per year. To estimate the amount of electricity that can be generated from the capture and utilization of the methane emitted, the assumption of a collection efficiency of 95 percent was applied to arrive at a figure of is 141,730,944.03 scf per year

or 273.401 scf per minute. Given the amount of methane emitted per minute at the Beetham landfill site, the amount of electricity that can be generated from the capture and utilization of the methane emissions is 1.418 megawatts of electricity per minute. When the net capacity factor was applied to take into account variables such as parasitic losses among others, the amount electricity that can be generated for distribution is 1.205 MW per minute.

Table 1. Beetham Landfill Cost Output

	Internal Combustion Engines (Standard Reciprocating Engine-Generator Set, 15 year lifespan)	Gas Turbines (Small Engine-Generator Set, 15 year lifespan)	Microturbines (Microturbine-Generator Set, 10 year lifespan)
Total installed capital cost for year of construction (US$)	Total Cost - $5,049,802	Total Cost - $3,264,815	Total Cost - $3,854,893
	Gas Collection and Flare - $2,058,300	Gas Collection and Flare - $2,058,300	Gas Collection and Flare - $2,058,300
	Gas Compression/Treatment, Engine/Generator, Site Work, and Housings - $2,718,100	Gas Compression/Treatment, Engine/Generator, Site Work, Housings, and Electrical Interconnect Equipment - $1,206,500	Gas Compression/Treatment, Microturbine/Generator, Site Work, Housings, and Electrical Interconnect Equipment - $1,796,600
	Electrical Interconnect Equipment - $273,400		
Annual costs for initial year of operation (US$) (O&M)	$617,245	$413,321	$383,301
Internal rate of return (%)	Negative	Negative	22%
Net present value at year of construction (US$)	($323,909)	($1,856,913)	$205,988
Net present value payback* (years after operation begins)	None	None	6

Table 1 gives the costs for implementing a landfill gas to energy project at the Beetham landfill site. Analyzing the internal rate of return, net present value at year of construction and net present value payback, the most economically feasible electricity generating technology should be used at the site are microturbines which have a lifespan of 10 years. The internal rate of return, net present value at year of construction and net present value payback of microturbines are 22 percent, US $205,988 and 6 year respectively. Internal combustion engines and gas turbines have negative internal rate of return and net present value at year of construction and no return on investment. As a result, at the Beetham landfill site should implement a landfill gas to energy project for electricity generation which utilizes microturbines base on this analysis.

Forres Park Landfill

The Forres Park landfill was estimated to be emitting 1.84012 Gg of methane per year. Converting this quantity of methane to tons and then standard cubic feet gives 1,840.12 tons per year and 87,002,713.72 scf per year respectfully. Assuming 95 percent collection efficiency, the amount of methane that can be collected is 82,652,578.034 scf per year or 159.438 scf per minute. Estimates show that 159.438 scf per minute of methane can produce up to 0.83 megawatts of electricity per minute and taking into account the net capacity factor of the landfill gas to energy system, the actual amount of electricity that will be available for distribution is 0.7055 MW per minute.

Table 2. Forres Park Landfill Cost Output

	Internal Combustion Engines (Standard Reciprocating Engine-Generator Set, 15 year lifespan)	Gas Turbines (Small Engine-Generator Set, 15 year lifespan)	Microturbines (Microturbine-Generator Set, 10 year lifespan)
Total installed capital cost for year of construction (US$)	Total Cost - $$3,150,420	Total Cost - $3,502,243	Total Cost - $2,577,428
	Gas Collection and Flare - $1,291,900	Gas Collection and Flare - $1,291,900	Gas Collection and Flare - $1,291,900
	Gas Compression/Treatment, Engine/Generator, Site Work, and Housings - $1,585,100	Gas Compression/Treatment, Engine/Generator, Site Work, Housings - $1,936,900	Gas Compression/Treatment, Microturbine/Generator, Site Work, Housings, and Electrical Interconnect Equipment - $1,285,500
	Electrical Interconnect Equipment - $273,400	Electrical Interconnect Equipment - $273,400	
Annual costs for initial year of operation (US$) (O&M)	$369,452	$298,239	$273,453
Internal rate of return (%)	Negative	Negative	Negative
Net present value at year of construction (US$)	($264,081)	($178,948)	($186,364)
Net present value payback* (years after operation begins)	None	None	None

Table 2 gives a breakdown of the costs of implementing a landfill gas to energy project at the site. Analyzing the output, it is found that among the convention electricity generating technologies – internal combustion engines, gas turbine, and micro turbines - none of the technologies are economically feasible. All of the three technologies have negative internal rate of return and net present value at year of construction. Also, there is no return on investment from any of the three technologies over their respective lifespan. Therefore, implementing a landfill gas to energy project at the Forres Park landfill will not be economically feasible.

Guanapo Landfill

For the Guanapo landfill, it was estimated that the site emits 0.9685 gigagrams of methane per year which gives the 968.5 tons of methane per year or 45,791,648.5 scf of methane per year. Accounting for 95 percent collection efficient of methane, the quantity available for utilization is 43,502,066.075 scf per year or 83.916 scf per minute. The capture and utilization of methane at a rate of generation of 83.916 scf per minute can produce 0.435 MW of electricity per minute. This quantity subjected to the net capacity factor gives an estimate of 0.37 MW per minute available for distribution.

Table 3. Guanapo Landfill Cost Output

	Internal Combustion Engines (Standard Reciprocating Engine-Generator Set, 15 year lifespan)	Gas Turbines (Small Engine-Generator Set, 15 year lifespan)	Microturbines (Microturbine-Generator Set, 10 year lifespan)
Total installed capital cost for year of construction (US$)	Total Cost - $1,615,012	Total Cost - $1,817,443	Total Cost - $1,370,420
	Gas Collection and Flare - $507,300	Gas Collection and Flare - $507,300	Gas Collection and Flare - $507,300
	Gas Compression/Treatment, Engine/Generator, Site Work, and Housings - $834,300	Gas Compression/Treatment, Engine/Generator, Site Work, Housings - $1,036,700	Gas Compression/Treatment, Microturbine/Generator, Site Work, Housings, and Electrical Interconnect Equipment - $863,100
	Electrical Interconnect Equipment - $273,400	Electrical Interconnect Equipment - $273,400	
Annual costs for initial year of operation (US$) (O&M)	$167,822	$130,341	$142,620
Internal rate of return (%)	Very High	Very High	Negative
Net present value at year of construction (US$)	$75,149	$119,957	($88,276)
Net present value payback* (years after operation begins)	1	1	None

Analyzing the output in table 3 for the Guanapo landfill, the results show that both internal combustion engines and gas turbines are economically feasible to be utilized for electricity generation at the Guanapo landfill site. The internal rate of return, net present value at year of construction and net present value payback for internal combustion engines is very high, US $75,149 and 1 year. For gas turbines, the internal rate of return, net present value at year of construction and net present value payback for internal combustion engines is very high, US $119,957 and 1 year. There will be no return on investment if microturbines are used. Therefore, looking at the net present value of year of construction show that gas turbines have the higher value meaning the return on investment will be higher taking into consideration costs and revenues and as a result, the project should use gas turbines to generate electricity at the site.

Benefit Analysis

The implementation of landfill gas to energy projects at the three landfill sites in Trinidad and Tobago will yield some level of benefits to the island. The major benefit will be the reduction of GHG emissions in the form of methane emissions. It is assumed that the landfill gas to energy projects will capture 95 percent of the methane being emitted at each of the landfills and combusted at high efficiency (burnt completely) to produce electricity. Therefore, these projects will mitigate GHG in the form of methane from entering the atmosphere. The global warming potential of methane is 21 times the global warning potential of carbon dioxide. This means that 1 ton of methane will cause the same amount of global warming as 21 tons of carbon dioxide. Therefore, the amount of methane that will be mitigated from each of the landfills in terms of carbon dioxide equivalents are 62,950.23 tons CO_2e per year at the Beetham landfill; 36,710.394 tons CO_2e per year at the Forres Park landfill and 19,321.575 tons CO_2e per year at the Guanapo landfill. Together, the three landfill gas to energy project will mitigate a total of 118,982.199 tons CO_2e per year.

Given this amount of carbon dioxide equivalent being mitigated via the use of landfill gas to energy projects if implemented at the three major landfills on the island, there will also be the mitigation of carbon dioxide from the using methane as the fuel source to generate electricity instead of fossil fuels. According to the United States Environmental Protection Agency (2011), the commencing of a 3 megawatt landfill gas to energy project for electricity generation can have an approximate displacement of 16,000 tons of carbon dioxide from fossil fuels a year. If a landfill gas to energy project is implemented at the Beetham landfill site, the potential amount of electricity that can be generated is 72.3 MW per

hour. For the Forres Park landfill, a landfill gas to energy project if implemented at the site can generate 42.33 MW per hour of electricity and at Guanapo landfill; a similar renewable energy project can generate 22.185 MW per hour of electricity. Therefore the amount of carbon dioxide that can be displaced by utilizing methane from the Beetham landfill, Forres Park landfill, and the Guanapo landfill are 385,599.759 tons CO_2 per year; 231,093.189 tons CO_2 per year; and 118,319.926 tons CO_2 per year respectively. The total amount of carbon dioxide being mitigated from combusting fossil fuels to generate electricity by using methane as the fuel source for the projects is 735,012.874 tons CO_2 per year.

Benefits will also accrue to the communities located close to the landfill sites such as the Beetham Community, the Springvale Community and the Guanapo Community which is located close to the Beetham landfill, the Forres Park landfill and the Guanapo landfill respectively. The main benefit to these communities will be the provision of electricity from a renewable source that can prove to be sustainable. Moreover, there will be employment opportunities for residences in the communities in the construction phase of the landfill gas to energy project as well as the creation of permanent jobs at the project sites when completed. The landfill gas to energy projects can induce companies to set up production activities close to the landfill gas project due to availability of electricity from a renewable energy source which will boost their image in terms of supporting renewable energy and being environmentally friendly, and provide employment for the surrounding communities. There will be the direct reductions in unpleasant odors and improvement of air quality in the communities. Indirectly, this reduction in air impurities will lead to reduction in health related expenses relating to respiratory problems caused by emissions and other air impurities of the landfills. The communities will be beacons of innovation for renewable energy projects in the country and the region, and the images of these communities will be enhanced positively.

Conclusion

Trinidad and Tobago as a relatively high emitter of GHG as a SIDS on the western hemisphere of the globe which can reduce methane emissions from landfill sites via landfill gas to energy projects for electricity generation. Countries have implemented these sorts of projects and have shown that these projects are feasible and can reduce greenhouse gases. In the case of Trinidad and Tobago, its it shown for the Beetham landfill site, implementing a landfill gas to energy project which utilizes microturbines will be economically feasible; implementing a similar project at the Forres Park landfill site will not be economically feasible no matter the type of electricity generating technology used; for the Guanapo landfill site, implementing a project which uses gas turbines will be most economically feasible. There are many benefits that can accrue if the projects are implemented for which the main benefit is the reduction of methane emissions from the landfill sites. Also, there will be the reduction of carbon dioxide emissions due to the substitution of methane as the fuel source for electricity generation instead of natural gas. Environmental and community benefits will also be derived from the projects. These projects provide a solution for sustainable green energy and sustainable waste management for the island of Trinidad and Tobago.

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A Proposal of Architecture for a Social Media Platform for Promoting Events

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Abstract

Some organizations organizes events. The success of the event are important for the advertising of organizations and the environment of the organization. Information Technologies (IT) play an important role in the promotion of events. Most of the events are promoted through a set of software applications. Some authors realized studies where explain which is the best social media platform for promoting a specific event. In this paper we analyse a set of social media platforms for promoting events and we propose an architecture for this kind of platforms. The architecture proposed is adaptable to the different types of platforms and can be used as framework for the developing of new platforms or new services/functionalities in the existing platforms.

Keywords: Social Media Platform; Information System Architecture; Events;

Introduction

Some organizations organizes events to promote their products and services or for the socializing of their employees, clients or suppliers. Nowadays most of the hard flyers were substituted by emails, Facebook, Newsletters or other types of IT resources.

In the IT domain there are a set of software solutions for promoting events. The simplest tool is the email. Other type of tool is the Newsletter (email or a Webpage). The social networks platforms, as for instance Facebook, have functionalities for promoting events. According Smith, (Smith, 2014), 31% of men and women use Facebook for keeping up with news and current events.

Besides the social networks platforms, there are specific software tools for promoting events. These kind of tools were developed for this specific purpose. Most of these software tools have some weaknesses.

In this paper we present an architecture that can be used as framework for developing software tools for promoting events.

In section 2 we do a description of several software tools for promoting events. The section 3 presents the architecture that we consider a framework for the software tools for promoting events. We conclude the paper with a conclusion section.

Software Tools for Promoting Events

As previously said, there are several software tools that can be used for promoting events. Wang, (Wang, 2013), describes five softwares. Although, besides these tools, there are other software tools. In these section we do a brief description of each software tool and in the final it is done a comparison between all the software tools.

The Active tool, (Active, 2013), has a free version and a paid version. The Active tool is available through an internet application. In this tool it is possible to create a Web page for promoting the event and send mail with promotion information.

The eEvent tool, (eEvent, 2013), is a Web software tool. This software tool has two versions: one is paid and the other is free. In this software tool we can configure and users and create events. An event can be managed by more than on user. We analysed the free version of these software tool and we concluded that this version does not integrate data with social networks tools.

The Eventbrite, (Eventbrite, 2014), is other web application tool that can be used for promoting events. Regarding to the two previous described tools, the Eventbrite tool is more complete. This tools enables the integration with Facebook and it enables the selling of tickets.

Another software tool available is called Eventida, (Eventida, 2014). This tool does not create a specific Web page for each event.

O Eventioz, (Eventioz, 2014), is software tool for managing events. The main functionalities of this tool are: sending of invites through emails, website and ticket sales.

Table 1 - Software tools comparison

	Web Tool	Social Networks	Creates a Webpage	Email	Mobile Application
Active tool, (Active, 2013)	Yes	Yes	Yes	Yes	Information not available
eEvent tool, (eEvent, 2013)	Yes	No	Yes	Yes	Information not available
Eventida, (Eventida, 2014)	Yes	Yes	No	Yes	Information not available
Eventbrite, (Eventbrite, 2014),	Yes	Yes	Yes	Yes	Information not available
Eventioz, (Eventioz, 2014)	Yes	Yes	Yes	Yes	No

Besides the tools above described, there are other tools can be useful for promoting events. These tools are not directly related with the promotion of events but can help in this task giving benchmarks about the success of the promotion process or managing the information in social networks. In this type task, it can used the following software tools:

- Google Analytics, (Google, n.d.-b) ;

- Google Alerts, (Google, n.d.-a);

- Google Blogsearch, (Google, n.d.-c);

- Facebook Insights, (Facebook, 2014);

- Youtube Insights, (Youtube, 2014);

- Flickr Analytics, (Flickr, n.d.);

- HootSuite, (HootSuite, 2014);

- PostRank Analytics, (PostRank, 2014);

- Scup, (Scup, 2014);

- Vitrue, (Oracle, n.d.);

- Twitter Grader, (Marketing Grader, 2014);

- RetweetRank, (Retweet Rank, 2014).

The Architecture for a Social Media Platform for Promoting Events

Analysed the set of software, it can be concluded that there are a set of blocks/functionalities that are mandatory in template of the architecture that we propose. This architecture is now described regarding to the principles defined by the recommendation 1471 of IEEE, (IEEE, 2000).

Regarding the context of the promotion of events, namely the end users and the types of organizations that will use this type of software tools, it is possible to conclude that:

- The software tool must be an web application;

- The software tool and the social networks must communicate;

- The software tool and the mobile devices must communicate.

The architecture must comprise three mandatory modules: a Web module, a Social Network interface module and a mobile device interface module. Beside these three modules we propose an Administration module, an Users management module, a Communication module and an Event Management module. All the modules must be supported by a database of data and knowledge. The structure of the architecture is shown in figure 1.
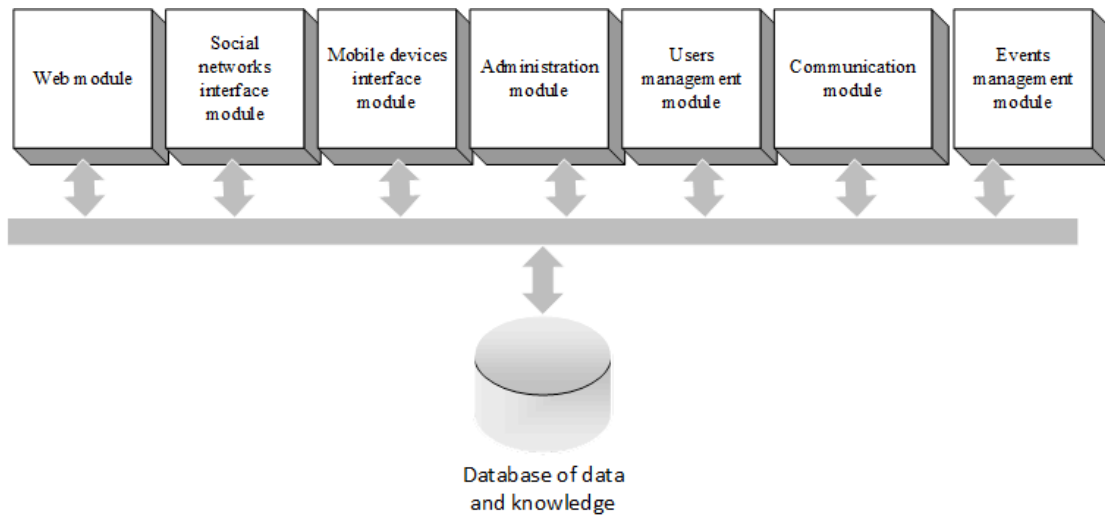
Figure 1 - The Architecture for architecture for a social media platform for promoting events

The major objective of the Web module is provide resources for hosting the web pages for promoting events. For that purpose the system must store a set of templates of web pages and must be designed in a way that a user easily define a web page for promoting events. The main aim of this module and its sub-aims are shown in figure 2.
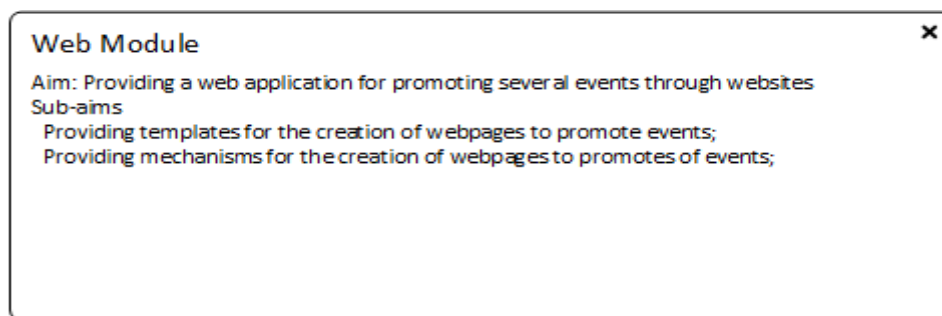
Figure 2 – Aims of the Web Module

The aim of Social Network interface module is to provide interface mechanism for the integration of data related with the promotion of events into social networks. This integration is done through web services that provide data in XML format. For that purpose it were written global and local ontologies (Jurisica, Mylopoulos, & Yu, 2004), (Mika, Iosif, Sure, & Akkermans, 2004). In figure 3 it is shown the aims of the Social Network interface module.
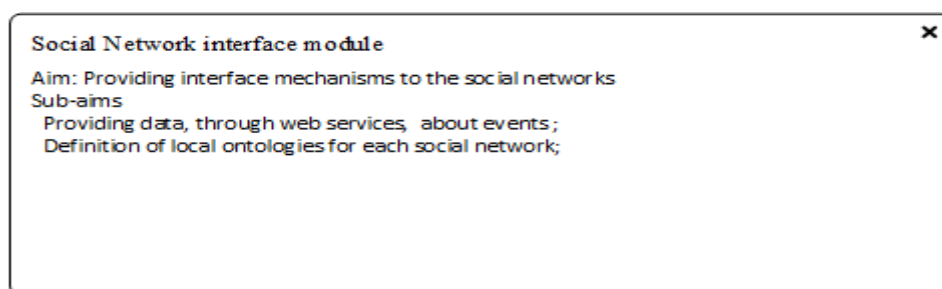
Figure 3 – Aims of the Social Network Interface Module

The Mobile Device Interface Module has as main aim providing an interface for the integration of the data in mobile applications. The interface is done also through a Web service that provides data in XML format. The configuration of the data format is also done through a global ontology and several local ontologies.

In the Administration module it can be done all tasks related to the main administration of the software tool. It can be managed in this module the users permissions (high level task), the web pages templates and the types of services provided by the software tool.

It is in the Users management module that new users are created. It this module that it is managed task related to the assignment of users to groups.

In Communication module are implemented tasks related with the sending of SMS and mails.

It is through the Event Management module that are defined the new events and the data related with it. In the definition of a new event it is defined: name, location, email, photos and other types of data related to the event.

The *Database of Data and Knowledge* provides resources for storing data and knowledge. For instance, this element stores data about events and users. The knowledge part is related with local and global ontologies. As previously mentioned, the two modules that do interface with external elements provides this interface through the use of ontologies.

All the structure of the architecture is already implemented in ASPX technology and SQLServer database management system. It is in development process a mobile application for Android devices.

Conclusions

In this paper we present a Proposal of architecture for a social media platform for promoting events. This architecture was developed based in the analysis of some software tools that are already implemented for promoting events.

All the structure is already implemented through of Microsoft technologies ASPX and SQLServer. Now it is being developed a mobile application for Android devices.

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Acknowledgements

Learned Helplessness and Demographic Factors Influence Teachers' Perception of Glass Ceiling Syndrome

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Abstract

This study has empirically investigated the influences of learned helplessness and selected socio-demographic variables on teachers' perception of glass ceiling syndromes propensity. A pilot study was conducted with the teachers working in college in city of Antalya/Turkey for the purpose of identifying the significant predicators. The results from the binary logistic regression analysis reveal that child possession and learned helplessness are the main factors affecting teachers' perception of the glass ceiling syndrome in their working environment. This shows that in order to understand teachers' perception of the glass ceiling syndrome, one should take into account not only socio-demographic, but also psychological factors such as learned helplessness.

Keywords: Glass Ceiling Syndrome, Learned Helplessness, Women Teachers

Introduction

While the average stay of women's labor force participation rate is 61.8% in OECD countries, this ratio is only 28.8%.in Turkey. According to Turkish Statistic Institution, the non-institutional female population in Turkey is around 37.2 million as of October 2012. Moreover, the numbers of women aged over 15 years were determined as 27.9 million. In parallel with these ratios, number of women working is only 7.6 million (Aşık, 2013,s.1). According to World Bank classifications, Turkey with the lowest women labor force participation rate was in the same group of developing countries in Europe and Central Asia (Can and Özer, 2012). Women have been trying to get out of the traditional line in every sphere of life in this country. Nevertheless, women cannot be adequately represented especially in leadership positions in every sector.

The teaching profession is considered to be a woman profession in Turkey. Although the number of female teachers is greater than the number of male teachers, it is known to be a cliff between the number of women and man managers. Women are disappointed when they cannot get promoted to managerial positions, As a result, women have to give up efforts towards career progression and leave their jobs. It is pretty hard to overcome barriers which is called glass ceiling for women. Therefore number of women who can access to top management is very limited. Large majority of the remaining working women give up their efforts to promote. In other words, women will feel helpless and suffer from learned helplessness syndrome because they believe they will never be successful. This study aims to empirically investigate the influences of learned helplessness and selected socio-demographic variables on teachers' perception of glass ceiling syndromes.

A glass ceiling is a political term used to describe "the unseen, yet unbreakable barrier that keeps minorities and women from rising to the upper rungs of the corporate ladder, regardless of their qualifications or achievements. The glass ceiling metaphor has often been used to describe invisible barriers ("glass") through which women can see elite positions but cannot reach them ("ceiling"). These barriers prevent large numbers of women and ethnic minorities from obtaining and securing the most powerful, prestigious, and highest-grossing jobs in the workforce (US Federal Glass Ceiling Commission Report, 1995).

It can be noted that the proportion of women in lower and midlevel management positions has increased dramatically, while the proportion of women reaching top management positions or climbing up the corporate ladder has remained relatively small. According to Meyerson and Fletcher (2000), despite the increased numbers of women both participating in the workforce and achieving management positions, the 'glass ceiling' still exists. Women are denied only because they are women (Şimşek et al., 2007). In

summary, all these ideas show that glass ceiling is visible and invisible obstacle which separates the professional and organizational hierarchical level for women.

Seligman (1976) introduced the Learned Helplessness Theory following many years of animal and human experimentation. According to this theory, learned helplessness occurs initially when an individual perceives a situation as an unfavorable stress or challenge. The individual therefore identifies potential actions to manipulate the situation to make it less challenging, less stressful, and/or more favorable. According to the Learned Helplessness Theory, an individual moves from situational perception to learning behaviors and outcomes are independent of one another as surrounding situations are unable to be influenced by personal actions.

This theory may influence female teachers' perception of glass ceiling syndromes. According to this theory, if a person is prevented from behaving freely, they may then become more determined to behave in the way in which they want. However, if they are repeatedly prevented from doing so, they may perceive the desired behavior to be beyond their control. As a result, they may either give up and/or lose confidence in trying to achieve it, and consequently experience helplessness, even if circumstances change, enabling them to subsequently behave in the manner to which they desired in the first place. In such cases, the individual has learned to behave helplessly irrespective of whether the opportunity is restored to help themselves, by avoiding unpleasant or harmful circumstances to which they have been subjected. Learned helplessness may arise in everyday situations in which female teacher feel or actually have no control over what happens to themselves regarding of perception of glass ceiling syndrome.

Repeated unsuccessful experiences in the past will affect the performance of employees and this situation may lead to learned helplessness (Kümbül-Güler, 2012, s.500). From the perspective of psychology, there may be serious consequences of learned helplessness such as alienation, abandonment of job dissatisfaction, burnout and absenteeism (Tayfur, 2012). Qutaiba (2011) revealed that there is correlation between learned helplessness and loyalty of teachers in schools.

Aim and Method of the Study

This study aims to empirically investigate the influences of learned helplessness and selected socio-demographic variables on teachers' perception of glass ceiling syndromes. A pilot study was conducted with the teachers working in college in city of Antalya/Turkey. To collect data for this pilot study, a questionnaire was conducted to research group was chosen by convenience sampling method. A self administered questionnaire was distributed to teachers. The purpose of the survey was explained to the participants and only volunteers were recruited for the study. The data collection was conducted from June to May in 2014. 83 questionnaires were obtained after eliminating incomplete questionnaires.

The survey instrument contains two sections. First section includes demographic questions and a binary categorical scale is pertinent to teachers' perception of glass ceiling syndrome. Section 2 deals with the measurement of teachers' perception of learned helpless with 11 items. Five point Likert scale anchored by "strongly disagree (=1) to "strongly agree (5=) was used in the scale. The data analysis was carried out in three main stages. First, descriptive statistics analyzed the profile of respondents. Second, a principal factor analysis with a varimax rotation method is conducted on learned helpless scale for data reduction purposes. Third, a binary logistic regression is employed to investigate the predict utility of selected demographic variables and learned helplessness on teacher's perception of glass ceiling syndrome. This study specifies teachers' perception of glass ceiling syndrome (0 = no, 1 = yes) as the dependent variable for the logistic regression, while teachers' perception of learned helplessness and demographic variables are the independent variables.

The underlying dimensions of the 11 learned helplessness items were assessed using principal component analysis (PCA). A varimax rotation was followed. Principal component analysis is a standard statistical procedure that identifies a hidden structure in a set of variables. It is appropriate for large numbers of items and large sample. A check on the adequacy of the sample size was made using the Keiser-Meyer-Olkin (KMO) measurement of sampling adequacy. In this study the value was 0.84, indicating a very satisfactory sample size. When Eigen values greater than 1 were considered, the procedure produced 2 factors. Eigen values are a measure of the coherence of the factor and depend on the number of items loading or defining the underlying dimension of interest.

Usually when eigen values are 1 or more, the underlying dimension in the data is considered to represent a strand of meaning worthy of further consideration. Only items where the factor loadings were above 0.40 were used to explain the factor (Nunnally, 1978). The percentage of variance explained by this solution was 63,4%. Cronbach's coefficient alpha was used to measure the internal consistency among

the items. Hair, et al.(1999) report that this is the most generally used reliability measure to estimate the degree to which the items on a measure are representative of the domain of the construct being measured. The criteria of 0.70 for the coefficient alpha is usually considered reliable. Both two factors resulted in a Cronbach's coefficient alpha score above 0.70, which indicates strong consistency among the items in each factor. The results are shown in Table 1.

Table 1. Factor Analysis of learned helplessness

Factors	Items	Factor loadings
Learned helplessness (38,5)a (**α**=,93)b	No matter how much energy I put into a task, I feel I have no control over the outcome.	,903
	I do not try a new task if I have failed similar tasks in the past.	,922
	No matter how hard I try, things never seem to work out the way I want them to.	,871
	I don't place myself in situations in which I cannot.	,896
	I do not try a new task if I have failed similar tasks in the past.	,828
	I am unable to reach my goals in life.	,785
Learned inability (24,9)a (**α**=,93)b	I do not have the ability to solve most of life's problems.	,727
	I feel that my own inability to solve problems is the cause of my failures.	,739
	I feel that my success reflects chance, not my ability.	,623
	My behavior does not seem to influence the success of a work group.	,695
	I cannot find solutions to difficult problems.	,614
	I am unsuccessful at most tasks I try.	,761

Kaiser-Meyer-Olkin measure of sampling adequacy: 0.84

67.9% of variance explained; motive items with factor loading <0.40 is discarded

a = Variance explained, b = Cronbach's alpha reliability coefficient

Results

Table 2 shows the demographic profile of respondents. Among the 83 usable questionnaires, the dominant majority are married. In all, 90% hold a undergraduate degree, slightly over half of the respondents have not child.

Table 2. Respondents' profile (N=83)

Demographic variables	Frequency	Percentage	
Age 20-29	10	12.0	
30-39	35	42.2	
40-49	18	21.7	
49-older	20	24.1	
Education			
Undergraduate	75	90.0	
Graduate	8	10.0	
Marital Status			
Single	23	72.0	
Couple	60	28.0	
Child Possession			
Yes	38	45.7	
No	45	54.3	

Logistic regression analysis

A logistic regression is a suitable technique to predict the likelihood of an event to occur and uses a dichotomous dependent variable. Likewise, it can accommodate independent variables that are measured on either a continuous or categorical scale. In this study, perceived glass ceiling syndrome is expressed as a discrete variable Y with a value 1 if the respondent is likely to perceive glass ceiling syndrome, and a 0 if not - that is:

$Y_i^* = \alpha' Z + \beta i$,

Where Y_i^* is an unobservable variable reflecting the likelihood of perceived glass ceiling syndrome. The observed counterpart of Y_i^* is Y_i with an observed value.

$Y= 0 \qquad Y_i^* \leq 0,$

$Y= 1 \qquad Y_i^* \geq 0,$

Among the 83 usable questionnaires, 38 teachers reported that they perceived glass ceiling syndrome (i.e. Y = 1), while 45 teachers did not perceive glass ceiling syndrome. Selected demographic variables (marital status, child possession) and two factors of perceived learned helplessness are specified as the dependent variables. The factors of perceived learned helplessness are continuous measures while the demographic variables are discrete measures. For simplicity purposes, the demographics were converted to dichotomous measures (as shown in Table 3) before the logistic regression analysis.

Table 3. Definitions of dichotomous demographic variables.

Variables	Dichotomous value
Marital status	**couple = 1** **single = 0**
Child possession	*Yes = 1* *No= 0*

Table 4 reports the results of the logistic regression. To assess the model's goodness of fit, the chi-square value and the Hosmer and Lemeshow goodness-of-fit index are computed. As shown in Table 4, the model chi-square is significant (i.e. $\chi 2 = 48.426$, d.f .= 2, $p = 0.000$), indicating that the classification of teachers into perceived glass ceiling syndromes and did not perceived could be predicted from the study's independent variables. In addition, the Hosmer and Lemeshow goodness-of-fit index is 20.005 (d.f. = 8, $p = 0.010$), meaning that the model fits quite well.

The second column of Table 4 shows the logit estimates of the parameter β for all independent variables. The fifth column shows the significant p-value for these sample statistics. Two learned helplessness factor - namely, learned inability and learned helplessness- are significant at p < .05. Here, the βs of learned inability (1.990) and learned helplessness (1.824) are positive. This implies that the more learned helplessness that teachers perceive; the more likely they perceive glass ceiling syndromes. The odds ratios of both learned inability and learned helplessness are greater than 1, revealing that they predict which type of respondent is more likely to perceive glass ceiling syndromes. Regarding the demographic variables, only child possession is significant at p< .01. The β (3.706) of this variable is positive and its odds ratio is greater than 1. The odds of propensity to perceive glass ceiling syndromes, if the respondent has child.

Table 4. Result of binary logistic regression (Dependent variable: glass ceiling syndromes, n = 83).

Variables (1)	β(2)	SE (3)	WALD (4)	Sig. (5)	Exp(β) (6)
Learned inability	1.990*	0.957	4.320	0.038	7.316
Learned Helplessness	1.824*	0.739	6.098	0.014	6.196
Child possession	3.706**	0.907	16.692	0.000	10.698
Marital status	-,010	0.943	0.000	0.992	0.990
Constant	-17.584	4.822	13.300	0.000	0.000
Log-Likelihood = -66.045 Goodness-of-fit Chi-Square : 48.426 (DF = 2, p-value = 0.000) Hosmer-Lemeshow: 20.005 (d.f.= 8, p = 0.010)					
Notes: (a). 1, marital status (couple) = 1, child possession (possess) = 1 (b). **: p < 0.01, *: p < 0.05.					

Conclusion

This study has empirically investigated the influences of learned helplessness and selected socio-demographic variables on teachers' perception of glass ceiling syndromes propensity. A pilot study was conducted with the teachers working in college in city of Antalya/Turkey for the purpose of identifying the significant predicators.

The results from the binary logistic regression analysis reveal that child possession and learned helplessness are the main factors affecting teachers' perception of the glass ceiling syndrome in their working environment. This shows that in order to understand teachers' perception of the glass ceiling

syndrome, one should take into account not only socio-demographic, but also psychological factors such as learned helplessness.

George (2005) emphasized that having children brings a lot of responsibilities to a family life. This may be the reason why many women decide to leave their careers prematurely so as to raise their children sufficiently. For this reason, employers occasionally hesitate to promote women because they are afraid that women will choose their families first. Family responsibility refers to instrumental activities relating to child upbringing, providing goods and support services for the family. Family responsibilities had played a major role in whether or not the women had accepted the jobs.

The findings herein are also limited to the location scope in this study. The sample of this study is only obtained from teachers working in private schools. Last but not least, empirical data by employing a probability sampling method rather than convenience sampling method can improve the representativeness of research objects.

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Strategic Dilemma as a Game Theorsy: Retortion and Negotiation Dilemma of Companies and Suppliers

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Abstract

We live in a world where development and ropagation of information and technology accelerate. This situation presents us a world where boundaries among countries removed and ever country could predict current or probable moves of other ones. In this global world, we are all in game as a maneger, politican, investor that has rules and gains.Game theory is a decision making method analayzin current situations, probable moves of opponent player and ways of maximizing self gains. In this game theory. Some dilemmas such as "acting selfish" to "contributing to common benefits" or "retortion" to "negotitation" ocur in game theory. Theory. This strategic dilemma consists of two differnt strategic moves as self gains where opponent player loses or self gains where opponent player wins together. This paper analysis dominant moves of strategic dilemma as game theory and constitutes pay-of matrix. So, comparative analysis among such dilemmas are performed and moves that will maximize rational gains both people and partners are visualized. Sample fort his analysis was selected as game between company and its supplier from business life.

Keywords: Game Theory, Strategic Dilemma, Negotiation Strategy, Retortion Strategy

Introduction

Strategic thinging is analyses for your basic skills and the way that you use your skills on this area. In strategic thinging everybody has decision on their daily life, politica and work life. (Dixit & Nalebuff, 2010).

According to the Dixit & Nalebuff (2010), deciding subject is called game theory in social sicenses. Base of human behaviour and interest, developed in a persfective of strategic thinking attackts, all of moves and decisions within the scope of game theory. The most important component of game theory, which is formed of strategy clusters, is strategy Notion. In this strategy Notion, complete possible plan during the game (Watson, 2013). In case component of strategic game, players, actions of players and choises of players. (Osborne, 2005). Players, common process and profits are factors which should be for a game. To fictionalise a game, sfecify these factors is necessary (Dixit & Nalebuff, 2010). In the game which is set up with these components, players compaign the best for themselves.

A game is not only made decision about its value and ability but also needs also consider its environment. Businesses which are living within a system, both affected by environment and also have potential to affect environment. Fort his reason for businesses take right decision with strategic thinking and move are so important.

In our daily lifes, we are in a game where we play important roles. Because all of us have a common purpose and result of this purpose profic and a little bit information about people we have relationship. We have to think strategic within the partial information and act rationally.

In our daily lifes, we are in a game where we play important roles. Because all of us have a common purpose and result of this purpose profic and a little bit information about people we have relationship. We have to think strategic within the partial information and act rationally (Dixit & Nalebuff, 2010).

According to the Gura Maaschler (2008), game theory is a tool in creating mathematical model and decision through results of this model and don't need to take same decision. Because game also shows possibility to offer many rational choices. Strategies which are produced as a result of strategic thinking, when considered in the context of game theory, researchers and academics who studied in this field tend to two main strategies. This distinction are played consecutive games and played simultaneouly games

Distinction of Played Consecutive Games and Played Simultaneously Games

Games are in mutual and interaction. These interactions arise in two ways. Moves come successively or simultaneously step unknowingly the actions of the opposing player (Dixit & Nalebuff, 2010).

According to the Dixit and Nalebuff (2010) timing of attact reclines between played consecutive game and played simultaneously game. Consecutive game players make their moves in turn, and player estimate future move of the other player and then across from this situation predict his future move and then his rival's future move. With such a range tend to strategic thinking. In case simultaneous game move unknowingly against player's move. The best known and best example fort his simultaneously game is dilemma game of prisoners'..

Time is seemed key criterion in played consecutive game and played simultaneously game but it isn't what it looks like. The fine line is associated with information. It is matter of who knows what or who knows what about or what will know. So in a sense time is invalid. If players who reached information, use this and improve strategy, if this consecutive game reach information results of same time attact, in this case simultaneous game is concerned. If himself and against player before move know information about after attact, this situation makes consecutive game (Straffin, 1993).

In a game to reach perfect information need to know players and their choices. The statue of knowing previous attact before player is called perfect information (Osborne, 2005). Difference of consecutive game from simultaneous game, players have perfect information at the time attact.

Strategic thinking in consecutive games is predicting next move and inferencing backward. Backward inference " look forward, reasoning backwards" obtained a set of strategies. In cınsecutive games there is a backwards induction.(Dixit & Nalebuff, 2010), (Watson, 2013).

In the consecutive movement game, players move by sorting their moves. A player makes his first move and then the other player see his first move, respond to him. Example to consecutive game, chess game, response to the attacts of leader of a country move of other country's leader, companies intending to enter monopol market of price war games considered (Carmichael, 2008).

In simultaneous game theory information is more limited. For this reason the strategy development methods show varieties. In the light of a lot of prediction and strategic thinking sequences of moves can be generated. The prisoners dilemma is a simultaneous game theory. Factor that makes prisoner's dilemma simultaneously, not the timing of confession does not know to treat each other and knowing the factors that a decision is to be given. In this case drag the players tos harp distinction. This distinction is shapes as common interests or pry individual interest. In the light this information to make rational decision in this crossroads, simultaneously strategies show us the way.

This study exemplifies a strategy that can simultaneously companies doing business with the supplier or not the common dilemma by constructing a game on is effort to create a set of strategies. Before moving on to this fictional game, information about game theory analysis is provided.

Analysis of Game Theory

To provide high returns in a game, need to use information strategicly. For this need to identfy players, rules, aims, profic factors. According to the economics and business proffers Ben Polac, game theory can't make many things to specify rules of game but after than game theory has a lot of thing to say.

After specify factors and profcts of the game, can move to duration strategic thinking. In simultaneously games is analysed with specify dominant stragey and balance rules (Dixit & Nalebuff, 2010).

Dominant strategy has the highest profit between choices you get from opposite players move (Dixit & Skeath, 2004). Besides, your dominant strategy also show your passive/dominated moves. Prioritise your dominant strategy, after eleminate dominated strategies to tend to effective strategic thinking, necessary to put yourself in against's shoes.

Putting yourself against player's place, you need to specify his dominant and dominated strategies. After eleminate against player's dominated strategies and feature dominate strategies, when you look again game, against player choice whichever choice, dominated strategy offers opportunity to show rational move. There is a rulet hat leads us to the conclusion : " You shouldn't play your dominated strategy."

After analyse of dominated strategy, analysis of Nash balance is necessary. Nash balance, in a strategic game as a result of players act rationally and make best choice balance at a point. This balance point is called Nash balance (Osborne, 2005).). In a game you can get more than one balance point.

Nash balance states common profits of people and comes up results of convergence of profits. In Nash balance decisions are taken with motivate people for some point. To achieve a perfect solution in a game theory, Nash balance should be obtained. To create a Nash balance in a game should believe that all players act rationally. (Gibbons, 1988).

In a simultaneously game, specify dominate strategies and set of strategic decision is created. But ever game doesn't show itself clearly and analiysis of dominate stragey is not enough for solution of game. In this case Nash Balance analysis is referenced. In Nash balance analysis with assumption that all the players think strategically manifests itself in the confluence of common interest and every choice exclusion from this point wake of regret to each player and reduce gain of benefits (Polac, 2007).

In the light of this general strategy, game between supplier firm and business will be analysis. In the methodology part , it will be evaluated in perfective of strategic thinking that if these two players choose which one of thw options of reconciliation and retaliation, will they provide higher returns.

Game Theory and Analysis of business and suppliers

This study aims to make rationally choice between common work interest in work life and retaliation interest limited knowledge. This result in the selection of strategic thinking as a tool to analyze the game is a gamet hat fictionalizes. Results of analysis it presents set of strategy to make decision makers.

This study was fictionalised to identify details of event and aim to see. In addition to aim to develop explanations about game and evaluate game, produce set of strategic decisions is aimed. Fort his reason, case studies techniquie is used. According to the Gall, Barg, Gall (1996). Case studies is a used technique to describe details of event, evaluate and explain situations of event. This study in game theory, players business which based function is sales of products with a supplier firm.These two companies' aims also get profit with high degree. In these two businesses's choices profit sharing partners to do business with competitors in the same industry is to expand the scope of activities. Interests of game is thought like that.

Supplier		Company Negotiation		Retortion	
	Negatiation	3	3	3	2
	Retortion	2	3	1	1

A company earns 3 points depending on its focus to the main points and its usage of exterior sources of logistic functions. Similarly, the acquisition reaches by using the same way up to 3 points if the company gets benefits from exterior sources and focuses on logistic sources. Let us assume that one side chooses to agree while the other one chooses to reject each other's ideas or disagree, both sides get the equal 2 points. On the other hand, if both companies choose to disagree it is only possible to get 1 point for both sides. The reason behind that is the more revenue and profit the company gets, means the more responsibility and the amount of risks they are taking which also cause ambiguity. According to Watson, game theory doesn't provide benefits when calculating the payoffs and possibilities. However, after the game is set the game theory has a lot of phenomenon to bring up as a topic. The analysis is made during the methodology part of this work.

This is a simultaneous game, because there is no time difference between the moves. At the same time, it will be assumed that there won't be a knowledge difference between the players and a spy in the structure of both companies. That is why the game is definitely a simultaneous one.

The purpose of this research is to ask the question of "Do we have a surprise attack strategy during the first analysis of the simultaneous game?"

Please find the dominant strategies in the table below: Dominant strategy would be answering the question of what would be the best move that I can do against the other player?

Supplier		Company Negotiation		Retortion	
	Negatiation	**3**	**3**	**3**	2
	Retortion	2	**3**	1	1

Dominant strategies are not able to get over with other strategies. Therefore, it is necessary to make the Nash Equity analysis as another step.

Nash Equity analyses…The strategies that are shown in table 2 show the dominant strategies of Nash Equity which is a common dominant strategy. Compromise of both players is actually a Nash Equity. Nash Equity shows us what step to take.

		Company Negotiation		Retortion	
Supplier	Negatiation	**3**	**3**	3	2
	Retortion	2	3	1	1

The strategic decision stack we got out of this game's analysis is the option of agreement for both sides. As a result, both players are able to serve in their actual activity areas and also reach to wider consumer popularity so that they could keep their incomes high.

Conclusion

Game theory, is to learn how to think systematically even in complex situations and realizing how to be serious about the next move of opponents. The information that you have and a well formulated theory of games offers you the opportunity of making effective decisions. Game theory shows that the interests of your opponents are important factors in your decision. Game theory shows agreement is more beneficial than retortion just like the prisoners dilemma. Game theory argues that there is not only one theory for each case and decisions are changeable depending on the situations. However, in some cases, retortion offers better returns than compromise. It is possible to see the benefits from outsourcing and returning to the real functions within the framework of game theory. In today's modern organizational structure, downsizing, outsourcing benefit from simplification in the nature of a decision offers support strategy the administrator of both institutions. The strategists of the decisions we make in daily life decisions and the game theory strategies present the methods of effective decision making. For this reason, the analysis on game theory won't be enough and will be a encouraging about the works in this field.

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Relationships between Perceptions of Virtual Destination Environment, Satisfaction and Behavioral Intention

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Abstract

Nowadays, with the increase in the use of the Internet and social networks, destinations are defined not only as physical places but also as places in the virtual world. The Internet offers a number of tools which support indirect experience, and thus can potentially reduce the intangibility of the tourism product. Hence the Web now plays an important role in destination marketing. Especially social network sites has become the most significant fields where destinations show existence. Facebook is the World's most successful site, with more than one billion users. Like companies, destinations utilize Facebook for connecting and raising awareness of existing and potential tourists. Although many destinations utilize a Facebook page, there are few theoretical frameworks relating the virtual destination environment factors. Therefore, this study focuses on relationships between virtual destination environment factor and visitors' satisfaction and behavioral intentions. Virtual destination environment factors are based upon Kaplan and Kaplan's Preference Matrix. Kaplan and Kaplan (1982) developed a Preference Matrix to describe how people use information to satisfy their needs of making sense and exploration in a physical environment. According to the model, while coherence and legibility help one understand the place; variety and mystery landscape encourage exploration. Each of the factors can be associated with elements of the virtual destination environment. The data were collected from 170 users who visited *My Destination Barcelona* Facebook page. Exploratory and confirmatory factor analyses, structural equation modelling were employed to analyze the data. The structural equation modelling analysis revealed that variety and mystery significantly influence the visitors' satisfaction. In addition, satisfaction was found to have a significant effect on visitors' behavioral intentions.

Keywords: Virtual Destination Environment, Kaplan and Kaplan's Preference Matrix Model, Facebook Page, Satisfaction, Loyalty.

Introduction

Nowadays, with the increase in the use of the Internet and social networks, destinations are defined not only as physical places but also as places in the virtual world. The Internet offers a number of tools that support indirect experience, and thus can potentially reduce the intangibility of the tourism product. Hence the Web now plays an important role in destination marketing (Buhalis&Law, 2008). Especially, since services in tourism cannot be experienced and evaluated before consumption, virtual destination environments which exist in social networks; such as, Facebook, play a vital role in forming clues related to the destination and travel experiences. Moreover, experience within such a computer-mediated destination environment can support forming expectations and simulating real visits. Today, social network sites have become one of the most significant fields where destinations show existence. Facebook is the world's most successful site, with more than one billion users. Like companies, destinations utilize Facebook for connecting and raising awareness of existing and potential tourists.

Studies conducted in the field of environmental psychology and marketing displayed that customers show affective and cognitive reactions to the physical environment where the service is received. Especially, it is claimed that in fields where hedonic consumption is the focus such as in tourism, customers/tourists are more sensitive to the physical environment of the hotel, restaurant or destination compared to the other customers (Wakefield and Blodgett, 1994; 1996; 1998; 1999). In recent studies conducted, it is found that when services are consumed with hedonic aims and when more time is spent in the physical environment, the physical environment is the most essential determiner of customer satisfaction and behaviors (Wakefield and Blodgett, 1996). Therefore, the importance of understanding and investigating the physical environment in tourism constitutions is increasing. However, a theoretical framework related to evaluating a virtual destination environment in contrast to the importance of physical environment does not exist. Hence, the study in issue adopted and extended Kaplan's landscape preference model by including factors of legibility, coherence, variety, and mystery, and examined their effect on affective appraisal and their impact on behavioral intention.

Kaplan and Kaplan's Preference Matrix Model

Environmental psychology focuses on architecture and landscape architecture physical environment, visual preferences in constitutions and their environmental trail effects on behaviors. Although there are various approaches to evaluate place and environmental perception, it is the cognitive approach which aims at forming models that foresee dominant approach place preferences and are based on defining meanings and values related to the places (Singh et al., 2008: 339). In this sense, Stephen Kaplan and Rachel Kaplan (1975; 1979; 1995) conducted research on human preferences in natural and artificial environments and the preference model they develop received great attention and important support from the literature. Kaplan and Kaplan's Preference model sees people as organisms which search for information and utilize this information. Since it is extremely vital to collect, process and store productive and beneficial environmental information (in cognitive maps and figures) in terms of life and coherence, human beings are extremely experts in collecting and processing information about their environments (Kaplan, 1992). When it is considered from this point of view, Kaplans' Preference Model is based on evolution psychology theories. When man's evolution process is taken into consideration, preferences are closely related to basic needs. In other words, the preferred places would be places where human beings are more active and places where their needs are more frequently fulfilled (Kaplan & Kaplan, 1978: 149). Stephen Kaplan stated that information is important in people's lives (1992:583), first man were dependent on information, and it was the greatest biotic model to discover their environment for information (1992: 584). The ground of the theory is based on the belief that people's place preferences are related to the evolution process. According to this belief, human beings are searching for places which are easily understood, provide information related to the environment (such as wayfinding information, food information (Kaplan, 1992: 581). The studies of Kaplan and Kaplan show that the need for basic information related to specific areas/places affects preferences. People tend to prefer environments/images which help them perceive an indefinite world (environment). According to the preference matrix (Kaplan, 1995: 58), which was tested with various experimental studies, people react to their environment in two ways: similar to a plain image (like a photo pf a scenery), visual organization, two dimensions and three dimensions of a place. In other words, during the perception of an environment or place, people not only pay attention to the two dimension quality of the environment but also when they enter an environment of a place, they imagine themselves (revitalize mentally) in that environment and predict how they will act in that environment (Kaplan, 1992).

Kaplan and Kaplan (1975; 1979; 1995) suggested a Preference Matrix which consists of four components which they determined in their studies on environmental preferences. Kaplan and Kaplan (1992; 1995) state that human beings' functions are, to a great extent, dependent on information and the skill of providing the information. In this model, preferences display that people are not unbiased towards their environments, and preferences are reactions combined with information figures which show some environments are liked more compared to others. Preferred environments have two features: making sense and involvement. Making sense is related to understand and perceive what is happening in the immediate environment. However, involvement or exploration is related to the variety and richness of the environment and to the information degree gained during strolling in the environment. While making sense reflects psychological constructions defined as organization and security, involvement includes stimulation and impulse (Kaplan, 1995: 50).

As it can be seen from Figure 1, the first field in the Preference Matrix includes a person's "understanding" and "exploration" needs. The second field is related to what extent the information is ready, "immediate" level information is directly perceived and in inferred and predicted level information can take place at the back of the immediate view.

	Making sense	Involvement/ Exploration
Immediate	Coherence	Variety
Inferred	Legibility	Mystery

Fig. 1. Kaplan and Kaplan's Preference Matrix
Reference: adapted from Kaplan and Kaplan, 1975; Kaplan, 1979.

Kaplan and Kaplan stated that understanding and perceiving what is happening is essential for people's functions and when a person perceives and understands the environment, they will prefer that environment more frequently. Additionally, they indicated that exploration is an important element in gaining experience and the more the skill of understanding complicated situations of an individual develops, the more tendency of increase in information is shown (Kaplan&Kaplan, 1995: 51) and by questioning different aspects of the same situation, it provides individuals a way to improve their

perception levels (Kaplan, 1995: 52). Kaplan and Kaplan state that the categories of understanding and discovery are influenced by the past experiences of an individual to a great extent.

Kaplan and Kaplan's model forms a conceptual basis for developing a theoretical model for virtual destination environments. The perception of a physical environment may share the basic features of a virtual environment. Furthermore, perception development process of seeing physical environment is similar to that of online visitors. People who visit a particular landscape develop their preference after visiting, entering into, walking around, and comparing it with other landscapes. Similarly, online visitors develop their preference toward a particular social networking site after visiting, searching and navigating it. Through this process, people perceive whether an interesting virtual environment has coherent, various, legible, and mysterious features. Third, the visitors at an interesting physical environment combine their perceptions from the direct and inferred features. This can also be true for visiting virtual environments. Online visitors develop their direct perceptions immediately by looking at destination virtual environment. They further develop their perceptions by navigating and experiencing a successful virtual space.

Hypotheses Development

A conceptual model has been developed with the aim of evaluating the factors included in physical environment matrix suggested by Kaplan and Kaplan regarding virtual destination environment (Fig. 2). According to the model, a legible, mysterious, various and coherent virtual destination environment creates the emotion of satisfaction at the individual, and by this way, it causes the person show behaviors of revisiting that place and recommending the place to others.

The coherence factor in the preference matrix is defined as providing the emotion of order and directing attention (Kaplan&Kaplan, 1995: 54). In other words, coherence is the order or organization level of the elements that form an environment. The organization of a consistent place is orderly. The different environments forming the place can be perceived clearly and explicitly. A person can differentiate these different environments easily, and this makes understanding and making sense of the place in an easy way. Kaplan (1995: 58) defines coherence as the easiness of a person's understanding the organization of the environment. Coherence in virtual environment is the ability of a website to provide consistent and orderly contents, structures, and multimedia components. Online visitors easily grasp the organization of a website by providing a common look and feeling on each page, and this affects their attitude towards the website positively (Lee&Kozar, 2008). In studies, it was found that coherence (order, clarity and unity) develops positive evaluation (Nasar, 1989:36). Moreover, it was determined that coherence affects an individual's order perception and with coherence, an individual's preference probability is increased (Nasar, 1987:501). Bitner (1992:63-64) stated that coherence develops a person's satisfaction in servicescape. Therefore, we hypothesized:

h_1: Coherence of virtual destination environment significantly influences satisfaction.

Variety is defined as the number of different visual elements in an image, intricacy and richness of an environment (Kaplan&Kaplan, 1995: 53). The variety of the elements in the environment means possessing enough information to keep the individual interested and busy, and it stimulates an individual's exploration impulse. Variety in virtual environment involves the ability of a website to provide diverse website components which create vivid interaction and communication with its customers (Lee&Kozar, 2008). Visual diversity in websites are measured by number of different elements present on the web page (Deng and Poole, 2004). Destination websites provide diverse destination images and photographs, information about destination culture, accommodation options and events in destinations. People have more enjoyment and fun when they visit such destination sites. Therefore, we hypothesized:

h_2: Variety of virtual destination environment significantly influences satisfaction.

Legibility is the easiness of grouping and operating the elements of an environment or an individual's exploring the environment without being lost. Legibility is defined as a place which can be easily understood and remembered (Kaplan&Kaplan, 1995: 55). In addition, Nasar (2000) investigates legibility as the degree and quality of the balanced relationship among the sections of an environment or place. Legibility represents ease of navigation of a site. It helps users acquire more information than they are seeking since information is easier to find. When visitors are able to visit Facebook page as a virtual destination environment, reach the information they search for and surf on the page comfortably, they will feel satisfied with the page. Therefore, we hypothesized:

h3: Legibility of virtual destination environment significantly influences satisfaction.

Mystery is the degree of rousing interest and curiosity of the individual and presenting much more information in the environment (Kaplan, 1995: 58). To illustrate, finding a curved way instead of a straight way will increase the impulse of exploration. However, deterred sceneries of views do not create mystery. In a space, using design elements to arouse curiosity of the individual can aid to create the perception of mystery (Çakcı&Çelem, 2009: 89). Therefore, we hypothesized:

h4: Mystery of virtual destination environment significantly influences satisfaction.

We expect visitors who are satisfied with their experiences in the virtual destination environment to visit that destination page more frequently, and when they need information or news related to the destination, the page will be their first choice. Therefore, we hypothesized:

h5: Satisfaction with virtual destination page significantly influence behavioral intention.
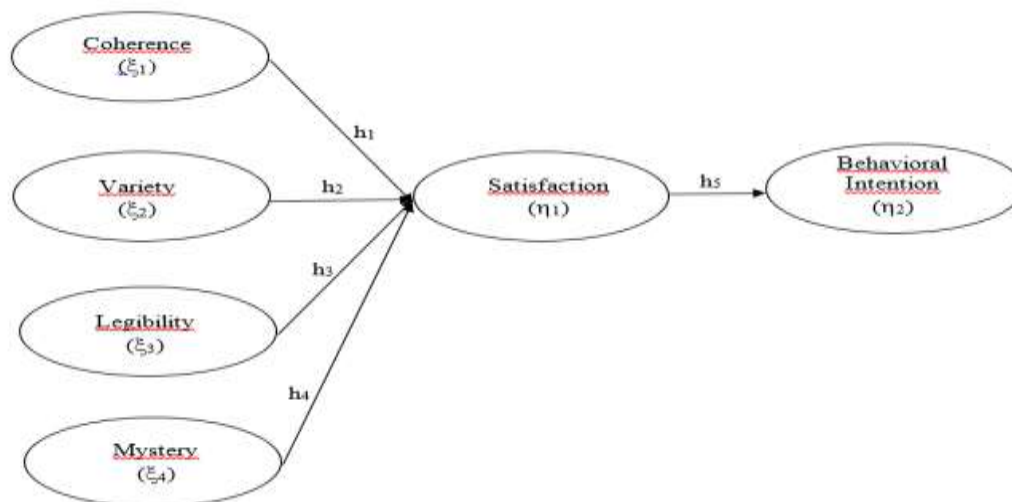
Fig. 2. A proposed hypothetical model

Research Method

Research Site and Sample

We selected a most popular Facebook destination page (My Destination Barcelona) as main survey social networking site. The population of the study was individuals who visited the page at least once in the past at destination facebook page. The online questionnaire was sent to these visitors who visited the page earlier. After sending the questionnaires, 170 usable responses were gathered.

Scale Development Process and Questionnaire

To investigate variety, legibility, mystery and coherence factors in the Preference Matrix of Kaplan and Kaplan in a virtual destination environment, the scales of Lee and Kozar (2008) and Rosen and Purinton (2004) were used. To measure the variables of satisfaction and intention in the model Kim, Jin and Swinne's scale (2009) was used. 17 expressions to determine the variables of variety, legibility, mystery and coherence, 4 expressions to determine satisfaction and behavioral intentions and 3 questions to find out demographic information of the participants take place in the questionnaire. Except the demographic questions in the questionnaire, all variables were constructed with a 7-point Likert Scale structured. Furthermore, an additional column as "No idea" was added to the questionnaire for the participants who do not have an idea about the expressions, and data received as "No idea" were considered as missing data while analyzing the data.

Results

Demographic Profile of the Respondents

Descriptive statistics was used to analyze the demographic profile of whole sample of respondents (N=170). The respondents of this study consisted of 50.6% males and 49.4% females with 41.2% of the

respondents were aged between 23-29 and 22.9% were aged between 16-22. In terms of educational qualification, 68.8% of the respondents graduated from university, 13.5% had a master's degree.

Scale Dimensionality and Reliability

Prior to structural equation modelling procedures, an exploratory factor analysis was performed for purposes of identify the underlying dimensions of virtual destination environment and reducing the number of variables in the constructs. Barlett's test of sphericity was significant (p<.001) and the KMO measure of sampling adequacy was .861, which is well above the recommended level. Using Varimax rotation, the latent root criterion of 1.0 was used for factor inclusion, the factors to be extracted were expected to correlate with one another. Items were retained if they loaded at .40 or more on a factor and did not load at more than .30 on any other factor. This procedure may help to decrease multicollinearity or error variance correlations among indicators in the confirmatory factor analysis (CFA) of the measurement model (Hair et al. 1998). The results of EFA analyses showed that three distinct factors emerged (representing 68.498% of the explained variance extracted) from eight variables which are labelled as "legibility", "variety" and "mystery" (Table 1). Three factors in Table 1 had Cronbach Alpha Coefficients over .71 with the result of no increase if any of the items were deleted. However, the items of coherence factor in the scale were omitted from the analysis since they had a high factor overload point for the legibility dimension and low Cronbach Alpha coefficient (.42). Consequently, three design factors were employed in structural equation modelling procedures.

Table 1. The results of EFA

	Factor loading	Communality	Explained variance (%)	Cronbach Alpha
Legibility			42.324	.714
LEG1-It is clear where I can go on the page	.791	.679		
LEG2-it is easy to get around on the whole page	.571	.660		
LEG4-I can always figure out where I am	.552	.496		
Variety			8.928	.821
VAR1-The page has too many distractions, making it confusing	.845	.722		
VAR2-The page does not contain enough components to interest me	.844	.776		
VAR4-I feel drawn in by the variety of information or components the page offers	.866	.767		
Mystery			17.246	.759
MYS1-The page makes me feel there is something interesting to explore	.813	.700		
MYS2-As I navigate through the page, more curiosity inspires me	.789	.766		
KMO=.861; Bartlett's Test of Sphericity=973.622; df=66				

Confirmatory factor analysis (CFA) of the measurement model specifying the posited relationships of the observed indicators for the latent constructs, with all the constructs allowed to be inter-correlated freely, was tested. According to Anderson and Gerbing (1988), confirmatory measurement models should be evaluated before measurement and structural equation models are examined simultaneously. Thus, before testing the measurement model overall, each construct in the model was analyzed separately except for the satisfaction construct because this construct measured only one indicator. Additionally, in the design factors scale, the item in Mystery dimension (MYS3) was omitted from the model because it received high error variance and low standardized factor overload point. Since CFA analysis performed for the other constructs provided acceptable values, the measurement model analysis was carried out. In overall measurement model testing, CFA using LISREL 8.51 with maximum likelihood estimation was run on the covariance matrix.

As shown in Table 2, eight indicators for exogenous variables (3 from legibility, 3 from variety and 2 from mystery) and four indicators of endogenous variables (1 from satisfaction and 2 from loyalty) were identified. The results of the measurement model with five constructs and 11 indicators were derived from confirmatory factor analysis. This measurement model described the nature of the relationship between latent constructs and the manifest indicators that measured those constructs. Table 2 lists the factor loadings, t-values, composite reliability and the average variance extracted (AVE) for the variables. Most indicators had significant factor loading higher than .70 and *t*-values for all the standardized factor loadings of the items were found to be significant (p<0.01). The construct reliability

estimates ranged from .74 to .79 and exceeded the critical value of .70 (Hair et al., 1998), indicating a satisfactory estimation. Convergent and discriminant validity were assessed based on the average variance extracted (Fornell&Larcker, 1981; Hair et al. 1998). In this study, the average variance extracted for all the latent variables exceeded .50. These results show that the measurement model has convergent validity. Therefore, the hypothesized measurement model is reliable with regard to testing the structural relationships among the constructs.

To examine the overall fit of the model, this study used sample size-dependent measures of goodness of fit. The X^2/df was 1.6, which is below the desired threshold of 2.0. The RMSEA was 0.060, which is below the 0.08 cut-off. All GFI (0.97), AGFI (0.92), NFI (0.98) and CFI (0.99) were above their corresponding cut-off value of 0.90. These results suggested that the measurement model adequately fit the data.

Table 2. The Results of CFA

	Completely standardized loading	Error variance	t-value	Construct reliability	Variance extracted
Legibility				.794	.57
LEG1	.74	.46	10.80		
LEG2	.66	.57	9.30		
LEG4	.85	.28	13.06		
Variety				.744	.50
VAR1	.60	.64	8.34		
VAR2	.75	.44	11.03		
VAR4	.75	.44	10.85		
Mystery				.799	.66
MYS1	.81	.35	12.00		
MYS2	.82	.32	12.06		

Testing the Structural Model

After confirming the measurement models, the structural model was examined. The results of the standardized parameter estimates and t-values are reported in the Table 3. To identify the fit of the structural model, the overall fit index and supplementary goodness-of-fit indices were used. The Chi-square value ($X^2_{(170)}$=42.41) was found as significant. However, other fit indices indicated a marginally acceptable level (RMSEA= 0.026, GFI=0.0.94, AGFI=0.89, CFI=0.99, SRMR=0.053).

As shown in Fig. 3 and Table 3, variety and mystery have a signifant influence on visitors' satisfaction, supporting h_2 and h_4. Nonetheless, it was found that legibility factor does not have a significant effect on satisfaction, , h_1 was rejected. This finding supports the study of Lee and Kozar (2008), which proved that variety and mystery showed strong influence on affective appraisals while legibility did not. As hypothesized in h_5, satisfaction was found to have a significant effect on visitors' behavioral intentions.

Chi-Square=60.60, df=38, P-value=0.01133, RMSEA=0.059
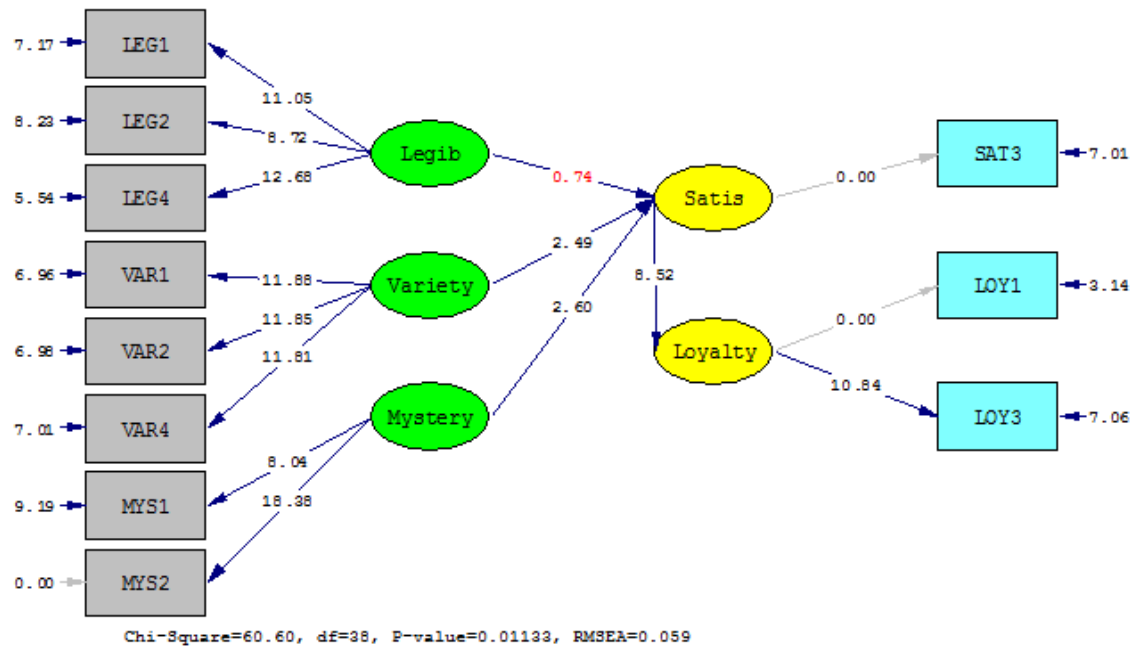
Fig. 3. Results of testing the structural model

Table 3. Structural Model: Standardized Coefficients, t-values

	η_1 Satisfaction
ξ_1 (Legibility)	$\gamma_{1,1=}.16$ (0.74)
ξ_2 (Variety)	$\gamma_{2,1}=.55$ **(2.49)**
ξ_3 (Mystery)	$\gamma_{3,1}=.18$ **(2.60)**
	Behavioral Intentions
η_1 (Satisfaction)	$\beta_{2,1} = .96$ **(8.52)**

Discussion

The study explored the relationships among virtual destination environment, satisfaction and behavioral intentions based on Kaplan and Kaplan's Preference Matrix. Based on Preference Matrix, current study proposed a theoretical model and tested it in an virtual space. According to the model, while coherence and legibility help one understand the place; variety and mystery landscape encourage exploration. Each of the factors can be associated with elements of the virtual destination environment. The most contribution of the current study is in its empirical demonstration of how online visitors perceive virtual destination environment and how perception directly influences visitors' satisfaction feelings and indirectly affects their behavioral intentions.

The findings show that the proposed model had strong psychometric properties and be considered as an alternative model in evaluating the virtual destination environment. The mysterious and diverse virtual destination environment invoke visitors' satisfaction feelings. In this context, the virtual environment will provide a positive attitude on visitors containing different visuals and infos about destinations as well as involving the environmental factors that stimulate visitors' curiosity, excitements and entertaintment.

Several limitations of the present study should be mentioned. First, since data from this study were collected from visitors of only one destination Facebook page (*My Destination Barcelona*) as virtual destination environment. Second, although the sample size (N=170) in the study seems enough for structural equation modelling, it is quite low. In addition, the use of a convenience sampling approach could decrease external validity. Thus, future studies should consider developing a systematic design to better represent the population.

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Organizational Culture Integration in Mergers and Acquisitions

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Abstract

The purposes of this paper are to present literature review in the field of organizational culture integration in mergers and acquisitions (M&A), define types of organizational cultures, reveal cultural reasons of unsuccessful M&A, and propose stages for a succeful cultural integration in M&A. Organizational culture which is affected from national culture differs with values, norms, behaviors, rituals and traditions. Companies prefer to achieve M&A due to global competition. They want to complement each other, improve their strengths and eliminate their weaknesses to enter into new markets, provide value and gain competitive advantages. The synthesis of organizational cultures of both companies and development of a new integrated culture are critical for the sucess of M&A. Cultural changes in organizations face resistance which forms a barrier to M&A. However, management and guidance through integration stage can significantly reduce resistance to change to achieve successful M&A. There is a limited number of studies about integration of organizational cultures in M&A. This study is believed to guide companies to implement procedures proposed in the framework to achieve successful cultural integration in M&A.

Keywords: Merger, Acquisition, Integration

Introduction

Nowadays, companies try to have more competitive advantages. They aim to be leaders in global markets. They want to be leaders and sustain their leadership position for a long time. They may consider conducting mergers and acqusitions (M&A) to be stronger in the global markets. Companies can complement each other, can increase their strenghts and their weaknesses when they achieve M&A. They can also get the advantages of opportunities and get rid of threats when they act together. Their market value can increase and find new investors to grow. They can reach to higher market share, have bargaining power over suppliers and customers. Companies can enter foreign markets faster and easies if they conduct M&A with companies. Thus, number of M&A increase in global markets.

There are several forces driving globalization process; such as cost, market, political conditions, technological improvements, and scarcity in resources. The first wave in mergers occured with horizontal mergers between 1897-1904, the second wave happened with vertical mergers in 1916-1929; third wave followed with diversified conglomerate mergers in 1965-1969, fourth wave took place with congeneric, hostile takeovers, corporate ridings in 1981-1989 and fifth wave was caused by crossborder mergers in 1992-2000 and the last wave happened with shareholder activism and private equity in 2003-2008. Financial integration, legal structure, and business performance were the main issues during these waves. The human factor which was the main element of the integration, wasn't considered until 1967. Kitching proposed typologies of M&A integration strategies in 1967. Howell presented the human side of mergers in 1970. Buono ve Bowditch focused on the different levels of cultural integration in 1989. Napier reviewed organizational issues in M&A in 1989. Cartwright and Cooper revealed psychological reasons for M&A between 1990 and 1992. Bower discussed how industry constraint mergers in 2001 (Faulkner, 2012: 346).

Culture of an organization is like a glue keeping organizational parts together. Although, companies are successful before M&A, they can not walk together for a long time. If they don't achieve cultural integration, the whole project will end with a disappointment such as Daimler Chrysler case.

The values, life perspectives, behaviours, the way to evaluate events of a person is effected by the culture of the community that this person growed up in (Koçel, 2010: 135). Schein (1989: 12) defined culture as "a pattern of shared basic assumptions that the group learned as it solved its problems of external

adaptation and internal integration, that has worked well enough to be considered valid and, therefore to be taught to new members as the correct way to perceive, think, and feel in relation to those problems."

Culture begins with the civilization and change through ages. It is comprised of values, norms, rituals, behaviors, and traditions. It is different in each region and nation. Discovery of new continents caused migrations from one region to another. When people migrate, their cultures spread to new regions. Nowadays, media, internet, travel opportunities, mobility of people due to education or work cause cultural change and integration.

Globalization accelerates mobility, although people continue to live in their region, values can be transfered by companies in different regions. Although companies want to integrate with other companies, cultural differences can cause conflicts in during integration stages. A study revealed that 30% of failed integration is due to cultural conflicts. Cultural differences cause difficulties to make fast decisions and have effective operations (Dixon, 2005). This paper presents a literature review of cultural integration procedures of M&A.

Culture and Organization

The first stage of the presentation consists of the difference between Societal Culture and Organizational Culture. Societal culture consists of language, ideological belief systems including religion and political belief systems, ethnic heritage, and history. Organizational culture consists of nomenclature within an organization, shared organizational values, and organizational history. Culture is the commonality among members with respect to the psychological attributes; and the commonality of observed and reported practices of entities such as families, companies, economic and legal systems (House et all., 1999). According to Mueller (1994: 407) "Although a cultural effect is obviously related to a social effect, they are not identical"

Hofstede (1983: 75) believes that; the key issue for organization is the influence of national cultures on management. He suggests that Collectivism versus Individualism, Large or Small Power Distance, Strong or Weak Uncertainty Avoidance, Masculinity versus Feminity are four dimesions of national culture. The nationality of culture, the organization's environment and sector affect the organizational culture.   "....because national culture and industry are integral parts of the environment in which organizations function organizational culture by implication should be influenced both by the broader societal culture and by the industry in which they operate" (House et all., 2004: 74). Hofstede's dimensions are classified according to the impact of societal and industrial levels. Societal level differences have a substantial impact on the cultural practices of organizations through; power distance, uncertainity avoidance, instutional collectivism, group collectivism, gender egalitarianism, assertiveness, future orientation, performance orientation, human orientation. Uncertainty avoidance, power distance, gender egalitarianism and assertiveness are effected by the organizational culture practice scale (House et all., 2004: 661).

Another classification of culture is; Linear-Active, Multi-Active and Reactive cultures. Characteristics of each classification need to be considered for integration. Characteristics of Linear-Active culture are; introvert, patient, quiet, minds own business, likes privacy, plans ahead, does one thing at a time, works fixed hours. Characteristics of Multi-Active culture are; extrovert, impatient, talkative, inquisitive, gregorious, plans grandoutline, does several things at one, works any hours. Characteristics of Reactive culture are similar in some characteristics with Linear-Active culture. However they differ with, respectful, looks at general principle, reacts, good listener specialities (Lewis, 2005: 33).

Characteristics of organizational cultures need to be defined during the integration process. Organizatitional cultures need to be classified. The integration system has to be processed accordingly.Figure 1 shows culture categories.Introverted respect oriented listeners
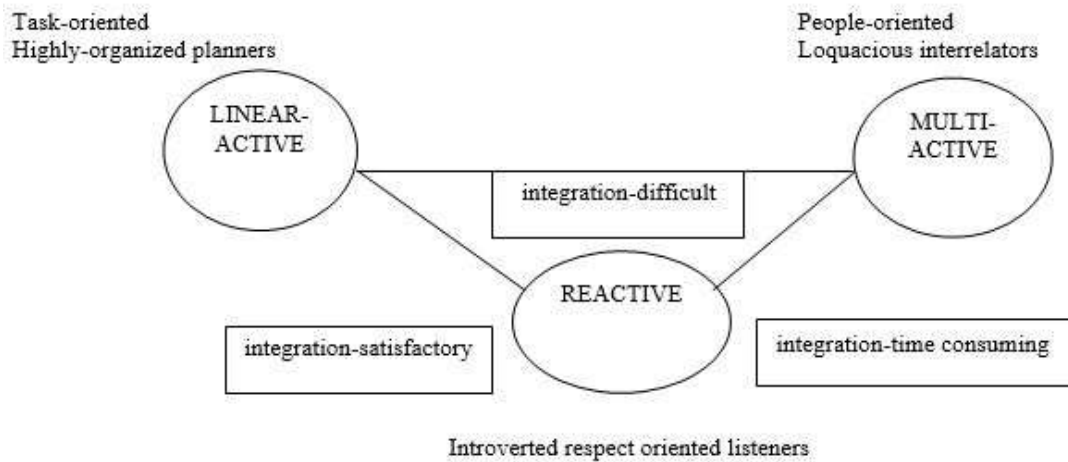
Fig. 1. Categorizing Culture
Reference: R. Lewis (2005) *When Cultures Collide: Leading Accross Cultures.* Connecticut: Nicholas Brealey International, p.39

The attitude of the member is influenced by the culture of the society. Cultural values, norms and beliefs are guides that have been experienced and accepted. They have worked before and expected to work in the future.

Denison (1990: 2) defines the culture as "the underlying values, beliefs and principles serve as findings for an organization's management system. It creates principles and practices that have have meaning for the members of an organization. They are admitted by members because they have worked well in the past. Members believe that they will work in the future. Culture is related with the organizational effectiveness. The values, beliefs and meanings that underlie a social system are the primary source of motivated and coordinated activity."

Any cultural group is dependent and related with each other due to their experience (Lewis, 2005: 49).

Management is one of the most important organizational function which refers to members to develop the culture and guide through integrations. It depends on the cultural circulation. Culture affects the managerial style of the organization due to manipulating symbols which have meaning to employees. The effective organizations in different cultures have leaders who adapt foreign management ideas to local cultural conditions (Hofstede, 1983: 88)

Managerial attitudes and behaviors are the product of the culture that managers live in. Culture has expectations from roles of manager/leader and subordinate. (Kao et all., 1999: 269)

Organizational Culture Change Models

Companies can engage in M&A activity either domestically or globally. Financial and legal constraints are important for M&A. However, organizational culture plays an essential role in all stages of M&A.

"Most often, business leaders and deal teams are more focused on getting the deal closed. Integration teams tend to be more focused on getting the structures, systems and processes integrated. Beyond this, there is often not enough focus on how to actually make the deal work – and the key to making it work is about effectively integrating two (or more) cultures…Organisational culture differences ranked as one of the most significant challenges...cultural differences often spell decreased productivity, which leads to lower revenues and income, and hence the combined entity may be worth less than expected." (http://www.mmc.com/views/Mercer_impactCultureM&ATransactions.pdf)

The cultures of organizations become important when two companies merge or one company acquires another. Some authors support the main element to develop the structure is protecting the balance; some authors mentioned about eliminating the defense. When two company decide to merge, they usually check their financial strengths, customer portfolios, market shares to assume the health of companies. However, their missions and philosphies defined by their culture are very important (Schein, 1989: 268).

Culture affects the success of the integration, and the strategy of the new outcome. The degree of cultural differences is crucial for the integrated organization. It affects the performance of operations, and financial performance of the merger (Weber, 2000: 310).

Many companies are not aware of the critical meaning of the culture during the transaction negotiations. According to a survey, 58% of companies did not have a specific approach to assess and integrate culture in a deal (http://www.aon.com/attachments/thought-leadership/M_A_Survey.pdf).

A culture change is needed when cultures of two companies integrate. "Leaders who attempt organizational change often find themselves unwittingly caught in balancing processes...balancing processes can generate suprising and problematic behavior if they go undetected (Senge, 1990: 88).

Schein presented that the dynamics of change are; unfreezing, cognitive restructuring, and refreezing. He added that "At different stages in the evolution of a given organization's culture different possibilities for change arise because of the particular function that culture plays at each development stage" (Schein, 1989: 303).

Table 1. **Culture Change Mechanism**

Organizational Stage	Change Mechanism
Founding Early Growth	1.Incremental change through general and specific evolution
	2.Change through insight from organizational therapy
	3. Change through promotion hybrids within culture
Midlife	4. Change through systematic promotion from selected subcultures
	5. Planned change through organization development projects and creation of parallel learning structures
	6.Unfreezing and change through technological seduction
Maturity and Decline	
	7.Change through infusion of outsiders
	8.Unfreezing through scandal and myth explosion
	9.Change through turnarounds
	10.Change through coercive persuasion
	11. Destruction and rebirth

Reference: E. Schein (1989) *Organizational Culture and Leadership*. San Francisco: Jossey-Bass Publishers, p. 304.

Some of the authors questioned that if the change was an on and off process. Weick and Quinn (1999: 362) believe that change is ongoing and continous adaptation. Cameron (2008) presented the following organizational culture change model:

1. *Clarifying meanings*

2. *Identifying stories*

3. *Determining strategic initiatives*

4. *Identifying small wins*

5. *Craft metrics, measures, and milestones*

6. *Communication and symbols*

7. *Leadership development*

Lewin (1947) defined cultural change stages as unfreezing (preparing to change by explaining and motivating that it's needed), change (transition) and freezing (establishing stability when the change occured).

Kotter mentioned the following steps for organizational change: (1) establishing a sense of urgency by helping others see the change is needed and convincing them for urgent action, (2) creating a guiding coalition by assembling a group with power to lead the change and encouraging it to work as a team, (3) developing a change vision and strategies to achieve it, (4) communicating the vision and strategies to the team, (5) empowering broad-based action by removing obstacles to change, changing systems or structures that undermine the vision, and encouraging risk-taking and nontraditional ideas, activities, and actions, (6) generating short term wins by planing for achievements, following-through with them, recognizing and rewarding employees, (7) never letting up by using increased credibitility to change systems, structures, and policies that don't fit the vision, also hiring, promoting, and developing employees who implement the vision, and reinvigorating the process with new projects, themes, and change agents, (8) incorporating changes into the culture by articulating connections between new behaviors and organizational success, and developing means to ensure leadership development and succession

Cameron and Quinn (2006) presented the following six steps for initiating culture change effort:

1. Reach consensus on the current culture

2. Reach consensus on the desired future culture

3. Determine what the changes will and will not mean

4. Identify illustrative stories

5. Develop a strategic action plan

6. Develop an implementation plan.

The Stages of Mergers and Acquisitions

The transaction of M&A is complicated due to issues raised from valuation and deal structure to tax and securities law. Other industries can be affected by this activity (Sherman, 2010: 3). Leaders need to consider an integrating activity to teach employees the new value and perspective of the new organization (Ashkenas et all., 1998). Table 2 shows steps of merger excellence whereas Figure 2 shows acquisition development stages.

Table 2. The Seven Steps of Merger Excellence

Pre Merger	Cultural DNA Due Diligence: Collaborating on an integration strategy culture of Engagement Framework
Step I	Involvement and Engagement: Dreaming the dream of the future New Identity formulation
Step II	Shared Vision: Expanding the vision from mine to ours and giving it life
Step III	Analysis: Evaluation of current reality in line with strategy
Step IV	Action: Cascading the process by creating ownership in the process
Step V	Implementation: Building and creating momentum
Step VI	Maintenance: Focusing direction and energy of corporate New Identity
Step VII	Renewal: Re-evaluation and re-creation
REPEAT Step I	Integrated Organization: Dreaming the dream of the new future together

Reference: S. Hill & J. Weiner (2008) "Seven Steps to Merger Excellence", *The Organization*, September-October, http://iveybusinessjournal.com/topics/the-organization/seven-steps-to-merger-excellence#. U1QKAFV_tIE

The Wheel of Fortune Model Describes Acquisition Development Stages:
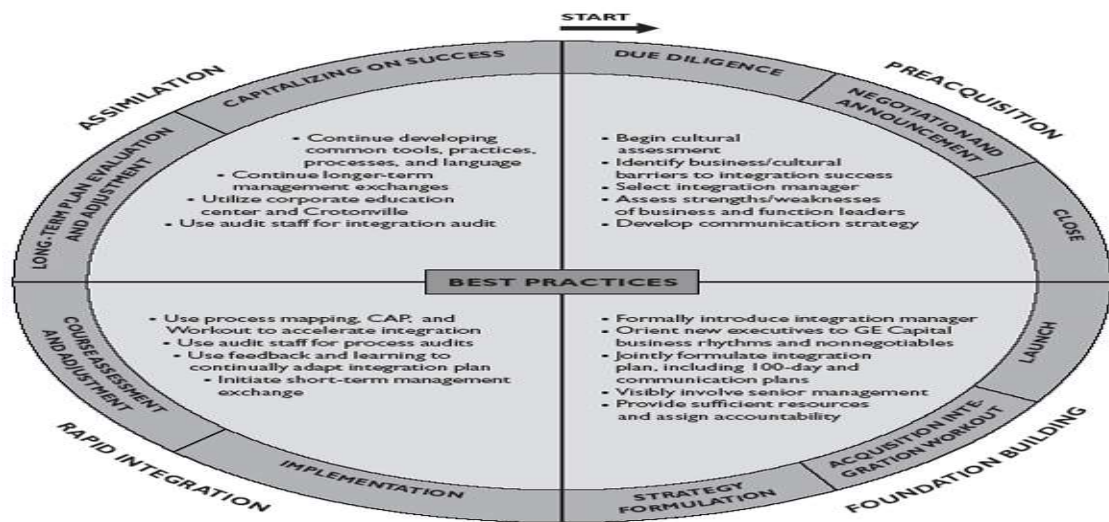
Fig. 2. The Wheel of Fortune

Reference: R.N. Ashkenas, L.J. Demonaco & S.C. Francis (1998) Making the Deal Real, How GE Capital Integrates Acquisitions, *Harvard Business Review,* 76(1), 165-178.

Proposed Stages for Cultural Integration in Mergers and Acquisitions

Stages can be proposed for cultural integration in M&A based on the defined issues. First of all, integration process needs planning with appropriate milestones. The top management of a new established company as a result of M&A needs to be responsible from cultural integration. Cultural integration needs to start before the integration of both companies. The top management needs to form a leading team which will be responsible from organizational cultural change. The leading team needs to consist of members from both sides to ensure both sides will be represented. This team needs to do its homework by exploring both cultures before the integration strategy is defined. Common perspectives from both companies can be presented if they exist. The new culture should be formulated by gathering information from internal, task and external environments. Using feedback from members of the organization can improve the acceptance level of cultural change. In addition, all the future hesitation and uncertainity need to be clarified. The trust has to be built to prevent any resistancy to change. The top management of M&A can apply the following cultural integration stages for gaining and retaining competitive advantages in the global market;

(1) they need to form a leading team which will cooperate with top management and be responsible to achieve cultural change process

(2) top management and this team need to prepare a plan for cultural transformation and follow milestones in this plan

(3) they need to formulate an integration strategy which will decrease resistance to cultural change and enhance trust to the organization and the top management

(4) they need to provide resources to be allocated when it is required

(5) they need to explore and define cultural aspects of each company

(6) they can highlight cultural differences between two companies

(7) they can decide which cultural aspects they need to keep to succeed in global markets

(8) they need to determine the new cultural aspects which M&A need to gather for having competitive advantages

(9) they need to design a new organizational culture including the appropriate cultural aspects of both companies and new aspects for having global competitive advantages

(10) they need to determine new job descriptions, employee selection criterias, and employee performance appraisal criterias based on this new organizational culture

(11) they need to determine monetary and non-monetary awards for employees who have high performance appraisals

(12) they need to determine organizational mission, vision, values, goals, strategies and policies based on this new organizational culture,

(13) they need to announce this new organizational culture, job descriptions, employee selection criterias, employee performance appraisal criterias; organizational mission, vision, goals, strategies and policies to employees in meetings, company handbooks, and intranet system (they need to explain reasons of cultural integration, advantages of new culture, disadvantages of old cultures clearly to eliminate resistance against cultural change and initate trust to company),

(14) they need to give training to employees to adapt to new organizational culture

(15) they need to be role models by behaving and acting based on new organizational culture

(16) they need to conduct performance appraisal to employees to determine whether they adapted to new organizational culture

(17) they need to give awards to employees who have high performance appraisals to establish new organizational culture

(18) they need to control the establishment of new organizational culture periodically. If there are problems, they need to find their reasons and try to get rid of them to succeed in cultural change.

Conclusion

Culture is a glue holding the organizational elements together. Thus, cultural integration is required for the success of M&A. Neither financial integration nor legal integration will be successful without cultural integration. Companies which conduct M&A can apply the proposed road map for cultural integration. Top management needs to explain reasons of the cultural change, advantages of new organizational culture, disadvantages of old cultures, importance of cultural integration clearly to employees. They need to get their approval to decrease the resistance against cultural change and establish the new culture in the organization in the appropriate time. Leaders need to be role models by their attitudes, behaviors, and actions in this cultural integration process. Initiating and keeping trust of employees to the company and top management are keys to achieve cultural transformation and establishment of new culture to the organization. It is not an easy process, it is worthwhile to try.

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Innovation Design in Mobile Gaming and Digital Music: The Next Frontier (Technological Convergence, Innovation Design and Revolutionary Business Concepts)

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Abstract

There is a paradigm change in the mobile gaming and digital music industries based on technological convergence, high potential of value network through the industries, new business concepts innovative design opportunities, new revenue streams and most of all new roles for the key stakeholders, revolutionizing the current media entertainment sector as a whole. The objective of this research, while providing comprehensive insights about contextual changes, is to predict the most important market trends and discuss innovation design business concepts' opportunities that will lead to new gamification models. Moreover, the analysis of the next frontier in terms of design and innovation encompassed the discussion of several approaches and theories concerning gamification models and innovative design. Finally, the research focuses on product design and development innovative process, is mainly supported by a) gaming literature that explores critical features and players' motivations, and b) market research that allows complementing the existent literature and identifying customer needs and their relative importance, which were interpreted and translated into product characteristics in order to generate innovation design approaches in Mobile Gaming and Digital Music business concepts.

Keywords: Casual Gaming, Digital Music, Technological Convergence, New Product Development, Game Design Innovation, Business Concepts, Revenue Streams.

Strategy Ranking Methods Which Integrate Multi-Criteria Decision Making Methods with SWOT Analysis (A Review of Literature)

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Abstract

The strategy selection problem is one of the most important decision making problem. Managers evaluate alternative strategies and try to choose the best strategy by conducting time consuming meetings. They are generally controversial. There are a lot of SWOT analysis factors to evaluate and rank alternative strategies. Brainstorming and some other workshop techniques sometimes remain inadequate. Group decision making might be a hard job if you do not have a robust method to evaluate alternatives. In this paper, we researched strategy ranking methods which integrate SWOT analysis and MCDM methods based on trends and industries which apply them. After this research, it was tried be figured out the gaps of this subject.

Keywords: SWOT Analysis, MCDM, Strategy Ranking

Introduction

The importance of strategic planning has increased due to the influence of globalization in the business world in 21.century. Organizations have grown up and become complex. Competitiveness between rival firms has risen. Quality expectations of customers have improved. Number of macro and micro environmental factors has increased. The importance of strategic planning has increased because it helps managers to compete with rivals and determine the future of their organizations. Managers need to conduct SWOT analysis, define mission and vision of their organizations for strategic planning. On the other hand, strategy selection is the most important stage of the strategic planning. It is conducted after SWOT analysis so it has two significant stages. First one is analysis of internal organizational factors whereas the other one is analysis of external environmental factors. Strategy selection follows the SWOT analysis and is affected from its findings. In this section we'll explain these stages briefly.

There are several methods developed for representing internal and external situation of organization to conduct strategic planning. SWOT analysis is the most popular and used one. Thus, our study focuses on SWOT analysis. Making macro environment scanning with respect to economic environment, technological environment, socio-cultural environment, demographic environment, legal environment, political environment, and ecological environment analysis provides a research for the strategy manager to have information about area which influences the organization indirectly. Another area which influences the organization directly needs to be analyzed. This is micro environment or industry environment for business world. In this environment, we have rival firms, suppliers, customers, firms that produce substitute products or services. This phase of environment scan informs us about the market structure, attitudes of customers, suppliers and rival organizations and so on. Last input of current situation analysis is scanning the organization itself. By this analysis we gather information about the organization's assets, skills and value chain (in bound and out bound logistics, operations processes, marketing, services and maintenance, human resources, technology resources and general infrastructure). After these bunches of analysis are made, SWOT matrix can be prepared. If we want to summarize what SWOT analysis is, we may say it is the classification of external analysis information in terms of opportunities and threats, also classification of internal analysis information in terms of strengths and weaknesses. Up to that part strategic analysis concepts defined briefly. After that task, whatever we make our SWOT analysis for, we have to produce strategy alternatives in order to choose the best one according to SWOT analysis. This is another difficult task. Constructing the SWOT matrix, formulating strategy

alternatives and selecting the best one are conducted by workshops. These workshops are challenging and controversial because number of SWOT factors and number of strategy alternatives are generally very large for evaluating in meetings without using any analytic decision support tool. In strategic planning meeting generally some problem solving methods are used. These problem solving methods are human oriented methods. Delphi method, brainstorming, fishbone diagrams, nominal group method could be given as examples for them. Using these methods has a lot of drawbacks. Human brain has ability to process seven data at most at the same time. However, managers attending to strategic planning meetings may have to analyze hundreds of data. They may not evaluate each data and strategy alternative objectively all the time. They may have biases. Furthermore, they may not consider each SWOT factor and strategy alternative. In fact, it can be admitted that group decision making is difficult without any specific method.

On the other hand, several researchers who deal with decision sciences developed analytical methods for that problem. Multi-criteria Decision Making Methods are subset of operations research methods. "Multiple criteria decision making (MCDM) refers to making decisions in the presence of multiple, usually conflicting, criteria. In business context, MCDM problems are more complicated and usually of large scale. For example, many companies in Europe are conducting organizational self-assessment using hundreds of criteria and sub-criteria set in the EFQM (European Foundation for Quality Management) business excellence model." (Xu and Yang, 2001, p.3) These operations research techniques fit well for strategy ranking or selection problem. Executive Decision Support Systems are used in strategy selection problems to help decision making of management teams.

There are two types of MCDM problems due to different problems settings. One of them has a finite number of alternative solutions whereas the other one has an infinite number of solutions. Alternative solutions are limited in selection and assessment problems. An attribute may take any value in a range in design problems. Potential alternative solutions may be infinite. This is a multiple objective optimization problem instead of multiple attribute decision problem. (Xu and Yang, 2001, p.4) In this paper (which is a summary of the literature review of the dissertation study), we made a literature review of strategy ranking methods by using SWOT analysis and MCDM methods simultaneously. Then, we found some gaps in the literature.

Literature Review

As we mention in the introduction section, there are several MCDM methods. Due to strategy ranking problem has finite number of decision alternatives; we focused on Analytic Hierarchic Process, Analytic Network Process, Promethe, Topsis, Electre, Vikor and Demantel methods in our paper. We made an investigation about combination of these methods with SWOT analysis for strategy ranking. As it is mentioned in intro section, these sorts of hybrid methods became popular after the development of executive decision support systems. Therefore, we have searched the articles since new century began. Besides that every sorts of decision support systems need improved computer technology for calculating the alternatives properly. So, this is another reason of late development of decision support systems in comparison to other subjects.

First significant study for this field is a development of a hybrid method which integrates SWOT analysis with AHP (Analytic Hierarchic Process) for helping to prioritize SWOT factors and ranking strategies. That hybrid method got the name as A'WOT which is A of AHP and WOT of SWOT. Because of A'WOT hybrid method forms a basis for most of following studies; in the beginning of literature review part we describe it properly. First, SWOT analysis is carried out; and then pairwise comparisons between the SWOT factors are made separately within each SWOT group. The real case in pairwise comparison is which factor is more important than other one and how much? Second step is determining the mutual importance of SWOT groups (Strengths, Weaknesses, Opportunities, and Threats) "The factor with the highest priority may be chosen from each group, and these four factors are then compared pairwise and their relative priorities are calculated on the basis of the comparisons. After that, the other factors are scaled relatively to these priority values within each group. Another possibility is to directly compare the importance of the entire groups." (Kangas and others, 2001, p. 190). Third step is evaluating the strategy alternatives according to SWOT factors. Finally, global priorities of SWOT factors and strategy alternatives can be derived from the last matrix (Kangas and others, 2001).
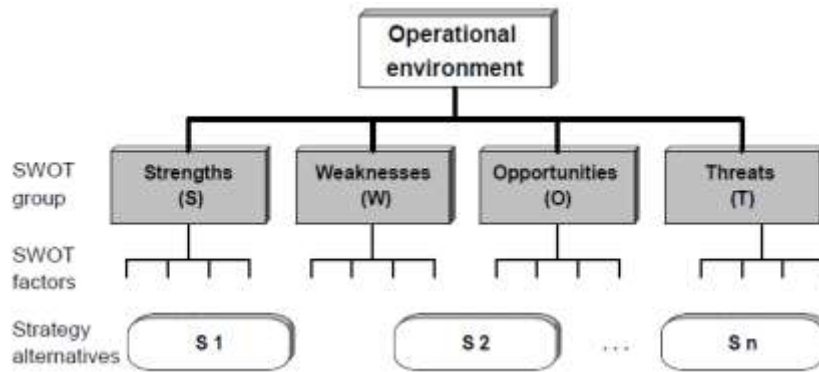
Fig. 1: The hierarchical presentation of A'WOT analysis.
Resource: (Kangas and others, 2001)

A decision model which combines Stochastic Multi-criteria Acceptability Analysis with Ordinal Criteria (SMAA-O) and A'WOT method were developed in 2003. This method was called S-O-S (SMAA-O in SWOT). "SMAA-O belongs to the family of Stochastic Multi-criteria Acceptability Analysis (SMAA) methods. SMAA methods have been developed for discrete multi-criteria problems, where criteria data are uncertain or inaccurate and where it is impossible to obtain accurate or any weight information from the decision makers. When SMAA-O is applied in a SWOT framework, it is not necessary to determine any importance in the first phase. Central weight vectors, together with rank acceptability indices (still with no importance information), as provided by SMAA calculations, serve as good starting points for an iterative and interactive analysis process" (Kangas and others, 2003, p. 351, 355). In that study, they applied this method for evaluating the strategies of forestland estate. Another study about method development was made by using integration of Value Focused Thinking and A'WOT hybrid method. Value Focused thinking was used for defining values and objectives for strategy planning. This approach was used to decide if local culture is important for rural tourism or not. The research was made in two regions which are Yla-Savo in Finland and Kassel in Germany. The results of this study indicated that culture was expected to be a success factor in rural tourism in both research areas. The research results emphasized the importance of investments to strengthen and raise awareness of local culture (Kajanus and others, 2004). Researchers started to use A'WOT hybrid method in different industries towards the middle of first decade of 2000s. Taşkın and Güneri (2005) applied A'WOT method for selecting the product with more strategic importance to produce. This study was implemented in a firm that produced paint. Yüksel and Akın (2006) conducted a research which described the story of evolution SWOT-AHP method until 2006. They also emphasized mathematical description of A'WOT method. Kandakoğlu and Güneri (2006) made master thesis about subject "Strategy Development and Evaluation". Their study offers prioritization of SWOT factors by using fuzzy AHP. This analysis also involves the evaluation of strategy alternatives. After that they developed flexible and reusable software as a decision support system, they tested it by solving a military operation strategy evaluation problem. An important development occurred about A'WOT method in 2006. This method was used by Forest Research Organization with scenario analysis and statistical analysis. "SWOT analyses formed the basis for further operations that were applied in the strategy process of the forest research station. The methods applied in the following phases were scenario analyses based on the external operational environment factors, formulation of strategic factors from the internal operational environment factors, and statistical analyses of the priorities of the strategic factors in the created scenarios. The process and methods applied provided a natural and analytical way for researchers to participate in the strategy process. The operations carried out resulted." (Leskinen and others, 2006, p.267) SWOT-AHP method was used in medical sector in 2007. A medical firm which served ambulatory surgery, specialized medical consulting, laboratory services and medical programs for firms decided to make a strategic plan. They formulated six alternative strategies but they couldn't decide the best one for the firm. They decided to use a decision support method and tried A'WOT hybrid method for ranking strategies (Osuna and Aranda, 2007). East Mediterranean Forest Research Institute used A'WOT hybrid method in Turkey for a European Union Project called ARIGEL. Its subject was "Improvement of Beekeeping at Çamlıyayla" A'WOT hybrid method was used to evaluate effects of internal and external factors on success of the project (Yılmaz, 2007).

SWOT analysis was also used with Analytic Network Process (ANP) instead of AHP. AHP method assumes decision factors which are hierarchical. There may be no interdependence among factors. ANP method which was introduced by Thomas Saaty is the generalization of AHP. ANP has network structure unlike AHP's hierarchical structure. Network structure allows decision makers to model complex

relationships among decision levels and attributes. This method can model the problem both top-bottom and bottom-top approach.
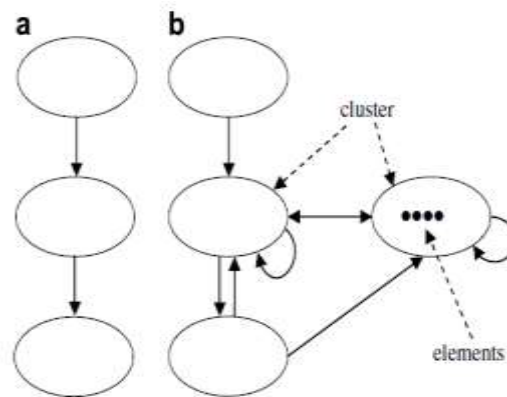
Figure 2: a- Hiearchic Structure b- Network Structure
Resource: (Yüksel and Dağdeviren, 2007)

Bottom-up approach means, importance of SWOT factors may not determine the importance of strategy alternatives all the time but strategy alternatives may determine the importance of SWOT factors. Although there are decision levels and decision alternatives as hierarchy in AHP, there are clusters and elements as networks in ANP.

ANP was used with SWOT for strategy ranking in a textile firm which produces and exports ready-made clothing in Istanbul. The decision makers formulated four alternative strategies and evaluated them based on SWOT-ANP hybrid method (Yüksel and Dağdeviren, 2007). MCDM was used with SWOT analysis for strategy ranking by the end of 2000s. One of the example of this is integration of fuzzy TOPSIS method with SWOT analysis. After linguistic variables were represented by fuzzy numbers to asses weights of SWOT factors, TOPSIS method was used for strategy selection. TOPSIS is MCDM method which was developed by Yoon and Hwang in 1980. Philosophy of this method is choosing the best decision alternative by finding the shortest distance from the ideal solution and the longest distance from the negative ideal solution. A bad result in one criteria can be compensated by a good result in another criteria in this method. Each criteria has either a monotonically increasing or decreasing preference. We can summarize process of Strategy Ranking by Fuzzy TOPSIS method respectively; (1) organizing strategy experts who are supposed to determine SWOT factors and sub-factors, (2) constructing the weighted normalized fuzzy decision matrix, (3) finding two solutions, one is ideal solution other is anti-ideal solution, (4) measuring distance of each strategy alternative to both solutions, (5) ranking the alternative strategies according to closeness coefficients (Hatami-Marbini and Saati, 2009). Zavadkas and others (2011) developed another method based on SWOT analysis and permutation method of feasible alternatives. Permutation method which was developed by Paelnick (1976) checks all permutations of alternatives according to their preferability and compares with each other. That method was used for strategic planning in construction enterprises. MCDM and SWOT analysis were also used for developing a method for mining industry. Fouladgar and others (2011) invented a method by integrating SWOT analysis, ANP and VIKOR. They employed SWOT analysis to represent current situation in terms of internal and external factors. ANP method was used to calculate weights of SWOT factors. VIKOR method was used to rank strategy alternatives. Case study of this article deals with evaluating Iranian mining strategies. Gallego-Ayala and Juizo (2011) applied A'WOT analysis for water-resource management in Mozambique. They used A'WOT analysis to establish a priority ranking of the fundamental factors to affect the outcome of the Integrated Water Resources Management (IWRM) reforms in Mozambique. Data for A'WOT analysis were supplied from expert group meeting and questionnaire to water resources management experts and practitioners. Participation of expert ideas to decision making process increased the effectiveness of decisions.

TOPSIS method was secondly applied with SWOT analysis for strategy ranking by Ghorbani and others (2011). They handled TOPSIS method by assuming that strengths and opportunities are positive criterias whereas weaknesses and threats are negative criterias. Their approach was applied by Yüksel and Dağdeviren (2007). On the other hand, Zavadskas and others (2011) improved their work by developing the following three stage strategy selection method for construction enterprises management: (1) making SWOT analysis by strategy experts, (2) calculating weights of SWOT factors by using AHP and expert judgment techniques, (3) ranking strategy alternatives by performing permutation method (Zavadkas and others, 2011). Fuzzy ANP method was applied with SWOT analysis for prioritizing strategies by Iranian

researchers. They modeled SWOT factors as a network and put them in fuzzy logic to take advantage of uncertainty modeling. Fuzzy ANP differs from classic ANP method by types of matrix inputs. Fuzzy ANP matrix data use triangular numbers which symbolize uncertainty instead of single number. The rest of the model is classical ANP. They applied this method to tile manufacturing firm in Iran (Babaesmailli and others, 2012). ANP and AHP are the most integrated methods with SWOT analysis for strategy ranking. Görener (2012) conducted a research to find out their common and different characteristics in the face of SWOT analysis and strategy selection. He highlighted the difference between hierarchical structure and network structure of SWOT models. He designed the following three stage procedure to solve strategy ranking problem: (1) constructing an initial SWOT model by taking the advantage of industrial characteristics, literature and company indicators, (2) constructing final SWOT by employing external experts, chief of planning department and department managers, (3) identifying the weights of each factor via AHP or ANP and creating the strategy ranking model. After he solved the problem by using by ANP and AHP, he compared the results and expressed that ANP is the generalization of AHP.

Kajanus and others (2012) examined the evolution of A'WOT analysis, SMART and SMAA-O applied within SWOT and MCDM more generally in terms of strategic decision making. They considered that MCDM method selection integrating SWOT analysis should be selected based on decision maker's abilities. They admited that AHP was outshined more than other methods. ANP method was started to be used in last years. They proposed a scenario approach to handle uncertainty of strategy ranking problem with SWOT analysis integrated MCDM method. Sevkli and others (2011) conducted a study in airline industry in Turkey. The subject of this case study was selecting the best strategy for Turkish Airlines Company. This study was a classic MCDM integrated SWOT analysis. However, after they performed AHP, ANP, Fuzzy AHP and Fuzzy ANP, they compared the results. Using these methods and comparing their results provided a quantitative basis to analytically determine the ranking of factors in SWOT analysis via a multi-criteria decision making method and incorporate inherent vagueness and uncertainty of the human decision making process by means of the fuzzy logic. ArshadiKhamseh and Fazayeli (2013) used MCDM integrated SWOT analysis prioritizing SWOT factors and selecting the best strategy alternative for a drug distribution company. They used AHP, ANP, FAHP and FANP. They compared the results after they solved the problems. Electronic government is another popular subject to make meticulous decisions. In UK, Shareef and others (2012) developed a method to evaluate the proposed stage model based on various criterias identified by SWOT analysis. AHP method was used to evaluate significant objectives about e-government which were cost effective establishment, transparency and accountability and economic development

Conclusion

At the end of the literature survey, it is being noticed that strategic decision making is hard job for decision makers because there are a lot of challenging constraints. Number of strategic factors to evaluate has been increased dramatically in recent years because of globalization. On the other hand, strategic plans are normally made by a planning team. This team includes external strategy experts, administrator of foundation and department managers. Selecting the best strategy alternative is the hardest job of this team because many SWOT factors need to be evaluated. According to SWOT analysis, the most appropriate strategy alternative needs to be selected. Technically, it is hard to compromise on this strategy formulation process. Different experts have different views on subjects. Human decision making process is open to biases. Strategic planning workshops which involve SWOT analysis and strategy selecting are controversial when participants do not use appropriate decision methods. Generally, they may use brainstorming, Delphi method, fishbone diagrams etc. in these meetings. However, these methods are not analytic methods and reflect disadvantages of human judgment ability. Thus, some decision support systems have been created via MCDM methods. These methods allow decision makers to decide objectively in a short time. MCDM methods are appropriate for group decision making due to their structure. In this literature survey, we represent chronological evolution of usage of MCDM methods integrated SWOT analysis for strategy alternatives ranking. We observe that AHP is the most used method for strategy selection and prioritization of SWOT factors. Second most used method is ANP which is generalization of AHP. For modeling uncertainty of this problem FAHP and FANP are used. TOPSIS, VIKOR and PERMUTATION methods which integrate AHP and ANP methods are also used. Expert groups were employed to provide data for those methods. When we examine which case studies mainly made with MCDM methods, we can sequence them as follows:

- Forest Certification Case
- Evaluating the Strategies of Forestland Estate
- Tourism Management Case

- Chemicals Production Case
- Forest Research Institute Case
- Textile Manufacturer Case
- Medical Service Case
- Development of Beekeeping Project (EU Project)
- Cosmetic Industry Case
- Strategy Selection for Construction Enterprises
- Mining Industry Case
- Water Resource Management Case
- Tile Manufacturing Case
- Cooker Hood Manufacturing Case
- Natural Resource Management Strategy Case
- Airline Industry Case
- Drug Distribution Case
- Electronic Government Case

Strategy ranking or selection problem is between semi-structured and unstructured decision problems. Semi structured decision problems can depend on human judgment and involve uncertainty. It is hard to model them. Therefore, MCDM methods integrated SWOT analysis for strategy ranking models have validity problem. (Validity of model means the ability of model representing the real system.) This validity problem generally causes from uncertainty nature of strategy selection problem. Strategic planning is a long term planning issue. Once a strategy is formulated, its application takes long time. It may take five years. Selected strategies influence future as well as they are influenced by future. As strategy selection is a future oriented job, forecasting ability of strategic planning team on the future of macro and micro environment is very important. The more they make accurate forecast about future, the more they select the appropriate strategy. They use scenario planning technique or some other types of forecasting techniques to achieve that task. At the end of literature survey we observed that, they have not integrated those techniques analytically to decision methods we examined. Thus, modeling the uncertainty of strategy selection problem is open to new developments. Future studies may be on this subject to model strategy selection problem with MCDM integrated SWOT and scenario analysis for modeling uncertainty.

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Game Theory Analysis: Telecommunication Companies of Turkey

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Abstract

Game theory is characterized as the art of strategic thinking. The art of strategic thinking is the ability of emphatizing with other people and estimating others how to act. This ability is an important factor determining result of the game where aims and targets collide. Making strategic decisions and taking decisions as the results of predicting opponent's strategy provides supremacy of competition.Game theory analysis means determining aims and gains of opponent player, determining dominant moves that will establish supremacy of competition and predicting moves of opponet player via emphatizing byself ay every step. In this paperability of strategic thinking and planning development of itself are aimed. In this paper, strategic moves among telecommunication companies of Turkey in 2013 was selected as sample. Reason for selecting telecommunication industry is the industry being one of industries having highest amount of fixed costs. So forth, there are few companies and high competition at industry. Moves of companies in this industry occur as opposite moves to opponent companies. Analyzing interaction among moves of companies is aspect of game theory and doing researchs supporting rationality of decisions made are aims of research.

Keyword: Game Theory, Strategic Planning, Stategic Thinking, Telecommunication

Introduction

We live in a world in which a fierce competition prevails. We witness that in this fierce competition, every rival is competing against each and they include their rival's decisions in their own decision-making criteria. Future-oriented decision-making tool is referred to as planning, whereas any planning in a competitive environment is referred to as strategy development. Hayri Bilge illustrates this: what a student does for future is a career planning. When an individual gets a job, what this individual does to be promoted and to come to a better position is no longer planning for the future but rather strategy development. Because there are rivals (Ülgen & Mirze, 2014). We consider an environment in which rivals exist when strategy is concerned.

In a competitive environment, planning for the future is regarded as strategy development. There are many competing environment in which strategies are developed. For instance, there are many environments in which strategies are develop such as a chess game, a competition for being the leader in an election, promotion activities when the competitors' new products are released, price competition of a potential competitor which try to enter to a monopoly market. Different strategies emerge in different areas, even though the competition is common.

If the economy is to operate where underemployment exists, then, strategies emerge. According to economists, prices are welcomed in full employment level and every buyer and seller is consent to the price. This fact is considered as the most basic assumption of full employment economy (Atiyas, 2000). However, in real life, neither buyers nor sellers accept the price. Both sides tend to act rationally in the bargain process. Besides, firms compete on price and they develop strategies such as advertising, promotion and product development. This fact shows that the economy is not at full employment level; on the contrary, it proves the existence of underemployment situation.

In the economy, there are many factors causing underemployment and increasing the severity of competition. Natural monopoly occurs in the economy in which this factor is the most severe. These factors are high fixed costs and the presence of scale economy, diversification of products and lack of information. Among these factors, high fixed costs and the presence of scale economy are reasons that give rise to natural monopoly. The telecommunications sector in which high fixed costs exist and the presence of scale economy is high in addition to the firms operating in monopolistic competition in a natural monopoly ground give the impression that the competition is fierce.

This paper researches the strategies in the telecommunications industry where fierce competition prevails. Strategy studies in social sciences are called game theory (Dixit & Nalebuff, 2010). For this reason, game analysis in the telecommunications sector is characterized as the title of this work. This

study creates a conceptual framework on game theory and strategic thinking in Conceptual Framework part and studies the telecommunications sector in Turkey. Institutionalizing available games in the telecommunications industry, the next section analyzes and develops strategies. Comparing the developed strategies to implemented strategies, strategist power of players are commented.

Conceptual Framework

Studies on Strategic thinking in the social sciences take place as *Game Theory* in the literature (Dixit). Indeed, when we look around with strategic thinking in social life, we see that a lot of game theories. In addition to the concept of strategic thinking forming the basis of Game Theory, strategies as outputs of this trend and the fact that these conceptualized strategies in game theory expand the limits of the conceptual framework.

Game Theory and Strategies

Game theory is a science derived from strategic thinking. Game theory is a tool in rational decision-making as a result of strategic thinking. If you want to give a decision within a policy, this policy is the subject of the science. If you want to make a choice between quantity and price of firms in a country's economy, then, game theory is a part of the science of economics. If you want to get ahead by developing a volleyball game strategy, game theory is then the subject of sports science. If you aim to keep up with the competitive environment and compete against your rivals in the market by implementing outstanding moves such as advertising slogan, business positioning, promotion, game theory then serves to the science of business. As seen, game theory is a strategic decision-making tool. It offers the opportunity to achieve superiority no matter which science matters. With this aspect of game theory is a tool to compete against the player. But game theory, game theory is evaluated within the field of social sciences as it is a strategic thinking activity on human behavior. Studies of strategic thinking conducted in the field of the social sciences are called game theory (Dixit & Skeath, 2004).

Creating a mathematical model, Game Theory provides a connection between this model and decision-makers and decision set (Gura & Maschler, 2008). Some components are required to form this mathematical game. Game theory has three main components: possible actions of the players, expectation of players, return of players (Watson, 2013). One of the factors that trigger competition, players has inadequate information. Information is a key factor for the game. If the player has perfect knowledge or shared knowledge, it is one of the factors that changed the direction of the game. Not all collective knowledge is common knowledge. You can have information about your rival. However, your opponent can not see this information about itself. This information is collective knowledge. But, it is not common knowledge (Polak , 2007). In contrast, perfect information means that you the preferences and the way the players follow, so you have the perfect knowledge. (Osborne, 2000). Perfect knowledge means that you know what will happen in a game before any action is taken (Polak , 2007). This situation is often encountered in consecutive games. In a sequential games, games are dependent on a strict order. Every player focuses on how they respond to the opponent's moves. Players need to develop an effective strategy in order to predict opponent's moves (Dixit & Skeath , 2004). In such sequential movements games, players step up by sorting moves. In other words, a player makes the first move, then the other responds to him seeing his first move (Carmichael, 2005). Perfect information is available in such games. Graphics techniques used to show and analyze consecutive moves is referred to as the game tree (Dixit & Skeath , 2004). Using decision tree graphics, decision set is obtained retrospectively in sequential games.

A game can also be played simultaneously just as it can be played successively. Players make choices without having information about the moves of other players in simultaneous games.

The game's strategies vary as different situations are concerned in a game. First, a game should be organized to determine strategies. Systematically strategic thinking ground is prepared with a game theory.

After obtaining a game theory, game theory offers us a set of appropriate strategies. we need to analyze the game in order to get a strategy set.

If a game theory is a simultaneous, techniques used in this game are usually dominant strategy and equilibrium analysis. If it is a sequential game, the techniques used in this game are look-back-predict-forward, create induction set, go forward, or standstill strategy.

For the analysis of a game, differentiating between simultaneous and sequential games offers us a more systematic study. The basic criterion in this distinction is timing of moves and information. Here,

information is an important criterion. Previous players can see the moves to the next player in sequential games. However, as it is not possible in simultaneous games, information is more limited. If you know what the opponent player do, and even the opponent do not move at all, this game is a sequential game. Knowledge is a factor altering the flow of the game.

A lot of studies have been conducted on game theory in literature and strategies have been offered in many cases. As sifferent intertwined situations require different strategies, game theory is considered to be an unending field of study (Dixit & Skeath, 2004).

This study is a set of decisions arising as a result of strategic thinking in the telecommunications sector. Competition is fierce in the telecommunications sector due to economic and environmental conditions. For this reason, it is accepted that strategic thinking trend is high and game theory is thought to be more. Another context of the conceptual framework is built on the telecommunications industry in order to better recognize this sector.

Discussion

The social science evaluation of the even is called game theory. In the theory of the game the player should have good strategy to earn more and to achive his goal. The players shold think rational and earn more than other players.

According to Osborn (2000) the perfect knowledge is when the player knows the competitors moves in advance. But the Knowledge of the game environment is also has its impact on own rational thinking.

The strategy of the game can be changed by the game goal. At the first stage the simultaneus or conseeutive game anysis are made. All this stage the main factor is the knowledge or by making the first move can change the game,rules,players moves by including them into the game strategy

By having more knowledge about the game player can have more better strategies acording to the social science game theroy appears in human's actions more observation can not only change the game strategy but also can invate new games and can add more into game theroy.

Conclusion.

Game theory, strategic thinking and the theories on human thinking are the science. Game theory is including a lot of sciences like an economy, in politics and policy strategies that maximize the interests of people's research of different strategies.

This study has analyzed a consecutive game, go or not to go ahead has been thought over strategy. Here, the game was built in telecommunications industry where two players from Turkey were selected. In this game shows that the theory of being ahead is not always the best choice, sometimes being behind is better choice to win. The 1st player is always ahead and the 2nd player is always behind. Which shows that the 1st player is always winning because the 2nd player didn't have better strategy to win the game. The choice of the strategy, to be ahead or to be behind is depending on the choice of the timing and the product development. This game shows that with the fully developed product the player always can win unless the second player have better strategy and move, by which the second player can decrease the first players profit.

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Information Technology Employees' Business Intelligence Perceptions at Enterprises

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Abstract

Business Intelligence provides the transformation of enterprise data to information to support fact-based decision-making and the accessibility of this information by the right people at the right time. The accessibility of the information is occurred by business intelligence applications. Business intelligence applications consist of tools which transform enterprise data to information. Decision making occurs quicker, more rationally and more accurately at any decision making level at an enterprise through business intelligence applications. Therefore business intelligence helps enterprises in gaining competitive advantages. Business intelligence has two dimensions, organization and technology. Consequently, it is a topic of interest for both information technology employees and other employees at an enterprise. In this study, we aim to evaluate the business intelligence perceptions of information technology employees at enterprises which use business intelligence applications in Turkey. In order to achieve this goal, interviews were conducted with employees who work with business intelligence at enterprises which use business intelligence applications. Obtained information was analyzed and the interview results were interpreted.

Keywords: Business Intelligence, Competition, Knowledge, Enterprise

Introduction

Making right decisions at the right time became the greatest requirement of the changing business world as a result of competition gaining a global dimension. Integrated systems developed in the 1990s, innovations in database systems and data analysis tools resolved the existing systems' problems. Thus the applications rendered by decision support systems gained flexibility and having these applications more easily with less cost became possible. As the result of these technological developments, business intelligence (BI) emerged. Howard Dresner, later an analyst at Gartner, coined the term "BI" (Watson:2009). Having analyzed the information technology (IT) market, he referred to business intelligence as a kind of "umbrella" that covers numerous methods, technologies, and applications oriented to real business decision support in an enterprise (Surma,2011:7). However, according to Power (2009:26), knowledge management, decision support, decision support systems and business intelligence are broad general terms. Whether it is interpreted as a subset of decision support systems or an innovation, business intelligence connotes a transformation process. This process is the transformation of the enterprise's data to information. Obtained information is submitted by various applications to decision makers at any desired time. Consequently, at any decision making level at an enterprise, decision making occurs quicker, more rationally and more accurately. Therefore it helps enterprises in gaining competitive advantages. According to Sauter (2010:12), understanding market conditions and being able to predict changes in market conditions in the global environment require good business intelligence. According to Gartner (2003), BI helps business managers in making tactical decisions, as well as establishing, modifying or tuning business strategies and processes to gain competitive advantages, improve business operations and profitability, and generally achieve whatever goals management has set. In a similar way, according to Willams and Willams (2007:2), BI combines products, technology, and methods to organize key information that management needs to improve profit and performance. Thus, it answers the questions of an enterprise related to enterprise's behaviors in the past, present and in the future. Business intelligence applications consist of tools which give these answers. Due to their enhanced user interfaces, business intelligence tools enable end users to prepare their queries and reports without the need for the support of information technology departments (Manavoğlu , 2009:16). These tools use an enterprise's historical data . Effective usage of these tools is possible by the asking of right questions at right times by the right people. Therefore business intelligence has two dimensions, technology and organization. It is seen that the definitions about business intelligence focus on these two dimensions. Table 1 provides some of the more prevalent definitions of BI (Işık, 2010:10-11).

Table 1. Business intelligence definitions and focus points

BI Definition	Author(s)	Definition Focus
An umbrella term that encompasses data warehousing (DW), reporting, analytical processing, performance management and predictive analytics	White (2004)	Technological
A system that takes data and transforms into various information products	Eckerson (2003)	Technological
Organized and systemic processes which are used to acquire, analyze and disseminate information to support the operative and strategic decision making	Hannula and Pirttimaki (2003)	Technological
An umbrella term for decision support	Alter (2004)	Organizational
Results obtained from collecting, analyzing, evaluating and utilizing information in the business domain	Chung et al. (2004)	Organizational
The use and analysis of information that enable organizations to achieve efficiency and profit through better decisions, management, measurement and optimization	Burton and Hostmann (2005)	Organizational

In this study the technology dimension is emphasized.

Method of the Study

In this study the interview method is used. Interviews are conducted with 30 information technology employees who work on business intelligence at 20 enterprises in banking, retail, telecommunication, information technology and logistics sectors. 19 enterprises use business intelligence applications, one enterprise was planning to use the applications when the interviews were conducted. Multiple choice and comment questions are asked to participants at interviews. Participants are asked to consider their enterprise's business intelligence systems with multiple choice questions. Expectations of participants from a business intelligence system are also evaluated by multiple choice questions . It is aimed to gather participants' opinions about the following subjects by long answer questions regarding the following:

- Contributions and troublesome aspects of business intelligence at an enterprise.
- Business intelligence applications' usage prevalence in Turkey.

Analysis and Evalution

Overall Information Technology Infrastructure

E-mail and internet as well as established local area networks are used at all enterprises where the interviews were conducted. Besides these, intranet is used by %95, CRM applications are used by %80, extranet is used by %75, ERP applications are used by %50 of the enterprises.

Enterprises' Business Intelligence System Preferences

The enterprises had applied more than one method while business intelligence systems were being established. Table 2 shows the enterprises' business intelligence system preferences.

Table 2. Enterprises' business intelligence system preferences

Business Intelligence System Preference	Frequency	Percentage
Ready-made system	12	60,00
In house development	12	60,00
Outsource development	4	20,00
Other	1	5,00

The "Other" preference in Table 1 includes usage of a business intelligence system as SaaS (Software as a Service). Enterprises which have preferred in house developed systems or ready-made systems utilize different products of different vendors. Table 3 shows the enterprises' vendor preferences for business intelligence systems.

Table 3. Enterprises' vendor preferences

Vendor	Frequency	Percentage
SAP	9	45,00
Oracle	10	50,00
Microsoft	10	50,00
IBM	2	10,00
Qlikview	3	15,00
Other	3	15,00

The "other" preference in Table 3 includes BI tool "Microstrategy and Salesforce", and zoho.com as SaaS (Software as a Service).

In this study it is seen that more than one person or department have influences over enterprises' decisions on utilizing business intelligence systems. Table 4 shows the decision makers who have an influence over enterprises utilizing business intelligence systems.

Table 4. Decision makers who have influences over the enterprises' utilization of business intelligence systems

Decision Maker	Frequency	Percentage
Executives	9	45,00
Employees' Requests	10	50,00
Information Technology Department	6	30,00
Unknown	4	20,00

At more than half of the enterprises, business intelligence systems run on transaction processing systems and data warehousing infrastructure together. Table 5 shows business intelligence systems' running structure at the enterprises.

Table 5. Business intelligence systems' infrastructures at the enterprises

Business Intelligence Systems' Infrastructure	Frequency	Percentage
Data warehouse	6	30,00
Data warehouse & Source systems	14	70,00
Total	20	100,00

The information obtained by business intelligence systems is submitted to the users who need the information at various organization levels at many enterprises. However, there are also enterprises where only the executives or executives and some of the employees use the systems. Table 6 shows the system users at the enterprises.

Table 6. Business intelligence system users at the enterprises

Business Intelligence System Users	Frequency	Percentage
Top and middle level managers	3	15,00
Determined employees	3	15,00
Any employee at any organization level	17	85,00

In the systems used by the employees who request them, the information is submitted to the users through multiple methods. Table 7 shows which method is used to submit the information obtained by business intelligence systems to the users at the enterprises.

Table 7. The methods for submission of the information at the enterprises

Method	Frequency	Percentage
Reports	18	90,00
Dashboard	17	85,00
Portal	9	45,00
Scorecard	8	40,00
Other	2	10,00

Enterprises were evaluated as "good" at many points by the participants regarding the business intelligence systems they have. Table 8 shows participants' evaluations of the enterprises' business intelligence systems.

Table 8. Participants' evaluations of the enterprises' business intelligence systems

	Perfect	Well	Medium	Poor
Defining the purpose of business intelligence (%)	26,67	50,50	23,33	
Gathering and arranging of data (%)	26,67	63,33	6,67	3,33
Analysis of data (%)	30,00	46,67	20,00	3,33
Usage of business intelligence applications by employees (%)	20,00	46,67	23,33	10,00
Evaluation of strategic significance of the information obtained by a business intelligence system (%)	23,33	40,00	23,33	13,33

Expectations from Business Intelligence Systems

At the enterprises, 30 information technology employees' expectations of business intelligence systems were evaluated. Accordingly, all except one of the participants indicated that in a business intelligence system, accurate and quick reporting, analysis and planning are very significant. Another expectation of nearly all the participants is that business intelligence systems should facilitate decision making. This expectation shows that it can be thought that the information technology employees understood the purpose of business intelligence. Table 9 shows the information technology employees' expectations of business intelligence systems.

Table 9. Information technology employees' expectations of business intelligence systems

Expectations of Business Intelligence Systems	Very Significant	Significant	Not Significant
More accurate reporting, analysis or planning (%)	96,67	3,33	
Improved customer satisfaction (%)	43,33	50,50	6,67
Advanced strategic planning(%)	63,33	33,33	3,33
Accessing critical information easily (%)	63,33	26,67	10,00
Facilitation of decision making (%)	90,00	10,00	
Advanced risk management (%)	40,00	43,33	16,67
Advanced analytical modeling (%)	50,00	36,67	13,33
Competitive advantage (%)	36,67	50,00	13,33
Reducing overheads (%)	20,00	53,33	26,67
Revenue growth (%)	36,67	46,67	16,67
Save time (%)	86,67	13,33	
Detailed analysis for existing and potential customers (%)	66,67	26,67	6,67

It was found that nearly all of the participants consider "being accessible at any moment" a necessary attribute. *This result supports participants' expectations of business intelligence system because being accessible at any moment is very important for a system to support decision making.* Table 10 shows the perceived significance of business intelligence systems' attributes.

Table 10. The perceived significance of business intelligence systems' attributes

Business Intelligence System Attributes	Extremely Significant	Somewhat Significant	Not Significant
To be able to provide up to date and quality information	88,89	11,11	
Being accessible at any moment	96,30	3,70	
Being simple and easily understood	74,70	25,93	
Allowing making queries on the data for desired time period	88,89	7,41	3,70
Supported by graphics	37,04	51,85	11,11
Drill-down	44,44	48,15	7,41
Transforming the obtained information to presentation format easily	29,63	51,85	18,52
Including the data both inside the enterprise and outside the enterprise	22,22	62,96	14,81
Adding new data sources easily	77,78	22,22	

Opinions about the Contribution of Business Intelligence to Enterprises

More of the participants expressed opinions that the contribution of business intelligence to enterprises are mostly towards reporting, analysis, planning and supporting decision making. This case overlaps with participants' expectations of a business intelligence system. Although fewer in number, there are participants who expressed opinions that the contribution of business intelligence to enterprises should productivity and competitive advantages. Expectations regarding productivity are saving time and increasing employee productivity by improving business processes. Competitive advantage is mostly

indicated as a result that is achieved by the contribution of business intelligence. In the light of these opinions, it can be said that information technology employees think business intelligence helps an enterprise in gaining a competitive advantage and raising productivity by reporting and supporting decision making with analysis.

Troublesome Aspects of Business Intelligence

More of the participants expressed opinions on these points which are about troublesome aspects of business intelligence:

- Analysis
- Data quality and process
- Source systems
- Customers/Users

On the opinions about the analysis, users' or customers' inability to express their requests clearly and the analyst's inability to determine the request due to lack of their business knowledge are emphasized with their respective reasons. Regarding the source systems, the difficulties for business intelligence caused by database design and the data storage format are mentioned. Therefore some of the source system problems are caused by the data indirectly. Based on the participants' opinions, it can be said that both the processing of data and the analysis while establishing the system are troublesome aspects of business intelligence due to it being fed by more than one source system.

Opinions on the Lack of Widespread Use of Business Intelligence Applications in Turkey

Most of the participants consider insufficient awareness of business intelligence as the reason for the lack of widespread use of business intelligence applications. This common opinion is followed by the opinions on the challenges of the human resources in business intelligence. The challenges of human resources include both a lack of trained employees for working on establishing or maintaining business intelligence systems and the absence of users to utilize the system effectively. Additionally, most participants stated obtaining and processing data is expressed as one of the troublesome aspects of business intelligence.

Conclusion

In this study business intelligence perception at enterprises were researched through information technology employees regarding the following aspects:

- The methods followed for using business intelligence applications
- The users utilization of the information obtained by business intelligence applications
- Expectations from business intelligence systems
- The attributes that a business intelligence system should have
- The contribution and the troublesome aspects of business intelligence
- The reasons for the lack of widespread use of business intelligence applications in Turkey

According to the findings obtained, at the enterprises, a system which is specific to the enterprise is established by information technology employees with different products of different vendors.

The information obtained by business intelligence systems is submitted to the users who need the information at any organization level generally. This finding suggests that business intelligence applications are utilized not only for strategic decisions but also for operational decisions. It can be seen that business intelligence expectations of information technology employees working on business intelligence are towards reporting and analysis. Also, it is noted that in for information technology employees, the most important issue about business intelligence is source systems. The challenges of source systems are considered both a troublesome aspect of business intelligence and the reason for the lack of the widespread use of business intelligence applications in Turkey by information technology employees. The poor quality data at distributed information system infrastructures of many enterprises is perceived as the reason of the challenges of source systems. The perceived difficulties regarding data, point that additional processes are necessary for data quality. These processes will bring additional labor and time costs to enterprises *during the transition of business intelligence applications.*

Constraints of the Study

The encountered strict security policies at many enterprises where business intelligence applications are used caused the study to be done with limited participation. Therefore it should be evaluated that the obtained results are indicators. Some differences may exist in overall trends.

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A Data Mining Approach towards Predicting the Academic Succes of Students based on Demographic Features and Highschool Education Parameters: Results of a Preliminary Study at Sakarya University

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Abstract

In today's World, the lack of qualifications of bachelors and their failure to meet the needs of the business environment have become a serious problems. In this respect, the placement of students of according to conscious choices of departments where they would be sucessful is of vital importance.In this study, a knowledge discovery process application was conducted on factors that may affect the academic success of students.A classification tree applcation in MATLAB was chosen as the method of the study . Thus, it is aimed at improving the education standards at universitiesy and helping students make conscious choices.

Keywords: Data Mining, Classification Trees, Loglinear Test, Academic Performance

Introduction

It is expected that bachelors have adequate knowledge and qualifications to contribute to the academic and business environment. In order to reduce the difference between these expectations and the qualifications the bachelors actually have, raising awareness among students about major choices is significant. Having chosen a major as a conscious decision undoubtedly plays an important role in a student's attitude towards their department. In this regard, these students are considered far more motivated, hence more succesful.

In related studies done in Turkey so far, the progression of the national university entrance exam (ÖSS,ÖYS,ÜSS) has been the main research topic. Kuran (1987) analysed the relationship between the academic success of the students and their scores from the university entrance exam in her study conducted in the Hatay and Adana Education Academy of Çukurova University. Descricptive data analysis techniques were employed. In a similiar study done in 2003, the correlation between the ÖSS scores and the academic success of the students placed to departments which accept quantitative, equally-weighted and verbal types of scores was investigated . The scope of study contained these departments: Quantitative (Agricultural Engineering, Civil Engineering), equally-weighted (Law, Business Administration) and verbal (social sciences teaching, Turkish Philology) Gradual Regression Analysis was utilized. (Karakaya, Tavşancıl; 2008) The common point in these studies, is that the grade point average for the first semester was chosen as the criterion for academic success. The reasons for this criterion being considered a valid measure of academic success are stated as followed:

• 	The reduction in correlation between the academic success and the University Entrance Exam score over years with the effects of other intervening factors;

• 	The similarity between the contents of the University Entrance Exam and the courses in first semester.

• 	The loss of data stemming from lateral and vertical transfer (Whitney,1989) (Zwick,2006)

Altınkurt(2006), investigated the correlation between the ÖSS and/or Special Talent Exam scores and the academic success of the students who were placed to the Arts Faculty in of Dumlupınar University. The program SPSS 10.0 was used to analyze the data. Kablan(2010) explored the data extracted from 330 students graduating from Kocaeli University to interpret the relationship between their KPSS (Public Personnel Selection Examination) scores and Grade Point Averages using the program SPSS 12.0 .

Result of the study, a high level of correlation between Grade Point Average and KPSS Scores was observed.

Data Mining can be described as extraction of unknown, potentially useful and hidden information from data. Based on this description, data mining is utilized to predict and exhibit the unknown relationships between different parametres.

There are studies which employed Data Mining Techniques to reach aforementioned kind of information in the literature. Gülen and Özdemir (2013) utilized data mining to identify the interest fields of gifted children. Association rules were extracted via WEKA 3.6.9 package program. In another study made by Rampell in 2008, the use of data mining in universities across the United State to evaluate the performance of the students in their courses was outlined. Ogor (2008) tried to improve a system that enables taking proactive measures by using the data extracted from the performances of the students in their courses. Within the scope of it; factual (Gender, Date of Birth, Subject etc.) and behavioral (motivation, attitude and environment) data were mined in Clementine 10.0. C 5.0, C&RT, ANN, CHAID, QUEST, Link Analysis, K means techniques were employed and their performances were compared. At the end of this process, C 5.0 turned out to have the most representative results.In a study conducted in three French-speaking Belgian Universities , the students' were categorized into 3 risk groups as "low", " medium", "high". The data acquired through a questionnaire wereanalyzed with Decision Trees, Artificial Neural Network and Linear Discriminant Analysis. Shannon's entropy and ID3 algorithms were engaged in this study where SAS/Enterprise Miner was used. (Vandamme et al. ; 2008) In a similar study that was done with 6690 students in Arizona State University, the factors affecting the probability of passing from junior year to senior year was determined and predictions of whether or not they would pass that were made. For this purpose, classification trees, multivariate regression models and Artificial Neural Networks were utilized. (Yu;2010) In another related study, the performance of Artificial Neural Networks and traditional statistical techniques were compared to design a system which predicts the academic success of applicants to Business Schools. (Paliwal, Kumar;2008) Adams and Hancock (2000) concluded that the working experience is a more explanatory variable than GMAT score in predicting the academic success whereas Braunstein(2002) identified GPA (Grade Point Average) and GMAT as having the highest correlation. Moore (1998) brought an expert system approach towards Graduate School admission decisions and academic performance prediction. Within the study, a two-staged expert system was used for both deciding about the admission of students to the MBA program and predicting their academic success. Inputs were divided into 2 major classes: Academic Preparedness (GMAT, GPA, INDEX) and Personal Demographics. The ID3 algorithm was used in this study.

Unlike the other studies in related literature, the effects of factual data that belongs to secondary education (matriculation score, the type of highschool etc.) and demographic features were investigated. By doing this, it is aimed to improve the quality of higher education and raise the awareness of department choice, hence contributing to qualified workforce.

Data

The data used in this study is provided from Sakarya University Student Affairs. The research sample spans the bachelors having graduated from, Industrial Engineering which uses the quantitative score type in admissions, Business Administration which uses the equally-weighted score type and History from verbal score type , between 2009 and 2013. Along with the parameters which were specified in related previous studies, brand new parameters such as students' horoscope are utilised in order to reach interesting and potentially useful patterns. The attributes obtained are as followed:

- Entrance date (EntDate)

- Date of birth (DateBirth)

- Registration Date(RegDate)

- Years for graduation (Class)

- Gender (Gender)

- Registration cause (RegCause)

- Education type (EduType)

- Faculty ID (FacID)

- Department ID (DepID)

- Student ID (StudentID)

- Grade Point Average (GPA)

- Graduation year (Year)

- Father's occupation (FatOcc)

- Mother's occupation (MomOcc)

- Matriculation score (MatScore)

- Highschool type (HSType)

- Highschool graduation year (HSGDate)

- Score type (ScoreType)

- The number of siblings (SibNum)

- Ranking (Ranking)

- Percentage (Percentage)

- Placement type (PlaType)

- Contingent of the registration year (Contingent)

While preparing the data, a great deviation in rankings, score types and percentages was observed. It is thought that this might be due to the acceptance policy of Higher Education Council (YÖK) over the past few years. Because of this deviation, these factors should be normalized. So, a normalisation index was developed. It is as followed:

$$\text{Quota\_success} = \text{Quota} * \text{Ranking} \tag{1}$$

$$\text{Normalization coefficient (nc)} = \quad v' = \frac{v - min_A}{max_A - min_A} \tag{2}$$

Based on this coefficient, normalised ranking is calculated by using the following formula.

$$\text{Normalized\_Ranking} = (nci*(max(Vi) - min(Vİ))) + min(Vİ) \tag{3}$$

In order to conduct the methodology in an easier way, the string values must be converted into integers:

- Highschool type (1= Vocational Highschool; 2= Anatolian Highschool/Science Highschool; 3= Highschool)

- The department (1= Business Administration; 2= Industrial Engineering; 3= History)

- Gender (1= Male; 2=Female)

- GPA status (1=Below Average, 2=Average, 3= Honors, 4= High Honors)

    (if GPA>= 2 and GPA<2,5 then "Below Average", if GPA>=2,5 and GPA<3 then "Average", if GPA >=3 and GPA<3,5 then "Honors", if GPA>=3,5 and GPA<=4 then "High Honors")

- Horoscope (1= FIRE, 2=EARTH, 3= AIR, 4= WATER)

- Preparation status (0= No, 1=Yes, 2= Exempted)

- Entrance at the first try (1= Yes, 2=No)

- Graduation in normal period (1=Yes, 2=No)

- Profession of parents (1= Military, 2= Farmer, 3= State Official, 4= Educator, 5= Retired, 6=Tradesmen, 7= Worker, 8= Accountant, 9= Police, 10= Self-employment, 11= Technician, 12= Passing, 13= Manager, 14= Housewife, 15= Architecture/Engineer, 17= Private sector, 18= Health Specialist)

- Region (1= Marmara, 2= Akdeniz, 3= Karadeniz, 4= İç Anadolu, 5= Doğu Anadolu, 6= Güneydoğu Anadolu, 7= Ege)

Methodology

Basically, data mining techniques are used for two purposes: Predictive and descriptive modeling. Predictive modeling is the purpose of the study. In this respect, the academic success of the students whose data were used are conceived with the purpose of classification into as followed : "High Honors" (GPA between 3.50 and 4.0), "Honors" (GPA between 3.0 and 3.50),"Average" (GPA between 2.50 and 3.0) and "Below Average" (GPA between 2.0 and 2.50) Since the inputs to the system developed predominantly consist of categorical values, the use of Classification trees was considered appropriate. Trees can be used for interactive exploration and for description and for descriptive and predictive modeling of patterns and processes.(De'ath, Fabricius;1999) It is preferred in terms of easiness to interpret.

In order to define the major variables which will be used in Classification Tree, the inputs were determined in accordance with the loglinear test results via SPSS 20 package program. Loglinear analysis which is capable of identifying the correlations between more than 2 categorical variables was considered beneficial. The sample results are as followed:

Table 1. Goodness of Fit test results in SPSS

Goodness-of-Fit Tests[a,b]			
	Value	df	Sig.
Likelihood Ratio	13,076	4	,011
Pearson Chi-Square	13,433	4	,009
a. Model: Poisson			
b. Design: Constant + EduType + Gender + GPAClass + Gender * GPAClass + EduType * GPAClass			

Table 2. Correlations between sample parameters

Correlations of Parameter Estimates[a,b,c]

	Constant	[EduType=1]	[Gender=1]	[GPAClass=1]	[GPAClass=2]	[GPAClass=3]	[Gender=1]* [GPAClass=1]	[Gender=1]* [GPAClass=2]	[Gender=1]* [GPAClass=3]	[EduType=1] *[GPAClass=1]	[EduType=1] *[GPAClass=2]	[EduType=1] *[GPAClass=3]
Constant	1	-,776	-,361	-,921	-,956	-,913	,334	,344	,329	,726	,741	,708
[EduType=1]	-,776	1	,000	,715	,742	,708	,000	,000	,000	-,935	-,954	-,912
[Gender=1]	-,361	,000	1	,332	,345	,329	-,927	-,953	-,912	,000	,000	,000
[GPAClass=1]	-,921	,715	,332	1	,880	,840	-,409	-,316	-,303	-,740	-,682	-,652
[GPAClass=2]	-,956	,742	,345	,880	1	,873	-,320	-,373	-,315	-,694	-,766	-,677
[GPAClass=3]	-,913	,708	,329	,840	,873	1	-,305	-,314	-,376	-,663	-,676	-,765
[Gender=1]*[GPAClass=1]	,334	,000	-,927	-,409	-,320	-,305	1	,894	,846	,000	,000	,000
[Gender=1]*[GPAClass=2]	,344	,000	-,953	-,316	-,373	-,314	,894	1	,870	,000	,000	,000
[Gender=1]*[GPAClass=3]	,329	,000	-,912	-,303	-,315	-,376	,846	,870	1	,000	,000	,000
[EduType=1]* [GPAClass=1]	,726	-,935	,000	-,740	-,694	-,663	,000	,000	,000	1	,893	,853
[EduType=1]* [GPAClass=2]	,741	-,954	,000	-,682	-,766	-,676	,000	,000	,000	,893	1	,870
[EduType=1]* [GPAClass=3]	,708	-,912	,000	-,652	-,677	-,765	,000	,000	,000	,853	,870	1

a. Model: Poisson

b. Design: Constant + EduType + Gender + GPAClass + Gender * GPAClass + EduType * GPAClass

c. Redundant parameters are not displayed.

Results and Conclusions

Classification trees are known for their easiness to interpret, which means that anyone can predict an unseen data by looking at them. As a preliminary study to help grasp the behaviour of the data, Classification tree was considered appropriate.

Based on the variables determined by the loglinear test, MATLAB version R2013b was used to form a Classification Tree. Gender, Horoscope, Dep and HSType are chosen as inputs and GPAClass was predicted by the combination of these inputs . The structure is displayed below:
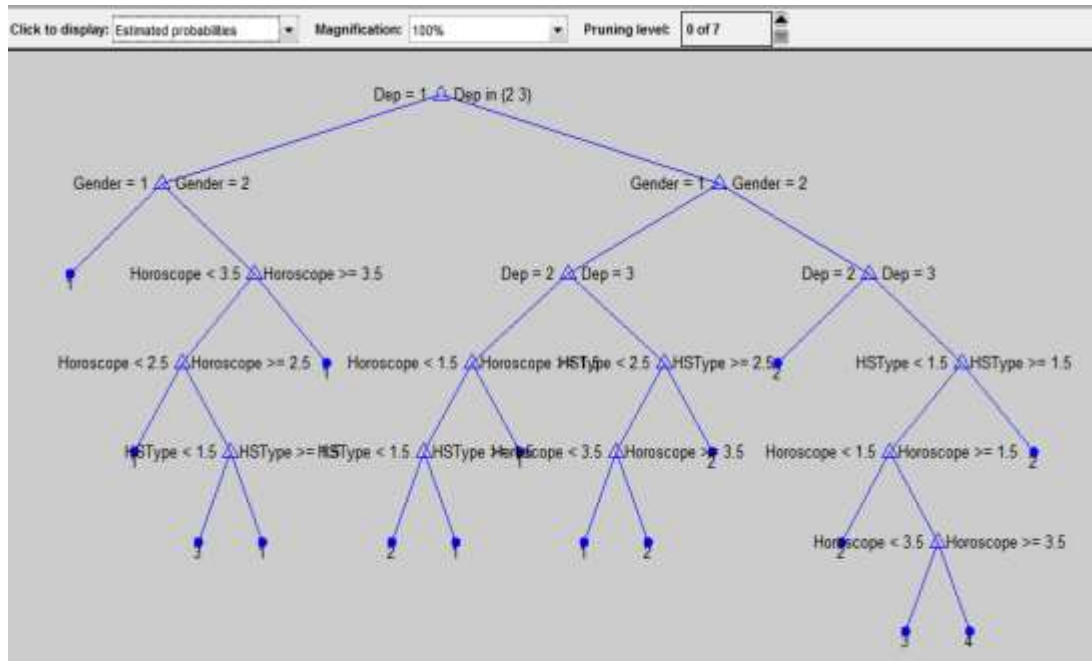
Fig. 1. Classification Tree

When it comes to cryticising interpreting the tree, some rules can be inferred such as:

If (Dep =Business Administration; Gender= Female; Horoscope= Water) GPAClass = Below Normal) (with the probability of 0.496)

İf (Gender= Male; Department= Industrial Engineering; Horoscope = Fire; HSType= Highschool) then GPAClass = Normal (With the probability of 1)

More rules can be deduced by interpreting the tree to predict the unseen data at some certainty. The branches that have low significance were pruned to stress the actual structure.

In order to reach more accurate results, the structure may need to be improved. In further studies, the current methodology may be hybridized by some Artificial Intelligence Techniques to integrate the advantages of different Data Mining Techniques.

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Storytelling Brand Narratives in the Digital Age

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Abstract

Narrative has become centrally important in brand building as brands strive to reshape and reinvent their meaning in the eyes of sophisticated and connected consumer groups. Evolving from the structural concepts of narrative theory we have seen the development and adaptation of storytelling techniques to engage with consumers and create an authentic and immersive brand experience. Adopting storytelling structures provides greater cognitive processing opportunities for consumers allowing for sense-making and meaning in their brand encounters. That storytelling process has frequently involved the co-creation and sharing of brand content on multi-channel digital platforms. New technology is facilitating engagement and a greater degree of authenticity in brand encounters through the characters, personas and stories developed by brands. Established social media and broadcast channels such as Facebook and YouTube, alongside newer content curation websites such as Storify, are enabling brands and consumers to collate, create and disseminate brand-consumer stories. This discussion paper examines the growing importance of the role of storytelling in the branding process and how digital communications channels are enabling brand-consumer storytelling opportunities and sharing.

Keywords: Brands, Marketing, Narratives, Storytelling, Digital

Introduction

The Role of Narrative in Brand Building

Brands have long been identified as having meaning over and above the functional benefits and can act as symbolic resources used by consumers to communicate the self to others (Elliott & Wattanasuwan 1998). The alignment of consumers to brand values and the consumption of brands has been described as representing a "narrative of the self" through which "Identification of the meaning that brands represent for consumers uncovers a story, or brand narrative, that consumers put to work via consumption." (Schembri, Merrilees & Kristiansen, 2010, p.633). Bastos & Levy (2012, p. 360) tell of the "connection to symbolism, fantasy, and design" of the brand concept.

Interpreting the role of message and meaning in brand narratives, Salzer-Mörling & Strannegård describe how; "In the narrative perspective, brands are seen as stories about values. Brands are stories about the corporate self; they carry a message of the inner, core values of the organisation or the product." (2004, pp.227-228) The role of dialogue in brand building is illustrated by Gove (2001) who describes how "As the creators of myths and stories, we are only as good as the impact we can have on our audience and we are only our passion, sincerity, and love of the brand will be able to create a dialogue and, eventually, a brand based on trust" (p.238).

The cornerstone structures for narrative are fundamentally similar and consistent in the literature (frequently using three-level divisions). Bal (1985, pp.7-9) proposes fabula, story and text ("The fabula is a series of logically or chronologically related events, caused or experienced by actors" Waterhouse, 2010, p.534). Rimmon-Kenan (1983, pp.3-4) classify a narrative consisting of story, text and narration. Meanwhile Walle (1986, p.21) organises the 'hero-tale' into three recurring components: (1) separation, (2) initiation, and (3) return. Laurence (2012) identifies the storytelling elements in brand narratives; "Brand narratives can take many forms, but they always contain three key parts: a genre, a narrator, and a message." (p.148)

The implication for the central importance of narrative to the branding process is the need to create, extend and continually reinvent the brand narrative whilst ensuring that the narrative matches what the brand is actually delivering (Denning, 2006).

Stories and Processing

As a piece of literary myth-making Ernest Hemmingway's response to a challenge to tell a story in six words is hard to beat: "*For sale: baby shoes, never worn.*" In itself, Hemmingway's response constitutes a fantastic story full of character and adding to the myth and legend of the great writer. Underlying this

is a tacit demonstration of our capacity to fill the narrative void present in the brevity of Hemmingway's six words; its implicit suggestion of a tragedy of some kind and our imagining of the emotional state of the human characters behind the narrative. We may recall our stored knowledge gleaned from stories we absorbed through literature and film media or we may transpose our own personal experience to interpret the implications present in those six words. Shank and Abelson (1995) view this as narrative processing where individuals relate an incoming story to stories they have in memory.

Küpers (2005) explains how stories convey non-explicit information, emotional knowledge and "meta-knowledge" to create a multi-dimensional experience; "The amount and quality of knowledge that is activated in the embodied mind of the listener or reader is far greater than the relatively small amount and quality of information that is explicitly stated in the story" (p.121). Escalas (2004, p.179) describes how a narrative mode of thought and narrative processing allows people to "think about incoming information as if they were trying to create a story – for example, imposing a beginning, middle and end, attributing causality and so forth". Woodside (2010, p.532) proposes that it is the use of indices ("touch points to the lives of listeners/viewers and to others that cause implicit and/or explicit awareness and emotional connection/understanding in the minds of listeners/viewers") as a process of storytelling behaviour whereby "Information is indexed, stored, and retrieved in the form of stories". When consumers process received information as a story (narrative processing) they may relate the brand image to their own personal experiences or "sense of self" Huang (2010, p.309).

Brand Storytelling

Brand storytelling is a hot topic in marketing as brands strive to not only find differentiation and a clear positioning strategy but also to elicit brand engagement with connected, savvy and scrutinising global consumer markets. Existing literature around the role of storytelling in brand building is scarce. However, there is a recognition that the use of storytelling narratives have been in the marketers toolkit for a long time: "For more than a hundred years, advertisers have used stories as their primary weapon for persuading people to make decisions about who they are, what they want, and (obviously) what they buy." (Bennet, 2013, n.p). Vincent (2012, p.146) identifies the human attachment to storytelling as evolutionary in source: "Humans are narrative thinkers, the only species on the planet yet discovered that filters information and experiences through the lens of stories." Smith (2011) pinpoints how narratives aid our capacity to filter, reconstruct and reach a shared understanding a process that has an experiential source: "Narrative is a natural heuristic; because our brains retain stories better than any form of information, they are the most powerful aid to recall, recognition and, perhaps most importantly, relevance." (p.27)

Storytelling in marketing has been described as a form of narration that makes sense of and brings meaning to the brand and what it stands for (Salzer-Mörling & Strannegård, 2002). Escalas (2004) argues that consumers create 'Self-Brand Connections' (SBC) by processing their experiences with brands in a narrative mode of thought, that is, by creating stories or imposing a story-like structure on events. In turn these stories create the belief for the consumer that the brand contributes to meeting his or her self-related, psychological needs. (Ibid, p.169) 'Brand-consumer storytelling' (Woodside, 2010; Woodside, Sood & Miller, 2008) is a term that relates to "narratives arranged by consumers where brands and products' play a role in stories told" (Kretz & Valk, 2010, p.134). The capacity for effective brand storytelling to affect brand image and allegiance is illustrated by Crystal & Herskovitz (2010, p.22) who describe how strong brand narratives and personas "come to evoke strong emotional responses from their customers, including loyalty, trust, and even devotion."

Echoing Maslow's 'Hierarchy of Needs' the author Philip Pullman (Goodreads, 2014) claims that "After nourishment, shelter and companionship, stories are the thing we need most in the world." Extending an ancient artform to the modern consumer-led marketing environment Herskovitz & Crystal (2010) illustrate how scientific research has provided "a sound empirical understanding of storytelling as a clear aid to memory, as a means of making sense of the world, as a way to make and strengthen emotional connections and as a way of recognising and identifying with brands of any type" (p.21)

Daw (2010, p.175) explains how, "Stories provide a key way to create a memorable message that will grow with repetition and time." Johnson (2012) describes how the use of stories relates back to a more traditional and powerful form of communication; the ancient art of storytelling. Woodhouse (2010) highlights how "Narrative theory informs the development of propositions of storytelling behaviour by providing understanding and description of story enactments and content". (p.534)

An important distinction is made between lecture and drama forms of story delivery (Solomon et al, 1999, Deighton et al, 1989). Drama, with similarities to a play or film draws viewers/listeners into the action in contrast to a lecture being principally in the form of a speech directed at an audience.

Frequently that storytelling relies on the use of recognisable archetypes that transcend culture and demographics representing "certain basic characters and storylines that appear regularly in myths, fairytales, literature and film" (Mazur, 2007, p.26). Those archetypes are collective unconscious forces (Jung, 1959) hardwired in the human mind: an unconscious primary form, an original pattern or prototype in the human mind (Woodside, 2010). Associating archetypes with product brands serves to provide symbolic meaning allowing consumers to construct identities across cultural boundaries (Mark & Pearson, 2002; Tsai, 2006)

Storytelling and the Search for Authenticity

The new media environment has radically and permanently altered the way in which both consumers and brands communicate their vision, their passion and their identity. Relationship-building by brands is increasingly being achieved through the use of stories. In an environment where consumers are bombarded with advertising and brand communications messages, In suggesting ways in which to remake brands to respond to 'new customers', Burnett and Hutton (2007) propose creating a "master narrative that reflects the company's core values and is operationalized through the brand" (p.345). This narrative would draw on effective storytelling and "bring certain story elements to mind such as courage, harmony, sacrifice, caring, equity, compassion, and so forth" (Ibid, p.345). Storytelling techniques can also facilitate the use of narrative arc as a framework for translating the overall brand promise into a narrative form (Smith & Wintrob, 2013) or as a means of changing the emotional, symbolic and social connections between company and customer, buyer and brand (Smith, 2011).

Dahlan, Lange & Smith describe how "The role of narrative (storytelling) in branding is now gaining more and more prominence because of its power to metaphorically connect people with brands" (2010, p.397). Dawson (2012) believes that "Storytelling is at the very heart of how we humans share and connect what we value about our heritage, our communities and ourselves. Brand storytelling is about connecting the outer value the brand provides to the inner values of the customer. There must be a deep affinity between the two or the relationship is just a transaction." (n.p).

Modern brand management is recognising that stories can play a pivotal role in brand communications as a potent form of communications, helping to bring the organisation to life and to convey meaning (Daw, 2010). Munford (2013) describes the resurrection of the 'oral traditions' and campfire lore: "The power of storytelling was something that brands and publishers suddenly began to use; stories to engage their audiences, to enrapture their audiences; storytelling became trendy." (n.p). He goes on to pinpoint the rise of digital communications as a key facilitator: "The strange rise of social media reinforced the rebirth of storytelling. In many ways, those who use social media correctly and in an interesting way are not only mini-publishers, they are also storytellers." (n.p). Escalas (2004, p.169) declares that consumers are creative story builders who "do not record the world, but create it, mixing in cultural and individual expectations as they construct their personal narratives". Herskovitz and Crystal (2010, p.25) suggest that storytelling strengthens the connections consumers have to brands, connections based on "the narratives he or she has constructed that incorporate the brand".

Citing Joseph Campbell's research on myths and storytelling, Sachs (2012) identifies issues of empowerment, rather than the role of passive consumer in the use of the narrative structure identified in 'The Hero's Journey' through which an individual "Conquers their own fears, reaches for their deeper, higher value, and helps to make a better world, contributing to the community in the process, and making sacrifices along the way." He goes on to describe how these empowerment stories have always been passed around quickly and robustly in the oral tradition.

Cabrel (2014) illustrates how "Storytelling is powerful, and brands have tapped into this power for a long time, whether it's understanding the history and pedigree of a brand like Jack Daniels or sharing in the passion of a brand, such as Nike." Advertising Exec Jon Howard-Spink describes how people respond to and resonate with the "real stories" behind the brands; "Companies that have a sense of what their own passion is –their story – can then articulate it. If you don't have that then you are back in the world of making it up." (Mazur, 2007, p.26)

Smith & Wintrob (2013) identify a brand story anthology that maps four types of story constructs:

- Heritage stories: Detail how the brand came to be and why it has certain qualities.

- Contemporary Stories: The suite of stories brands tell today – often with intersecting plotlines.

- Folklore stories: The stories told about a brand by others that organically nurture the culture and sub-cultures around a brand.

- Vision stories: Imagines a future state – creating the story of an eventual legacy. (p.37)

Brand Storytellers

The UK–based smoothies and juice brand innocent have long been adept at utilising story structures to document the roots and development of the brand. The birth of the brand at a music festival in 1999 has entered branding folklore when they asked customers to vote with their empty packaging in 'Yes' or 'No' bins to decide whether they would give up their jobs to make smoothies. It's become a central narrative to the innocent story, akin to an 'origins' story in movie parlance and mirroring a natural, organic beginning with the natural and organic nature of the products themselves.

Innocent have continued to build their brand narrative. A campaign launched in 2013 focused on the positive impact they can have in the global supply chain. The 'Chain of Good' campaign launched through traditional print and broadcast media highlighted the impact of the charity commitments made by innocent to support farmers and traders in developing countries to become self-sustaining in producing goods and crops and also the longer term societal impact. As an ethical brand built on a commitment to "do business in a more enlightened way, where we take responsibility for the impact of our business on society and the environment" (innocent, 2014) the authenticity of ethical claims is enhanced by the ability to directly tell the stories of those who benefit from the brands commitments and the impact from consumer purchase to the beneficiaries of the good causes supported by innocent. In one of the adverts, accompanied by online content, the story is told of Janet and Otai in Uganda who benefit from the ability to become prosperous farmers and subsequently buy a bicycle for their son to ride to school to gain from education and subsequently realise his dreams of becoming an engineer. Integrating communications even further the brand created a hashtag: #chainofgood and even created a counter advert 'Chain of no good' highlighting the negative consequences the wrong brand choice. Dan Germain, group head of brand and creative at Innocent Drinks describes the motives behind the campaign: "We've made great drinks, written good copy, told interesting stories and put on some fine festivals. We continued in that vein for a few years, each time finding a different way to tell people about our products, but rarely deviating from the bottle/fruit/park format. We had to somehow keep people coming back there, so we kept telling them why, with umpteen product-led messages. But all the time we knew there were so many other great stories inside our business that we could share." (Germain, 2014, n.p.)

Evidence suggests that innocent have utilised storytelling forms extremely effectively throughout the organisation, with storytelling forms evident in all its recent marketing campaigns. An advertising campaign launched in 2011 presented a superhero smoothie, enacting an 'Epic Hero' archetype, destined to save the population from excess and bring healthy goodness into their diets with a tagline of 'Here to save the peckish'. The fully integrated campaign combined TV adverts, poster and digital campaigns supported by a dedicated website, i-phone app, on-pack and in-store POS activity including bottles adorned with superhero capes. In what we might traditionally expect from a DVD extra innocent also released a 'making of' video via YouTube utilising on the video sharing platform's ability capacity to deliver fresh audiences to the brand through its capacity to reach up to 1 billion unique users each month. The success of YouTube as a marketing channel is reflected in the creation of dedicated brand channels to publish videos and engage with brand fans and aiding electronic word of mouth (Ewom) to potentially millions of online consumers (du Plessis, 2013). The growing importance of digital video as part of strategic marketing communications is seen in IAB research in 2014 reporting that 75 per cent of brand marketers and ad agency executives anticipate that digital video will become as important to their business as television advertising within the next three to five years (The Drum, 2014a, n.p.).

Of course innocent have a well-defined and archived story hinting at a degree of authenticity and sustainability in terms of their long-term brand building as Germain (2012) explains: "To not invest fully in creating and curating your organization's story means that you miss a massive trick, because what you then end up doing is spending a ton of money on inventing some kind of fake story that never happened, but has to be turned into some sort of ad campaign, or book, or redesign or rebrand". (n.p)

Another brand with a strong brand heritage is the Body Shop whose origins as the creation of a determined and media savvy ethical entrepreneur Anita Roddick created its own narrative arc closely related to the passion and determination of its founder. In 2013 the Body Shop introduced a new store concept that puts storytelling centre stage in revitalising and reinventing the brand. The 'Pulse' concept

is a worldwide redesign of the Body Shops' stores in over 60 countries, an interactive retailing model with information and conversation areas designed to encourage customers to linger as they flow through the store. Body Shop Brand Manager Sam Thompson describes the concept and how store staff are encouraged and trained to 'tell the story' behind the origins of the products: "Like all brands we're going through a complete digital revolution, so working out how we maximise that potential for storytelling and bringing to life the history and the authenticity of the brand, is also a massive opportunity." (personal interview, September 19, 2013) As a brand with similarities in terms of ethical commitment to innocent, the Body Shop have also used digital communications channels to tell the stories behind the product sourcing, suppliers and community fair trade projects.

A New Panacea: Branded Content

An additional priority dominating marketing strategy in the digital age is the emphasis on 'content'. With the need to engage consumers in a crowded media and digital environment, branded content is seen as a panacea to eliciting consumer attention and engagement. The fast paced evolution and shifting trends in social media have opened up new platforms for branded content. At the forefront are Facebook and the introduction of sponsored stories and adverts into personal news feeds, as well as the promoted tweets options offered by Twitter. Instagram, owned by Facebook in a significant $1bn takeover in 2013, is also slowly and strategically opening up this social space for commercial activity. Facebook's acquisition of smartphone app 'Whatsapp' in a similarly high profile deal in 2014 has prompted speculation of how this digital platform might opened up to commercial exploitation: "For Facebook this is a key growth area where, even if they don't monetise this product, this is a way that Facebook can get the next billion smartphone consumers into their ecosystem." described technology consultant Ben Bajarin (BBC, 2014). In this context we can advance research by Wallace et al (2014) on the engagement of consumers on social media channels, principally through the "likes" function of Facebook, and their potential to be brand advocates participating with the brand through high involvement and positive word of mouth (WOM).

These ever-evolving social media platforms, with increasing consolidation and vertical integration, have opened up possibilities for new forms of branded content and paved the way for more subtle, engaging brand messages. Davies (2013a) depicts a marketing communications landscape which can leave marketers feeling flat footed at the rapidity of change; "Whether it is via YouTube or other video platforms, social media, or creative partnerships with publishers, branded content is evolving fast. Marketers are waking up to the fact that to meet the expectations of tomorrow's consumers, they must explore new ways to tell their stories, while fully understanding the nuances of each distribution platform to harness their full power." (n.p)

UX designer and founder of Byflock, Anna Dahlstrom offers the recognition that; "When we are talking to people, there needs to be a narrative...what is the story we are trying to tell? What is the journey? Where do we want them to go?" Describing a digital landscape that offers a much less linear journey for users Dahlstrom explains how "Storytelling can make sure that we capture a user's attention" and as a result drives them to click through the desired links on a website (Lepitak, 2013, n.p.).

The DNA of Digital Brand Storytelling

Perhaps what new digital communications and social media channels in particular offer most is the capacity to elicit engagement and co-creation in developing brand stories. Coleman (2012) describes a process that goes beyond how the brand tells the story, becoming increasingly focused on how people share the story of the brand; "Powered by the phenomenal efficiencies the Internet and social media platforms have created, people are able to more readily share stories with the extension of their own audiences, networks, and communities." (n.p)

The fast-paced innovation curve of mobile and internet technology (and it's assimilation in developing economic markets) leaves consumers with opportunities to experience brands from a multitude of angles. Interpreting engagement through the interactivity and longevity offered by digital channels Cabral (2014) describes how; "We've moved away from a more traditional 'broadcast' approach to brand storytelling, with a decline in broadcast media, and into a new, more fragmented world of digital channels – whether it's a website, a mobile app or social media. This new digital world has meant that the rules for digital brand storytelling are radically different." (n.p)

A host of new online storytelling platforms that collate and curate content such as Storystream, Lyvefire, StreamHub and Storify are offering the opportunities for brands to develop interconnected content and develop symbiotic narrative threads as a process of reinforcing brand values, disseminating feel good

moments and attaching the brand to significant moments in culture and history. "The need for brand storytelling hasn't changed. However the web creates a completely new type of storytelling landscape. The breadth of media formats, data and communication channels is constantly growing and means storytelling needs to be an always-on and agile activity to connect with the right audiences. This always works best when they are made part of the storytelling experience, something the web enables perfectly," declared Alex Vaidya, Founder of StoryStream (Munford, 2013 n.p).

Offering the capacity to select and collate information, commentary, opinion and reportage from across a range of social media platforms, tools such as Storify allow socially or culturally consistent content to be aligned to a brands existing narrative. The aggregation of Tweets, posts, photos and links allows users to create narratives and curated content in new contexts, a function that brands are beginning to capitalise on. Enabling the creation of "native ads" described as a "sub-set of the catch-all content marketing, meaning the practice of using content to build trust and engagement with would-be customers" (The Guardian, 2014) these storytelling platforms are amplifying content by syndicating across a range of media partners. The power to gain acceptance and engagement from consumers is evident in a 2014 survey which found that 70 per cent of respondents said native placements were the most effective at showing a brand as innovative, while 55 per cent described them as 'fun' (The Drum, 2014b, n.p.).

Conclusions

The marketing implications for incorporating storytelling structures into brand building and eliciting consumer engagement are evident: " Crafting a story whereby a brand is a supporting actor enabling the protagonist to achieve conscious and/or unconscious goals… helps build very favourable consumer-brand relationships (e.g., committed partnerships, best friendship, flings, or a secret affair.)" (Woodside, Sood & Miller, 2008, p.128) Sax (2006) suggests that storytelling is not only one of the oldest means by which humans organise and interpret experience; it is also the most robust. Meanwhile, Mayhew and Wood (2011) stress the importance of consumers helping to create and establish the brand's storyline.

The ancient origins of storytelling were rooted in the transfer of information as "People told stories to communicate knowledge and experience in social contexts." (Zipes, 2012, p.2) Frequently these stories handed down the themes and skills necessary for survival (warning about danger, how to procure food, or explain what seemed inexplicable), it could just be that those same processes could be essential to the sustainability and survival of brands.

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Acknowledgementszipes

Designing an Information Technology Development Index for Business Organizations

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Abstract

As a result of rapidly changing consumer needs, an increasing number of substitution products as well as accelerated contraction of the markets and constantly increasing competition force business organizations to distinguish from others to survive. An important step in achieving competitive advantage is to follow evolving technologies, harmonize their strategies with these developments and adapt innovations as quickly as possible. While there are some reports and studies that describe the development level of countries in the information technology (IT) domain, there is a lack of studies dealing with that issue at the company level. This study therefore aims at developing a multi-dimensional composite index for measuring the development level of business organizations in the IT domain. The purpose of this index is to comparatively evaluate those organizations in terms of their IT ownership and usage, as well as to detect inherent weaknesses.In the course of developing the index, several sub indexes of different dimensions (such as technology ownership, utilization, perception, economical power, institutional structure) and their underlying indicator sets will be determined from literature and opinion of experts. Designated indicators should represent the dynamic structure of the technology to reflect the changes over time. The new index will be expected to provide a better understanding of institutional IT development standards and allow ranking of organizations to stimulate competitive gains.

Keywords: Information Technology, Composite Index, IT Development Level, Business Organizations.

Introduction

Up to the present, humanity has experienced three important stages, lived three important revolutions and finally transformed into its present state (Kocacık, 2003). The first stage of this transformation was changing into an agricultural community. The next transformation stage is industrial revolution. Industrialization began with "industry revolution" which consists of a set of technological changes affecting essential tools and instruments used by English people during the 18th century. (Giddens, 2000). The third transformation stage of humanity is referred to as the Communication and Information Revolution. (Kocacık, 2003).

As the main characteristics of agricultural, industrial and information societies, all made use of specific technologies respectively. Change in technology makes impacts on societies in economic, social, cultural, political areas and also exposes new changing processes (Erkan, 1998).

Technological development has become an important criterion not only for societies but more specifically also for business organizations. As the importance of this term has been understood, some indexes which are applied for measuring the technological developments of countries and business organizations have been developed. For example;

- *Technology Readiness Index (TRI)* developed by Parasuraman (2000) , measures the tendency of nations to embrace new technologies,
- *Technology Achievement Index (TAI)* demonstrates the formation of technology in one nation and how it harmonizes with skills of people. (United Nations Development Programme, 2001),
- An index developed by Archibugi and Coco (2004) measuring the capacity and development of technology for developed and developing countries by adding one indicator to the initial set of indicators of the Technology Achievement Index.
- The Web Index (2013) is a measure of the World Wide Web's contribution to development and the fulfillment of basic human rights. The construction of the Index involves a rigorous process of collecting and analyzing data across a large number of indicators and countries.

The indexes mentioned above were generally developed for countries and published in reports. Although, Turkey is one of the developing countries and also has lots of opportunities like its geographical location to trade, productive lands, massive young population, it is not one of the most technologically advanced countries, and moreover its rank is quite low according to these indexes. However, there have been no studies focusing on the technological development area neither for country nor business organizations in Turkey yet.Because of the aforementioned reasons, the purpose of this study is designing a composite "information technology development index" for business organizations, applicable for all of Turkey. Not only business organizations already operating in the sector but also ones that just newly embarked on are targeted with this index.

While the index is being developed, consulting decision makers of related sectors and taking into account their knowledge and experience is considered vital. It is assumed that the designed index will reveal significant inter-relationships among the technological development of firms.

In order to choose the suitable indicators, as one of the major steps in designing an index, literature has been reviewed and opinions will be obtained from experts as an ongoing part of our study. After the suitable indicators are selected, their statistical suitability has to be tested.

Importance of Information Technology for Business Organizations

Starting in the 1950s with the commercial use of computers introduced information technology to the broader society. Until it reached the current form, it had passed through three stages. These stages continued approximately for 15-20 years each and were named as; computing era, micro era and lastly network era. The network age is changing the way (by whom and where) technological innovation is created and disseminated. Global research and development (R&D) activities are increasingly privatized and networked. Corporations have resources and the ownership (patents) to finance R&D and take products to market (Desai et al., 2002)

It is clear that importance of IT is increasing daily both for institutions and people. Especially for institutions, the necessity of serving vast human needs with limited resources creates a brutal competition. Hence, using IT is inevitable to survive in today's business environment (Kızılaslan and Gönültaş, 2011). After the 1990s with the increasing effect of globalization, the development of technology forced people to use IT (Perçin and Karakaya, 2012). As the technology spread, use has increased; as the use increased, institutions have visibly changed. Structural, technological and cultural perspectives of them include the most important changes. They become more flexible, dynamic and communicative called structural changes, using ERP systems, increasing the number of R&D personnel called technological changes and the lastly cultural changes includes team work, delegation, much more friendly managers and collaborative work etc.

Besides these changes, processing data is also different when compared to the past. When The Global Information Technology Report (GITR) and the Networked Readiness Index (NRI) were created more than 10 years ago, the attention of decision makers and investors was on adopting business and financial strategies that would allow them to develop in the context of a fast-moving but nascent Internet economy. Over more than a decade, the NRI has provided decision leaders with a useful conceptual framework to evaluate the impact of information and communications technologies (ICTs) at a global level, and to benchmark the ICT readiness and the usage of their economies (The Global Information Technology Report, 2013). Business organizations could sell anything they produced and always made profit at the earlier stages of globalization, but now change in demands of customers and market conditions and increasing competition compelled them to differentiate themselves. Their goal has become not only to produce product anymore but also to reduce costs, increase quality standards, use time effectively, satisfy demands of customers, harmonize themselves with the electronic distribution channels, ensure cooperation and reach their strategic goals. They must use IT in every department of their businesses efficiently to survive.

Literature Review

The determinants of the generation, transmission and diffusion of technological innovations have been studied both from the theoretical and empirical viewpoint by a large body of literature. But the current understanding on the devices of technology creation and transfer are still inadequate, also for the lack of detailed indicators of technological change (Archibugi and Coco, 2004). Our work has been inspired by a variety of attempts to generate measures of technology capabilities.

In 2000, the Technology Readiness Index (TRI) was developed by Parasuraman in order to measure the tendency of people to use new technologies. Four dimensions of TRI were proposed: discomfort, insecurity, optimism, and innovativeness. Data were obtained from the volunteers who took the National Technology Readiness Survey (NTRS). Finally the relationship between having technological products, using and diversification of technology based services and TRI was explained. Tsikriktsis (2004) replicated Parasuraman's (2000) study by collecting data on English consumers and found support for the four TR dimensions, as did a Swedish study by Parasuraman et al. (2004).

Liljander et al. (2006) indicated the proposition of Parasuraman (2000) in their study that future studies should investigate the antecedents and consequences of both the TR index and the individual dimensions. After Parasuraman had developed the TRI, Desai et al. (2001) suggested another composite index whose aim was to make a comparison between countries according to their technological development as reported by the United Nations Development Programme (UNDP). That index aimed to capture technological achievements of a country in four dimensions: creating new technology, diffusing recent innovations, diffusing existing technologies that are still basic inputs to the industrial and the network age and building a human skill base for technological creation and adoption

Archibugi and Coco (2004) built upon that attempt by Desai et al. (2001) and their Technology Achievement Index (TAI). They designed the "Ar-Co Technology Index" which is similar to TAI in many ways. Their main modifications are enlarging the number of countries examined and allowing comparisons over time. This index has taken into account three dimensions of technological capabilities: the creation of technology, the diffusion of technology and the development of human skills. As a result of the study they grouped the 162 examined countries in different blocks named as "leaders", "potential leaders", "latecomers" and "marginalized".

Although UNDP uses TRI; the United Nations Conference on Trade and Development (UNCTAD) adopts a comparative approach based on relative country rankings to identify countries that are making progress in Information and Communication Technology (ICT) development and those which are being left in the digital divide (ICT Index, 2003). In accordance with the Commission on Science and Technology for Development (CSTD), UNCTAD reviewed and evaluated existing work to measure ICTs from different sources including academia, the private sector and international organizations (UNDP, UNIDO, OECD and ITU). The ICT Development Index (IDI) is a benchmarking tool used to monitor information society development worldwide (International Telecommunication Union 2009, 2011: cited by: Dobrota, Jeremic and Markovic, 2012). IDI has three main dimensions; Access, skills and use.

Another index called the Web Index (2013) is a measure of the World Wide Web's contribution to development and the fulfillment of basic human rights in 81 countries. The Index combines existing secondary data with new primary data derived from an evidence-based expert assessment survey. It consists three sub-indexes; universal access, freedom and openness, relevant content and empowerment.

Besides these indexes that were generally developed for measuring the technological development of countries, there is no index which compares business organizations in terms of their level of technological developments. In our study, we attempt to design an index which creates added value and supports organizations to survive in the competitive market.

Information Technology Development Index

This work in progress study will be based on literature review and expert interviews. To achieve the objective of measuring the technological development of organizations, suitable indicators and sub-indexes need to be determined in a first step. In order to select appropriate indicators, information technology usage has to be understood accurately at the level of the organization.

"What must be the indicators measuring the technological development of a business organization?"

To find an answer for this question, earlier studies have been reviewed and five dimensions of technological development of a business organization are identified accordingly.

1-) Technology ownership

- number of computers with or without internet connection (ICT, 2003)

- number of servers and total storage (ICT, 2003)

- internet bandwidth per internet user (ICT, 2003)

2-) Utilization

- amount, frequency & purpose of use (Petter, Delone and McLean, 2008)

- voluntariness (Szajna, 1993)

3-) Perception

- perceived ease of use (Venkatesh and Davis, 1996)

- perceived usefulness (Venkatesh and Davis, 1996)

- user satisfaction (Petter, Delone and McLean, 2008)

4-) Economical power

- percentage of total revenue spent in hardware and software

- percentage of total revenue spent in R&D facilities (Grinstein and Goldman, 2006)

5-) Institutional structure

- number of people working in R&D department

- number of people working in IT department

- patents (Archibugi and Coco, 2004)

Conclusions

Designing an index of technological development for business organizations is the main scope of this study. There are many indexes developed for measuring the technological capacities of countries but there is lack at the organizational level

It is a work in progress study. Follow-up research aims at including a comprehensive set of indicators and sub-indexes as well as the subsequent index composition. Although, the main indicators and their sub-indexes have been identified at this stage, their setup has not yet been statistically tested. In order to do so, relevant data applicable to quantify the indicators and sub-indexes must be gathered. The selected indicators will provide a basis for further studies investigating technological developments of organizations.

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Examining the Residents' Attitudes toward Tourism Development: Case Study of Kaş, Turkey

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Abstract

The present study has been conducted to analyze the attitude of local people in Turkey's province of Antalya county of Kaş related to the support for the development of tourism; this county's tourism was defined to be in a decline according to the Butler's (1980) life cycle model. The attitude of local people in Kaş County related to tourism development has been analyzed with the help of observed variables (perceived positive effects of tourism and perceived negative effects of tourism, personal benefits from tourism development, satisfaction of local people related to tourism development). For this purpose, Ko and Stewart (2002) model has been used with frequent references in literature. Questionnaire has been used as a data gathering tool in the study. Questionnaires have been applied on 270 volunteers selected by convenience sampling. Structural equation model has been used in order to test hypotheses formed in line with the purpose of the study. The results of the study showed that the observed variables in the model are effective in explaining local people's attitude related to the development of tourism. The findings have been evaluated in the context of study.

Keywords: Destination Life Cycle, Tourism Development, Residents' Attitudes

Introduction

Tourism researchers discovered that local people's support must be won in order to enable a successful development in tourism industry (Ramchander, 2004). It is important to evaluate local people's attitude in the context of enabling a sustainable development for tourism destinations. A healthy tourism development may not be expected without local people's support. The support of local people is essential in the development, sustainability and success of tourism (Jurowski et al., 1997). If local people's tourism perception is positive, they will give every kind of support in order to contribute in the development of tourism (Yoon et al., 2000). Tourism plan has to get local people's approval in terms of development model, scale and location if tourism activities are to be sustainable (Avcıkurt, 2003). Many studies have been conducted in the last 30 years within tourism literature to identify local people's perception and attitude concerning the development of tourism. As a result of the studies conducted in various locations, the reactions, behaviors and attitudes of local people concerning the development of tourism were explained through typologies and taxonomies (Sharpley, 2014).

The studies conducted on the attitude of local people living within the destination towards tourism have been focused around economic (Perdue et al., 1990), social (Fesenmaier et al., 1996), cultural (Murphy, 1985) and environmental (Liu et al., 1987) effects of tourism. The changes in economic, sociocultural and environmental resources perceived by the local people play an important role in the support given by local people for the development of tourism. Tourism researchers emphasize that the support for tourism will take form depending on the economic, social, cultural and environmental results. The relation between the effects of tourism and local people has been analyzed in many studies (Akis et al., 1996; Ap, 1992; Belisle ve Hoy, 1980; Lankford, 1994; King et al., 1993; Lindberg ve Johnson, 1997; Liu ve Var, 1986; McCool ve Martin, 1994; Besculides et al., 2002; Long et al., 1990; Lankford ve Howard, 1994; Tosun, 2002).

The most frequently used theory originating from sociology to explain behaviors of local people concerning development of tourism is social exchange theory. According to this theory, local people carefully evaluate the benefits and costs of tourism when perceiving the effects of tourism (Ap, 1992; Getz, 1994). Social exchange theory suggests that the support of local people for the development of tourism continues unless the benefit of tourism perceived by the people doesn't fall behind the cost of tourism (Allen et al., 1993; Jurowski et al., 1997).

McGehee et al. (2002) have conducted a study on twelve different populations living in Arizona and analyzed the relation between the factors of personal benefits gained from the development of tourism and the support for the development of tourism in scope of social exchange theory. According to this

study, local people who personally benefit from tourism were observed to have a positive perception towards tourism and supported the development process of tourism. On the other hand, the study conducted by Oviedo-Garcia et al. (2008) in the Santiponce region of Spain, analyzed the relation between the effects of personal benefiting levels from tourism on the attitude of the people and the support they give for tourism planning and development. The conclusion of this study showed that the people who directly benefited from tourism had a more positive perception towards the development of tourism compared to the ones who didn't. The ones who had personal benefits gave more support to tourism development while they didn't show the expected level of support for tourism planning.

Local people's general satisfaction level is another factor affecting the supportive attitude of local people towards tourism development. The positive attitude towards the development of tourism is quite important for the satisfaction of local people and the repetitive visitors. The satisfaction of tourism industry actors constitutes a motive for social exchange as well. Satisfaction has an important role in the dynamics of change although it is defined as a process of social exchange. Houston and Gassenheimer (1987) emphasize that need of satisfaction constitutes the beginning point for any change. The need for satisfaction motivates the individual for this change dynamic and thus, the person wills to enter into interaction with other groups. The conducted researches have reached to the conclusion that the people satisfied from the development of tourism supports the development of tourism (Ko ve Stewart, 2002; Vargas-Sanchez et al., 2009).

Ko and Stewart (2002) have tested the relation between the attitudes towards the host population and the tourism effects local people perceive based on the structural equation model. The study has been conducted on Cheju Island which is a big domestic tourism destination of Korea. The results of the study suggest that society's satisfaction is related to the positive or negative tourism effects perceived by the local people. In other words, society's satisfaction is being affected by the perception of the effects of tourism. Vargas-Sanchez et al. (2009) analyzed the relation between perceived effects of tourism and local people's satisfaction level in Huelva region of Spain based on structural equation model utilizing Ko and Stewart's (2002) model. They reached to the conclusion that the positively perceived effects have a positive effect on satisfaction.

In the study conducted by Duran and Özkul (2012) in Turkey's province of Düzce concerning the research about tourism development and local people's perception and attitudes, the factors affecting the local people's attitude have been tested through a model consisting of five potential structure (benefit from tourism, socio-cultural, environmental, economic effects and long term planning). The results of the study suggested that local people's support was being highly affected especially from the relation level between benefit from tourism and long term planning factors. Very few of the studies conducted in the literature were interested in the attitude of local people towards the support of the development of tourism while the life periods of the destination were taken into consideration. And no studies were found in the national literature in this direction.

Aim, Scope and Methodology of Research

The present study has been conducted to analyze the attitude of local people in Turkey's province of Antalya county of Kaş related to the support for the development of tourism; this county's tourism was defined to be in a decline according to the Butler's (1980) life cycle model. The attitude of local people of Kaş County towards the development of tourism has been analyzed with the help of the observed and evaluated variables. For this purpose, Ko and Stewart (2002) model has been used with frequent references in the article. The present study is expected to provide important insights for the responsible parties in the development of tourism. The model (Figure 1) and hypotheses of the study are given below.
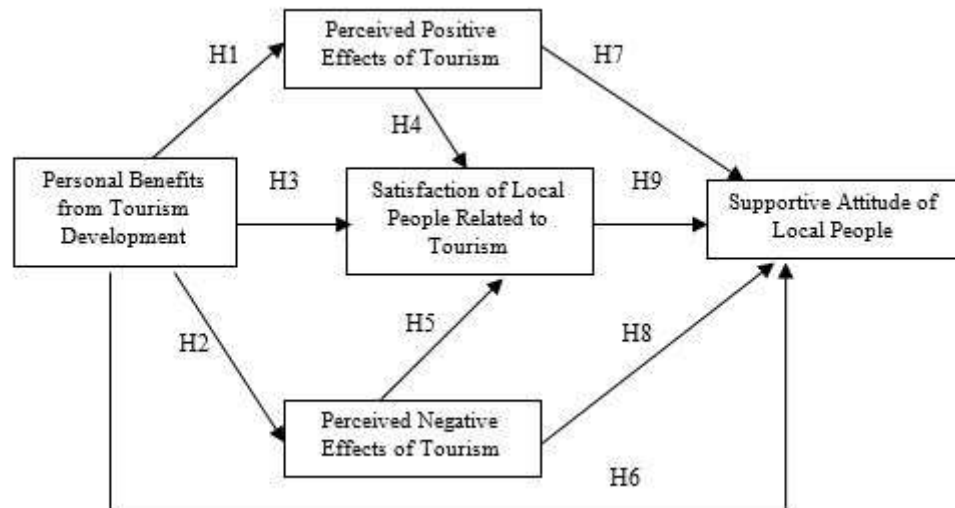
Fig. 1. Research Model

H1: There is a relationship between personal benefits from tourism development and perceived positive effects of tourism.

H2: There is a relationship between personal benefits from tourism development and perceived negative effects of tourism.

H3: There is a relationship between personal benefits from tourism development and satisfaction of local people related to tourism development.

H4: There is a relationship between perceived positive effects of tourism and satisfaction of local people related to tourism development.

H5: There is a relationship perceived negative effects of tourism and satisfaction of local people related to tourism development.

H6: There is a relationship between personal benefits from tourism development and *supportive attitude of local people towards development of tourism.*

H7: There is a relationship between perceived positive effects of tourism and *supportive attitude of local people towards development of tourism.*

H8: There is a relationship between perceived negative effects of tourism and *supportive attitude of local people towards development of tourism.*

H9: There is a relationship between satisfaction of local people related to tourism development and *supportive attitude of local people towards development of tourism.*

The universe specified for this study consists of the local people living in Kaş County within the Antalya provincial borders. Kaş is an important tourism county located to the west of Antalya province which is defined as the capital of tourism. According to the data of Turkish Statistics Institute, the resident of the region consists of 53,061 people in total as of the end of February 2013. 270 people participating to the study has the power to represent the universe with 10% error margin and 90% reliability level. The data has been gathered for the study through questionnaire technique, one of the most common data gathering techniques, along with face to face interviews. Questionnaires have been applied on volunteers selected by convenience sampling. The statements in the measurement tool used in the study have been collected from the previous studies. Before implementation of questionnaire and sampling, a pilot study has been conducted during March and April with the participation of local people in the city center of Antalya (150 people).

Internal consistency method has been utilized in order to test the reliability of the scale in the study. The study data has been subjected to explanatory factor analysis in this context. The dimensions gathered as a result of factor analysis and factor loads of the statements belonging to each dimension, Cronbach's Alpha values of each dimension (sub scale) and the explanation rate of a single dimension concerning the variance have been given in Table 1. In the process of reliability analysis conducted with the help of the statistical package program, the statements which reduce the internal consistency of the scales and

the ones with low statement-dimension correlation and/or factor loads have been taken out from the scales. This was due to the low measurement probability of the statements with low factor load and low statement-dimension correlation for the related concept (Özdamar, 2004). Cronbach's Alpha values achieved the recommended values in the literature (0.70 and above) satisfactorily and this fact shows the scales to be reliable (Nunnally, 1978).

Table 1. Findings Related to Reliability of Measurement Tool (Factor Loads, Explanation Variance Ratio of a Single Dimension)

Variables		Factor Loads	Explanation Variance Ratio of a Single Dimension
Positive Effects of Tourism	P1: Tourism contributes to the cultural development of the local community.	,858	
α = 0,87	P2: Tourism is one of the most important sectors in supporting the local economy.	,878	0,75
	P3: Tourism contributes to protect the natural environment and development.	,853	
Negative Effects of Tourism	N1: Tourism causes the destruction of the cultural values of local people.	,841	
α = 0,82	N2: Tourism causes social problems such as crime, prostitution, drugs, gambling.	,814	0,64
	N3: Tourism, increases the price of products and services.	,832	
	N4: Tourism development causes to pollution.	,718	
Personal Benefit	B1: I benefit from the development of tourism in the region in general.	,787	
α = 0,84	B2: Tourism development has a positive impact on my business.	,850	0,69
	B3: Without tourism, my earnings fall	,849	
Satisfaction of Local People	S1: I am pleased environmental change and development that tourism has created.	,841	
	S2: I am pleased economic development that tourism provides to our region.	,703	0,66
α = 0,84	S3: I am pleased social opportunities and possibilities that tourism provides to our region.	,874	
Supportive Attitude of Tourism	S1: Tourism should be continued to be an important part of our society.	,784	
	S2: Investments in tourism should continue increasingly in the region	,868	0,66
α = 0,89	S3: More effort should be made for the development of tourism in the region.	,855	
	S4: I support the development of tourism in the region.	,736	

The reliability of a scale does not guarantee its validity. Reliability is a precondition for validity but it is not enough by itself. The validity of a scale is its ability of measuring the feature to be measured (Nunnally, 1978). Although literature mentions many validity standards, it is possible to gather most frequently used ones under four general titles: content validity, face validity, convergence validity, divergence validity. Development of a valid measurement in terms of content and face is possible by the creation of an effective statement pool through literature review and evaluation of experts (Nunnally, 1978). In the scope of the present study, the indicators of content and face validity are considered to be the gathering of statements of the applied scales from the related literature, taking and benefiting from the opinions and suggestions of academic members and local people before its development and implementation and developing the scales in line with these. Explanatory and confirmatory factor analysis and correlation analysis have been used together in order to test the convergence and divergence validity. The statements directed at defining the attitude of local people towards tourism have been collected in five different dimensions as a result of the explanatory factor analysis applied on study data. This is also consistent with correlation structure. The high level of correlation between the statements within the same factor is an indicator of convergence validity while low level of correlation between the statements under different factors is an indicator of divergence validity.

The validity of the dimensions obtained as a result of the explanatory factor analysis has also been tested by confirmatory factor analysis. Confirmatory factor analysis is mainly focused on the conformity of the factors to the data (Hair et al., 1998). Confirmatory factor analysis is a strict statistical method revealing whether there is a sufficient level of relation between factors and variables, which variables are in a

relation with which variables and whether factors are independent of each other (Özdamar, 2004). Explanatory factor analysis is used to test which variable groups have a high level of relation with which factors while confirmatory factor analysis is used to determine whether the variable groups contributing to the specified "k" number of factors are sufficiently represented by these factors or not. Confirmatory factor analysis conducted with the help of LISREL 8.7 program revealed five factor model's suitability for the scale prepared in order to measure the supportive attitude of the local people concerning development of tourism (Table 2).

The measurement model has been formed in order to test the validity of the scale. And the fitness statistics located below the figure show acceptability of the measurement model. For example, model's goodness of fit (GFI) value is at an acceptable level with 0.94. And normalized goodness of fit index (NFI) value has a quite satisfactory level with 0.96. Root mean square error of approximation (RMSEA) value has been 0.057 and it is found sufficient in the scope of accepted range which is 0.08 and highest threshold of 0.1 and below values (Hair et al., 1998: 634).

Table 2: Confirmatory Factor Analysis Results

Model	χ^2	Df	RMSEA	CFI	NFI	GFI	AGFI
E.R.A.T.T.D	295.23	109	0.057	0.98	0.96	0.94	0.91

Note: RMSEA= Root Mean Square Error of Approximation; CFI: Comparative Fit Index; NFI: Normed fit index; GFI: Goodness of Fit Index; AGFI: Adjusted Goodness of Fit Index

Research Findings

*The present study has evaluated the relations between the variables (*perceived positive effects of tourism and perceived negative effects of tourism, personal benefits from tourism development, satisfaction of local people related to tourism development) *the literature determined as effective on the supportive attitude of local people towards development of tourism by utilizing structural equation modeling for Kaş County of Antalya which is one of the most important tourism destinations of Turkey.*
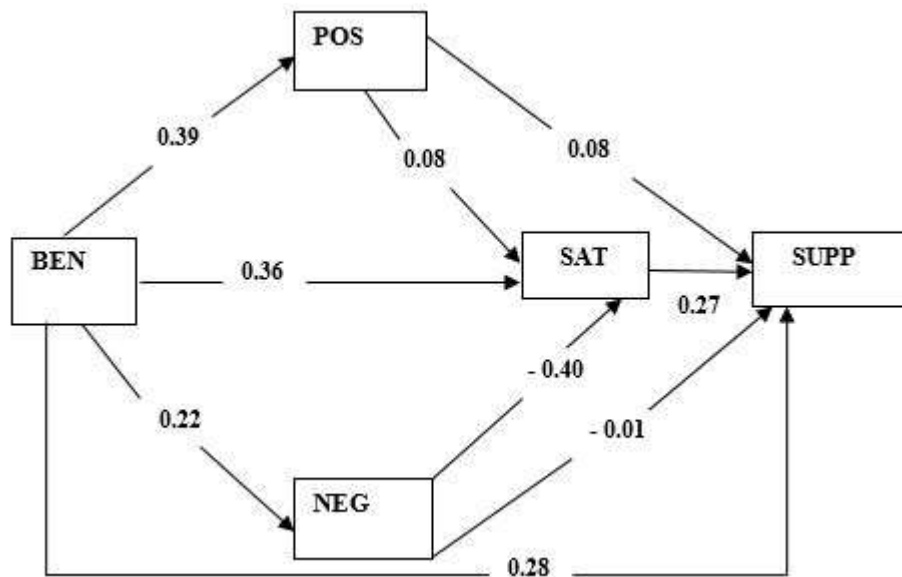
Fig. 2. Kaş LISREL Path Model

Abbreviations Used in This Figure

POS (perceived positive effects of tourism), NEG (perceived negative effects of tourism), BEN (personal benefits from tourism development), SAT (satisfaction of local people related to tourism development), SUPP (*supportive attitude of local people towards development of tourism*)

When the results of analysis have been assessed, χ^2 and degrees of freedom rate has been found below 3, RMSEA value has been determined as 0.069, GFI, AGFI, NFI values have been found above 0.90 and NNFI CFI and IFI values have been observed to be above 0.90. When the goodness of fit indexes were analyzed in general, all were observed to conform to the acceptable value conditions, χ^2/sd rate being in the first place (Hair et al., 1998).

Table 3. Goodness of Fit Values for Structural Model

Relations Between Variables	β	T
Personal benefits from tourism development → perceived positive effects	0.39	5.58
Personal benefits from tourism development → perceived negative effects	0.22	3.04
Personal benefits from tourism development → satisfaction of local people	0.36	4.86
Positive effects of tourism → satisfaction of local people	**0.08**	**1.10**
Negative effects of tourism → satisfaction of local people	- 0.40	- 5.87
Personal benefits from tourism development → supportive attitude	0.28	3.56
Positive effects of tourism → supportive attitude of local people	**0.08**	**1.17**
Negative effects of tourism → supportive attitude of local people	**- 0.01**	**- 0.10**
Satisfaction of local people → supportive attitude of local people	0.27	3.66

$\chi 2$	250. 86
df	110
P	0.000
RMSEA	0.069
GFI	0.96
AGFI	0.90
NFI	0.93
NNFI	0.95

Based on these results, when the standardized path coefficients and t values were reviewed in the model formed for Kaş region, all hypotheses except forth, seventh and eighth were confirmed.

Results and Suggestions

According to the results obtained in the study; the attitude towards tourism was observed to be positive in local people who benefit from tourism in Kaş region. As people of the region "benefits from the development of tourism, their perception levels concerning positive effects of tourism" have been observed to increase. The findings are in conformance with the findings of other studies in the related literature (Perdue et al., 1990; Poh Ling et al., 2011; McGehee et al., 2002; Oviedo-Garcia et al., 2008; Ko ve Stewart, 2002; Duran ve Özkul, 2012; Vargas-Sanchez et al., 2009).

In the model tested for Kaş region, local people's perception of "negative effect of the development of tourism has been observed to increase even though they personally benefit from the development of tourism." In the region where tourism is in a setback phase, local people has been determined to be negatively affected from environmental, cultural and social effects of tourism even though they personally benefit from tourism Another finding was that local people's satisfaction levels increased as their perception of benefit from the development of tourism increases. This finding is of a quality supporting Social Exchange Theory. When the structural equation model established for Kaş region was analyzed, no relation could be found between "perceived positive effects and satisfaction." When the relation between "perceived negative effects and satisfaction" was evaluated in the context of Kaş region model, a negative relation has been determined to be present. The local people in the region have a perception that tourism has negative effects and this situation decreases their satisfaction levels concerning the development of tourism. When the model was analyzed, no relation was found between "perceived positive effects and support" as well.

When the relation between "local people's satisfaction towards the development of tourism and their supportive attitude for the development of tourism," local people's levels of support for the development of tourism has been observed to increase as their perceived satisfaction increased. These findings are consistent with the studies conducted in the related literature. In their studies, Mason and Cheyne (2000) concluded that local people are satisfied of the development of tourism and they support the development of tourism in the regions which are in the development phase of the destination life cycle. The study of Ryan et al. (1998) in which local people's attitudes towards development of tourism in destinations with two different development levels were analyzed, suggested that people living in the developing region welcomed tourism enthusiastically and supported its development while local people of the region in the mature phase had a negative attitude towards tourism.

The present study is an important one due to its being the first study conducted in Turkey to determine the attitude of local people towards tourism in a touristic county which is in setback phase of destination

life cycle. In addition, the relations between the variables affecting the supportive attitude of the local people towards the development of tourism have been analyzed quantitatively in the scope of the results. The actors responsible of the development of the destination could evaluated and assess the factors affecting the attitude of the local people towards the development of tourism in a destination which is in a setback phase in terms of development level and use these evaluations to establish a tourism plan specifically for Kaş. Due to the method used in the study, the relations between variables have been evaluated quantitatively but the how and why of these relations were not analyzed. Researcher may use qualitative methods to analyze the attitude of local people living in tourism destinations towards tourism more in depth. Additionally, comparisons may be made between the attitudes of local people of tourism destinations with different life periods.

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Swiss Army: Diversifying into the Fragrance Business?

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Abstract

In 2005, Victorinox, the famous company manufacturing the Swiss Army knives, acquired it's only competitor Wenger S.A. The acquisition also included purchasing their watch, luggage, as well as the fragrance label "Swiss Army Fragrance." The acquisition of Wenger allowed Victorinox to become the only producer of the famous Swiss Army Knife as well as the key player of the Swiss Army Watches (also some smaller competitors sold watches under the label of 'Swiss Army' or 'Swiss Military'). Urs Wyss, Victorinox's head of marketing, was asked to assess what they should do with the acquired fragrance business unit. How should they enter the fragrance industry? Should they design a business strategy that would allow Victorinox to enter the fragrance industry successfully? Should Victorinox diversify into the fragrance business? Should Victorinox aim to transfer its existing brand attributes to the fragrance products or should they sell fragrances under another brand name? Urs Wyss was asked to present Carl Elsener, the CEO of the company, a plan on how best deal with the newly acquired fragrance business unit.This is a marketing and branding case with emphasis on the process of diversification and brand extension strategy. It can be used in undergraduate and graduate business courses in international business, international marketing, business operations, and business strategy courses to illustrate competitive strategy with diversification, marketing and specifically branding and positioning strategy. It highlights the challenges and processes related with new product development, pricing, distribution, promotion of new products and the complexity of identifying market opportunities in a competitive global industry. Furthermore, it allows students to relate to the risks and issues associated with decision making at the managerial level.

The Influence of Social Media on Consumer Perception of Brands

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Abstract

The present work analyzes a medium that is increasingly present in the daily lives of people: social media. Besides the people, companies are increasingly taking advantage of this new trend of communication and this study aims to identify the impact of social media in strengthening brands. For this a questionnaire was applied to students of Management at the University of Brasilia, young people who were born in the Digital Age. The goal was to learn more about the buying behavior of this population in relation to the use of media. As a result of the research we had that Facebook is the largest social media impact on interaction with brands, social media influence at the time of purchase and are an important means for the brand to interact and communicate with their consumers, so the assumption was valid and it was possible to conclude that social media help to strengthen brands.

Keywords: Digital Marketing, Social Media, Strengthening Brands

Introduction

Nowadays, the social media are part of most people' lives, especially youngsters. In spite of being something new, their utilization has been growing and having a big impact on people's behaviors. This impact may happen through several ways and one of them is on consumers' purchase process. The social media are strong and can influence on people's purchase choices more and more. The communication made on the Internet between brand and consumer is increasingly more strategic in institutional communication. The organizations must be aware of these changes and act in order to take advantage of this great trend. A recent study of the consultancy company Deloitte (2010) shows that 52% of businessmen consider social media important to the business and 86% of them affirm that this importance will grow in the next years.

In the 60s, there was an advance in the semi-conductors; in the 80s, the advance was for personal computers; in the 90s, the Internet browsers sprang; and in the early 2000, there was the great outbreak of the social media. The Web 2.0 has changed the consumer's behavior and the social media became even more relevant. If Facebook was a nation, it would be the third greatest population of the world, with more than 350 million users (The Economist, 2010), which gives us an indication of its power.

The social media are a current phenomenon, but its understanding is still vague, due to difficulties presented in the measurement of its results (ROCHA ET AL, 2011). They are not explored enough yet, but the companies which explore it reach amazing results.

The companies create and enhance their brands through different means, online and offline. The offline means are already used often, but the enhancement of the brand by online means is still a differential of modern companies. Kotler (2010) says that in order for an enterprise to succeed, it is necessary to understand that consumers have changed and, nowadays, appreciate co-creation and the development of the company's personality each day more. In other words, the current consumer is much more present and demands a greater interaction and identification with the brands they use and the social media are being considered a great way to do that.

Social media and brand strengthening are subjects of highlight in this article. The article aims at analyzing the impact of Facebook on the strengthening of brands, considering its great presence in its users' lives. In order to reach this objective, questionnaires have been applied to students of Business Management in the University of Brasilia, more specifically to members of the junior enterprise of the course, so it would be possible to analyze the behavior of the population regarding the use of social media. Another relevant aspect of this research is to identify whether Facebook influences or not when a user wants to purchase something and if it influences the knowledge a consumer has about the brands. The central question of this article was about the extent of social media's influence in the perception of brands by consumers.

Review of the literature

Marketing

The Digital Marketing is a new theme and its utilization by the companies is presented as a great tendency in today's world. In order to properly approach this theme, it is necessary to initially conceptualize and understand the evolution of Marketing as a study field. Kotler and Keller (2006) highlight that Marketing involves the identification and fulfillment of human and social needs in a lucrative way to the enterprises. The website of the American Marketing Association (2001) defines Marketing in a broader manner, even though it is really valid, in which all clients of the company are not only the ones who consume its products, but everyone who is affected by the company, including the society. For AMA, marketing is the activity, group of institutions and processes to create, communicate, deliver and exchange products that have value to its clients, a.k.a, consumers, partners and society in general.

Peter Drucker (2002) says that the Marketing field is essential to the establishment of objectives and acquirement of results and that it is through performance and contribution of Marketing that the client decides its purchase.

Digital Marketing

The society of information, also known as digital age, is characterized by the online interactivity (KOTLER; KELLER, 2006). According to the authors, the enterprises need a new business and marketing mentality to successfully act on the Digital Age.

The outbreak of the Internet was not a simple disruptive innovation, but it was practically the embodiment of a biblical concept of we all becoming one (ADOLPHO, 2011). This happens because the Internet brought with it the reduction of distance, approximation between people and, as a result, approximation between company and client.

The client is not satisfied only by going to the store and purchasing something. They research about the product on the Internet, consult old consumers, want to help in the creation of the content and the product, among other common behaviors of the new online consumer. The digital media has brought clients and companies closer, more present on its daily routine. Kotler and Keller (2006) say that clients, these days, appreciate the co-creation, communication and development of the brand's personality and the organizations should be aware of this in order to succeed.

There are many changes and stratifications of the traditional Marketing, and this new type of marketing deserves attention of all the enterprises which wish to survive and prosper in a digital world.

Social Media

The Internet has provided interaction and proximity between people, regardless of time and place. The social networks were an explosion in terms of popularity and their websites are figuring among the most visited in the world, and it is no longer only a manner of getting in touch (DIAS ET AL, 2012). Nonetheless, nowadays most enterprises still use Internet tools only with the objective of promoting their brand and products, making them a unilateral channel of communication and missing the opportunity of creating relationships, using clients to co-create their products or services (LEITE ET AL, 2012) and strengthening their brand with affective features. The enterprises are still learning that the social media are also a business tool.

Currently, the social media allow companies to get relevant and strategic information about their target public, in addition to being a free channel of communication with them.

Facebook

Facebook is the most relevant tool of study inserted in the virtual environment. Its communication is fluid, visual and almost instantaneous, making communication easier than in other social networks (TELLES, 2011).

Still in accordance to Telles (2001), Facebook has resources that facilitate the dissemination of information, such as the possibility to "like" and "share". Adolpho (2011) states that the organizations should not use Facebook only as a marketing tool, once it is a tool created for social purposes. However, it does not mean that this relationship cannot result in tangible earnings; nevertheless, the enterprises must promote themselves in a subtle manner. The Facebook ideology is not the brand, but it is the friendship. This tool frees up three forms of integration: profile, fan page and groups. The profiles are

suitable for people and the fan pages for brands and companies. There are also several indicators on Facebook that gives information such as the degree of interactivity of the page with its fans and who the people liking your page are. Through Facebook it is also possible to perform several marketing actions (ADOPLHO, 2011).

In Brazil, there are 66,552,420 users on Facebook with a penetration of 33.09% of the total Brazilian population, being the second country with the biggest number of users in the world. And the number of Brazilian users keeps growing: it increased more than 11,118,000 in the last six months. (Source: http://www.socialbakers.com/facebook-statistics/brazil)

Brand

The brand as an idea has been real for at least five thousand years. However, its highlight in the role of conquering a clientele came with the Industrial Revolution, period that demanded the search for new markets and increase of the competition (SOUZA, LEÃO, 2012). The American Marketing Association defines brand as being a term, sign or symbol – or a combination of them -, destined to identify the products of a supplier and differentiate it from other competitors. To Kotler and Keller (2006), a brand is a product or service that aggregates dimensions that, somehow, differentiates it from other products or services developed to meet the same need.

It is possible to observe similarity between the concepts regarding the differentiation. Both authors mentioned brand as an important element for the enterprise to be different before its competitors in the market. To Kotler and Keller (2006), the process of strategic management of the brand involves four main steps:

- Identification and definition of positioning of the brand
- Planning and marketing implementation of the brand
- Evaluation and interpretation of the performance of the brand
- Growth and maintenance of the value of the brand

As we can see, brands need management and attention. The brands demand time to be constructed and enhanced, and also demand time and effort to be managed.

Enhancement of the Brand in the Social Media

One of the changes in the administration of Marketing proposed by Kotler and Keller (2006) is the change in the construction of brands through traditional propagandas for the construction of brands through integrated communication.

With this change, the Marketing professionals are giving up on relying on only one communication tool, such as the propaganda and sales force, and starting to mix several tools to deliver a consistent brand image to the clients in each one of the contact fronts. It is in this context that the social media are presented as a current tool able to play this part of communicating and building relationships.

To Kotler and Keller (2006), branding has been real for centuries as a way of distinguishing the products of a manufacturer from the others. And in order to put a brand on a product, it is necessary to teach consumers 'who' is the product, as well as 'what' it is and 'why' the consumer should be interested in it. Branding regards the creation of mental structures and helps the consumer to organize its knowledge about products and services, in a way that they are able to make a more informed decision. The brand is not only a symbol, a name, a logo and drawing; it constitutes only material signs, which will be empty until the brand builds its history, its principles and other factors that identify it with its consumers (SOUZA, LEÃO, 2012). This makes the enterprise to tell its history to its consumer aiming at creating an identification of the consumer with the brand.

From the studies presented in this article, we may realize that Facebook is currently a tool of high reach and it is being used by many consumers and enterprises. However, no one knows what will happen and if this tool will keep growing its number of users for good. It is possible that another kind of social media calls the attention of users and they migrate to it. Nonetheless, something is right: the interaction between brand and consumer through these social networks will not step back, considering the great success achieved by several enterprises and the presence of social media in the 21st century consumers' lives. Consequently, virtual environment represents new management and strategic challenges for enterprises.

Methods and Procedures

The main objective of the descriptive research of this paper is to describe the characteristics of business management students of the University of Brasilia's behavior regarding social media e brands. The technique used in this research will be survey. It is recommended in this case, as we are investigating punctual questions in a large sample. Gil (1999) states that through surveys, a direct question is asked to the people – who, in this case, are Business Management students. The data collection will be performed through a questionnaire and after that, the results will be interpreted before statistical analysis, with the software SPSS. The sample was composed by students of Business Management of the University of Brasilia, members of the Junior Enterprise. According to the website of the University of Brasilia, the course has 1000 students in the daytime and nocturnal periods. AD&M has an average of 60 members every semester. For the sample, we will use 5% of this population (students of Business Management of UnB), that means 50 students. The questionnaire used was a printed structured one. The questionnaires printed will be filled out by the students during their work time in the junior enterprise.

Results and Discussion

The findings of the research will be presented through graphs that were generated from the results of each question asked in the questionnaire. The objective was to identify how young university students interact with the brands through social media, in order to validate the hypothesis that social media – especially Facebook – are a relevant means for the enhancement of brands. The data were tabulated and treated in the software SPSS and the graphs were made on Excel. Frequency analysis in every question of the questionnaire and some cross-checks between questions were performed.

Profile of the ;Interviewees

The research was performed by single youngsters of both genders, students of several different periods of the University of Brasilia and members of the Junior Enterprise of the Business Management course. This public was chosen due to its familiarity with social media and enterprises.

Frequency that Students Access Social Media

From the answer to the question "How often do you access social media?" we could conclude that young university students are really assiduous consumers of social media, since 82% of the interviewees alleged to use them all the time.

Importance of Social Media

It is possible to observe that, in reference to the second question of the questionnaire, almost 100% of the young students classify the media as something important or very important. Considering that, we may prove the extent to which social media are a part of their lives.

The Importance of Social Media in Certain Aspects

As Dias (2012) defends, the social media are very popular nowadays and are no longer only a manner of keeping in touch with people; they become important in several other aspects, as highlighted in the outcomes of question number 3 of the questionnaire "What is the importance of the social media in the following aspects to you?" and different aspects were mentioned to be judged as: not important, a little important, important or very important. All the items mentioned in the survey presented some degree of importance to the interviewees; however, to most of them, the social media have a greater importance regarding the interaction among friends, as none of the youngsters disagreed on the importance of this aspect. "Research and Current Events" was also an important item to the users, as we can see on graph 8, in which 44% of the young students classified as important and 44% as very important. Freedom of speech was a well valued item, in which 44% of the interviewees considered important and 38% very important. In the item "Interaction with enterprises", 72% of the students classified it as important or very important, which show us that social media are being faced as an important means of communication to enterprises more and more, despite its main objective – interaction among friends.

Another aspect that starts to become important to the users is shopping. In this item, 44% of people considered it somehow important and 56% did not. As the acting of enterprises on the social media is a novelty, "Shopping" is still something that is not present in the reality of most interviewees and the interaction with brands in the media ends up being subtler and with a more informative character, as Conrado Adolpho (2011) stated earlier in this paper. Meeting new people was an aspect which divided

the opinion of the youngsters. 56% of them did not consider it important, while 54% did (graph 12). This happens because the social media are seen nowadays as a way of keeping in touch with your friends rather than making new friends, as evidenced on the survey. "Leisure and Entertainment" presented a high level of importance to the youngsters in the social media. 13,88% considered this topic important. "Work and networking" was also seen as important, 50% considered them important and 38% very important.

How Often People Use Certain Social Media

In the fourth question, the frequency with which people use each one of the social media was questioned. From the frequency data of Facebook use, we may realize that 100% of the interviewees have a Facebook profile and 80% of them used it all the time, showing a great advantage before other media. The results agree with the affirmation of Telles (2011), who says Facebook is the most relevant tool of study inserted in the virtual environment.

Instagram demonstrated potential, as it is a new medium and 66% of the students had already had some contact with it. Because it is a recent medium, its results may be considered expressive, and it is a medium that should be monitored by brands, since it could be a high reach tool in the future.

Twitter presented low reach because only 6% use it often and 66% have never used it. It is not considered an expressive medium for the communication of brands, in general. Linkedin also presented low reach on this young population, as it is a social medium focused on the professional aspect, still not prioritized by youngsters in this moment of their course. 84% of them have never used it. Foursquare also figured as a medium not well-known by the youngsters: 84% of them have never used it and only 16% use it rarely or sometimes. Foursquare is a social medium that can present advantages, for instance, for restaurants and an older and more sophisticated target-public. It is not a medium with a great power of reach, though.

Relationship between Brands and Social Media

As it has been mentioned in the theoretical reference, the Internet has brought with it the reduction of distances, approximation of people, and consequently, the approximation between enterprise and client. To prove this interaction, before the fourth question "Are you use to interact (like pages, follow, comment, share…) with any brand/enterprise in the social media?", most people alleged to have the habit of interacting, which enhances our hypothesis of these media being a great means to strengthen brands in the consumer's mind. From the 26% who alleged not to interact, six of them alleged lack of interest, two did not find out brands of interest in social media, one alleged lack of time, two do not enjoy this kind of Marketing and the last two do not see benefits in interacting.

When responding to question number 5 "What is the reason why you interact with brands in social media?" most youngsters pointed out as a motive obtaining information, knowing about promotions and the sector. Therefore, we may infer that social media are good platforms of communication of brands to their consumers, and not so much of interaction, once only 12% alleged to talk and clear doubts with the brands.

As well as André Telles (2009) has stated, consumers nowadays are influencers and multipliers of digital platforms. When answering to the question "Have you already bought a product influenced by your communication in social media?", 70% of the youngsters answered yes, admitting they are influenced by the media; answering to the question "Have you already bought or given up on a purchase influenced by recommendations or complaints made by users of social media?", 86% also answered yes. Thus, some people end up being influenced by its medium on an unconscious level. Another important analysis is that when people responded to the question "Do you use to research about any brand on social media before buying something?" only 46% of the interviewees alleged to go to the media in order to research about a purchase; even though most people do not seek for it, they end up being influenced by comments made by users.

Other important questions were "What is the degree of influence of recommendations made by users in the media when you shop?" and "What is the degree of influence of complaints made by users in the media when you shop?". Respectively, we may realize that complaints and recommendations made in the social media have a great power on the consumer's decision of purchase. The complaints have even more influence than the recommendations. That shows us how important the presence of the brands in this environment is, so they can monitor and act on the possible complaints. Kotler and Keller (2006) used to say that the new online consumer researches about the product on the Internet and consults old consumers. The digital media has made consumers become closer to opinions about enterprises and as

social media grow, consumers can influence other consumers with their opinions and experience more and more.

One more time we prove the power of Facebook when it comes to interaction between users and brands. When answering to the question "In which social media mentioned do you have more contact with brands?" 92% alleged to have contact with brands through Facebook. When they answered the question "Have you ever increased your knowledge about any brand through social media?", 68% of the interviewees alleged to have increased their knowledge, which contributes to the hypothesis that social media strengthen brands. The brands mentioned by the students in the open question below were very diverse in size and sector. The most mentioned were Apple, Nike and Adidas. The recommendations keep being what most influences when purchasing something, because as it was explained in the theoretical reference, they generate more confidence in the consumer than traditional propaganda. It has been proved by graph 29, regarding the question "Among the media below, chose the two which influences you the most to buy a product/service", where we can notice a decrease on traditional propaganda like newspapers, magazines, TV, radio and billboards. That shows us that traditional media are less efficient in comparison to the social media, for this young public. And one of the changes in the administration of Marketing proposed by Kotler and Keller (2006) is the change of construction of brands through traditional propaganda to the construction of brands through integrated communications.

In spite of alleging to have a great contact with brands in the social media when it comes to the question "Do you pay attention to the propaganda exhibited in the social media?" 56% of the youngsters answered they only pay attention sometimes. This shows us that this enhancement of brands is subtle; in other words, brands build a relationship with several actions in the media and not only through direct propaganda, considering that only propaganda does not have a high reach. Adolpho (2011) says that the organizations should not use Facebook only for propaganda purposes, because it is a tool created for social purposes. And Leite (2012) complements it by saying that these days most enterprises still use the Internet tools with the objective of only promoting their brands and products, making them a unilateral channel of communication, and missing the opportunity of creating relationships.

Relationship between Brands and Facebook

By analyzing graphs 31 and 32, referent to the questions "Dou you like enterprises' pages on Facebook?" and "On a scale from 0 to 10, how much of the publications posted by the page brings you closer to the brand?", respectively, we may prove one more time the high reach of Facebook to the brands, once 84% affirmed to like enterprises' pages (Graph 31). Regarding the question about the degree of influence, it also shows us how much these publications on enterprises' pages bring the consumer closer to the brand. About 84% of the youngsters graded above 5 on the influence of the publications of Facebook on their proximity with the brands (Graph 32).

"Has Facebook already influenced you to buy anything?" - almost half the people affirmed to be influenced by Facebook when they shop. This influence has happened in several different products and the most mentioned were: sports products, food, electronics, clothes and accessories.

As we can see in graphs 34 to 38 regarding the question "What is the degree of importance of the aspects "Values", "Tradition/Reputation", "Personality", "Low price" and "Presence in media" when choosing a brand", aspects such as values and reputation are the most valued. This means there are certain aspects that overlap the presence in the media; in other words, before the brand wants to enhance in the social media, it needs to have certain attributes which are more related to the essence of the brand, such as tradition and personality, for instance. In the option "Others", honesty and quality were mentioned.

Kotler (2006) has highlighted that a strong brand provides some advantages of marketing, such as better perception of the performance of the product, greater fidelity, less vulnerability to marketing actions from the competitors, less vulnerability to marketing crisis, greater windows, less sensitiveness of the consumer regarding increase in prices, more sensitiveness of the consumer regarding reduction in prices, more cooperation and commercial support, more efficiency of the marketing communications, possible opportunities of licensing and additional opportunities of brand extension. The attribute "Values" presented high level of importance, with 66% of people classifying it as important or very important. The attribute "Tradition/Reputation" was considered more important than "Values", presenting 48% of the interviewees considering it important and 46% very important (Graph 35). Martins (1997) says that reputation is something difficult, expensive and it takes a long time to be achieved, exactly because of its importance in a company. It is common to the company not to give the proper attention to it and ends up losing it, reinforcing the importance of its management and management of other attributes of a brand.

The attribute "Personality" was also well evaluated, where 52% of people considered it important and 30% very important.

"Low price" was a valued attribute, as exposed on Graph 37, 48% consider it important and 38% very important. An interesting fact that we can observe is that tradition and reputation of the brand was better evaluated than low price, which means that consumers are willing to pay extra money for well-regarded brands. According to Souza and Nemer (1993), the simple variable "low price" is not the most important in the process of purchase, once brands can symbolize status and rise confidence and security in the consumers' mind.

Presence in the media is not a strong aspect when classifying brands, in accordance to the youngsters. Graph 38 shows us that 60% of the students do not consider this attribute as important. This reveals to us that the brand must work on its essence and then go the media, because presence in the media by itself does not turn a brand valuable to its consumer.

According to Graph 39, almost 100% of the interviewees agree with the affirmation that the enterprises must be present in the social media, what shows us that they are in line with the tendencies and consider this presence important to the current market. However, regarding the affirmation about its behavior, presented in graph 40, the same importance was not identified in the same answers, since 40% of people seem to agree, 26% having no opinion about the subject and 34% disagree. We may conclude that the subject 'social media to enterprises' is present in their daily routine, possibly in subjects of the Business Management course, but when the issue is their own consuming habits, they are not so sure or have never reflected upon the subject.

Cross-Checks

As we can infer from Graph 41, the majority of people who interact with brands in the social medium, do it through Facebook, which shows us that this medium is still the strongest one referring to brands.

We can observe on graph 42 that most youngsters who affirmed having their knowledge increased about brands through media, also like enterprises' pages on Facebook; from that information, we can infer that this increase of knowledge happens by publications made by the pages.

Conclusions and Recommendations

The scenario that was established in the end of the 19th century and beginning of the 20th century is characterized by great social and economic transformations. These changes were caused by technological transformation and the accelerated process of globalization. Within this context, the communication media become very relevant, and speed and easy access are demands from the consumer. Therefore, the social media get their space and start having a direct influence in social and commercial interactions.

Although it is something recent, the use of social media is a tendency that keeps growing and affecting people's behaviors, in relationships, purchases and enhancement of brands. The communication done on the Internet between brand and consumer is growing and the organization must be aware of these changes to act in order to take advantage of this great trend.

This paper aimed at analyzing the impact of social media, especially Facebook, on brands. The main analysis was about the use of this tool in the enhancement of the brand, having as a presupposition the growing participation of youngsters in the digital age.

A survey was carried out with business management students of the University of Brasilia and members of the junior enterprise of the course, AD&M, with the objective of collecting their perceptions about social media and identifying their purchase behavior.

The outcome of the research reveals the great use of social media by the youngsters. In the scale of frequency, it was possible to observe that 98% of them use social media very often and identify them as important. With this research, we could also observe the youngsters' preference for Facebook, where 100% of them have a profile. Facebook is even stronger before the other social media when it comes to interaction with brands.

The interaction with brands is still incipient among the interviewees; nonetheless, the enterprises should disclose their brands in social media more and more, because the growing use of this tool may be a competitive differential for the organizations, once the consumers demonstrate to use social media to increase their knowledge about brands. The interaction with consumers must happen in an effective way, since it influences them when they shop.

The research also confirmed the hypothesis that Facebook is a great means for the enhancement of brands and boosting of sales, mainly when it comes to a young public.

It is known that Facebook is a very strong social medium; nevertheless, the focus of this paper is to identify the importance of social media in the enhancement of brands and it was identified that Facebook is the medium which better assumes this role currently. However, the digital world changes frequently, that is why the brands should not focus all of their efforts only in one medium; they should pay attention to the market trends and cannot be short-sighted (LEVITT, 1960) regarding this issue, because Orkut was once the most popular in Brazil, today it is Facebook and we do not know which one will be in the future.

The research presented limitations, but they do not invalidate it as an input to the proposed conclusions, since the conclusions were born from a deep study and were proved by the application of the questionnaires. The limitation of the research regards the collected sample, which was not representative, because we decided to select only Business Management students who are members of the junior enterprise, due to the contact they have with companies of the market, a way of guaranteeing the understanding of the questionnaire by all. The questionnaires were answered in person, to avoid setbacks and guarantee the reliability of the data.

The outcome achieved met the specific objectives of the work and contributed for the studies about Digital Marketing and its fronts.

Considering the dynamics of the media market, it is essential the constant performance of the new researches for the identification of new important media for the enhancement of brands, in addition to new researches to discover other functions of these media.

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Middle East Tourists: Impact of Destination Experience on Recommendation and Loyalty

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Abstract

Tourism is a growing international activity despite economic crises, political conflicts and natural disasters. Tourism is also becoming more global, with advancements in technology and relaxation on visa processes the dominance of western tourist generating countries international tourism is shifting. Far East, Middle East and CIS countries' growth rates of outgoing tourists are remarkable. Although the importance of these emerging regions has been acknowledged, the research on tourism has long been focused on Western tourists. Among these markets Middle east is the fastest growing market with a 3,4% annual growth between 2000-2010. Middle East region has supplied 36,2 million tourists in 2010, an increase from 8,2 million in 1990. It would not be surprising to see this trend continue as the population of the area has also expected to shift from 250 million to 400 million by 2050 (UNWTO, 2012). Current consumer research on tourism is focused on western societies and neglects most eastern cultures especially the Muslim world. Although Middle East tourist market is among emerging geographical segments for World tourism demand there is a lack of research on their needs, experiences and behaviors. According to UNWTO (2012) Middle East countries include; Bahrain, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Oman, Palestine, Qatar, Saudi Arabia, Syrian Arab Republic, United Arab Emirates and Yemen. Especially gulf countries (Saudi Arabia, United Arab Emirates, Kuwait, Bahrain and Qatar) account for 75% of total expenditure from the Middle East countries. This study examines the tourist experiences of Middle Eastern tourists visiting Istanbul. Istanbul is a popular destination for international travelers and it is also attracting a large share of Middle East tourist market mainly because of cultural and geographic proximity. The quantitative analysis is based on extant literature and interviews conducted, transcribed and content analyzed with Middle East tourists. The survey includes demographic, tripographic questions and statements about tourist experiences as well as intention to return and recommend to others. The findings of the study is expected to reveal important information about Middle Eastern tourists overall experiences in a destination. The findings can also facilitate a better planning, decision making and product design for tourism professionals and destination planners who intent to attract more visitors from Middle East as a growing market segment.

Keywords: Middle East Travelers, Tourist Experience, Arab Tourists.

Trends in Roll-Your-Own Tobacco Use: Findings from the International Tobacco Control (ITC) Europe Surveys

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Abstract

The benefits of raising tobacco taxes to reduce consumption and protect smokers from the hazards of smoking are well documented. However, evidence suggests that consumption of roll-your-own (RYO) cigarettes is rising particularly among young smokers and those from disadvantaged groups.To examine the trends in prevalence, and correlates of RYO use in the UK, Germany, Netherlands and France. Data come from the International Tobacco Control (ITC) Europe surveys, a cohort study, with the Netherlands (N = 1773), Germany (N = 1515), France (N =1735) and United Kingdom (N = 1643), between June 2006 and December 2012. Generalised estimating equations were used to assess trends in RYO use, and whether RYO consumption varied by health, economic and socio-demographic variables. Preliminary analyses show that smokers using exclusive RYO over time had increased significantly in the UK from 26.4% to 32.7% (p=.003), France from 12.2% to 19.1% (p=.002), and Germany from 12.7% to 18.6% (p=0.002), but not in Netherlands. Pattern of predominant RYO users compared to FM users across countries tended to be low income earners.The findings add further evidence to studies that advocate for reducing the price advantage of RYO cigarettes, and support policies that target young smokers with additional health messages to correct misperceptions of RYO consumption.

Keywords: Tobacco Consumption, Taxation, Roll-Your-Own Tobacco

Introduction

The benefits of raising tobacco taxes to reduce consumption, increase quit attempts, and protect smokers from the hazards of smoking are well documented (Siahpush, Wakefield, Spittal, Durkin, and Scollo, 2009; Dunlop, Cotter, and Perez, 2011; Chaloupka, Straif, and Leon, 2011). However, the tax disparities on different types of tobacco products offer an opportunity for smokers to seek lower priced tobacco products such as roll-your-own (RYO) cigarettes (Morris and Tynan, 2012; Young et al., 2012). In countries such as the Netherlands, regular top-end brands, e.g. Marlboro RYO tobacco can be easily bought at retail outlets. This provides Marlboro consumers a cheaper option especially as Marlboro factory-made (FM) cigarettes are becoming increasingly expensive. Such lower priced products undermine the public health impact of tax increases by discouraging consumers from quitting and encouraging them to switch to competitive cheaper brands (Chaloupka et al., 2011; Young et al., 2012).

Several studies suggest that RYO consumption in countries like the USA, UK, Australia, New Zealand, Thailand and Norway has increased particularly among younger smokers from deprived communities (Young et al., 2006, 2008; O'Connor et al., 2007). These findings are worrying because smokers who use RYO tobacco compared to higher priced FM cigarettes might be at a greater risk of tobacco related diseases (Engeland, Haldorsen, Andersen and Tretli, 1996; De Stefani, Oreggia, Rivero, and Fierro, 1992; Tuyns, Esteve, and Pipe, 1983). Despite this, less is known about the extent to which these issues might affect RYO smokers over time in European countries. An exception is a recent study which examined RYO use among adult smokers in four developed countries (Young et al., 2012), although only one European country (i.e., UK) was considered in the study.

Aside from the price differential between RYO tobacco and FM cigarettes, smokers tend to roll thinner RYO cigarettes (Young et al., 2012; Connolly and Alpert, 2008). Evidence shows that price minimisation strategies encourage smokers, particularly those from low socioeconomic groups to continue to smoke even more by saving tobacco and compensating for higher FM cigarette prices (Young et al., 2012; Shahab, West, and McNeill, 2009). Another factor that drives smokers to use RYO tobacco is the misperception that RYO products are less harmful than FM cigarettes (Young et al., 2008; O'Connor et al., 2007), despite research suggesting that the former are no less harmful than the latter (Laugesen et al., 2009; De Stefani et al., 1992). This is not surprising as in the UK and across Europe, tobacco companies have promoted the image of RYO brand as an acceptable product (Young et al., 2012; Robinson and Bugler, 2010)

In the European Union (EU), tobacco pricing is highest in the UK, lower in Germany and France, and lowest in the Netherlands (Federal Statistical Office Germany. 2013). Specifically, FM cigarette pricing in Germany has increased steadily from an average of 21.31 Euro-Cent per cigarette in 2006 to 25.10 Euro-Cent in 2013, i.e. an increase from 4.26 Euros per pack of 20 cigarettes to 5.02 Euros, compared to RYO tobacco for which the average price rose from 103.01 to 130.18 Euros per gram, i.e. from 4.12 Euros per pouch of 40g to 5.21 Euros (European Commission, 2012). In France, FM tobacco prices increased from 5.30 Euros in 2007 to 6.60 Euros per pack in 2012 for the most commonly sold 20 cigarettes pack brand, while RYO tobacco increased from 6 to 8.70 Euros per 40g in the same time. Tobacco pricing in the Netherlands has also increased for both FM and RYO tobacco. However, RYO tobacco prices have remained fairly stable while the number of grams per pack has decreased. In the UK, RYO has been subjected to significantly lower taxation than in the rest of EU.

Recognizing the attributes of those who smoke RYO cigarettes, especially among disadvantaged groups (Young et al., 2012, 2010), would therefore help to support policies intended to reduce the harm from smoking. To date, however, there is a scarcity of research assessing the influence of RYO tobacco use relative to FM cigarettes on smokers in Europe, especially among those from deprived communities. We extend the results of an earlier study (Young et al., 2012) to examine the prevalence of and reasons for using RYO tobacco among adult smokers in Europe. Specifically, we seek to address three questions: (1) examine if trends in RYO use relative to FM cigarette smoking have been rising, (2) determine the extent to which economic motives and perceptions that RYO cigarettes are less harmful act as primary motivations for use, and (3) examine whether the level of RYO tobacco use varied among disadvantaged smokers in Europe.

Methods

Sample

The sample was adult smokers (aged 18 and older) who were interviewed in a multi-cohort study as part of the International Tobacco Control (ITC) Europe Surveys. In this study longitudinal sample of 6666 participants, comprising adult smokers from the ITC Europe surveys in the UK (waves 6 – 1643, 7 – 1487, and 8 – 977), France (waves 1– 1735, 2 – 1540, and 3 – 1420), Netherlands (waves 1 – 1773, 3 – 1747, and 4 – 1800), and Germany (waves 1 – 1515, 2 – 877, and 3 – 496) were used. Participants from the UK, Germany and France were recruited by geographically stratified probability sampling, and surveyed via computer assisted telephone interview (CATI). In the Netherlands, participants were surveyed via computer assisted web interviewing (CAWI). The Netherlands web sample was drawn from a large probability-based database with respondents indicating their willingness to participate in research on a regular basis (Nagelhout et al., 2010). Respondents lost to attrition were replenished by recruiting additional participants at each wave. There was no replenishment sample in the ITC Germany Wave 3 data. A full description of the ITC project conceptual framework and methods can be found elsewhere (Thompson et al., 2006; Fong et al., 2006). In this study we included only current smokers.

To permit comparisons of smokers' reported use of RYO tobacco we selected waves occurring at approximately similar times. Therefore, data from the four countries was collected between December 2006 and December 2012 and utilized in the analyses. Specifically, survey period for the data used in the respective countries were: UK (waves 6 – September 2007 to February 2008, 7 – October 2008 to July 2009, and 8 – July to December 2010), Netherlands (waves 1– March to April 2008, 3 – March to May 2009, and 4 – May to June 2010), France (waves 1 – December 2006 to February 2007, 2 – September to December 2008, and 3 – September to December 2012) and Germany (waves 1– July to November 2007, 2 – July to October 2009, and 3 – September to October 2011). All surveys were approved by the Research Ethics Board at the University of Waterloo and cleared for ethics at the appropriate Ethics Boards within each country

Measures

RYO use: All respondents in the UK were asked if they smoked "FM cigarettes only", "mainly FM", "FM and RYO similar", "mainly RYO", or "only RYO". In France, Germany, and the Netherlands, smokers were asked whether they smoked "FM only", "RYO only", or "both RYO and FM". For the present analysis, smokers were categorized as FM only, RYO only, and both RYO and FM. Also, predominant RYO smokers were those who consumed mixed cigarettes (i.e. RYO only or both RYO and FM cigarettes).

Reasons for smoking RYO: This was a multiple response variable, and asked respondents to identify up to four reasons from a list: because they are cheaper; because of the taste; because they help you reduce the amount smoked and because they are not as bad for your health. It is worthy of note that in the Netherlands, we could not assess all reasons for use of RYO tobacco, i.e. "because they are bad for your health" was asked only at the first wave. More so, we did not use the item 'because they help you reduce the amount smoked' because this was not asked repeatedly in all countries.

Intention to quit: A four-point scale based on the stages of change (de Vries and Mudde, 1998) was used to capture quit intentions and for analyses was dichotomised to determine whether or not smokers have any intention to quit in the next six months.

Covariates: Control variables were gender, age, heaviness of smoking index (HSI) (ranging from 0 to 6), and socioeconomic status of respondents, which was measured based on two variables (i.e., education and income). Education was categorised into three levels (low, moderate and high). A 4-point scale was used to capture level of income (i.e., low, moderate, high and no answer). The educational levels were only partly comparable across countries because of differences in educational systems. Respondents from the Netherlands and the UK were asked about their gross household income per month. However, respondents from Germany and France were asked about their net household income. Hence, to permit comparison across countries income was transformed into four categories as indicated above.

Analyses

A cohort sample of 7117 smokers, followed over three time periods in each country, i.e. the Netherlands (n=2224), France (n=1735), Germany (n=1515), and the UK (n=1643) was employed in the analyses. Altogether 17461 participants were used in the analyses. All analyses were based on weighted data to ensure that the sample is represented in proportion to the target population in all countries. Univariate and bivariate analyses were performed including self-reported prevalence. To assess correlated data across the waves we used generalised estimating equations (GEE) via binary logistic analyses with working correlation structure. The statistical package SPSS version 21 was used for all analyses.

Results

Trends in the Prevalence of RYO Use

The prevalence of RYO and FM use by country across waves is presented in Table 1. Results showed that the proportion of smokers using only RYO over time in the UK had increased significantly from 26.4% to 32.7% (p=.003). Use of only RYO across waves increased in France and Germany from 12.2% to 19.1% (p=.002) and from 12.7% to 18.6% (p=0.002) respectively. However, the proportion of exclusive RYO use over time was fairly stable in the Netherlands (i.e., from 31.7 % to 34.3%).

Table 1. Prevalence (%) of exclusive factory-made (FM) use, both RYO and FM use, and exclusive roll-your-own (RYO) use by country and across waves (weighted data).

Wave (period)	United Kingdom			France			Netherlands			Germany		
	FM only	RYO Only	Both RYO +FM	FM only	RYO only	Both RYO +FM	FM only	RYO only	Both RYO +FM	FM only	RYO only	Both RYO +FM
1	62.3	26.4	11.2	72.8	12.2	15.0	45.2	31.7	23.1	72.7	12.7	14.6
2	62.1	25.0	12.7	72.2	13.1	14.8	44.9	33.0	22.1	72.0	14.3	13.7
3	60.0	32.7	7.3	65.8	19.1	15.1	44.0	34.3	21.7	70.7	18.6	10.7
P-value for Trend	.047	.003	.144	<.001	.002	.560	.310	.241	.911	.014	.002	.266

Trends in Exclusive and Predominant RYO Use Compared to FM Use

Omnibus analysis via GEE revealed that country and wave were the variables strongly associated with exclusive use of RYO compared to all other forms of smoking (i.e., exclusive FM or both FM and RYO use), with $P < .001$ (see Table 2). Additionally, between country and wave interactions were significantly associated with exclusive use of RYO tobacco as well as predominant RYO tobacco use (i.e. those who smoked either RYO only or both RYO and FM tobacco). As shown in Table 3, price was the most commonly cited reason for using RYO tobacco. Howbeit, apart from Netherlands, price reasons for using RYO over the whole period remained fairly stable in the other countries.

Overall, exclusive use of RYO tobacco was highest among older smokers aged 40-54 (OR = 5.86; CI = 4.47-7.68), across all countries over time, compared to those aged 18-24. However, predominant use of RYO tobacco was lowest among those aged 55+ (OR = .74; CI = .62 - .88) compared to FM only smokers aged 18-24. Across all countries, females were less likely to report exclusive RYO use (OR = .74; CI = .64 - .86), and also predominant use of RYO tobacco (OR = .42; CI = .38 - .46). Comparisons by income showed that use of RYO only was evenly balanced over time across all countries. However, predominant use of RYO was less likely among moderate (OR = .84; CI = .75-.95) and high income earners (OR = .53; CI = .47-.61), compared to those with low income.

In terms of education, reported exclusive use of RYO was comparable across education levels over time across countries. However, predominant use of RYO was less likely among those with moderate education (OR = .81; CI = .73-.90) and high education (OR = .73; CI = .64-.84).We found no significant association between exclusive and predominant RYO users with quit intention within the next six months. More importantly, smokers who reported exclusive RYO use indicated that this was less expensive than FM cigarettes (OR = 1.27; CI = 1.05-1.54), across all countries and over time. Likewise, exclusive RYO users as well as predominant users across countries tended to be heavy smokers (Exclusive Users: OR = 1.10; CI = 1.04-1.50, and Predominant Users: OR = 1.72; CI = 1.56-1.90).

Table 2. GEE analyses for exclusive use of RYO compared to mixed use (FM only or both FM and RYO), and predominant use (RYO only or both RYO+FM) compared to exclusive FM use with weighted row percentage.

Variable	Level of RYO and/or FM Cigarette Use			Overall Model for Exclusive Use			Overall Model for Predominant Use		
	FM Only	RYO Only	Both RYO+FM	OR	CI	P Value	OR	CI	P Value
Country						< .001			<.001
UK	23.6	26.7	15.4	1	Reference		1	Reference	
FR	31.6	16.7	24.8	.35	.27-.46	< .001	.66	.57-.77	<.001
NL	24.9	46.6	45.9	.40	.29-.55	< .001	2.29	1.86-2.81	<.001
DE	19.9	10.0	13.9	.35	.26-.46	< .001	.62	.53-.73	<.001
Survey Period						< .001			<.001
1	42.4	38.0	42.0	1	Reference		1	Reference	
2	33.0	31.4	32.9	1.78	1.27-2.49	< .001	1.02	.92-1.13	ns
3	24.6	32.8	25.2	.79	.65-.98	.028	1.07	.93-1.24	ns
Survey Mode									
Telephone	76.5	56.5	58.0	1	Reference		1	Reference	
Web	23.5	43.5	42.0	1.23	.94-1.63	ns	.97	.81-1.16	ns
Gender						< .001			
Male	46.9	69.1	59.5	1	Reference		1	Reference	
Female	53.1	30.9	40.5	.74	.64-.86	< .001	.42	.38-.46	<.001
Age						< .001			
18-24	13.4	6.7	19.5	1	Reference		1	Reference	
25-39	32.0	26.7	34.1	4.09	3.28-5.09	< .001	1.05	.90-1.22	ns
40-54	32.7	41.8	34.4	5.86	4.47-7.68	< .001	1.24	1.06-1.44	.006
55+	21.9	24.8	12.0	2.43	1.95-3.04	< .001	.74	.62-.88	<.001
Income						.352			
Low	20.0	21.0	22.7	1	Reference		1	Reference	
Moderate	36.8	39.4	37.0	1.01	.84-1.20	ns	.84	.75-95	.002
High	31.7	24.5	24.4	.97	.79-1.18	ns	.53	.47-.61	<.001
No Answer	11.5	15.1	15.9	1.19	.93-1.51	ns	.80	.68-.93	.004
Education						.240			
Low	36.2	47.3	40.8	1	Reference		1	Reference	
Moderate	38.0	34.6	40.0	.88	.74-1.03	ns	.81	.73-.90	<.001
High	25.8	18.2	19.2	.95	.78-1.16	ns	.73	.64-.84	<.001
HIS						.001			
0-1	39.4	21.4	26.0	1	Reference		1	Reference	
2-4	55.7	71.7	65.8	1.10	1.04-1.50	.006	1.72	1.56-1.90	<.001
5-6	4.9	6.9	8.2	.67	.50-1.89	ns	1.91	1.59-2.29	<.001
RYO less expensive						.013			
No	-	14.9	11.5	1	Reference		-	-	-

Yes	-	85.1	88.5	1.27	1.05-1.54	.013	-	-	-
Intention to Quit						.420			
No	68.8	77.5	77.5	1	Reference		1	Reference	
Yes	31.2	22.5	22.5	.94	.81-1.09	ns	.67	.61-.73	ns

Table 3. Self-reported (%) reasons for smoking RYO (all users, all waves, weighted data, dichotomous responses).

	United Kingdom			France			Netherlands			Germany		
	Period 1	Period 2	Period 3	Period 1	Period 2	Period 3	Period 1	Period 2	Period 3	Period 1	Period 2	Period 3
Cheaper than FM	92.0	95.6	93.6	91.5	91.0	94.3	78.4	60.9	80.2	88.1	84.6	86.4
Taste	62.9	63.7	65.3	33.0	37.4	37.1	78.2	78.2	75.1	44.4	52.2	48.2
Healthier	25.6	27.9	26.6	18.2	18.7	15.8	na	na	na	11.8	7.9	11.3

Trends within Country by Exclusive RYO Use and Health Considerations

As shown in Table 3, reported health reasons for using RYO tobacco was comparable over time in the UK and Germany (i.e., UK: 25.6%, 27.9%, 26.6%, and Germany: 11.8%, 7.9%, 11.3%), but a significant decrease was observed in France (18.2%, 18.7%, 15.8%). Table 4 depicts within country comparisons for use of RYO by health reasons and key demographics.

GEE analyses indicated that overall, exclusive RYO users were more likely to report that RYO cigarettes were healthier than FM cigarettes (OR = 1.54; CI= 1.26-1.89). This trend was similar in France (OR = 1.70; 1.22-2.34) and Germany (OR = 2.68; CI = 1.54-4.65), though results in the UK were comparable. Trends in RYO only use across all countries were more pronounced among smokers aged 40-54 (OR = 3.75; CI = 2.91-4.82) compared to those aged 18-24 over time. Similar findings were reported in the respective countries, i.e. UK (OR = 2.66; 1.74-4.15), France (OR = 4.75; CI = 3.13-7.20) and Germany (OR = 4.34; CI = 2.83-8.70) over the study period.

Comparisons by income and education over the study period revealed no significant difference between as well as within country association with exclusive RYO use. However, in the UK, users with moderate education were less likely to report that they use RYO tobacco compared to those with low education (OR = .67; CI = .47-.95). Use of RYO by heaviness of smoking index was evenly balanced across all countries and over time. We found no association with quit intention over the whole study period and across countries.

Table 4. GEE analyses by country for exclusive use of RYO compared to use of factory-made only or both factory-made and RYO (with health considerations and using weighted data).

Variable	United Kingdom			France			Germany			Overall Model		
	OR	CI	P value	OR	CI	P value	OR	CI	P value	OR	CI	P value
Country												<.001
UK										1	Reference	
FR										.34	.26-.46	<.001
DE										.37	.29-49	<.001
Survey Period			.001			.001			.035			.001
1	1	Reference		1	Reference		1	Reference		1	Reference	
2	.80	.66-.98	ns	1.17	.95-1.43	ns	1.16	.85-1.58	.010	.79	.64-.96	.021
3	1.35	.97-1.88	.033	1.58	1.23-2.02	<.001	1.67	1.13-2.47	ns	1.31	.93-1.84	ns
Survey Mode			.001			-			-			.001
Telephone	1	Reference		-	-	-	-	-	-	1	Reference	
Web	2.58	4.32-5.65	.001	-	-	-	-	-	-	3.80	4.25-5.67	.001
Gender			ns						ns			.018
Male	1	Reference		1	Reference		1	Reference		1	Reference	
Female	.75	.55-1.02	ns	.81	.60-1.08	ns	.83	.56-1.22	ns	.80	.67-.96	.018
Age			<.001			<.001			<.001			<.001
18-24	1	Reference		1	Reference		1	Reference		1	Reference	
25-39	1.63	1.09-2.43	<.001	2.72	2.81-4.07	<.001	3.17	1.75-5.74	<.001	2.23	1.75-2.86	<.001
40-54	2.66	1.74-4.15	<.001	4.75	3.13-7.20	<.001	4.34	2.83-8.70	<.001	3.75	2.91-4.82	<.001
55+	2.67	.06-4.54	ns	1.45	1.02-4.82	.001	3.96	.49-5.44	ns	4.26	.42-5.99	ns
Income			.038			ns			.044			ns
Low	1	Reference		1	Reference		1	Reference		1	Reference	
Moderate	.99	.68-1.46	ns	1.06	.78-1.44	ns	.71	.46-1.08	ns	.97	.79-1.19	ns
High	.71	.48-1.07	ns	1.01	.68-1.50	ns	1.21	.80-2.18	ns	.92	.72-1.17	ns
No Answer	1.49	.88-2.53	ns	1.72	.79-3.78	ns	.92	.48-1.74	ns	1.37	.97-1.94	ns
Education			.02			ns			ns			.033
Low	1	Reference		1	Reference		1	Reference		1	Reference	
Moderate	.67	.47-.95	.024	.88	.65-1.20	ns	1.57	.93-2.64	ns	.86	.70-1.06	ns
High	1.45	.96-2.19	ns	1.02	.68-1.53	ns	1.47	.87-2.48	ns	1.18	.93-1.50	ns
HSI			ns			ns			ns			ns
0-1	1	Reference		1	Reference		1	Reference		1	Reference	
2-4	.83	.57-1.20	ns	1.18	.89-1.57	ns	1.34	.89-2.02	ns	1.11	.92-1.35	ns
5-6	.57	.31-1.06	ns	1.06	.54-2.07	ns	.69	.89-1.62	ns	.78	.53-1.14	ns
RYO Healthier			ns			.002			<.001			<.001
No	1	Reference		1	Reference		1	Reference		1	Reference	
Yes	1.21	.95-1.61	ns	1.70	1.22-2.34	.002	2.68	1.54-4.65	<.001	1.54	1.26-1.89	<.001
Intention to Quit			ns			ns			ns			ns
No	1	Reference		1	Reference		1	Reference		1	Reference	
Yes	.95	.69-1.31	ns	1.02	.78-1.33	ns	.67	.43-1.04	ns	.94	.78-1.13	ns

Discussion

This study reports data that depict the extent to which economic motives and misperceptions that RYO tobacco is healthier serve as primary drivers of RYO use, particularly among disadvantaged groups. We found that exclusive RYO use is increasing in the UK, France and Germany, consistent with previous study (Young et al., 2012), though prevalence was relatively stable over the study period in the Netherlands. Pattern of exclusive RYO use compared to FM use across all countries was fairly stable by income profile, but predominant RYO users tended to be low income earners. This latter finding suggests that predominant RYO smokers may be consuming mixed cigarettes (i.e. RYO only or both RYO and FM cigarettes) to counterbalance the relatively higher priced FM cigarettes de (Young et al., 2006), Consistent with this findings, the most commonly cited reason for using RYO tobacco across all countries was price considerations. This was however stable over time in all countries, apart from Netherlands, where reported price reasons for consuming RYO appear to increase.

Our results show that overall, exclusive RYO use was strongest among older smokers whereas predominant RYO consumption was prominent among younger users, howbeit, both consumer types were more likely to be males as well as heavy smokers over the study period. These effect suggest that exclusive users may be insensitive to tobacco pricing probably because this represents a more permanent choice. On the other hand consumption patterns of predominant users (i.e. either RYO or RYO and FM cigarettes) may be influenced by their available funds. Indeed, in some countries such as the UK, RYO tobacco has been subjected to relatively favourable RYO taxation (Young et al., 2012; Devlin, Eadie, and Angus, 2003). In terms of education, this was comparable among exclusive RYO consumers but predominant RYO users tended to have low education.

Reported health reasons for using RYO tobacco was stable over time in the UK and Germany, although a significant decrease was observed in France. Comparatively, exclusive RYO consumers overall said RYO tobacco was healthier than FM cigarettes, with France and Germany indicating similar findings, though results in the UK was comparable. Our analyses suggest that misperceptions of RYO use still exist for a minority of smokers, which is consistent with previous studies (O'Connor et al., 2007; Young et al., 2006). Additional health messages are therefore needed to correct misperceptions of RYO consumption.

This study is not without caveats. First, we had relatively small number of RYO smokers in any given wave, especially in France and Germany. As such monitoring changes in smokers' choice of RYO and/or FM tobacco consumption over time is somewhat problematic. To resolve this, we used GEE technique to assess cumulative changes in tobacco use. This approach also allowed for inter-wave correlation. Apart from this, the measures we assessed were obtained via self-report responses of smokers. Hence, smokers may under-report actual RYO prevalence, which might affect generalisation of the study findings to the target population. Despite this, the current prevalence levels (Rosenberry, Strasser, Canlas, Potts, and Pickworth, 2013; Young et al., 2006), and our results provide further evidence that would advocate for reducing the price advantage of RYO cigarettes, particularly for disadvantaged groups, and support policies that target smokers with additional health messages to correct misperceptions of RYO consumption.

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Evaluation of Protected Areas from the Perspective of Sustainable Tourism: Case Study of Mount Nemrut National Park/Adıyaman

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Abstract

The notion of Sustainable Tourism (ST) is a common framework of intergenerational value sharing. The basic goal of ST is to provide deeper and multidimensional insights about the protection of tourism resources especially for cultural heritage sites. It is envisaged that, because of its' critical situation, heritage sites should be considered on a preferential basis. On the other hand, in spite of the fact that it's essential importance, heritage sites are still underrated. The emerging arguments refer that, this predicament is closely linked with unsustainable tourism. In this sense, main idea of the ST is to bring forth awareness to today's human being for future generation within the context of world heritage. The main object of this paper is to evaluate Mount Nemrut/Adıyaman which is on the list of World Heritage Site within the frame of sustainable tourism. In this context this study discusses the chronic societal, bureaucratic and natural barriers of maintaining cultural heritage. Furthermore, different opinions are presented to set ground for preservationist understanding among local bodies and community.

Keywords: Sustainable Tourism, Heritage, Stakeholders.

Introduction

The concept of heritage as a socio-cultural phenomenon is an amalgamation of natural and historical assets included historical ruins, ancient monuments, natural features etc. In this sense, it is observed that, today's regional perspective of locals is dramatically seen as reckless, unawareness and characterised by uncertainty. Therefore understanding the sense of natural and cultural heritage to establish idea of common social consciousness is important for respect the future. At this point, ST is accepted as an insight that pursues the balance between today and future conditions of natural and cultural sources. There is a sensitive system in heritage sites. Regarding reality, this system requires strategic use of regional resources because of tourism growth and its' unexpected impacts (Aref, Redruzan and Gill, 2010). On the other hand, heritage is perceived as a primary reason for a tourism action (Zamani-Farahan and Musa, 2008). This fact makes heritages more meaningful for the destinations. Nevertheless it is assumed that, culturally unsustainable tourism can be emerged as well (Tosun, 1998).

Sustainable Tourism

Sustainable tourism (ST) is a holistic approach has all the dynamic factors of tourism and provides the ultimate goal of achieving regional success (Clarke, 1997). In this regard, ST is seen as a philosophy includes all policies and practices of multi-source efficiency in tourism (Kozak and Bahçe, 2009). This is may also referred to take defensive measures against unsustainable tourism. As Choi and Sirakaya (2005) state ST is necessary to reduce the negative impacts of tourism. In this respect, it reflects four fundamental points (Neto, 2002: 10):

1. The promotion of national strategies for sustainable tourism development, including the decentralization of environmental management to regional and local levels,
2. The use of both regulatory mechanisms and economic instruments,
3. the support for voluntary initiatives by the industry itself, and
4. The promotion of sustainable tourism at the international level.

In the light of the foregoing items, ST has been considered a basic tool of sustainability of all social, economic and environmental values of destination (Liu, 2003). But focusing on the regional values, evaluation of sustainability in any region requires attention because of multidimensionality (Tosun and Çalışkan, 2011).

Cultural Heritage

Tourist demand in any locality is the main reason for the development of tourism. However, the growth of tourism is also utilized as a physical oppression on living spaces, historical, artistic and natural

environment (Sessa, 1988). This might pose a threat to cultural values and may pose an obstacle to the purpose of tourism, because the culture of the host society is a strategic factor to interaction with visitors, and also exchange of sympathy (Besculides, Lee and McCormick, 2002). Clearly, it could be argued that, the sustainability of regional tourism is closely related with protection of cultural heritage (Goeldner and Ritchie, 2009).

Protected Areas as a Cultural Heritage

There is a critical balance between tourism and protected areas. It should be noted that, tourism serves a function of strengthening in protected areas. By contrast, purposes of providing more economic output may make the tourism as a threat risk (Ceballos-Lascurain, 1996). At this point Eagles, McCool and Haynes (2002: 64) suggested four strategic approaches:

1. **Preservation:** The stabilisation and protection of existing structures and artifacts;
2. **Restoration:** The repair of the structures and artifacts where replacements of missing parts should integrate harmoniously with the whole;
3. **Re-creation:** The creation of a new structure or artifact that faithfully replaces one that is lost, destroyed or too fragile to use; and
4. **Adaptation:** The restoration of part of the structure, but with change in another part, to make it more useful, for example for tourism.

Underlying these items is the notions that tourism may generate additional value for heritage but in some cases do not. Because of fragility, protected areas should not be considered as an income factors (Dudek, 2004). When viewed from this aspect, it is required to ensure a balance between resources and tourism activities (Farrell and Marion, 2002).

Mount Nemrut National Park

Nemrut Mountain (with its historic settlement) is one of the most attractive site in the world. It is also known as the highest open-air museum in the world. With its impressive statues, long inscriptions, mysterious tumulus and particularly physical location, it is accepted the unique heritage site among its kind (www.goturkey.com). Mount Nemrut National Park is situated in the Kahta county of Adıyaman province. In 1986, it was declared an Archaeological Conservation Area according to national legislature and inscribed into the UNESCO World Heritage List (CNDP, 2014).

Despite the importance of its historical background, it is observed that, the site needs to be preserved. In other words, Mount Nemrut National Park has to be evaluated in sustainable manner. Because of its vulnerable structure, it is required more protective and collaborative approach to local ownership of cultural heritage.

Study Methods

This study based on literature review and also key-informant opinions were used to clarify main issue. Given this, the literature was reviewed and opinions of relevant local bodies were used in the study. The key informants were consist of NGO's, opinion leaders, academicians, local authorities and private sector representatives and preferred for their extensive knowledge and involvement in their regions. As a result of study, alternative regional protection strategies were suggested and determined how to actualize the social awareness in shared groups and community.

Results and Discussion

The study is related to idea of consciousness-raising of cultural heritage and recall meaning of the ST that aspiring to build social bridge between past, today and tomorrow. In this context, according to the opinion of the stakeholders, the approaches consist in the following way:

Several key-informants emphasized that the lack of awareness among community is an important obstacle in collaboration. For example, most of NGO representatives informed that:

> We cannot protect the values of regional heritages. May be we assume the Nemrut Dağ as an exurban. This perceived distance probably cause societal oblivion. Therefore we should raise the awareness of public.

Based on above, a great number of respondents offer a common suggestion to built social bridge between cultural heritage and community:

> We (stakeholders) need a comprehensive strategic master plan that should emphasis on intergenerational heritage values and explains how to actualize systematic operation.

Indeed, observed that, it is substantially hard to create specific scale of common action by stakeholders in any region in the context of intergenerational interaction side (Çalışkan, 2011). On the other hand, there is no doubt that, community participation is important worth-stressing issue that is emerging phenomenon as part of approach in heritage policy (Daim, Bakri, Kamarudin and Zakaria, 2012). At this point, one company executive complained that:

> Community participation is an important factor for participatory regional planning. When local community is involved in planning process, they may acquire sense of local ownership (especially in Mt. Nemrut national Park) and awareness of sustainability.

In a sense, that is to say, achieving sustainable tourism needs societal cooperation, coordination and participation in this manner and as is also understood from this aspect, community will not profit from any non-participatory planning approach (Tosun and Çalışkan, 2011). For example most of stakeholder groups are in agreement that:

> There is a lack of coordination between institutions, regional tourism industry and various non-governmental organizations. In our opinion, this is the social breaking point for collaboration.

In parallel with statement above, it can be identified that there are five critical questions that should be answered by stakeholders before all in coordination (Reid, Smith and McCloskey, 2008): "→Do we want to partner?→Do we have the ability to partner? →With whom do we partner? →How we partner? →How do we sustain and renew a relationship over time?" To this respect, stakeholders in any tourism region must be ready for correlating wide social and business network and to be in integration depending on solidarity. Depends on participatory approach coordination among local bodies can be evolved properly by learning with operational scales (Meppem and Gill, 1998).

It may be acceptable that to raise awareness and collaborate with all stakeholders are thought as sense of common responsibility. Moreover, confidential aspect approach must be provided necessarily under the umbrella of social trust between each stakeholder. Concretely speaking, stakeholder groups should develop monitoring system and realize heritage management concept without negative dissensus (Choi and Sirakaya, 2005).

As a result, it can be said that societal approach to preserving and embracing heritage can shape the future of regional sustainability. In other words, unless local policies and implementations ensure collaboration and participation among locals and stakeholder groups, sustainability of heritage will not be built. After all, understanding the sustainability of heritage to establish idea of collaborative tourism action in favor of any region's destiny is important that respect for its' future.

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Private and Public Debt

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Abstract

We utilize the financial accounts as an analytical framework for revealing the development of both private and public sector debts in 18 EU countries in 1995-2011 (2012). The culmination of the ratio of private to public debt was mainly in 2007 and 2008 respectively. Since 2008 the ratio has the tendency to decline.Panel regressions have revealed that the impact of different forms of debt on the growth rate of real GDP (forward moving averages) has been negative and statistically significant with possible non-linear impacts.

Keywords: Flow of Funds, Private Debt, Public Debt, Panel Analysis.

Introduction

The still ongoing financial and economic crisis in full/fledged market economies has been a reminder of the multifaceted nature of crises which can have domestic or external origins. They are extreme manifestations of the interactions and spillovers between all sectors of the economy.

According to *Claessens-Ayhan Kose (2013)* financial crises have several common elements : a)large scale balance sheets problems in both financial and real sectors; b)severe disruptions in financial intermediation and the supply of external financing to the various sectors; c)substantial changes in credit volume and asset prices; d)large scale government support in the form of liquidity support and recapitalization.

But the ongoing crisis has also been rooted in some new factors including the increased interconnectedness among financial markets, the high degree of leverage of financial institutions especially in the United States and the important role of households and non-/financial corporations. Theoretically, the financial crisis can start on the real side (in private sector less households or non-financial corporations spending due to increasing debt levels) or on the financial side (overleveraged lenders can cut back). What is important not only for this paper is the fact that the real and financial sectors interact both on the way up and on the way down.

The financial and economic crisis has been contributing to underlying financial instability not only in the public sector but also in the private sectors. Generally, when the public sector (general government) has to raise saving to stabilize the debt at the macrolevel, it is helpful if the households and non-financial corporations can run down savings to offset the negative impact on economic growth. Therefore, one must stress that alongside the indebtedness of the public sector one must take into account also the incurring private debts.

Literature Overwiev

The surge of debt in the full-fledged market economies since the mid-1990s has raised concerns abou macroeconomic performance. As is well known from the economic theory, on the one hand, accumulating debt can help smooth real activity, but on the other hand it can create vulnerabilities in both private and public sectors and effect macroeconomic performance- *Merola (2012)*. It is often argued/*White (2012)* that the policy responses to the crisis, both macroeconomic and structural, will not succeed in restoring sustainable growth. Monetary and fiscal stimulus might raise aggregate demand in the short run (see e.g. Obamaˇs stimulation packages), but they contribute to higher debt levels in the private and public sectors. Mainstream opinion emphasizes that fundamental policy changes are now required, relying much more on supply side reforms than simple demand side stimulus.

The implications for crises (one distinguishes four types of financial crises-currency crises, sudden stops, debt crises and banking crises, see *Claessens-Ayhan Kose (2013)* are for both real and financial sectors. Crises are often preceded by asset and credit booms that eventually turn into busts. Both distant past and more recent crises episodes typically witnessed a period of significant growth in credit and external financing. When debt levels, particularly in the household and non-financial corporations, are above

trend, recessions are typically longer and deeper, often following a prolonged expansions-*Sutherland et all. (2012).*

The financial and economic crisis starting in 2007 in the United States has put considerable strains on private and public finances in the Member States of the European Union. One important question refers to the economic consequences of a regime of high debts in the economic sectors. From a policy perspective, a negative impact of public debt on economic growth strengthens the arguments for ambitious debt reduction through fiscal consolidation. The relationship between both public and private debt and economic growth has been investigated in several papers-e.g.*Checherita, Rother (2010), Kumar, Woo (2010), Cecchetti, Mohanty, Zampolli (2011)*

Private credit, at low levels, is good for economic growth, because, according to theory, raises trend growth. But there comes a point where the additional lending and a bigger financial system become a drag on growth-see *Cecchetti, Kharroubi (2012).*

High levels of debt have been achieved not only in the public sector, which is in the centre of general attention, but also in the household and corporate sector in the majority of the EU states-see.*Blundell-Wignall (2012), Izak (2012, 2013), Bouis et all. (2013).* In the run up to the financial crisis, households and non-financial corporations expanded their balance sheets massively. Much of the increase in debt may be regarded as "excessive" and private sector debt has had to be reduced. In the literature the terms "reduced indebtedness" and "deleveraging" are used interchangeably with falling debt-to-GDP ratios-*Bouis et all. (2013).*

In a well known article *Bernanke, Gertler, Gilchrist (1996)* the authors assert that firms with week balance sheets are likely to bear the brunt of an economic downturn and that the adverse shocks to the economy may be amplified by worsening credit-market conditions. Their "financial accelerator" was deduced from the rich empirical evidence (a panel of large and small manufacturing firms).

The attention devoted to the balance sheet approach has been fully justified in several research fields. An analytical framework for understanding crises, based on examination of stock variables in the aggregate balance sheet of a country and the balance sheets of its main sectors (assets and liabilities), focuses on vulnerabilities among economic sectors-*Allen et. all. (2002).* Further, a framework where the sustainability conditions of all economic sectors are considered simultaneously, is required-*Burger (2003).*The unsustainability can be shifted from public to private sectors and if this happens, indebtedness may cause a spate of bankruptcies in household and non-financial corporatios-*Cecchetti, Mohanty, Zampolli (2011).*

Methods and Data

The methodological approach of our paper is to utilize an analytical framework for understanding linkages between main private sector on the one side and public sector on the other side. This analytical framework is based on the financial accounts. They record transactions that involve financial assets and liabilities and that take place between public and private sectors.

An asset is a store of value representing a benefit accruing to the economic owner by holding or using the entity over a period of time. As concerns liabilities one must be aware that there are no non-financial liabilities recognized in the System of National Accounts, thus the term liability necessarily refers to a liability that is financial in nature. A liability is established when one unit (the debtor) is obliged, under specific circumstances, to provide a payment to another unit (the creditor). The framework labeled "flow of funds" or sometimes "from-whom-to-whom" puts debt for each sector of the economy in the context of total debt and thus underlines the role of the public sector (and private sectors also) in total financial flows and stocks.

The source of our dataset are detailed national accounts published regularly by OECD. More concretely National Accounts-Volume IIIb-Financial Balance Sheets-Stocks or Flows. They record the stocks or flows of financial assets and liabilities by institutional sectors. In this paper Households S14 and Non-profit institutions serving households S15 taking together, Non-financial corporations S11 and General government S13. One has a choice to select stock values (code 710) or flows (code 610), both consolidated or non-consolidated. From these 4 possibilities we have preferred to choose 710 Balance sheets consolidated.

We have gathered data for general government sector (public debt in what follows) and the debt of households including non-profit institutions serving households and non-financial corporations for 18

Member States of the European Union (12 full-/fledged market economies and 6 postsocialist countries) for the time period 1995-2011 (2012) enabling us to use the methods of panel analysis.

The raw data are reported at current prices in millions of national currency or in millions of Euros for EU countries which are members of the Euro zone. The changes in stock values can be compared with flows taking into account the differences due to holding gains/losses, price changes and other changes in the volume of assets and liabilities and net worth. The comparison has been omitted in this paper.

The identifiers in different models are following:

Austria (AT), Belgium (BE), The Czech Republic (CZ), Germany (DE), Denmark (DK), Estonia (EE), Greece (EL), Spain (ES), Finland (FI), France (FR), Hungary (HU), Italy (IT), The Netherlands (NL), Poland (PL), Portugal (PT), Sweden (SE), Slovakia (SK), Slovenia (SL).

Both F-statistics and Hausman test have preferred fixed method of panel analysis (the selection is not from a random sample but is fixed and the countries in the sample have unchanged special features which are constant in time.

In examining the impacts of different debt items on the growth rate of real GDP we have chosen as the dependent variable the forward moving average of GDP growth rate (2 and 3 years) and the non-overlapping 3 years averages. The forward lag is chosen to reflect the fact that loans take time before their effects on output growth can be registered. It addresses also the joint endogeneity of the two variables and the possibility of reverse causality. This problem exists in principle in our paper as well and one attempt to minimize it is by modeling loans in period t as affecting growth in successive periods. The 3 year averages for all variables stress the impacts in middle-term. Using the relatively restricted cross-sectional sample helps mitigating the issue of heterogeneity with the caveat that 6 postsocialist countries exhibit still differences vis-à-vis other states in the sample.

Results

Debt Ratios

For households debt is defined as total liabilities and for non-financial corporations as total liabilities minus shares and other equities. Data for private debt are in millions of national currency and for GDP in mld of national currency. Exhaustive information in time for our sample has been displayed in Table 1.

Table 1 : Ratio of private debt to GDP (time series)

	1995	1997	1999	2001	2003	2005	2007	2008	2009	2010	2011	2012
AT	1.06	1.15	1.22	1.31	1.34	1.37	1.40	1.47	1.56	1.58	1.54	-
BE	1.10	1.24	1.19	1.24	1.24	1.22	1.23	1.42	1.42	1.40	1.51	1.55
CZ	0.90	1.02	0.89	0.79	0.77	0.75	0.82	0.91	0.92	0.96	1.00	-
DE	1.29	1.37	1.48	1.53	1.52	1.47	1.41	1.42	1.46	1.37	1.33	
DK	1.67	1.78	1.81	2.03	2.03	2.23	2.51	2.61	2.74	2.66	2.59	2.60
EE	0.49	0.77	0.75	0.83	0.98	1.26	1.54	1.67	1.81	1.73	1.51	-
EL	0.48	0.52	0.64	0.78	0.84	1.00	1.17	1.30	1.33	1.39	1.42	-
ES	0.99	1.02	1.18	1.33	1.50	1.78	2.17	2.21	2.27	2.30	2.21	-
FI	1.09	0.99	1.00	1.06	1.22	1.35	1.42	1.59	1.71	1.74	1.70	-
FR	1.14	1.17	1.21	1.31	1.28	1.38	1.48	1.53	1.65	1.70	1.73	-
HU	0.54	0.56	0.65	0.80	0.91	1.06	1.27	1.55	1.66	1.50	1.64	-
IT	0.84	0.82	0.91	1.00	1.08	1.18	1.34	1.38	1.45	1.46	1.33	-
NL	1.71	1.82	2.11	2.23	2,30	2.40	2.39	2,39	2.55	2.55	2.55	-
PL	0.32	0.43	0.54	0.66	0.62	0.57	0.70	0.84	0.84	0.87	0.93	-
PT	1.11	1.53	1.75	1.97	2.05	2.08	2.28	2.40	2.53	2.55	2.59	-
SE	1.44	1.57	1.63	1.86	1.95	2.03	2.24	2.49	2.60	2.46	2.42	-
SK	1.23	1.22	1.15	1.03	1.01	0.94	1.05	1.05	1.10	1.10	1.14	-
SL	-	-	-	0.84	0.88	1.05	1.26	1.34	1.42	1.46	1.43	1.40

Source: Own calculations

Note: Data for Slovenia are at the disposal since 2001 only.

Starting from Table 1 we see a rapid rise in the ratio of private debt to GDP in the majority of full-fledged market economies with the acceleration in 2009-/2011. The peak was achieved in 5 countries in 2009, in 6 countries in 2010 and 2011. Even the countries with very low ratio in 1995 (Poland, Greece, Spain and Hungary) have exhibited a remarkable increase in private indebtedness in successive years.

Cross-sectional differences are displayed in Table 2. Three main facts stand out from the table:

a) Mainly postsocialist countries exhibit on the average still lower indebtedness (Poland, The Czech Republic, Hungary and also Greece).

b) On the contrary, the highest indebtedness has been, on the average, revealed in The Netherlands, Denmark, Portugal and Sweden. What is striking into eyes are the differences between private and public indebtedness (at the level of general governments the main culprits are Greece, Italy and Belgium).

c) High fluctuations (standard deviations) can be seen in Spain, Portugal, Sweden, Hungary and Greece. Relative stability has been achieved in Germany, The Czech Republic and Slovakia.

Table 2 : Ratio of private debt to GDP (main descriptive statistics)

	mean	maximum	minimum	st.deviation	observations
Austria	1.32	1.58	1.06	0.16	17
Belgium	1.27	1.55	1.10	0.13	18
The Czech Republic	0.87	1.02	0.75	0.08	17
Germany	1.43	1.53	1.29	0.08	17
Denmark	2.18	2.74	1.67	0.14	18
Estonia	1.11	1.81	0.49	0.27	17
Greece	0.91	1.42	0.48	0.32	17
Spain	1.61	2.30	0.98	0.50	17
Finland	1.28	1.74	0.95	0.27	17
France	1.36	1.73	1.14	0.19	17
Hungary	1.00	1.66	0.54	0.40	17
Italy	1.11	1.46	0.82	0.23	17
The Netherlands	2.22	2.55	1.71	0.27	17
Poland	0.63	0.93	0.32	0.18	17
Portugal	1.98	2.59	1.11	0.44	17
Sweden	1.97	2.60	1.44	0.37	17
Slovakia	1.09	1.23	0.94	0.09	17
Slovenia	1.16	1.46	0.84	0.25	12

Source: Own calculations

Ratio of Private to Public Debt

Some authors, e.g. *Cecchetti, Mohanty, Zampolli (2011)* stress a clear interaction between public and priváte debt. When private borrowing has fiscal backing, default increases public debt. And the ability of the public sector to cope with high debt depends, first of all, on its ability to raise revenue. And this ability is compromised if the household sector and non-financial corporations are already highly indebted.

In Table 3 we can observe the development of the ratio of private to public debt.

Table 3: Ratio of private to public debt (time series)

	1995	1997	1999	2001	2003	2005	2007	2008	2009	2010	2011	2012
AT	1.55	1.79	1.83	1.96	2.05	2.14	2.33	2.30	2.25	2.20	2.13	-
BE	0.85	1.01	1.05	1.16	1.26	1.33	1.47	1.59	1.48	1.46	1.54	1.56
CZ	6.42	8.07	5.65	3.31	2.68	2.65	2.93	3.19	2.69	2.53	2.44	-
DE	2.31	2.29	2.41	2.59	2.36	2.14	2.17	2.13	1.96	1.66	1.66	-
DK	2.30	2.72	3.12	4.09	4.31	5.91	9.24	7.83	6.73	6.23	5.58	5.69
EE	6.00	11.00	11.50	17.30	17.50	27.50	41.90	36.80	25.20	25.80	24.20	-
EL	0.50	0.53	0.67	0.74	0.85	0.98	1.09	1.15	1.03	0.93	0.83	-
ES	1.56	1.54	1.89	2.40	3.06	4.12	5.97	5.49	4.21	3.74	3.19	-
FI	1.92	1.82	2.17	2.50	2.74	3.23	4.04	4.70	3.93	3.58	3.45	-
FR	2.06	1.98	2.05	2.30	2.03	2.07	2.30	2.25	2.08	2.06	2.01	-
HU	0.63	0.90	1.08	1.52	1.56	1.71	1.90	2.13	2.08	1.83	2.01	-
IT	0.69	0.70	0.80	0.93	1.04	1.12	1.30	1.30	1.25	1.23	1.10	-
NL	2.25	2.67	3.45	4.40	4.43	4.63	5.27	4.09	4.20	4.04	3.90	-
PL	0.64	1.01	1.37	1.76	1.31	1.21	1.57	1.78	1.65	1.58	1.66	-
PT	1.88	2.75	3.42	3.65	3.44	3.07	3.33	3.35	3.02	2.72	2.39	-
SE	1.98	2.20	2.54	3.39	3.76	4.03	5.56	6.43	6.11	6.24	6.31	-
SK	5.56	3.63	2.40	2.10	2.39	2.75	3.54	3.76	3.09	2.68	2.63	-
SL	-	-	-	3.18	3.25	3.91	5.47	6.12	4.06	3.78	3.05	2.59

Source: Own calculations.

Note: The high ratio in The Czech Republic in the second half of 90´s is due to the officially very low and masked public indebtedness. To a certain degree the same is valid for Slovakia. Ratios for Estonia are outliers thanks to very low public debt.

The culmination of the ratio is, in accordance with expectations, mainly in the year 2007 (Austria, Denmark, Estonia, Spain, France, Italy and The Netherlands and in 2008 respectively (Belgium, Finland, Hungary, Poland, Portugal and Sweden). Since 2008 the ratio has the tendency to decline due to the process of deleveraging in private sector.

Generally, when private sector debt levels rise above trend the likelihood of a strong economic downturn increases. During a recession debt typically migrates from the private to the public sector (see Granger causality tests). Concerns about the health of balance sheets in one sector can have implications for others. Also household, non-/financial corporations or general government balance sheets affect the banking system (not examined in this paper), particularly when the banking system has too little capital cushion.

In a situation of high indebtedness in both household and non-financial corporation sectors a sudden shock can lead to cuts in aggregate demand with implications for government revenues. The implications of the vulnerabilities created by high indebtedness and the linkages between sectors suggest that high levels of debt can migrate and cascade across sectors. Typically, debt builds up in the private sectors and when the economy enters recession, ratio of private sector to GDP decelerates or declines and the public sector debt has the tendency to rise.

Cross-sectional differences are again summarized in Table 4.

Table 4: Ratio of private to public debt (main descriptive statistics)

	mean	maximum	minimum	st.deviation	observations
Austria	2.00	2.33	1.55	0.24	17
Belgium	1.26	1.59	0.85	0.23	18
The Czech Republic	4.10	8.07	2.44	1.93	17
Germany	2.22	2.59	1.66	0.27	17
Denmark	4.95	9.24	2.30	2.03	18
Estonia	20.65	41.86	5.96	10.23	17
Greece	0.81	1.15	0.50	0.21	17
Spain	3.16	5.97	1.45	1.44	17
Finland	2.91	4.70	1.82	0.86	17
France	2.11	2.30	1.92	0.12	17
Hungary	1.48	2.13	0.63	0.47	17
Italy	1.00	1.30	0.68	0.22	17
The Netherlands	3.91	5.27	2.25	0.88	17
Poland	1.38	1.78	0.64	0.34	17
Portugal	3.04	3.74	1.88	0.54	17
Sweden	4.01	6.43	1.98	1.60	17
Slovakia	3.06	5.56	2.05	0.88	17
Slovenia	3.83	6.12	2.59	1.04	12

Source: Own calculations.

Estonia is again the great outlier in both the difference between maximum and minimum and fluctuations of the ratio in time. Remarkable is the small ratio in Greece and Italy due to very high public indebtedness.

Spillovers Across Private and Public Debt

During the financial and economic crisis government budgets could have been affected by steadily increasing private debts. As is known, at high public debt levels, contagion from the private to the public sector can force governments to become procyclical during economic recessions.

The Granger causality test shows whether including lagged information (in our case 1 and 2 lags) of one variable (private debt) can help explain the current value of another variable (public debt). As has been emphasized many times in the literature, it does not prove by itself causality.

Pairwise Granger causality tests reveal if run-ups in private sector borrowing tend to "Granger cause" increases in public debt. In what follows private debt is, as in the previous parts of this paper, the sum of households and non-financial corporations debts on the one side and general government debt on the other side. Group unit root tests show that both private and public debt series are non-stationary

(according to the test assuming common unit root process and also according to 3 tests assuming individual unit root processes). Hence the changes of both variables which are stationary have been applied.

Null hypothesis is: A: Private debt does not Granger cause public debt

Null hypothesis is : B: Public debt does not Granger cause priváte debt

Table 5: Pairwise Granger causality tests

			lags			
		1		2		3
	F	P	F	P	F	P
A						
Germany	6.34	0.027	6.32	0.019	6.33	0.027
Greece	3.26	0.096			13.91	0.004
Spain			6.77	0.016		
Finland	4.32	0.060	2.92	0.105		
France			4.07	0.055	5.57	0.036
Poland	3.50	0.086	3.41	0.079		
B						
Spain			4.28	0.049	4.52	0.056
Poland			2.47	0.102	5.81	0.033
Portugal	6.39	0.027				

Source: Own computations

Note: Low probability (P-values) implies that information on lagged debt in the private sector does help explain debt development in the public sector (we reject the hypothesis A) or information on lagged debt in the public sector does help explain debt development in the private sector (we reject the hypothesis B). The P-values in Table 5 inform that only in some countries (6) we have discovered contagion going from the private to the public sector. The reverse causation, from the public to the private sector, has been revealed in 3 countries only. Of course these partial results are with a grain of salt due to small number of observation and must be taken with a caveat.

Another approach consists in putting together data for all countries and time periods. In this case we obtain 316 observations for changes in both private and public debts. We examine the changes in both private and public debt which are stationary. The results using first 5 lags emphasize mainly the mutual dependence of both forms of debt changes. If we look on 12 old EU Member States only up to the third time lag we can not reject that change in private debt does not Granger cause change in the public debt.

Decomposition of Private Debt

Private sector indebtedness can be decomposed on the household´s debt on the one side and on the debt of non/financial corporations on the other side. The descriptive statistics give the information about the differences across countries.

Table 6 : Indebtedness of households (main descriptive statistics), % of GDP

	mean	maximum	minimum	st.deviation	observations
Austria	50.0	57.3	42.1	5.2	17
Belgium	45.4	56.6	39.5	5.8	18
The Czech Republic	19.5	34.8	10.6	8.8	17
Germany	67.9	74.0	59.8	4.8	17
Denmark	121.7	156.4	91.8	21.7	18
Estonia	32.0	68.2	4.4	24.0	17
Greece	35.3	68.7	11.1	19.9	17
Spain	67.2	91.5	40.8	19.2	17
Finland	46.7	68.2	32.4	13.5	17
France	50.4	66.6	38.7	9.1	17
Hungary	21.8	42.6	7.2	13.7	17
Italy	35.5	51.3	20.5	10.8	17
The Netherlands	100.8	134.6	59.2	24.9	17
Poland	16.8	36.8	2.4	11.4	17
Portugal	79.7	105.5	39.5	21.6	17
Sweden	63.9	86.3	46.4	14,7	17
Slovakia	17.2	29.1	10.2	6.6	17
Slovenia	27.6	35.4	20.5	6.1	12

Source: Own calculations.

Several facts stand out when looking at the table:

a) Highly indebted, on the average, are households in such rich countries as Denmark \and The Netherlands with high fluctuations in time.

b) Postsocialist countries exhibit still low indebtedness, but are catching up.

c) High public debts in Greece, Italy and Belgium have been accompanied by lower houshold´s indebtedness.

More detailed analysis reveals that the debt of households, on the average, culminated in 2010 (70.6% to GDP) with a slow decline afterwards as households have begun to reduce thein debt-to-GDP ratio. Worth of mentioning is the sharp increase of ratio from 2006 to 2009 (from 60.2% to 69.8%).

The similar picture offers Table 7 showing the debts of non-financial corporations.

Table 7 : Debts of non-financial corporations (main descriptive statistics), % of GDP

	Mean	maximum	minimum	st.deviation	observation
Austria	82.5	1o1.1	63.7	11.1	17
Belgium	81.9	98.9	70.3	8.0	18
The Czech Republic	67.4	90.0	55.1	10.6	17
Germany	75.5	81.6	66.2	4.7	17
Denmark	96.2	118.2	74.8	16.0	18
Estonia	79.4	113.3	44.7	19.7	17
Greece	55.4	75.2	36.7	12.9	17
Spain	93.4	138.3	56.5	30.9	17
Finland	80.9	105.6	62.2	14.1	17
France	85.8	105.9	72.4	10.5	17
Hungary	77.9	124.4	44.2	26.5	17
Italy	75.1	95.2	60.1	12.3	17
The Netherlands	121.7	136.7	112.2	7.3	17
Poland	46.1	59.4	29.2	8.2	17
Portugal	118.6	157.6	71.9	23.5	17
Sweden	132.6	174.0	97.8	23.3	17
Slovakia	91.5	112.7	76.5	13.1	17
Slovenia	88.7	110.3	63.9	18.8	12

Source: Own calculations.

On the average, in this case, the greatest indebtedness has been in Sweden, The Netherlands and Portugal with no substantial differences between old and postsocialist EU Member States. The most stable has been the debts in Germany, The Netherlands and Belgium. In time (not shown here) the debt of non-financial corporations culminated in 2009 (103.8% to GDP. For the majority of countries in our sample the highest debt-to-GDP

Ratio was achieved in 2010 (Austria, Spain, Finland, Italy, Slovenia), then in 2009 (Estonia, Greece, Hungary, Sweden) and 2011 (Belgium, France, Poland, Portugal). Since 2009 the process of deleveraging has been going on.

Hence the expansion of debt in the EU Member States was not confined to households but also to non-financial corporations. In several countries indebtedness increased mainly to finance real estates and housing boom was accompanied by soaring household´s and corporation´s debt.

Panel Regressions

Having discussed some descriptive statistics we now turn to running some forms of panel regressions to be able to detect the impact of private debts on economic growth.

The usual starting point is the specification of a growth equation in the spirit of R. Barro´s contributions. We use, as mentioned early, forward looking moving averages (2 and 3 years) of GDP real growth rates. As the control variables we have the ratio of gross capital formation on GDP (GFCF), the growth rate of total labour force (GTLF) and openness (the sum of exports and imports as a ratio on GDP (OPO). We include also the log of initial level of income(LGDPIN) to model the catching up process. Control variables are not the variables whose parameters are of immediate interest in this paper. But they are usually included so that the estimates of the loans would be purged, as far as possible, from the imprecision due to errors of omitted variables. Table 8 shows the results.

Table 8: Growth equations

Estimation technique: Pooled EGLS (cross/section weights)

Dep.var.	Gr2	Gr2	Gr2	Gr2	Gr2	Gr3	Gr3	Gr3	Gr3	Gr3
Indep.var.										
GFCF	63.31 (9.56)	38.20 (6.96)	58.54 (9.00)	43.17 (9.40)	34.16 (5.16)	29.71 (7.02)	25.65 (5.56)	38.60 (8.04)	31.86 (9.95)	22.18 (5.73)
GTLF	0.08 (1.35)	0.09 (1.62)	0.10 (2.09)	0.08 (1.25)	0.08 (1.53)	0.04 (0.83)	0.03 (0.82)	0.03 (0.86)	0.01 (0.36)	0.05 (1.64)
OPO	9.33 (7.58)	6.28 (8.71)	7.76 (10.99)	5.91 (7.77)	7.15 (8.94)	4.64 (7.38)	4.13 (6.10)	4.18 (5.85)	4.04 (7.00)	4.25 (7.32)
LGDPIN	-0.19 (-2.33)	-/0.07 (-0.75)	-0.17 (-3.22)	-0.09 (-0.47)	-0.08 (-0.87)	-0.18 (-1.50)	-0.10 (-1.32)	-0.19 (-4.11)	-0.13 (-0.80)	-0.12 (-1.33)
PD	-	-0.04 (-11.02)	-	-	-	-	-0.04 (-11.1)	-	-	-
DPD	-	-	-0.01 (/0.72)	-	-	-	-	-0.01 (-2.45)	-	-
NFR	-	-	-	-0.07 (-12.14)	-	-	-	-	-0.05 (/12.77)	-
HLI	-	-	-	-	-0.08 (/9.94)	-	-	-	-	-0.07 (-10.33)
C	-19.44 (/13.81)	-5.19 (-4.32)	-16.28 (-15.58)	-5.75 (-2.69)	-6.72 (-4.77)	-6.87 (-4.78)	-1.14 (-0.85)	-8.53 (/7.85)	-2.68 (-1.52)	-1.59 (-1.56)
R^2_{adj}	0.77	0.85	0.80	0.83	0.85	0.89	0.93	0.90	0.93	0.93
N	269	250	249	250	250	233	215	214	215	215
AR cor.	(2)	(2)	(2)	(2)	(2)	(3)	(3)	(3)	(3)	(3)

Source: Own calculations.

Note: t-statistics in parenthesis; White period standard errors & covariance (d.f. corrected).

The partial conclusion which can be drawn from the table is the assertion that different forms of debt (PD-private debt, DPD-the change in private debt, NFR-debt of non-financial corporations and HLI-debt of households) exhibit a minus sign which is mainly statistically significant.

Table 9: Non-overlapping averages (3 years)

Estimation technique: Pooled EGLS (cross-section weights)

Dep.var.	gr	gr	gr	gr
Indep.var.				
GFCF	35.781 (1.91)	-5.764 (-0.40)	112.369 (65.51)	-6.973 (-0.51)
GTLF	0.086 (0.11)	0.580 (1.30)	-0.393 (-4.63)	0.762 (.2.15)
OPO	23.802 (3.29)	5.359 (0.81)	19.364 (9.17)	7.915 (1.45)
PD	-	-9.653 (-3.76)	-	-
DPD	-	-	-13.515 (-24.23)	-
PD	-	-	-	-22.535 (-4.47)
PD2	-	-	-	3.469 (3.04)
C	-41.156 (-3.50)	12.291 (1.77)	-40.502 (-18.87)	20.549
R^2_{adj}	0.52	0.79	0.99	0.91
N	54	52	34	52
AR cor.	(3)	(3)	(3)	(3)

Source: Own computations

Note: t-statistics in parentheses; White period standard errors & covariance (d.f. corrected).

In table what is interesting is the positive nonlinear effect of private debt on GDP growth rate. It means that the negative influence has been in time diminishing.

Conclusions

We have observed a rapid rise in the ratio of private debt to GDP in the majority of 18 EU Member States with the acceleration in 2009-2011. The highest indebtedness has been, on the average, revealed in The Netherlands, Denmark, Portugal and Sweden. Mainly postsocialist countries exhibit, on the average, low indebtedness.

The culmination of the ratio of private to public debt is, in accordance with expectations, mainly in the crisis years 2007 and 2008. Since 2008 the ratio of private to public debt has the tendency to decline.

Spillovers across private and public debt have been examined using pairwise Granger causality tests. Generally we see the mutual Granger causality stressing the interdependence of both private and public indebtedness.

Private sector indebtedness has been decomposed into household´s debt and debt of non-financial corporations. Several facts stan dout. Highly indebted, on the average, are some full-fledged market economies (old EU states). Postsocialist countries have still lower private debts but are catching up. High public debts in major trable makers imide the EU have not been accompanied by high private debts.

Having analysed the impacts of different private debt variables on the growth rate of real GDP we assert that the impact has been negative and statistically significant in almoust all growth regressions.

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Health Care Delivery through Public Private Partnership Model in India: An Evaluation

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Abstract

Health care governance and delivery has undergone a sea change in India after the introduction of neoliberal globalization programme which progressively increased the role of private capital participation in sectors like health, hospitals and health care delivery. Andhra Pradesh government introduced much acclaimed Rajiv Arogyasri Community Health Insurance Scheme (RACHIS) through the PPP model. The present paper examines the causes for the need to introduce a programme like RACHIS and the general rise in the medical expenditure due to unbridled corporatization of health care which became inaccessible to poverty ridden backward and Dalit communities that constitute 36% of the total population in the state. It is shown in the paper that the cost spiral in the health sector, encompassing health care delivery procedures, viz., consultation fees of physicians, and surgeons, laboratory tests, surgical procedures, medical equipment, and pharmaceutical drugs ranged between a whopping 150 to 650% during 1995-2005 period which had to be met out of pocket expenditure by individual patients. Evidence from pooled up data shows that majority beneficiaries are from RACHIS are from urban, semi-urban and town-place people who are connected through influential networking clusters. The project has been partially successful in ameliorating patients suffering from cardio-vascular, oncological, and neurological diseases (32%). Concentration of specialized hospitals with advanced facilities being located in metropolitan urban centres, lack of infrastructure, trained personnel in government hospitals and Primary Health Care centres, inter alia, are some of the crucial reasons for inaccessibility of health care delivery. Allocation of budgetary resources to health sector as a percentage of GDP has to be enhanced from present 1.5-2 to at least 3.5-4 forthwith.

Keywords: Health Care Delivery, Public Private Partnership (PPP) Model, Rajiv Arogyasri Community Health Insurance Scheme (RACHIS).

Introduction

The health care system in India consists of public sector, private sector, and an informal network of health care providers who are popularly known as registered medical practitioners (RMPs), private medical practitioners (PMPs) and different medicine men belonging to traditional systems. However, the present paper does not intend to cover traditional systems of medicine like Ayurveda, Siddha, Unani, and Homeopathy and any such other systems. Medical care delivery and health care in this paper include only allopathic system of medicine. In a country characterized as multi-cultural, diversified heterogeneous nation with multiple languages, religious practices and caste identities with 1.25 billion population encounters gigantic challenges in health care, delivery and public health administration.

The Constitution of India divides health-related responsibilities between the central and the state governments. While the national government maintains responsibility for medical research and technical education, state governments shoulder the responsibility for infrastructure, employment, and service delivery. The concurrent list (in the 9th schedule to the Constitution of India) includes issues that concern more than one state, e.g., preventing extension of infectious or contagious diseases among states. While the states have significant autonomy in managing their health systems, the national government exercises significant fiscal control over the states' health systems. The Ministry of Health and Family Welfare (MH&FW), Government of India oversees the national health system. The MH&FW has four departments - the Department of Health and Family Welfare, the Department of Ayush, Department of Health Research and Department of AIDS Control. (MH&FW, 2002).

Indian expenditure on medical care is not covered by insurance and most of it is met out of pocket by individuals which amount to 80 per cent. According to World Health Organization the Indian health expenditure per capita was $141 in 2011 and stood at 3.9 as a ratio of GDP. (WHO.2012. http://www.who.int/countries/ind/en/ accessed on 22/4/14).

In India while both health expenditure as percentage of GDP and public spending as percentage of total health expenditure are low when compared to OECD countries, and US and Canada, which is in the

range of 15-18 per cent. According the data in the Economic Survey, India spends around 4.1% of GDP on health, while China and Russia that are among the low spenders among the 11 countries identified in the government document, spending at least a percentage point more. Only Indonesia has a poorer allocation (2.6%) among the 11 countries, while Brazil and South Africa are neat the 9% range. This makes India the worst performer among the BRICS group.

In fact the expenditure in Brazil and South Africa is closer the average in several developed countries such Australia, Norway and the UK. Amongst advanced countries only the US has a double digit spend, estimated at 17.6% of GDP. (Ministry of Finance, 2013).

Cutting costs is especially vital in India, where more than two-thirds of the population lives on less than $2 a day and 86 per cent of health care is paid out of pocket by individuals. A recent study by the Public Health Foundation of India and the London School of Hygiene & Tropical Medicine found that in India non-communicable ailments such as heart diseases are now more common among the poor than the rich. The cost of surgery in India is now $1583, which may be attractively lower compared to $106, 385 in Cleveland Hospital, Ohio in USA. (Gokhale, 2013.) This could be an incentive case for medical tourism, but not a feasible element for universal health care delivery in a country like India. Price may appear to be competitive and attractive in international health care market, but it is dearer to the backward communities and Dalit sections of this country that form a sizeable number who need an affirmative action from the government on the lines of Medicaid, and Medicare that are in operation in US.

Given the challenges in health sector, which include accessibility of medical facilities, infrastructure, infirmaries, trained nurses, physicians specifically in the rural areas the government of India has embarked upon the public-private-partnership (PPP) model in this sector in 2005 in different states.

PPP Model

There are arguments for and against the implementation of PPP model in the health sector, since health involves human life and private sector working with profit motive, some argue, may not live up to the responsibility of protecting human life like the government does. There is a weak government initiative towards providing universal and quality health care through medical, diagnostic, curative and hospitalization facilities to all communities and sections with equal opportunities in accessing those facilities in India. The presence of public sector investment and participation in health sector has been negligible, compared to say heavy electrical, machinery and other infrastructural sectors. In fact, the PPP model is more relevant and synergetic for example, in the road transport and civil aviation sectors where a substantive public investment exists. The quantum of health care provided by the private hospitals, clinics has buoyed from a meager 5 per cent or so in 1950 to a whopping 60 per cent in 2004. Government sources account for only 21 per cent in case of non-hospitalized medical care. (Planning Commission.2008, 68-69). This is also confirmed by the National Family Health Survey (NFHS) data which shows that the majority of households in urban (70 per cent) as well as rural areas (63 per cent) receive medical care from the private sector only. The *National Health Policy, 2002* a comprehensive document envisaging integrated health care delivery to the people at large, hopes to enhance availability and coverage of specialty and super specialty diagnostic and curative services through incentivizing private investments. (MH&FW, 2002). India like many developing countries therefore, found it convenient to provide the essential medical and health care needs through assigning a more focussed role to private health sector stake holders and cleverly hoping to bring them under the regulatory ambit through PPP model. Regulatory framework governing the health sector is loosely knit for two reasons: 1) as mentioned earlier health is in the concurrent list -- which is used as an alibi to avoid the responsibility by either the state government or the central government if there is a deficiency or inefficiency in the provisioning of the service; and 2) the complex and dual nature of health being public and private good, welfare criterion cannot be applied strictly. This reinforces the significance of the PPP model which it is hoped to meet the health care delivery needs of the population, particularly those who are poor and below the poverty line. In this back-ground the introduction of Rajiv Arogyasri Community Health Insurance Scheme Phase-I was introduced by Andhra Pradesh state in the year 2007 as a sequel to Chief Minister's Relief Fund for hospitalization expenses to cover the BPL families. In the first phase three poor districts, viz., Ananthapur, Mahbubnagar and Srikakulam were identified to be covered under RACHIS. With the success of the first phase, it was proposed to cover 5 more districts in the second, and the entire state gradually through 3rd, 4th and 5th phases in the next three years. Social security in the form of community based health insurance is sought to tackle chronic diseases in the field of cardiology, neurology, cancer treatment, kidney ailments and urology which needs super specialty treatments and are quite expensive are made available at accessible channels through RACHIS.

Operation of RACHIS

The scheme is a target oriented safety net devised by the government of Andhra Pradesh aimed to benefit the poor who are below the poverty line and cannot afford quality health care. Identification of the beneficiaries of this scheme is based on the white ration cards issued to BPL families in the state. They are provided critical, surgical and acute therapeutic medical care in partnership with identified panel of super-specialty private hospitals, and health insurance companies. Collaboration of government, private hospitals and health insurance companies together with the assistance of information technology providers execute the operation of RACHIS. Financial support to the beneficiary families is supplied through state budgetary resources amounting to 25 per cent the total health budget in the state. The total health budget of the state in the same year, 2009-10 was 3.25 per cent of the total allocated resources. (Govt. of AP.2012. http://www.apfinance.gov.in/OldSite/html/budget-2011-12-books/ap-budget-in-brief-v-6.pdf).

Major participants in the scheme the state government, Chennai based Star Health and Allied Insurance and Tata Consultancy Services for IT related solutions and Arogyasri Health Care Trust established by the state government. About 151 government and 275 private sector tertiary hospitals across the state have been involved in implementing the scheme. The network hospitals which are part of the scheme have to get empanelled to provide treatment for Arogyasri patients based on the fulfillment of certain criteria set by the trust and insurance company. (Reddy and Mary, 2013).

Evaluation of PPP Model in Health Sector

PPP model in health sector in India has been under operation in states like Gujarat, Haryana and Maharashtra as well as Andhra Pradesh. Studies which evaluated theses schemes have come up with largely common conclusions as follows:

- PPP in the context of the health sector is an instrument for improving the health of the population that is perceived as a national asset with health promotion as goal of all health providers, private or public. The Private and Non-profit sectors are also very much accountable to overall health systems and services of the country. Therefore, synergies shall emerge where all the stakeholders are part of the system and do everything possible to strengthen national policies and programmes needs to be emphasized with a proactive role from the Government.
- In states and regions with weak health staffing, the private sector's presence to deliver primary health care also could be very weak. Hence, addressing human resource shortages in states like Uttarakhand, Himachal Pradesh and other such States would be critical for ensuring scalable and sustainable PPPs.
- In states with public sector primary health care center (PHC) provision is perceived as of poor quality, people tend to bypass public PHCs and instead seek care from formal and informal private health providers. Poor supervision, politicization of personnel, unionism, lack of appropriate skills, and shortage of personnel are some of the reasons for a less- effective public sector. Many of these factors add additional risks to social sector PPPs, that are risks not observed in hard infrastructure.
- The public sector is generally seen to be less effective in demanding situations such as the provision of care in remote and backward areas, reaching the poor, and serving physically/mentally challenged clients. The PPP models could offer more effective ways to reach these hard-to-reach population subgroups.
- The integration of Information and Communications Technology (ICT) for improving health service provision is of different scale in different states. For example, in Andhra Pradesh, and Uttarakhand ICT has been effectively used to improve emergency ambulance services, catastrophic health insurance, and help lines. This is possible as there are ICT firms willing to do social work as part of their corporate social responsibility, and a government willing to seek new collaborations and try new innovations. The gap between advanced states and less advanced states, and between rural and urban areas, in the use of ICT to enhance social service provision can be bridged and accelerated by PPPs.

PPP however would not mean privatization of the health sector. Partnership is not meant to be a substitution for lesser provisioning of government resources nor an abdication of Government responsibility but as a tool for augmenting the public health system. In study evaluating the performance of collaborations in Gujarat state it was found that the role of government was confined only to providing infrastructure, financial resources and the like. Whereas private sector was responsible for providing services, staff -- both medical, paramedical, and specialty curative and surgical therapies. It was found that in most partnerships, public sector was committed to providing physical infrastructure in the form

of building, equipment, supplies, and access to electricity, water and drainage. In most cases, private sector commit service provision to the target population, selection and recruitment of appropriate staff, maintaining the physical infrastructure provided by the public sector, and provides information to the public sector in the form of reports and account details. (Patel et.al. 2007, 8-10).

There is a lack of clarity about the roles and responsibilities of all partners. Inability of the government to provide committed resources (finance, staff, medicines, equipment purchases and repairs) in time, and recurrent funding shortfalls severely constrain the service delivery by the private sector. There are indications which suggest that the public sector tends to treat 'for-profit' organizations better than 'not-for-profit' organizations for grant or budgetary support.

Evaluation of RACHIS

As discussed before, the need for RACHIS has cropped from the rising medical costs The evaluation is based on a primary field survey conducted by Rao (Rao, 2011), in Srikakulam district of Andhra Pradesh, together with secondary sources and pooled up data from the government of Andhra Pradesh Arogyasri website. (*https://www.aarogyasri.gov.in/*) form the core of analysis.

Impact of RACHIS is analyzed by estimating employment, income and consumption patterns of the sample of 150 households in the study area before the scheme was implemented and the status after the scheme was introduced. These details are presented Table 1 below.

The average number of working days per beneficiary during the year was estimated at 58.13 days in agriculture activity and 65.58 days in non-agriculture activity before implementation of RACHIS in 2007-08. The beneficiaries seem to have improved their economic status from the scheme. When we look at the number of working days that have increased are 61 days in agriculture instead of 58.13 and 83 days in non-agriculture from 65.58 after the implementation of RACHIS in 2008-09. Both the years are normal years.

Table 1 Impact of RACHIS on Employment and Income

Source	Before RACHIS	After RACHIS	% Change
	Average work Days	Average work Days	
No. of Agriculture Days	58.13	60.97	4.67
No.of Non-Agriculture Days	65.58	82.77	20.77
Total	123.71	143.75	16.20
Source	Average Income in ₹	Average Income in ₹	% Change
Agricultural income	4764	4973	4.21
Non-Agricultural income	5979	7741	22.76
Total	10743.24	12714.67	18.35

Source*: Rao, 2011*

It clearly shows that 4.67 per cent increment in number of working days in agricultural sector and nearly 21 per cent increment in non agricultural sector during before and after implementation of RACHIS.

Similarly, average income per worker from agriculture has increased from ₹ 4764 before RACHIS to ₹ 4973 after the implementation of RACHIS, which is estimated at 4.21 per cent. The average income per worker from non-agricultural activities has increased from ₹ 5979 to ₹ 7741 during the same period, i.e., an increase of nearly 23 per cent increment. These figures are commensurate with the number of working days.

The average working days before RACHIS are 124 in agricultural activities which have increased by 16.20 per cent to 144 days per year after implementation of this scheme. On the other hand the total average income has increased by 18.35 per cent from ₹ 10,743 to ₹ 12,714 in the same period of time. In other words, the wage-earners in agricultural and non-agricultural sectors, both in rural and urban areas could enhance their net Disability Adjusted Life Years (DALYs) contributing to their productivity as a whole.

The analysis relating to employment and income levels of the respondents ultimately reveals that the respondents are able to receive higher level of employment and income after the implementation of RACHIS in the study area. This could be due to higher levels of health status which in turn gives an opportunity to work more wage days, increase in the alternate employment opportunities from Mahatma Gandhi National Rural Employee Guaranty Scheme (MGNREGS) and considerable increase in the agricultural wages in the study area. All these consequential positive changes ultimately caused positive impact on the employment and income conditions of the selected sample respondents.

Consumption Trends

The detailed information on the impact of the RACHIS on health expenditure and on its related segments viz., medicines, medical tests, consultation fees and other expenses which includes transport and attendant costs etc., is collected from the sample households. As per the Table 2, below, the monthly expenditure of households on the all segments of the health expenditure seems to have come down dramatically after the implementation of the RACHIS. The total health expenditure of the sample households has come down considerably by 40 per cent. Among all sub segments expenditure on others (includes transport and attendant costs etc.,) has drastically fell down by 95 per cent followed by medical tests (47 per cent), consultation fee (43.42 per cent) and expenditure on medicines (30 per cent). The data shows that this scheme has significantly reduced substantially the health expenditure of the poor people.

Table 2 Levels of per Household Monthly Health Expenditure before and After RACHIS

HEALTH	Before RACHIS (Amount in ₹)	After RACHIS (Amount in ₹)	Per cent Change
Medicine	1863(4.79)	1308(3.25)	-29.81
Medical tests	1314(3.38)	694(1.73)	-47.13
Consultation fee	903(2.32)	511(1.27)	-43.42
Others	1141(2.93)	614(1.53)	-94.59
Total	38900(100)	40243(100)	-40.11

Note: Figures in the brackets denote per cent to total monthly expenditure.

The positive effects of Arogyasri scheme could be seen also in changed pattern of households' consumption behaviour. Income gains accrued as a result of enhancement of DALYs has resulted in reduction of health expenditure and all its components in totality and not surprisingly the expenditure pattern depicted a 'healthy' spends in consumption of food, education and leisure activities. These details are provided in Table 3 below.

It is observed that the consumption of food items like the cereals and vegetables consumed by the respondents has increased by 13.4 per cent after the execution of RACHIS. Similarly, in the consumption of non - food items the expenditure on education and other non-food consumption has increased by 17.41 per cent and 2.23 per cent respectively. Another notable inference from this table is that the percentage of expenditure on health in the total expenditure has come down significantly from 13.4 to7.7after implementation of this scheme which is 40 per cent reduction during the same period of time. And the share of food expenditure to the total has increased from 56 per cent to 61 per cent. We may not attribute it completely to the impact of this scheme on consumption pattern. It may be due to the other employment schemes which have been implemented along with this scheme such as Public Distribution System (PDS),Indiramma housing programme, IKP/Velugu women SHGs and MGNRGES. Hence over all development schemes have taken place which in turn lead to increment in income and consumption of the households.

Table 3 Impact of RACHIS on Household Monthly Consumption (in per cent)

Consumption	Before RACHIS		After RACHIS		% change
	Expenditure	% to total	Expenditure	% to total	
Food	21732	55.87	24643	61.24	13.4
Health	5221	13.42	3127	7.77	-40.11
Education	1706	4.39	2003	4.98	17.41
Other non food	10241	26.33	10470	26.02	2.23
Total	38900	100.00	40243	100.00	3.45

Although expenditure on health has come down by 40 per cent it is still 8 per cent in the total household expenditure. It is still considered to be high which necessitates appropriate steps to be initiated by way of public policy and proactive role from for-profit and not-for profit health agencies to provide access to health care and delivery at affordable rates. RACHIS does not stipulate any mechanism for post-operative care which is very essential in case of the BPL families.

Social Compositions of RACHIS Beneficiaries

Caste is major determinant of status—economic and social in Indian scenario even at this stage. It becomes important to examine the caste background of the beneficiaries in this context, because most of BPL households comprise of socially depressed sections, particularly, Scheduled Castes (Dalits) (SCs), Scheduled Tribes (STs), Backward Castes (BCs). The majority of the beneficiaries of this scheme appear

to be BCs, Open Category (OCs) followed by SCs, and STs. From Table 4 it can be observed that 62.67 percent belong to BC Community, followed by OC (20.67 per cent), SC (11.33 per cent) and ST (5.33 per cent) communities. The socially depressed sections seem to have gained from the scheme, though, the most distraught sections like the SCs and STs could not gain the same way as others did.

Government of India has ushered in a programme of 'inclusive growth' from Eleventh Five Year Plan onwards. In fact, Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) is a consequence of this initiative which provides a hundred day employment guarantee to the BPL families. There is an attempt to bring RACHIS under the general ambit of inclusive growth and what has hitherto remained as a state government programme in Andhra Pradesh may find a place in the national macroeconomic policy, going by the populist, welfare-oriented acclaim the scheme has drawn from the political groupings, irrespective of the party affiliations.

Before we conclude we present the data in Table 4 as under:

Table4 Social Composition of RACHIS Beneficiaries

Caste	Frequency	% to Total
BC	94	62.67
OC	31	20.67
SC	17	11.33
ST	8	5.33
Total	150	100

Source: Rao, 2011.

RACHIS has leveraged, no doubt, the needy sections of the society in Andhra Pradesh to ameliorate not only in health status, but also in their socio-economic status. However, caution must be exercised in drawing conclusions. The criticisms are levelled against this scheme that there is an undue bias in favour of corporatization of health care with a view to favour big corporate hospitals and over-use of drugs and pharmaceuticals in curative therapies. Further it is pointed out that RACHIS is skewed towards tertiary care and for a smaller population at the cost of majority and focused on certain chronic diseases at the cost of communicable diseases. Though it has created access for the rural poor for specialized health services there is a clear shift in focus in terms of setting priorities for providing health care for the poor. The scheme completely prioritizes tertiary level super specialty health care that requires surgery and hospitalization, at times, without sound justification. It is also argued that no health insurance scheme focuses on curative care that is not dependent on over medication and high medical technology. (Reddy and Mary, 2013.253-254).

Conclusion

The present paper brings out the salient features of health status of Indian population in general and presents the need for expanding the opportunity of accessing health care facilities to the poor at affordable cost. Quality and efficient health care through government hospitals and public health care policies in the absence of health insurance and rising drug costs is shown to be proving inadequate in the light of growing demand for improved health status in the country. Government has come forward with the PPP model in health sector in 2005 in different states of the country. The paper explores PPP as is in operation in different states of the country and its role in strengthening infrastructure, equipment, supportive machinery in collaboration with the private players in the health care delivery. The paper discusses the initiation of RACHIS programme in Andhra Pradesh and evaluates its performance in terms of creation and expansion of accessibility of health care opportunities for poor families. It shows that the BPL families are generally better-off in post-RACHIS scenario than before the introduction of the programme. There is general improvement in the health status of the BCs and OCs compared to SCs and STs. There is an overall enhancement of the number of DALYs contributing additional income earning capacities of the wage-earning class in farm and non-farm sectors of both rural and urban areas. However, it is noted that caution must be exercised in stipulating norms in the further expansion of the scheme since it has inherent bias towards avoidable hospitalization and acute medical care with overuse of therapeutic drug dispensation for the scheme's sake.

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Acknowledgements

Travel Content Creation: the Influence of Innovativeness, Involvement and Use of Social Media

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Abstract

The development of social media travel websites has dramatically changed travelers' behavior, particularly in the travel planning process. Travelers now depend on social media travel websites to plan their trips and make decisions based on online reviews. What is noticeable is that there are far more people consuming information than generating it. However, online travel marketers need to pay attention to travelers that share their experiences online, since they have the potential to drive sales. Therefore, the purpose of this study is to examine factors that affect the likelihood to share travel experiences online. Using a sample of 244 Portuguese tourists, a structural model reveals that travelers' level of involvement with tourism products, innovativeness and use of social media directly influences writing reviews about travel experiences. Discussion centers on the implications of this model to theory and managerial development of tourism strategies. Recommendations for destinations managers and promoters and tourist organizations administrators are addressed.

Keywords: Social Media, Travel, Innovativeness, Involvement, User Generated Content

Introduction

The term user generated content (UGC) achieved popularity in 2005 and describes the various forms of media content that are publicly available and created by end-users (Kaplan & Haenlein, 2010). This new method of communication, that has also been referred to as online word of mouth (Blackshaw & Nazzaro, 2006; Gretzel, Kang, & Lee, 2008; Pan & Crotts, 2012; Pan, MacLaurin, & Crotts, 2007), has revolutionized the way people search for information, as consumers are no longer dependent on what companies have to say, because they can access information provided by their own peers (O'Connor, 2008). Consumers play such an important role creating and controlling information that TIME magazine nominated "You" as person of the year in 2006 (O'Connor, 2008; Yoo & Gretzel, 2012). Indeed, social media empowers consumers (Pan et al., 2007) that now have more power than vendors (O'Connor, 2008).

Different statistics evidence the importance of social media in the travel context. PhocusWright, one of the leading travel industry research firms, found that unique monthly visitors to social travel sites increased 34% between the first half of 2008 and the last half of 2009 (Fairlie, 2010). The World Travel Market Industry Report (2010) revealed that 36% of travelers from the United Kingdom used social media before booking a holiday. Gretzel, Yoo and Purifoy (2007) report that looking at other consumers' comments/materials is the most frequent travel related activity online. In a different study, 73% of the respondents find it better to read consumer reviews about a hotel than to rely on a hotel's description of itself (Cox, Burgess, Sellitto, & Buultjens, 2009). Several sources have indicated that travelers consider UGC more credible and trustworthy than reviews from professionals or marketer information (e.g. Compete Incorporated, 2007; Fotis, Buhalis, & Rossides, 2012; Gretzel & Yoo, 2008).

Since search engines are a popular tool used to search for travel information, travelers will inevitably stumble across social media websites because they are search-engine friendly (Gretzel, 2006). Xiang and Gretzel (2010) found that when using Google to plan for a trip, 10% of the results were social media websites. Likewise, in a similar study conducted more recently by Walden, Carlsson and Papageorgiou (2011), almost 28% of the hotel search results from search engines lead to a social media website.

While some individuals actively participate in creating travel related content by posting comments, photos and videos, others do not demonstrate such an active role. Indeed, the gap between those who use travel generated content and the actual number of content creators is large (Yoo & Gretzel, 2011). According to Forrester Research, 75% of Internet users use social media, but less than half actively participate (Osborn, 2009). Online travel marketers need to pay attention to travelers that create travel content, since they will influence others and, consequently, have the potential to drive sales. Research

has found that motivations to create travel related content are altruistic and hedonic benefits (Yoo & Gretzel, 2011). However, few studies have focused on personal characteristics of those who create travel generated content. The current study, therefore, takes a different approach by analyzing the influence of travelers' personal characteristics – innovativeness, travel involvement and their use of social media – on the creation of travel content. As Yoo and Gretzel (2011) point out, it is crucial to find out what influences travel content creation, from both a theoretical and practical points of view.

The next section begins with a literature review on travel content creation, the use of social media for travel purposes, innovativeness and travel involvement that support the hypotheses proposed in this study. The research methodology is presented in the following section, before the section devoted to the analysis of the data and the discussion of findings. Finally, limitations, implications and future research directions are discussed.

Literature Review

Travel Content Creation

Individuals deal with UGC in three ways: by consuming, by participating, and by producing (Shao, 2009). Consuming refers to the individuals who only read, or view but never participate. Participating includes both user-to-user interaction and user-to-content interaction (such as ranking the content, adding to playlists, sharing with others, posting comments, etc.). Producing encompasses creation and publication of one's personal contents, such as text, images, audio, and video. Most travelers are just consumers or participators (Yoo & Gretzel, 2011). While some individuals actively participate in travel related social media by posting comments, photos and videos, others do not demonstrate such an active role. According to Forrester Research, 75% of Internet users use social media, but less than half actively participate (Osborn, 2009). Pan and Crotts (2012) report that travel blogs and social media sites have long recognized that there are far more people consuming information than generating it. Indeed, Yoo and Gretzel (2011) found that only 17% of the surveyed online travelers that use travel related consumer generated media have ever posted travel materials online.

The aim of this study is to examine the personal characteristics that influence writing reviews online. Hence, travel content creation it the main variable in the proposed model of this study.

Social Media Use

Even though Kaplan and Haenlein (2010) believe that the era of Social Media started 20 years earlier, with a social networking site named "Open Diary", the Merriam-Webster Dictionary (http://www.merriam-webster.com) posits that the first known use of social media dates from 2004 and is defined as "forms of electronic communication (as websites for social networking and micro blogging) through which users create online communities to share information, ideas, personal messages, and other content (as videos)". Social Media was enabled by Web 2.0, a term used to describe a new platform that provides users with the ability to publish content easily and for free. Web 2.0 allows content and applications to be created and published in a collaborative and participatory way and to be continuously modified (Kaplan & Haenlein, 2010).

The increase in social media use is remarkable. Indeed, according to the Pew Internet Project's research (2013) as of September 2013, 73% of online adults use social networking sites, while in 2005 this percentage was only 8%. Despite the recent growth of other social networks such as Pinterest and Instagram, Facebook remains the dominant social networking platform.

Research has found that social media use is linked to extraversion and openness to experiences (Correa, Hinsley, & Zuniga, 2010). People who are extraverted are more sociable, talkative, enthusiastic and active (Barnett, 2006). Hence, it is expected that those who are more open to experiences and are extraverted will be more likely to create travel content online. Based on these arguments, the first hypothesis is proposed:

H1: The use of Social Media positively influences travel content creation

Innovativeness

Innovativeness is a personal characteristic that many researchers consider when examining consumer behavior (San Martín & Herrero, 2012). Rogers (1995) defines innovativeness as the degree to which an individual is relatively earlier in adopting new ideas than others. For example, research supports that consumers' innovativeness has a positive relationship with online travel shopping adoption

(Kamarulzaman, 2007; Li & Buhalis, 2006). In a similar vein, McDonald (2002) defines innovativeness as the willingness and ability to adopt new technologies. In the specific context of information technologies, Agarwal and Prasad (1998) termed this personal trait as personal innovativeness in information technology, defined as the willingness of an individual to try new information technologies.

Thus, assuming that creating travel content and using social media are new technologies, the following hypotheses emerge:

H2: *Innovativeness positively influences travel content creation*

H3: *Innovativeness positively influences the use of social media*

Travel Involvement

Involvement is the degree of commitment in which consumers are committed in different aspects of the process of consumption: product, demand for information, decision making and the purchase (Broderick & Mueller, 1999; Zaichkowsky, 1985). It is the basis of the decision to purchase (Zaichkowsky, 1986) and profoundly affects the perceived value of products and its evaluation (Bolton & Drew, 1991). This study considers involvement as the relevance or importance of travel to consumers.

Tourist products are by nature highly engaging, especially in what regards to the destination choice since high-involvement processes are required, due to its intangibility and inseparability (Swarbrooke & Horner, 1999). The decision structure is cognitive and sequential (Stewart & Stynes, 1994). When consumers are involved, they give attention, perceive the importance and behave in a different way than when they are not (Zaichkowsky, 1986). Involvement is related to all stages of purchase, since the pre-purchase standards to the subsequent evaluations (Shaffer & Sherrell, 1997).

Previous research has shown that there is a link between involvement and travel content creation (Gretzel, Fesenmaier, Lee, & Tussyadiah, 2011). Therefore, the following hypothesis is proposed:

H4: *Travel Involvement positively influences travel content creation*

Methodology

Measurement Development

The hypotheses presented in the previous section represent relationships between the various constructs. These constructs cannot be measured directly and can only be measured using observable (manifest or measurable) variables commonly known as indicators (Gallagher, Ting, & Palmer, 2008; Hair, Black, Babin, & Anderson, 2010). The indicators used to operationalize the constructs came from several sources and are shown in Table 1. In all cases, a 5 point Likert scale was used to obtain responses from the participants.

Table 1. Indicators used to measure the Constructs

Constructs	Indicators	Sources
Travel Content Creation	TCC1 – I post travel related content online* TCC2 – I rate hotels and attractions visited during my trip*	Adapted from Yoo and Gretzel (2011)
Social Media Use	SMU1- I use Facebook* SMU2- I use Youtube* SMU3- I have a profile on more than one social network** SMU4- I read/ follow blogs* SMU5- I have an updated profile on a social network*	
Innovativeness	INVT1- I use technologies in everything I do** INVT2- I feel incomplete without new technologies*[a] INVT3- I was born and raised a digital native** INVT4- I like to be the first among my peers to explore new technologies**	Adapted from Agarwal and Prasad (1998) and Lu, Yao, and Yu (2005)
Involvement	INVL1- Compared to most people, I know a lot about travel destinations** (Travelers' Knowledge) INVL2-Travel interests me a lot** (Pleasure/Interest) INVL3- When one purchases a vacation, one is never certain of one's choice**(Risk) INVL4- You can really tell about a person by the trip that they take ** (Perceived sign value)	Adapted from Gursoy and Gavcar (2003) and Laurent and Kapferer (1985)

* 1 – Never; 2 – Rarely; 3 - Sometimes; 4 - Very Often; 5 – Always

** 1 – Strongly Disagree; 2 – Disagree; 3 - Neither Agree, Nor Disagree; 4 – Agree; 5 - Strongly Agree

The relationship between an indicator and a construct that is unobservable is expressed as being either formative or reflective (Chin, Peterson, & Brown, 2008; Hair et al., 2010). The most commonly used are reflective where indicators are considered to be functions of the latent construct (Hair et al., 2010; Hair, Ringle, & Sarstedt, 2011). Therefore, changes in the underlying construct cause changes in the indicators (Diamantopoulos, Riefler, & Roth, 2008; Jarvis, MacKenzie, & Podsakoff, 2003). Travel content creation, social media use and innovativeness were operationalized as reflective constructs.

Regarding involvement, several scales have been used to operationalize this construct in the tourism field. Most of the scales used consider that involvement is composed of different facets: traveler's knowledge, pleasure/interest, risk and perceived sign value (Gursoy & Gavcar, 2003; Park, Mothersbaugh, & Feick, 1994). Therefore, involvement was conceptualized as a formative construct, since the indicators are assumed to cause the latent construct (Chin et al., 2008; Jarvis et al., 2003). In opposition to the reflective constructs, involvements' items are interchangeable.

Data Collection

An online survey was conducted in the months of April and May of 2012 to collect data for this study, by sending e-mail invitations to colleagues, students, personal contacts and other email contacts. The email invitation explained the purpose of the study and requested respondents' participation. These contacts were composed of Portuguese Internet users. Therefore, the questionnaire was available in Portuguese. The last part of the questionnaire contained questions regarding respondents' demographic characteristics, namely age, gender and education level. A total of 244 complete responses were considered valid to test the hypotheses.

Results

Descriptive Analysis

A demographic profile of survey participants is summarized in Table 2. The age group with the most significant number of responses was the group under 25 years of age, with 44.3% of the total of responses, while only approximately 16% are aged over 46.

In terms of gender, there is a slight skew towards a higher proportion of female participants (63.1%). The sample seems to be a highly educated group, with approximately 89% of the respondents holding at least a college degree.

Table 2. Demographic Profile of Respondents

Variable	Category	N	% of Responded
Age	Under 25	108	44.3%
	26-35	59	24.2%
	36-45	37	15.2%
	46-55	33	13.5%
	+ 56	7	2.9%
Gender	Male	90	36.9%
	Female	154	63.1%
Education Level	Less than 12th grade	6	2.5%
	12th grade	20	8.2%
	Higher education	218	89.3%

On average, the sample population travels 3.4 times a year for leisure purposes.

Measurement Validation

Partial Least Squares (PLS), a component-based structural equation modeling technique, was used to test the hypotheses. To analyze the data obtained for the purpose of this study, the PLS approach was chosen for several reasons. First and foremost, in contrast to covariance based structural equation modeling, PLS readily incorporates both reflective and formative measures (Hair, Ringle, Hult, & Sarstedt, 2013; Hair, Sarstedt, Pieper, & Ringle, 2012). Moreover, in contrast to a covariance based analysis, the sample size can be considerably smaller in PLS path modeling (Hair et al., 2010; Henseler, Ringle, & Sinkovics, 2009).

The evaluation of a research model using PLS analysis consists of two distinct steps. The first step includes the assessment of the measurement (outer) model and deals with evaluation of the characteristics of the latent variables and measurement items that represent them. The second step involves the assessment of the structural (inner) model and the evaluation of the relationships between the latent variables as specified by the research model. The parameters of the outer and inner model were estimated using SmartPLS 2.0 (Ringle et al., 2005).

Assessment of constructs with a reflective measurement involves determining indicator reliability, internal consistency reliability, convergent validity and discriminant validity, as described by Hair et al. (2013).

The results shown in Table 3 indicate that the measures are robust in terms of their reliability, since all Cronbach's alpha are higher than 0.7. The composite reliabilities, that many researchers consider more suitable for PLS-SEM than Cronbach's alpha (e.g. Hair et al., 2011, Henseler et al., 2009, Garson, 2012), range from 0.85 to 0.90, exceeding also the recommended threshold value of 0.70 (Bagozzi and Yi, 1988, Nunnally, 1978). Furthermore, all indicator loadings are higher than 0.6 and most are ideally over 0.7 (Chin, 1998a; Henseler et al., 2009) and are significant at the 0.001 level, as shown by the *t* values obtained through bootstrapping. Convergent validity was also confirmed by the average variance extracted (AVE) that are all above 0.5 (Bagozzi and Yi, 1988; Fornell and Larcker, 1981).

Table 3. Reliability and Convergent Validity Measures of Reflective Constructs

Construct	Indicators	Indicator Loadings	t-Statistic	Composite reliability	Cronbach's alfa	AVE
Travel Content Creation	TCC1	0.91	68.73***	0.90	0.78	0.82
	TCC2	0.90	65.82***			
Social Media Use	SMU1	0.85	35.70***	0.87	0.80	0.56
	SMU2	0.74	18.51***			
	SMU3	0.65	15.17***			
	SMU4	0.70	16.42***			
	SMU5	0.81	21.94***			
Innovativeness	INVT1	0.86	44.72***	0.85	0.77	0.59
	INVT2	0.80	22.64***			
	INVT3	0.63	10.03***			
	INVT4	0.77	21.68***			

***Significant at the 0.001 level based on 5000 bootstrap samples

Discriminant validity was assessed with two measures that are typically used, the Fornell-Larcker criterion and the cross loadings (Henseler et al., 2009). The former assesses if a construct is more strongly related to its own measures than with any other construct by examining the overlap in variance by comparing the AVE of each construct with the squared correlations among constructs (Chin, 2010). Table 4 shows the correlations between constructs. The diagonal elements are the square roots of the AVEs that exceed all corresponding off diagonal elements. Therefore, each construct shares more variance with its own block of indicators than with another latent variable representing a different block of indicators (Henseler et al., 2009), supporting the discriminant validity of the scales.

Table 4. Discriminant Validity of the Constructs

	1	2	3
1 - Innovativeness	**0.77**		
2 – Travel Content Creation	0.38	**0.91**	
3 - Social Media Use	0.38	0.40	**0.75**

The bold values represent the square roots of the AVE

Discriminant validity was further assessed by extracting the factor and cross loadings of all indicators to their respective constructs. Not only should each indicator be strongly related to the construct it attempts to reflect, but should also not have a stronger connection with another construct (Chin, 2010). The results, presented in table 5, show that all indicators loaded on their respective construct more highly than on any other, confirming that the constructs are distinct.

Table 5. Factor Loadings (bolded) and cross loadings

	INVT	TCC	SMU
INVT1	**0.86**	0.38	0.33
INVT2	**0.80**	0.28	0.28
INVT3	**0.63**	0.19	0.29
INVT4	**0.77**	0.32	0.28
TCC1	0.34	**0.91**	0.42
TCC2	0.35	**0.90**	0.31
SMU1	0.29	0.32	**0.85**
SMU2	0.27	0.27	**0.74**
SMU3	0.33	0.28	**0.65**
SMU4	0.26	0.34	**0.70**
SMU5	0.28	0.36	**0.81**

INVT –Innovativeness; TCC – Travel Content Creation, SMU–Social Media Use

The Assessment of the involvement construct, with a formative measurement, involves assessing its indicators validity by examining indicators weights and bootstrapping to verify their significance (Hair et al., 2011; Henseler et al., 2009).

Table 6. Indicator Validity of the Formative Construct

		Initial Weight	t-statistic	Final Weight	t-statistic
Involvement	INVT1	0.72	4.01***	0.77	4.37***
	INVT2	0.45	2.093***	0.49	2.24***
	INVT3	0.27	1.645*	0.31	1.72*
	INVT4	0.21	ns	-	-

*Significant at the 0.01 level based on 5000 bootstrap samples
***Significant at the 0.001 level based on 5000 bootstrap samples
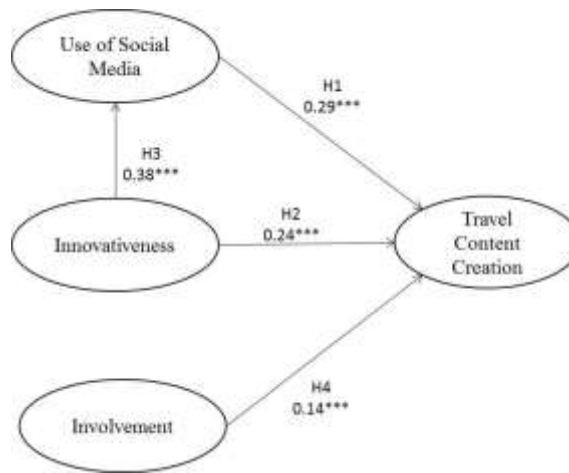ns – Non significant

Although all the initial weights are higher than 0.1, as suggested by Andreev, Heart, Maoz and Pliskin (2009), INVL4, regarding perceived sign value is not significant and, therefore, was eliminated. These results show that traveler's involvement can be conceptualized as a function of traveler's knowledge, interest/pleasure and risk.

The nomological validity of the involvement construct was also assessed, by examining if the formative construct behaves as expected, i.e., if the relationships with other constructs in the path model supported in literature are significant (Henseler et al., 2009). The expected relationship between involvement and travel content creation was supported, as will be discussed in the next section, evidencing involvements' nomological validity.

Structural Model

Since the inner model evaluation provided evidence of reliability and validity, the inner model estimates were examined (Hair et al., 2012) to assess the hypothesized relationships among the constructs in the conceptual model.

The standardized path coefficients and significance levels provide evidence of the inner model's quality (Chin, 1998b; Hair et al., 2012). They also allow researchers to test the hypotheses. Figure 1 provides the results of testing the structural links of the proposed research model using PLS.

Figure 1. PLS results
***Significant at 0.001 level

The first hypothesis that predicted that the use of Social Media would positively affect travel content creation was supported (β=0.29, p<0.001). Moreover, the use of social media is the construct with the strongest effect on travel content creation. To create travel content online it makes sense that the creators use social media. What this study demonstrates is that the more individuals use social media, the more likely they will create travel content online.

The empirical data also confirmed hypotheses 3 and 4, that innovativeness influenced travel content creation (β= 0.24, p<0.001) and social media use (β= 0.38, p<0.001), consistent with the general belief that people with higher degree of innovativeness are more prone to engage in innovative behaviors. It should be noted that even though innovativeness has a direct effect of travel content creation smaller than social media use, its total effect is 0.35. Therefore, innovativeness is crucial to the creation of travel content online.

Finally, the fourth hypothesis that predicted travel involvement to have a positive impact on travel content creation was supported (β= 0.14, p<0.001). Indeed, individuals more involved with travel will be more likely to write about their travel experiences. Surprisingly, this effect is the weakest in the model.

To evaluate the predictive power of the research model, a major emphasis in PLS analysis is to examine the explained variance (R^2) of the endogenous constructs (Chin, 2010) that indicate the amount of variance in the construct which is explained by the model (Barclay, Higgins, & Thompson, 1995). The main dependent variable in the current model is consumers' intentions to purchase travel online, with a R^2 value of 0.25, indicating that the theoretical model explains a substantial amount of variance of that construct. It should be noted that in the consumer behavior discipline, several researchers consider that R^2 values of 0.20 are considered high (Hair et al., 2013; Henseler, Ringle, & Sarstedt, 2012).

Implications, Limitations and Future Research

From a theoretical perspective, there are few studies that focus on the personal characteristics of travelers that create content online. The intention of this study is to help close this gap, providing useful insights with respect to this matter. At a time when marketing researchers are challenged to provide research with practical implications, it is believed that this theoretical framework may be used as a basis to pursue marketing strategies based on travelers personal characteristics.

Travel social media websites can only strive if travelers create content about their trips on those websites. This study has provided evidence that travel content creators are more innovative, involved with travel and use social media more often. Thus, travel review sites should develop strategies to reach these travelers based on these characteristics and incentive them to write reviews.

On the other hand, those who create travel content will influence other travelers. Therefore, knowing some of the personal characteristics of travel content creators is useful to travel related organizations, since they can adapt their marketing strategies, such as segmentation and positioning, knowing which type of travelers are more likely to write about the travel services that they offer. Indeed, a deeper understanding of the personal characteristics of travel content creators will help travel providers assess the revenue opportunities that the various social media channels might provide (Noone, McGuire, &

Niemeier, 2011). Travel marketers need to carefully nurture this segment, as they often act as advocates of a brand or an online travel provider.

As in any research project, this study has several limitations. First, the data used in this study were based on a convenience sample only containing the Portuguese population. Therefore, generalization of the results should be made with caution. The replication of this study in other countries would be desirable. It would also be worthwhile to conduct cross cultural research on this matter as suggested by researchers (e.g. Gretzel et al., 2011)

Second, the study used a quantitative approach to examine the effect of personal characteristics on travel content creation. A research using also a qualitative approach could shed new light on the understanding of the research hypotheses. For instance, it may be useful to better understand why travel involvement has a week effect on travel content creation, since it would be expected that people more involved with travel would have a higher probability to write about their travel experiences.

Another limitation of this study was that it did not consider the use of other popular social media websites, such as Linkedin and Twitter, to measure social media use. Since the authors intended a short questionnaire to increase the response rate, they were not included. However, further research could include more items to measure social media use.

The personal characteristics that affect travel content creation considered in this research only explain 25% of its variance. Therefore, there are other important factors which have not been included in the model, representing an opportunity for further research. For instance, a future line of investigation is to consider the effect of travelers' online personality, since this is a relatively unexplored field in the tourism and hospitality context (Leung & Law, 2010) that may affect the creation of travel content online.

In spite of several limitations, academic researchers, tourism practitioners and marketers can take advantage of this study to better understand the the creation of travel content online and consequently improve marketing strategies. The recommendations for further investigations also provide researchers with challenging directions for future research.

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The Management of Sport Innovation in Sport Markets: The Case of Decathlon (Oxylane Group)

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Abstract

The point under study is the first of such a nature. We examined the management of innovation in the European sporting goods leader Decathlon (Oxylane Group). In recent years, vertical integration has rarely been so much developed as in the leading company in sports retailing in Europe. Now a major force in the domain of sports equipment, the company Decathlon represents half of the European market in the sporting goods retailing. From bikes to rucksacks, from hiking boots to tennis rackets, this brand has acquired inimitable competitive advantage in sports conception and innovation. Based on the group's "sporting universe" concept, it now challenges some bigger brands (Prince, Salomon, Nike, Under Armor) on their main segments. More recently, Oxylane is looking forward to challenging Dick's Sporting Good and other retailers on the US market and in North America. We have interviewed the VP for Innovation in Europe in order to study the innovation model implemented. Since 2000, Decathlon's strategies have not taken a unique and rational way towards success. Sometimes unexpected, the path taken by the European leader does not fit the traditional linear model of innovation (Rogers, 1962; Mowery, 1983; Stoneman, 1995). Non-technological aspects of innovation played a key role in the group's capacity to penetrate new sports markets. The uniqueness of the Firm's innovation model is based on a distinctive know how in engineering, an exclusive culture of innovation associated with values such as pleasure and convenience regarding the use of sports' equipments. Studying two major innovations (the "2 seconds" tent and the surfing wet suit "Inergy"), we get an insight into the firm's innovation model in order to better understand the sources of its competitive advantage on different sports markets.

Keywords: Innovation, Sports Equipments, Marketing, Strategies, Retailing

Introduction

Now a major force in the domain of sports equipment, Decathlon (Oxylane) almost represents half the French market in the distribution of sporting articles. From bikes to rucksacks, from hiking boots to tennis rackets, this brand has acquired a great deal of savoir-faire in the conception and the production of its "sport experience" brand. By way of an example, Decathlon is the biggest producer of bikes (Btwin) in Europe, ranked first for rucksacks and the fourth largest producer in the world of sporting goods.

Positioning of the Research

Innovation management within a company varies according to the sectors in which they are positioned. These characteristics can go as far as being specific to the company itself (Smallbone, Leigh and North, 1995). An important part of the variations observed depend especially on the personality of the "director-owner" (Smallbone, Leigh and North, 1995; Autio and Lume, 1998). The usual classification is between two types of innovation: product innovation and process innovation (Abernathy and Utterback, 1978).

Life cycle concept makes it possible to highlight the two main orientations of companies involved in an innovation process: to accentuate the continuity in the innovative activity or to look for a break with the past by developing new skills (Autio and Lume, 1998). Thus, the firm manages its innovation process between the exploitation of existing sources and the exploration of unknown horizons. Two traps however, lie in wait for the company going through the innovation process: that of failure and that of success. The result is not simply the consequence of the activities of research and development (R&D) but a process, which will engender uncertainty and instability (requirement of new skills, modification of the distribution of resources, re-evaluation of the strategic universe…). In this case, two types of interaction exist. It is thus possible to distinguish an initial interaction between the different functions involved in the innovation process (integrated model), and second one acting between the company going through the innovation process and its sector environment. The research carried out is of an exploratory nature and the collection of data combines documentary analysis and the maintenance technique. The documentary data are used as the basis for comparison and interpretation to the primary data. As regards

the method of collecting the primary data, we chose the interview because of its absence of formalism. Firstly, this method, which is only slightly directive, seemed more adapted to one of the leading company directors, unfamiliar with more sophisticated techniques. Secondly, allowing the interviewee to structure his own answers, the interview made it possible to capture the subject's logic before rationalization *a posteriori* inherent to any form of longer reflection. Based on the interviews, the resources approach makes it possible to highlight the specific assets of a hyper-firm (Marchesnay, 1997) in its strategic development. The main objective of this approach is to understand why, within a single environment, companies are different. Above all it allows us to identify the factors, which maintain these differences and which are the source of different levels of performance between them. Therefore, we opted for a prolonged interview because this form of inquiry is, according to the authors, the only one capable of putting the person interviewed at ease so that he or she speaks freely of the innovations developed within Decathlon.

The Resources Based Approach

Our work is based on the postulate that certain non-technological determinants of innovation, in particular the organizational capacities developed for innovation play a significant role in Decathlon success model. Which factors make it possible to explain the obtaining and the development of durable competitive advantages in a single sector? What are the characteristics of the skills, which appear initially? With what and how historically do they combine with one another? In order to answer such questions, it is necessary to operationalize the resources approach and the concept of "core competencie" (Hamel, Prahalad, 1996). The concepts of "resource" or of "strategic assets" spring from the will to describe with precision the company's potential as a whole. Here they constitute elementary entities making it possible to define this potential (Barney, 1991, Dierickx and Cool, 1989; Peteraf, 1990; Wernerfelt, 1984). A resource is also a potential, which must be used in the goal of creating value for the client (Barney, 1991 in Rindova and Fombrun, 1999). The aim is to appreciate the characteristics of certain firms capable of identifying and imposing certain of their strong points as rules of the competitive game. Wernerfelt (1984) defined a resource as a tangible or intangible asset belonging to the company. For Grant, (1991): "*resources are more or less complex to construct or acquire, which determines their power of differentiation*". A skill is defined as a capacity to realize a task or an activity by way of resources. Makadoc (2001) makes an even clearer distinction between resource and capacity. From his point of view, a resource is an observable asset (but not necessarily tangible), which can be evaluated and exchanged just like a brand, a plot of land or a licence. A capacity, on the other hand, is not observable (thus necessarily intangible) and can neither be evaluated or exchanged in part but as a whole. The notion of resource, in its proper sense, is rarely questioned: it designates the two elements necessary for a company to function: the resources and the capacities. Indeed, the resources specified in this way do not suffice to express the internal potential: one is not concerned with the exploitation thereof (Penrose, 1959). The notion of skill is more complex. It was tackled very early (Selznick, 1957) under the topic of distinctive skills (domains in which companies excel). Hofer and Schendel (1978) were the first to establish the link with resources. Since then, even though certain authors (Hitt and Ireland, 1985; Peteraf, 1993) continue to see the link with distinctive skills as paramount, most approach skills from the resources point of view. Thus skills are an opportune combination of resources. According to the approach based on resources, organizations are made up of a set of organizational resources and capacities. When these different organizational resources and capacities are heterogeneous, rare and difficult to imitate or acquire, they are considered as strategic assets. The presence or absence of these strategic assets thus explains the differences in performance between organizations, which are in competition at a given time and on a given market (Amit and Shoemaker, 1993; Arrègle, 1996; Barney, 1991; Eisenhardt and Martin, 2000; Grant, 1991; Hamel and Prahalad, 1995, Peteraff, 1993; Teece and *al*, 1997, Wernerfelt, 1994). According to St-Amant and Renard (2004), organizational capacity concerns the "*deployment, the combination and the coordination of resources skills and knowledge under different internal influences to put into practice strategic objectives*[108]". The principle of the approach based on resources (Penrose, 1959; Barney, 1991) therefore consists in modelling the company on a set of resources, which, respected and combined lead to a certain number of specific organizational aptitudes (Métais, 1997). Developing a sustainable competitive advantage requires having resources that are difficult to imitate for competitors. Can rationality and chaos constitute distinctive skills in sporting innovation?

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[108] St-Amant, G., and Renard, L. (2004). *Aspects théoriques d'un cadre de développement des capacités organisationnelles*.

Rationality and Chaos: Two Organizational Possibilities for Sporting Innovation

In 1995, Microsoft presented its "Internet" strategy. The latter was based on technologies brought together from within the Microsoft Network, which launched itself into a frontal attack against AOL. Two years later, at a meeting for former employees, an executive in the company, blocked by a snowstorm, visited the campus to pass the time. There, flabbergasted, he discovered how the students were surfing the "web" and realized Microsoft's monumental mistake, which consisted in setting up an ownership type technology in a world that had become free and open. The email he sent to his company president, Bill Gates, had monumental consequences. The latter decided to completely reconsider the strategy that the company had adopted up until that time, to risk $300m and to affect 2 000 engineers to a new division working exclusively on the Internet. This example illustrates a brutal strategy turn around on behalf of one of the biggest companies in the world. Above all, it shows that one of the contemporary characteristics linked to the ever more rapid changes of the corporate environment is the flexibility and the permeability of the environment. Today, more often than not, the key to the strategy is a question of movement, change, adaptation, going back, hesitations, seizing opportunities, and accompanying emergence (Thiétart, 2000). In complex systems, several opposing forces are in play at any one time. Certain push towards instability and disorder. For example, in the company called "3 M", individual initiative and experiment are encouraged. The employees have fifteen minutes per day to do activities that they want to without constraint. This sufficient liberty is given to the researchers, to innovate, by giving them access to sufficient resources in order to explore without constraint new domains. On the contrary, other forces lead to stability and order. For example, in companies, planning, monitoring, and structuring are forces, which encourage stability. Planning, by favouring information and communication, is a means to deal with complex decisions. Through the breaking down of the general objective into elementary tasks, executives in a hyperfirm can organize innovation and set up a system of planning which improves the visibility of the medium and long term actions within the organization. This breaking down also improves the quality of the numerous links to the environment. Finally it helps to close a system, which is too complex to be apprehended in a general way. The main aim of monitoring is to control what the company does. As a formal tool, it contributes towards better surveillance and coordination of the different tasks undertaken in the framework of a particular mission. Structures are there to create formal links between actors, to delegate responsibilities, and to clarify the allocation of tasks and actions, and therefore to reinforce stability. Other forces can create instability and disorder, like, for example, rupture style innovations coming from competitors or a modification of the rules governing competition. Most research has highlighted the limits of the classic model of the company, which has to evolve in a turbulent environment. Being conditioned by rational thought and a very present formalism in the strategies of directors, numerous hyper firms often miss opportunities, which appear within their organization or environment. It is, in effect, reassuring for the strategist, to have recourse to a directive and planned style of management rather than a more supple and chaotic perspective. Procedures have been put into place in each one of them aimed at reassuring department heads notably in order to enable them to avoid all forms of disorder. Sports companies come up against ever more complex problematics in terms of the management of sport innovation. Over the last thirty years, the development of technological innovation has been the subject of thorough theoretical analysis. Certain researchers have concentrated on the strategic vision (Hamel, Prahalad, 1995), others on the management of R&D (Tarondeau, 1991), on the management of innovative projects (Giard, 1991) and finally on the marketing of innovation (Gaillard, 1997). These research findings have often been applied outside of the sporting sector (the food, the pharmaceutical, the chemical or the electric industry) and have therefore often excluded from debate the specificities of the sports sector in terms of marketing notably (Desbordes, Ohl, and Tribou, 1999). Sport encourages the consumption of goods with a strong technological added value (AV) but it is often linked to symbolic values, which can at times extract its only practical use. Oriented towards technological marketing to attract new clients, the capacity for innovation constitutes the main resource of sporting companies engaged in the sectors with a strong technical and technological AV. The Decathlon model thus illustrates the development of a strategic resource in the sector: an original "sporting" model of innovation. Our problematic consisted in examining, based on the model of Decathlon, whether a firm allows chaos to develop in its management style. The case of the organization of innovation at Decathlon seems to suggest that it is at the frontier of chaos that "sporting" innovation is created.

Decathlon's Model of Innovation

Innovative companies have often rethought their management model through introducing a certain form of liberty. This capacity to create a certain form of flexibility constitutes a strategic resource, which makes it possible to develop a culture of innovation at all, levels. The latter is an important factor

regarding creativity within the organization, which then becomes a capacity to innovate. A certain liberty, even a certain disorder, often seems necessary for creativity and innovation to emerge; innovation, which today in the face of competition from Asian countries is the only means of survival. However, this disorder implies that the hyperfirm take certain risks the consequences of which it will not necessarily be able to control. Furthermore the company will continually be at the limit of no longer controlling anything; a frontier which belongs to implicit knowledge and which it is difficult to appreciate in a rational way. But it is the capacity to know this limit and to go as close as possible to it, which will make or break the company and the experts, which make it up. More than the sum of their knowledge or their degree of specialization, it is their capacity to grasp and solve complex situations, which is paramount today. Based on two examples of sporting products from the main Decathlon brand, we now present an analysis of the innovation strategies in the industry of sports articles in order to put two hypotheses to the test:

H1: innovation can be opportunistic (a complex and unpredictable process) but which necessitates, basically, a form of company organization known as "creative and innovative";

H2: innovation fulfils a need to solve a technical problem to attract new consumers and to free up market shares in sectors with strong technical and technological aspects. This would rather be part of a rational approach.

From its creation in 1976 onwards, Decathlon has relied on innovation to offer quality-sporting articles thanks to its Decathlon research centre, situated in Villeneuve d'Ascq. However, this innovation culture is not solely focussed on the technological aspect. Indeed, the hyperfirm only rarely innovates on the latter rather it concentrates mainly on its commercial approach or on the conception of new sporting products. It would be reductive to, even destructive for a company, whatever its size, to only focus on one aspect of innovation. Since 1997, the R&D centre Decathlon Creation has studied the human body in movement. Its objective is to improve the safety, the health, the comfort and the pleasure of sportsmen and women. With the research department and the design teams within the brands, innovation is really at the heart of the company. Indeed, almost 300 engineers work on R&D, conception and tests. The VP of innovation describes the innovation process at Decathlon as very macro; the latter can be broken down into three stages. The initial stage is called "vision" its objective is to identify new targets and new approaches. In keeping with the brand's philosophy, this strategic phase makes it possible to "*define relevant targets (...) and with a strong potential for innovation*". Indeed, the definition of need in relation to a use is paramount for a brand. Based on comments from customers, feedback from shops and remarks from athletes, the project director thus defines the specifications of utilization. The technical specifications define the components and the assembly procedures according to the specifications of utilization. The second phase, more classic in style, is the project phase in which one projects on the "sporting" innovation, the creative part to find ideas. The following stage is R&D, initial study and creation of the project as such. From then on, the head of industrial prototypes realizes a first prototype in the prototypes and industrialization workshops in Villeneuve d'Ascq. Once the prototype has been created, it is not only tested in laboratories using torture tests but also in realistic conditions, on the field, by "the testers club", a panel of clients and Decathlonians, in order to test the quality and the safety of the product. It is necessary to produce several prototypes before deciding on the final one. Once the product has been perfected, a final list of technical specifications is then sent to the different countries where the Decathlon production offices are found. A sub-contractor, paid by Decathlon, based permanently in the country in question, will then undertake the production. It is their responsibility to supervise the sub-contracting; the supplying of components by chosen sub-contractors, the quality of the end product and the delivery dates in the Decathlon production warehouses. The company, from the choice of components, the fabrication process, to the finished product delivered to the warehouses, thus monitors all the fabrication stages. The last phase, which is in no way negligible, is commercialization and communication. This stage of implanting the product consists in presenting it to possible customers, in the shops, in the specialized press and via advertisements. The weight of these three phases can vary from one project to another. "*There are products which will be perfectly inspired from Vision (Decathlon), others which will be great opportunities and which will upset the first part but bring a revolution to the market*" said the VP of innovation. However, according to the nature of the project, it is not always advisable to systematically reproduce the same process for a new sporting product. This is why Decathlon tries to follow this general procedure: "*you need quantity, you need a lot of ideas (...), the process consists in trying in some way to enrich the reflection, to always be creative (...)*". Concerning its organization, Decathlon has "*a slightly chaotic, organic logic*": "*it's not very structured, we try to think outside the box, we put everything behind it and whatever it costs we come up with something*". This original process gives a certain liberty, freedom of spirit and creativity to each one of the Passion brands: "*it is in the interest of each brand to concentrate on a certain number of priorities*

but we try to define an optimal level to constitute the means and then, have a chance for the product to emerge successfully". However, this heterogeneity has the same objective; the commercial success of the sporting product. This is why Decathlon stands out from its competitors such as Adidas and Nike. In terms of innovation, the latter have a much more marketing style approach with much wider targets. The main objective for Decathlon is to highlight the technicity of its products to attract consumers who are sportsmen and women.

The Case of the Quechua "2 seconds" Tent

Decathlon has created instant tents called "2 seconds", this being the time it takes to set up the tent. This tent, which unfolds and sets up itself, is as spacious as it is compact, once it is folded into its carry bag. This new generation of tents was conceived in answer to customer demands; rapid setting up ("*Throw it into the air, it comes back down already in place!*") and as compact as possible for transport. Its waterproofing was tested in a laboratory (under 450 liters/h/m^2) and during mission tests. An international copyright was applied for. On the practical level all one has to do is throw the tent into the air or place it on the ground and it unfolds itself and sets itself up into position. Jean-François Ratel was the creator of this unique concept. An inventor for Decathlon, he solved the problem for numerous hikers and campers. Indeed, after many hours hiking setting up a tent can be an arduous task. It was by creating a game tent in the way of a prototype that he managed to perfect the "2 seconds" tent. Lighter and more fun, the Quechua "2 seconds tent" hangs on to the outside of rucksack using a special strap. It only takes 10 seconds to fold it back up again after use. The "2 seconds" tent is categorized as a level 4 innovation at Decathlon, this means that it is a major innovation, not only regarding the nature of the product but also that of the process. For users and for the tents market, this product introduces an exceptional usage benefit. Indeed, this tent has restructured the market of tents in so far as the company created a new need, a new market, that of self-setting up tents with a double roof. By launching this product, Decathlon asked itself a double question: replace or create a new market? For approximately ten years, the project leader was aware of what the customers wanted: a tent, which could be set, up rapidly, compact and light, and which could be carried easily using a rucksack. The test people (the testers club) were dreaming of a tent, which could be set up like that and would throw their arms into the air to show what they meant! However, no technical solution was available to answer the criteria; weight, size, setting up. A priority of functions choice was made, rapid setting up, the weak point of tents.

	Quotes
Project origin	The origin of the project goes back to approximately 1995*: "Assembly tents, instant assembly systems like that have existed for years on the market but mono roof types, shelters".* The starting point goes back to 2003-2004, said the director of innovation: *"in fact, there was an opportunity, a bit of a risky move, unforeseen, rather an opportunity which got people interested in this type of setting up which created, provoked, the project! (...) It was really a latent need which was identified and an opportunity, a really random thing that happened and wow what have we got here?"* Indeed, 4 elements were at the origin of the project: *"there was another alternative project which was sort of in the same style or spirit, which was already being worked on here at Decathlon. The market research really underlined the importance of the setting up and there was an outside element which proposed something to us which was about the same thing".*
Structure	Decathlon has a human and equipment structure which is conducive to innovation and to creativity where human capital has its importance: *"in terms of internal organization, we had someone who was taking care of innovation for Quetcha and whose job it was to develop innovation and who had the time and the motivation and therefore it was their job which made it possible to liaise and make it all happen (...). And if there had been nobody to take charge of it with a slightly different approach, their was a project leader, who didn't have this rupture style approach or risk taking style so it was a combination of opportunities; project/product ideas. But at the same time there was something else, a human and organizational context which meant that it could all come together! It was an internal / external mixture if you look at all the parameters, (...), if you take away any of these elements it just might not have happened".*
Launching	The launch was very complicated and laborious*: "there was risk taking and a need to reassure ourselves, to say "yes" it can work!"* Indeed, the "2 seconds" tent was in competition with other projects and the innovation strategy at Decathlon is rather particular. *"The project leader was working on the umbrella system, other systems existed, more complicated, heavier so he had his mind on that, he had been working on it for some time (...)".* It was as part of a logic of diversity that Decathlon launched a multitude of projects at the same time, they were not focused on specific research axes or constrained in any way.

The Case of the Wet Suit Tribord Inergy

Developed with the technical partners of Tribord such as Nicholas Capdeville (Three times winner of the World Body board Championship), Emmanuelle Joly (Five times winner of the European Surfing Championship and the French school of surfing excellence), the Inergy wet suit allows total freedom of movement[109]. For its creation, numerous studies of the human body in movement were carried out as well as a study of the skin using a scanner. Conceived for use in body board and surfing, the Inergy wet suit is made out of Duramesh Neoprene, giving it maximum elasticity; this also has the advantage of limiting the freezing effect at the level of the trunk, that is to say a brutal interruption of movement by the person wearing it. Ultraspan / Xtend anatomically designed suit parts create perfect adjustment for joints and the back and thus limits stiffness in the arms. These different parts of the suit are both sewn and glued together (S-Seal) which limits the amount of water that gets inside. Another technical characteristic is the pre-forming of the chest part, which was thought out taking into consideration women's expectations. Thus, this product was conceived to offer as many sensations as possible when in contact with the water and to guarantee, at the same time, optimal thermal comfort with a total freedom of movement. The benefits for users are significant; more ease, less fatigue and more pleasure. The brand Tribord applied for an exclusive patent for the Inergy wet suit.

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[109] For the director of innovation, *"the taking into account of the freedom of movement was minimal, almost inexistant on the market".* The Inergy wet suit is considered at Decathlon to be a technological innovation.

	Excepts of the interview
Origin of the project	Even though the project developed by Tribord in 2003-2004, the procedure was different to that of the "2 seconds" tent. At the origin, this wet suit was designed to be used for surfing in which technical skills and the fluidity of movement are essential. Decathlon went to great lengths to respond to several technical constraints: "*the aim of the wet suit was to bring much greater freedom of movement with a product which protects from the cold*". Indeed the first main objective of a wet suit is to protect a surfer from the cold. However, the thicker the neoprene, the greater the loss of freedom of movement; this will necessarily affect technical gestures. In order to solve this problem, Decathlon "*set out from a much more scientific, R&D, point of view on the understanding of the elasticity of the skin in order to base the construction of the wet suit on this*". After research work "*we made tests with filament on the skin to imagine all the surfer's movements etc. and after, based on all this knowledge we added a development of knowledge about materials to identify all the different natures of neoprene, in terms of stretch, tonicity etc. because elasticity is not the only way to allow movement but there is also perhaps the accompaniment to the tonicity, the nervous return, I mean neoprene which will make it easier for surfers to ride the wave*".
Nature of product	The result obtained by Decathlon is "*a completely exclusive combination which unites in the best way possible, the demands regarding protection from the cold of the human body and the problematics of ease, freedom of movement, elasticity of the human skin*". For the Tribord Inergy wet suit, "*the approach is much more directed, driven, and voluntary*". Defined as an innovation of the second level, this is a much more technical product and the benefit regarding its usage is much more subtle for the user. Compared to the "2 second" tent, this strategic product "*is designed for high level surfers, there is another approach concerning price. Evidently we are going to reach people, regular surfers, and even more occasional ones who want to have a good quality product from the start. But, it is, in effect, a product designed for the specialized market*".
Structure	Decathlon's organization allows permeability with the environment, it is open to the outside world*: "we often meet inventers, we are open to propositions, we often receive the latter and that guy arrived just at the right time*". The resources people allow the company to improve its knowledge or to conceive a new sporting product. *"It's strange but there is nevertheless an effect when someone comes from the outside, often people pay attention. They give more credit to an idea that comes from the outside than to one that's internal, I don't think it would have had the same impact (...). Therefore we worked especially hard to find a solution, we positioned ourselves much more clearly. In that respect, it got things off to a good start (...)*".
Objective	With this "sporting" innovation, the company's goal was to "*position ourselves very clearly on an existing market and to gain a greater share of the market without upsetting everything*". The fortuitous meeting enabled the Decathlon Creation teams to create an innovative sporting product: "*our problematic, to make it a real innovation, coherent with our offer and what we want to do, was to give it a double roof, it was to have a double roof so to find a technical principle which makes it possible, with the double roof, to have a tent, a real one!*" Single roof tents, which were self-setting up, had already existed for a few years, which is the reason why Decathlon, aware of this technical problem (condensation), took up a clear position "*if we used this principle and if we added our constraints, our requirements concerning the double roof, the size (...). And there, it was a real technical problematic, which was in front of us, which we didn't have the solution to. So, afterwards, there was some serious internal work, teams of engineers, model specialists, project leader, designers to find solutions to the technical problematic*".

Decathlon's (Oxylane Group) Sport Innovation Model

As we have seen, the two sports innovations took different paths within Decathlon organization. The latter generated its two products under total independence, at the very heart of the company using its research centre. Sports innovations are endogenous, on the one hand, because they are the result of a real innovation culture. On the other hand, they are exogenous since Decathlon encourages a certain permeability and flexibility in relation to the environment. As its leader points out, innovation is entirely

internal (Decathlon Creation): "*created, led from top to bottom (...). We maintain several forms of creativity during the project, therefore some options, ideas emerge along the way*". He gives the example of the Inergy wet suit which was in competition with another wet suit project: "*it was the other project that had the upper hand and in fact there was a test phase and the results were deplorable so that we had to go to the original project and accelerate it. You see it wasn't a simple straight road, so to speak, there were instituted phases that meant that this project came to fruition rather than another (…)*". However, this emergence of innovating projects is due to an organization based on chaos, uncertainty. "*The difficulty in the company is that there is inertia, everyone's busy, I can't say hey I've got a great idea, stop everything! (...). There was a moment of latency in the company, the time necessary for us to decide that the idea was good and what's difficult is to get people's time, their attention, the finances (...). So there you've got real risk taking, real organization within the company (...)*". From then on, the innovation process (from the product's development cycle to its being on the shop shelf) took between 18 and 20 months. At Decathlon, innovation management is thus centred around a very mobile dynamic and based on the free will of the company members. Everything is set up so that innovation and creativity are developed as much as possible without hierarchical or technical constraints. The director of innovation underlines that "*(...) It's very organic at Decathlon, it's not over structured, we really go for it, and whatever happens, we produce something, it's a bit like brainstorming*". This original vision of innovation management is specific to the company, which does everything possible so that the projects come to fruition. Each of the Passion brands concentrates its means on a certain number of priorities and constitutes, in the best way possible, the necessary means, in terms of people and equipment, for the development of "sporting" development. However, this organization can be considered as an opportunity and as a weakness. Indeed conceiving a sporting product on a chaotic model is risky and can pose problems for the company but it can also be a great way forward for the latter and thus help to win market shares. Seen from the outside, this "creative and innovative" organization can be observed as a weak point and be subject to criticism. However, within the company, they defend themselves saying; "*it's both an opportunity and a weakness… it can be perceived as a weakness since in effect sometimes, things can get a little confusing but at the same time, this chaos means that we sometimes come up with something exceptional (...) For myself, I feel that we create the chaos and try to control it (...) I think that the chaos can be used as a great force*". It is true that going from an idea to innovation is often considered to be risky, mysterious and impossible to master. Kanter (1998) said that "*the conditions within the organisation - structure and social set up - can actively stimulate and produce innovation, as long as these conditions take into account the "organic", "natural" and even "wild" side of innovation*". At Decathlon, this ideas' generation took place in a disordered way whilst following a directive axis, a creative logic. Therefore, the company has a complex approach towards innovation since numerous projects are being led at the same time.

Conclusion

The interest of this article has been to highlight the performance factors of a producer-retailer of sporting articles in the management of its innovation. They are part of the culture of innovation developed at Decathlon. The state of balance between order and chaos in the company depends on the combination and the relative weight of the different aspects of knowledge present within or outside the company. However, the different resources of the organization must be coordinated effectively to transform something into a commercial success. The hyperfirm has developed its organizational capacities between the rational management of innovative projects and a "creative chaos". The presence of certain skills within the group makes it possible to solve certain technical problems and orient the company towards a certain type of approach. It can adopt a classic approach when it has the skills linked to the development of a new sporting product. Inversely, certain products do not correspond to the state of the knowledge and the skills available within the firm. In this way the system can turn itself towards "chaos" so as to encourage the permeability towards the environment around the company and in so doing inspire its executives. This polyvalence is a distinctive quality (Hamel & Prahalad, 1996) since it provides a greater reactivity than in its sector (clients, investors…) in relation to the competitors of the brand. The two "sporting" innovations studied here reflect this distinctive quality by producing two different pathways in the development of two innovative products. The brand's organizational capacities are mainly to be found in the rational and chaotic management of innovation. The balance between these two basically opposing dimensions constitutes one of the company's distinctive qualities.

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Appendix: The 4 principles to manage and organize innovation at Decathlon Creation
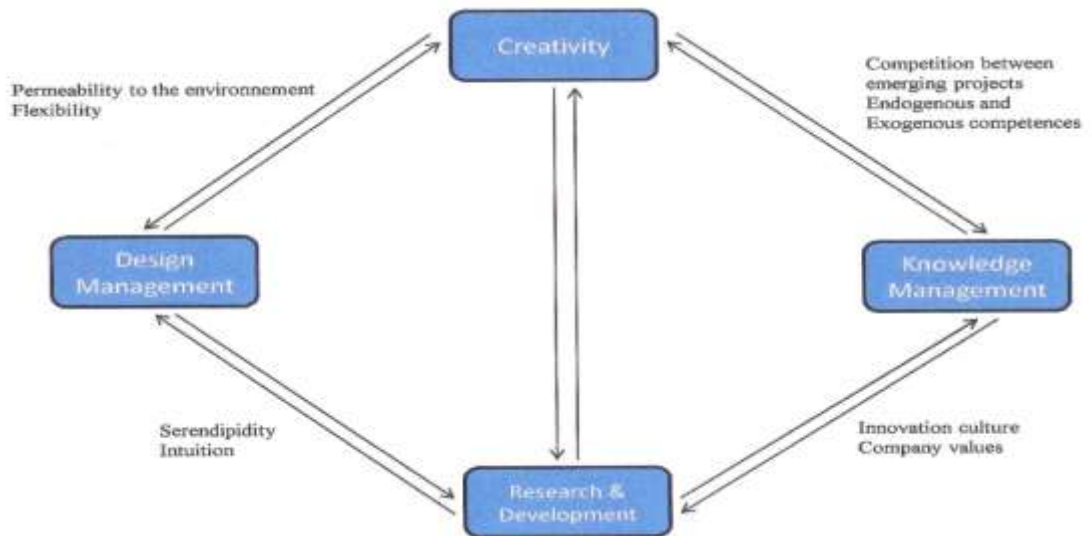
Appendix: Innovation and creativity management at Decathlon Creation
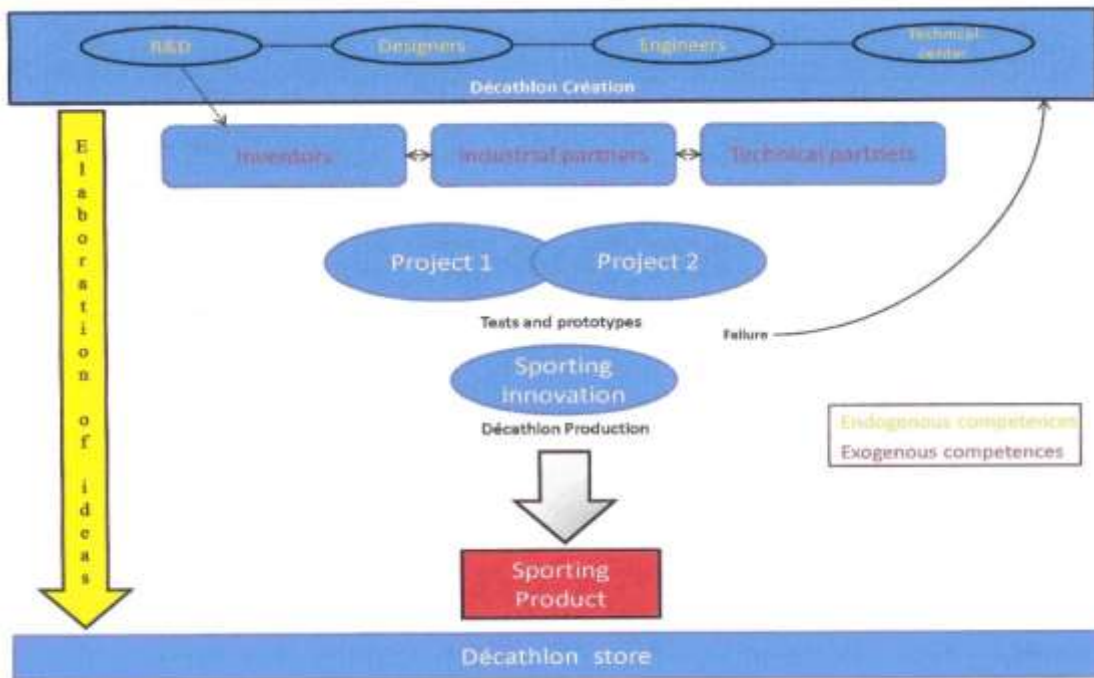
Management Success Factors of the World Class Research Universities

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Abstract

This article presents a structural equation model derived from a research aiming to identify factors affecting successful performance of world research universities. The study target sample was the best ranked universities in the Academic Ranking of World Universities (ARWU). Significant success factors identified were grouped in a statistically significant model that fits well to collected data. Research universities constitute the advanced and base level within each national higher education system. They substantially nurture the whole higher education system (HES), because of their faculties who create new knowledge and spread it to the rest of the institutions belonging to the system through their publication of articles and books. Moreover, the research universities form and update researchers and faculties for the whole system who are connected to the global research network through their faculties and students. Countries should face the hard task of forging and sustaining research universities in order to secure their development and wellbeing. The identification of the key management success factors of these universities will contribute both in the designing of the appropriate public policies as well as that of designing and implementation of the more effective strategies on the part of the higher education institutions (HEI).

Keywords: Research Universities, Success Factors, University Strategies, Development

Introduction

Two main driving forces have been shaping higher education in the world. First, the emergence of the society of knowledge, a state where science and technology is becoming a relevant driving that spreads all dimensions of human life, generating multiple and rapid social, economic and political changes.

The competitive advantages of the countries are strongly based on their institutions' ability as creators of wealth, as much for organizing the use of the created assets as for increasing them (Dunning, 1993). The institutions of higher education (HEI) play an important role in the creation and application of knowledge, transferring technology and forming researchers, professionals and technicians being capable to use technology (Gitlow and Gitlow, 2013; Perkmann and Salter, 2012).

Second, globalization as force of change has been generating major integration of countries compared to the past. People, goods, technology and services move as never before between countries. The geographical limitations, the distances and the major obstacles for the flow of commerce are being overcome. As consequence, globalization has changed the competitive field of companies and countries, extending its reach of operations to the entire world.

The higher education has been affected by both forces, the emergence of the society of knowledge and globalization, in many ways simultaneously. First, people demand massive formation from higher education institutions (HEI) in their different levels, because, they are aware that it is difficult to maintain a comfortable standard of life without higher education studies.

Also, the lowest income segments of the population aspire and feel the need to overcome formation received by their parents, as they do not count with sufficient resources to pay for, governments face the political challenge of offering real opportunities to major part of the students who are in age to reach the higher education. However, it is recognized, at the same time, this is an important moral challenge for the whole society. As a consequence, public and private institutions and governments have notably increased the enrolling of students in order to meet with their aspirations and that of their parents (Brink and Morgan, 2010).

Second, companies demand scientific knowledge, new technologies and management capacities to make innovations that increase its national and international competitiveness (Guloglu and Tekin, 2012).

Third, society and government demand support and compromise from the HEI, with the purpose of maintaining and increasing the economic, social and cultural development of the country, and the characteristics of national identity (Kurre et al., 2012).

Therefore, the institutions of higher education have been attaining a relevant and decisive influence in the most important aspects of the countries´life (Mahani and Molki, 2011; Altbach and Salmi, 2011). From the point of view of the institutions of higher education, this scenario has generated many challenging demands, which cover a wide range of stakeholders of social interest, including the governments.

The new sources of funding of the public goods produced by the institutions of higher education, has meant strong compromise with new stakeholder groups. As a consequence, the faculties, within the institutions, fear that these compromises weaken the autonomy and freedom of the universities, thus affecting its essential historic values (Lange, 2013; Mohrman, Ma, Baker, 2008).

The diversification of the financial sources of the universities and the newly derived compromises has required important changes in the organization and management of the institutions (Slaughter and Cantwell, 2012).

Meanwhile, new institutions arise in the world scenario of higher education to attend the growing demands. A growing institutional differentiation is observed that obeys to a wide segmentation of different demanders of the higher education system. The differentiation that is currently observed is based on some or several of the conception above mentioned.

On a general view, the central mission of higher education institutions is to create and spread knowledge, educate the new generations of researchers and professional graduates, and serve the community through the application of knowledge, transferring technology and contributing to cultural and social development (Altbach, 2007;Kerr, 2001).

Currently, the higher education institutions are around 17 thousand (Hazelkorn, 2008), but only very few universities carry on completely the mission above mentioned. These research universities are the ones driving the whole system. Despite the fact that they fulfill the complete mission; their principal focus is the research. The research universities represent a little portion all together, but they are very influencing within the higher education system. (Mohrman, Ma and Baker, 2008).

The majority of the research universities are located in developed countries, given the fact that developing countries have been rarely active in the creation of new knowledge, and frequently, have been isolated from the main scientific stream, which has deeply affected their development and creation of wealth (Altbach, 2007)

The research universities play a principal role in this stage for which they have to implement appropriate strategies by establishing direct links with the companies and have the adequate and indispensable resources support from the state (Gwynne, 2014).

In order to make possible a research university, several strategies could be applied, from minimizing resources and focusing the resources in one or in a selected group of institutions in order to create a national network of universities through which each university together, could contribute in achieving the objectives defined by the country. Other strategies are for creating an international research network based on small size developing countries, and establishing cooperation network with research universities from developed countries that possess global approach.

The main international rankings, ARWU, of the Shanghai Jiao Tong University and the Higher Education Supplement Times (THES), are mainly based on the research indicators (Deem, Mok and Lucas, 2008; Hazelkorn, 2007). These ranking allows identifying the research universities of higher performance in the world, denominated as "World Class Universities"

The reforms have affected the government of the institutions and organizational structures, and in addition have set up evaluation exercises, fusion strategies, re-engineering processes, comprehensive quality systems, and special financial programs (Yang and Welch, 2012; Deem, 2008; Mok, 2005).

Literature Review

The description of the current context in which HEI is involved, invites to a deeper study of the factors that affects its performance. In consequence, in the following lines a specialized literature review will be done in order to identifying the success factors of HEI proposed by the scholars.

Taking in account that scholars propose many factors affecting HEI performance, we grouped them into three categories such as strategic thrust, institutional resources and competences, and access to foreign comparative advantages.

Strategic Thrust

The strategic thrust considers the core strategic definitions, academic strategies, management strategies, and strategic implementation. Core strategic definitions are the base of the institutional strategic thrust, several factors are suggested by scholars such as mission and vision as guide for the academic activities (Kerr, 2003; Pursglove and Simpson; 2007; Deem, 2008); Institutional goals and scope, derived from a shared vision, in terms of teaching, research, community, and cultural development (Altbach, 2007; Bleikie and Kogan, 2007; Hazelkorn, 2008; Chen et al, 2009); stakeholders aspirations (Brown and Marshall, 2008);

Academic Strategies

Academic strategies give orientation to the paramount activities of the value chain into a HEI. Literature highlights factors related to teaching such as teaching and learning effectiveness, teaching guided by planning and student services (Chen at al, 2009); student diversity (Pursglove and Simpson, 2007); worldwide student enrolling based on merit (Altbach and Salmi, 2011); updated teaching and learning technology and teaching program innovation speed (Mistry, 2008; Brown and Marshall, 2008).

Scholars enhance other factors related with research, such as research orientation, that could be driven either by scientific curiosity and knowledge advancement or by current problems affecting the society (Kerr, 2001; Altbach, 2007; Deem, 2008); world research scope and teaching burden by each faculty (Altbach and Salmi, 2011); expenses budget rate on research (Pursglove and Simpson, 2007).

Management Strategies

Factors related with management strategies were grouped according to strategies of human resources, marketing, finance, technology management, quality assurance and partnership.

Many factors are mentioned by scholars in the human resources area, considered of a paramount importance. Faculty recruitment must be done worldwide, aiming, in this way, to enroll the best qualified professors no matter their country of origin (Musselin, 2013; Salmi, 2009; Altbach, 2007; Viswanadhan, 2006). Effectiveness of human resource strategies such as selection process, evaluation and promotion system, stimulating salaries and compensations, based on performance, and the proportion of faculties have tenure track contracts (Ab Aziz et al., 2012; Brown and Marshall, 2008; Ingvarson and Rowe, 2008).

Other factors that literature points out are linked to marketing strategies such as effectiveness of marketing strategies, definition of positioning targets and scope of communication strategies (Hazelkorn, 2008; Chen et al, 2009).

Scholars highlight factors related with many other management strategies. Effectiveness of financial strategies (McDaniel, 2002; Hazelkorn, 2008; Brinkman and Morgan, 2010); quality of computing and information technology strategies (Hargraves and Christou, 2002); accuracy measurement of academic process and results (M.Doherty, 2003; Chen, et al, 2009); quality of internal mechanisms of self-assurance (Deem, 2008; Choon, 2008); systematic processes of evaluation, accreditation and benchmarking (Sandmann, et al, 2009; Brown and Marshall, 2008); effectiveness of re-engineering processes (Sohail, et al, 2006); quality of planning systems (Cheng, 2003; Chen, Wang, and Yang, 2009); and partnership, alliance and merge strategies (Deem, Mok and Lucas, 2008).

Strategic Implementation

This dimension put together factors involved for setting in application the management strategies. Factors related with governance such as autonomy from government (Davies, et al, 2007; Bleiklie and Kogan, 2007; Deem, et al, 2008); degree of institutional government based on the academic collegiality (Welsh and Metcalf, 2003; Bleiklie and Kogan, 2007) and degree of institutional government based on stakeholders (Sahney, et al, 2004; Davies, et al, 2007).

Moreover, scholars highlight other success factors related to strategic implementation such as organizational structure design and institutional values like faculty's proud and honor (Hazelkorn, 2008); strength of organizational culture (Brown and Marshall, 2008; Mok, 2005); and leadership quality (McDaniel, 2002; Cheng, 2003; Calvo-Mora, et al, 2006).

Resources and Competences

The theory of advantages based on organizational resources considers in this dimension factors like value assets and competencies (Hunt, 2000); availability of qualified human resources, student per faculty and rate of foreign faculties and personnel (White et al., 2012; Deem, et al, 2008; Salmi, 2007); intangible resources, such as knowledge, idiosyncratic, trademarks and prestige (Steiner et al., 2013; Chen, et al, 2009); benefactors trust and attractiveness for applicant students (Hazelkorn, 2008); competitive intelligence and quality of information system (Mok, 2005; Hughes and White, 2006); procedural management (Pursglove y Simpson, 2007); organizational competencies for learning and catching up innovation opportunities (Teece, et al, 1999; Hamel, 2001; Sahney, et al, 2004; Hunter, 2010); links and research networks with industries (Brinkman and Morgan, 2008; Joseph and Abraham, 2009); availability of physical resources (Mohrman, et al, 2001; Viswanadhan, 2006;); budget level and public funds (Salmi, 2007; Brinkman & Morgan, 2010;); and location advantages (Rugman and Verbeke, 1993).

Access to Foreign Advantages

Into this dimension, were grouped factors mentioned by scholars that are related with internationalization of the institutions. Scope of world vision (Altbach, 2007; Salmi, 2007); foreign funding (Moharman, et al, 2008); foreign student enrollment (Altbach, 2007; Salmi, 2007; Naidoo, 2009); rate of foreign faculties and personnel (Salmi, 2007; Deem, 2008); international relationships (Boyle et al., 2012; Mohrman, et al, 2008); rate of courses in foreign languages (Altbach and Salmi, 2011); rate of programs and courses taught abroad (Naidoo, 2009); and global networking strategy (Harman and Harman, 2008; Choon, 2008).

The Study

Aiming to identify empirically which of those factors cited above are significant statistically to explain success of HEI, a study was done on universities included in the "academic ranking of world universities".

The hypotheses, based on the literature reviewed above, were defined as follows:

> H1: Factors related with strategic thrust affects HEI success.
>
> H2: Resources and competencies of the HEI affect their success.
>
> H3: Access to foreign advantages affects HEI success.

Factors identified through the literature review were treated as independent variables, grouped into three categories: strategic thrust, resources and competencies and access to foreign advantages. The score reached by the HEI in the ARWU ranking was considered dependent variable as a proxy to success measurement.

The target sample of the study was the 500 universities included into the "Academic Ranking of World Universities" (ARWU) that every year is elaborated by Jiao Tong University, from Shanghai, China. The study sample included 400 universities selected from ARWU considering the universities located at the first 200 places and the last 200.

The data were collected through a questionnaire, addressed to the president or rector of the selected universities. The response rate was 20, 25 %, corresponding to 81 universities.

The questionnaire encompassed 59 questions related to the factors identified in the literature review and five questions related with HEI identification. In order to check the reliability and translation fit of the questionnaire, it was applied to head managers from University of California, USA; University of Ottawa, Canada; and University of Oakland, New Zealand.

Data were processed by the statistical technique of structural equation modelling that permitted to group significant factors into a three dimensions model (Ismail and Datuk, 2012).

Results

The model was statistically significant, meeting all the statistical tests for the goodness of fit (see Annex 1).

The results of the research showed on table 1, confirm the hypotheses defined because, significant factors were find out in each category defined, that is, strategic thrust, institution resources and competencies and access to foreign advantages.

Table1. Structural Equation Dimensions

DIMENSIONS	QUESTIONNAIRE FACTOR NUMBER	FACTORS
1 CONTROL AND OPERATIVE PROCESSES	10	Learning Strategy Effectiveness
	15	Teaching and Technology Update
	22	Human Resources Strategy
	31	Performance Indicators
	33	Planning System
2 INTERNATIONAL STRATEGY SCOPE	4	World Strategic Scope
	56	Global Networks
	57	International Reputation
	58	International Relations
3 INSTITUTIONAL STRATEGY	1	Strategy
	3	Institutional Shared Vision
	17	Worldwide Scope of the Research
	20	High Quality Strategy
	47	Leadership
4 RESEARCH FOCUS	40	Autonomous Governance
	6	Focus on Research
	18	Research for Knowledge Advancement
	19	Institutional Support to Research
5 ORGANIZATIONAL ASSETS	8	Culture Oriented by Citizenship
	43	Proud and Honor
	49	Intangibles Resources
6 HUMAN RESOURCES STRATEGY	23	Worldwide Recruitment of Teachers
	24	Stringent Selection System
	25	Defined Promotion System

Dimension F3, institutional strategy; dimension F4, research focus; and dimension F6, human resources strategy, were significant in category strategic thrust, confirming hypothesis 1.

Dimension F3, institutional strategy, grouped factors high quality strategy, shared vision and world scope of the research, leadership, all of them proposed by many scholars (Mok, 2005; Hughes and White, 2006; Calvo-Mora et al, 2006; Altbach and Salmi, 2011).

Dimension F3 shows that it has been relevant for the position reached by the HEIs to define a strategy pursuing academic excellence and to have a research oriented to attend main problems faced by the world, what it is a common vision of the faculties about the kind of institution they expect to build up under a defined leadership.

Dimension F4, research focus, integrates factors such as autonomy of institutional governance, research fostered by the knowledge advancement, and institutional support and commitment with research activity. These findings confirm what was suggested by White et al. (2012), Altbach (2007) and Deem (2008).

Autonomy of institutional governance means the university defines its goals and strategies with independence of the government and other external institutions. Research is fostered and guided by knowledge advancement, no matter whether it will be useful for a concrete application. Finally, institutional support and commitment with research activity, means that HEIs have followed a strategy in order to set up a core research capacity through resources allocated in terms of human and material resources and facilities.

Dimension F6, human resources strategy, highlights some relevant strategies of the HEIs aiming to develop high specialized human capital into them. First, to recruit faculties worldwide based on capabilities and merit of the applicants, what was pointed out by Ab Aziz et al. (2012), Altbach (2007), and Salmi (2009). Second, HEIs must to have a stringent and defined selection and promotion systems of faculties, formally defined and known, this confirm what was suggested for many authors like Hazelkorn (2008), Ingvarson and Rowe (2008), Brown and Marshall (2008) and Altbach (2007).

Dimension 1, control and operative processes, and dimension 5, organizational assets, were significant in the category of organizational resources and competencies, confirming hypothesis 2.

Dimension 1, control and operative processes, encompasses five factors. First, learning strategy effectiveness, suggested by Chen et al (2009), meaning the HEIs must take care of the teaching quality, despite its strategic focus on research. Second, updated technology for teaching and learning, this factor was posited by Mistry (2008) and Viswanadhan (2006). Third, human resources and performance indicators used by the HEIs, both factors were suggested by Chen at al. (2009), and Deem (2008). Fourth, quality of the HEI planning system, factor indicated by Chen (2005).

Dimension 5, organizational culture, includes three factors. First, culture of the HEIs oriented by citizenship, pointed out by Mok (2005), and Brown and Marshall (2008).Second, proud and honor of faculties, both values of paramount importance for the academic community, suggested by Steiner et al. (2013) and Hazelkorn (2008), and third, intangible resources of the HEIs, highlighted by Chen et al (2009).

Dimension 2, international strategy, was significant in the category access to foreign comparative advantages, confirming hypothesis 3. International strategy encompasses four factors. First, scope of the international strategy; second, integration to global research networking; third, factor international prestige; and fourth, factor quality and world scope of the international relationships. Those four factors are coherent with proposals of researchers such as Boyle et al. (2012), Altbach and Salmi (2011), Harman and Harman (2008) and Choon (2008).

Limitations of the Study

The main limitation of this research is its low responses rate of 20,25 %, affecting the generalization of results.

This study was focused on the internal factors of HEIs that affect their performance. Nevertheless, other external factors of the environment must be considered affecting their performance as well. Next studies must to take in account other factors from the environment of the HEIs.

Implications

To strengthen and create research universities require high resources and efforts in order to design and execute institutional strategies that meet success factors identified.

Strategy of high quality focused on research for knowledge advancement and organizational culture oriented by citizenship requires qualified human talents and resources in order to produce public goods of high quality and coverage. When the scope is widening to the entire world, more resources are needed.

Taking account that most of the findings derived from the research, main product of these research universities, are public goods, where the externalities are high, the state or some international institutions aiming actually the common good, must accomplish with their mission of securing an appropriated production of them benefiting the society, by supporting the research HEIs. Thus, adequate public policies, at national and international level, are essential either in the developed or developing countries to develop research HEIs.

Conclusions

This study identifies relevant factors that must be considered in the design of appropriated strategies for an institution aspiring to become a world class research university.

The world class research universities have an autonomous strategic management that defines a strategy of high quality and excellence focalized on worldwide research, aiming to make contribution to knowledge advancement and responding to a shared vision.

In the strategic implementation plays a crucial role the stringent selection of faculties, and the qualification and promotion systems. The citizenship cultural orientation; faculty honor and proud values; and intangibles resources also play a relevant role.

The study find out that learning effectiveness and updated teaching technology are significant as well, despite the strategic focus defined by the HEIs.

Human resources management, quality of performance indicators, and the planning system of the HEIs were significant factors as well. The characteristics of the academic work, based on motivations, initiatives and capabilities of the faculties, explain the relevance of these factors.

The worldwide scope of the international strategy has been a relevant factor for HEIs access to foreign comparative advantages. Prestige, integration to global research network and international relationship management are key factors for actualizing the international strategy.

The development of the knowledge society requires countries and international community to support research universities in order to improve the quality of life of world inhabitants.

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Acknowledgements

Annex 1
Goodness of Fit of the Model
CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	54	365,322	246	,000	1,485
Saturated model	300	,000	0		
Independence model	24	1605,706	276	,000	5,818

Statistical Tests	Good or reasonable fitness	Measurements
The root mean square residual (RMR)	0,05 or less	0,049
Goodness of fit index (GFI)	Near to 1	0,749
Comparative fit index (CFI)	0,90 or plus	0,910
The root mean square error of approximation (RMSEA)	0,08 or less	0,076

Annex 2
Regression Weights: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P	Label
F1	<---	E	,529	,078	6,742	***	
F2	<---	E	,498	,081	6,133	***	
F3	<---	E	,634	,073	8,649	***	
F4	<---	E	,548	,088	6,215	***	
F5	<---	E	,393	,089	4,434	***	
F6	<---	E	,624	,101	6,176	***	
Learning Strategy Effectiveness	<---	F1	1,000				
Teaching and Technology Update	<---	F1	,899	,134	6,729	***	
Human Resources Strategy	<---	F1	,878	,114	7,678	***	
Performance Indicators	<---	F1	1,016	,147	6,901	***	
Planning System	<---	F1	1,087	,154	7,063	***	
World Strategic Scope	<---	F2	1,000				
Global Networks	<---	F2	1,278	,172	7,432	***	
International Reputation	<---	F2	1,168	,154	7,567	***	
Strategy	<---	F3	1,000				
Institutional Shared Vision	<---	F3	,874	,115	7,622	***	
Worldwide Scope of the Research	<---	F3	1,024	,141	7,243	***	
High Quality Strategy	<---	F3	1,048	,123	8,529	***	
Leadership	<---	F3	1,005	,128	7,860	***	
Autonomous Governance	<---	F4	1,000				
Focus on Research	<---	F4	1,053	,177	5,961	***	
Research for Knowledge Advancement	<---	F4	1,030	,170	6,078	***	
Institutional Support to Research	<---	F4	1,109	,182	6,104	***	
Culture Oriented by Citizenship	<---	F5	1,000				
Proud and Honor	<---	F5	1,542	,346	4,458	***	
Intangible Resources	<---	F5	1,202	,282	4,258	***	
World Recruitment of Teachers	<---	F6	1,000				
Stringent Selection System	<---	F6	,947	,131	7,205	***	
Defined Promotion System	<---	F6	,824	,121	6,828	***	
International Relations	<---	F2	1,364	,164	8,336	***	

*p<.05; **p<.01; ***p<0.001

Assessment of the Health Care Workforce Interest in Job Performance

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Abstract

The article presents the research results in which identified interest determinants of employed health workers. Stable and peaceful relations with colleagues are an important factor of interest, whereas frequent disagreements - have negative influence on employee interests in work activity. Found a significant direct relationship between work activity interest and the wages amount. Lone workers have a low level of interest in work activity. A significant factor was satisfaction with work process, because it's an implementation result of the employment interests of employees. Availability awards and bonuses to wages, overtime pay and it's payment determines to a lesser extent the employee interests in work activity.

Keywords: Job Performance, Workforce, Degree of Interest

Theoretical Overview

At a time of increasing global competition and the quality of the goods of separate staff member the contribution either in final result of single company or in society becomes the most important. At present it is necessary to understand the role and the duty of modern worker and therefore to structure the system of his motivation and stimulation. It means personal approach to a worker as individual and balanced growth of his or her interest to work in order to get the good results.

Workforce interest is provided with the system of interrelated forms and tools of motivation increasing satisfaction by various characteristics of career development. Thus in the modern sense of the term, the development of Workforce motivation particularly means to establish conditions for job involvement and to heighten Workforce interest in efficiency and quality of work. It gives the possibility to achieve self-actualization and to support the professional development needs improving the productivity and profitability of the organization.

In most recent research in economic and social science the assessment of the Health Care workforce interest in job performance is viewed as perspectives of motivation and stimulation. They present the interest in job performance as the most important component of stimulation of management system. This approach is viewed to be justified, because the mechanisms of stimulation coordinate interests of any socio economical system "...and inspire some element to perform some actions in the interest of other components or the whole system". (Novikov D., 1998) At the same time a variety of approaches to study tangible and intangible benefits of stimulation the employee's interest and their effectiveness are used by the researchers.

Andrienko V. and Danyuk V. define the stimulation of needs and interest as a driving force of people's economic activity. (Andrienko V., Danyuk V., 2005) They consider that needs and interests themselves do not provide unconditional job performance. Therefore system of driving force should have components connecting standard of people well-being with the job performance and its results.

Zorina N. and Akimova A. move further and analyse the impact of the motivation system as the instrument of pressure on certain employees' interests. (Zorina N., Akimova A., 2012) If the economic environment conditions based on motivation system prove the accomplishment of personal or communal interest, there is a financial benefit in suiting the results of personal or communal work to socially essential parameters. They come to a conclusion that interest, the derivative of the system of economic levers and motivation, act as the result of its performance.

This point of view of Russian economists expands from the findings of A.Maslow, one of the leaders of humanistic psychology. (Maslow A., 1943) Maslow claimed that in order to get the most out of the staff the employee only has to get them interested in achieving their personal goals.

There has been a lot of research about the necessity to raise the interest of workforce in job performance. The hypothesis about a favorable effect of collective ownership on interest of workforce was criticized. Usually the lack of enthusiasm in the workplace is the result of interest shortage of people. (Sergeev A., 2013) One more hypothesis was suggested - possibility to get extra profit on account of improvement of work quality, which in turn raise the workforce interest in job performance of the whole enterprise. The study shows that the application of the principles of collective ownership of enterprises «ESOP» corresponds to the increased interest in the results of their work and their high economic efficiency.

Generally it should be noted that raising the interest of Workforce by the motivation is explained by the theory of motivation. Modern theories of motivation are divided into 2 types: procedural and content. Procedural theories of motivation are based on the fact the person distributes its effort to achieve the desired results and why a person makes this or that type of behavior. (Expectancy theory of motivation V. Vroom, Adam's Equity theory of motivation, concept model of the Porter-Lawler). (Vroom V., 1964, Salmon W., Lawler E. and others, 2007) The motivation of employees to complete a task is affected by the reward they expect to receive. It explains direction in the behavioral process. It does not attempt to explain what motivates individuals, but rather how they make decisions to achieve the result they want.

On the contrary content theories of motivation primarily examine those needs of people that motivate them to act, especially when defining volume and contents of work. (Herzberg F., 1966, McClelland D., 1975)

Without criticizing the theories of motivation it should be mentioned that the interest in work acts as a significant factor in both theories. A lot of research has been done to study it.

Modern version of the process theory of motivation is presented by Daniel Pink. (Pink H., 2011) He suggests switching from external stimuli motivation (among which material reward is the main one) to internal - the most important of which is the full disclosure of human interest in job performance. According to Pink, in the information age monetary rewards, bonuses and other forms of material incentives are either useless or harmful to workers and the enterprise. Material compensation is effective when there are algorithmique tasks.

According to McKinsey & Co in the U.S. only 30% of new jobs are associated with algorithmic work, and 70% of people have jobs with elements of creativity and analysis. (Pink H., 2011) He lists three elements of the motivation formula: autonomy, mastery, and purpose. In situations where people are paid fairly, this trio drives, engages, and stimulates them to do the best of their job. It makes sense that old-school organizational and personal frameworks of productivity just do not cut it in this age when knowledge work, creativity, and problem-solving are required to stand out and succeed. He considers employing only those workers who have strong intrinsic motivation - curiosity and independence.

Certainly Pink's theory is impossible in modern Russia, where decent wages is viewed more as a "hygienic", than a motivational factor: heuristic activities (high-tech industries, inventions, applied sciences, research and development, etc.) are not developed. There is also low productivity, shortage of skilled workers and management in enterprises, etc. However we consider that the growth of Russian economy through building the Information society will make these postulates actual.

There is a similar approach towards question of theories of motivation in D. McGregor fundamental work "The Human Side of Enterprise" (1957), where he convincingly proved that "Effort in work is as natural as work and play" and that the capacity to use a high degree of imagination, ingenuity and creativity in solving organisational problems is widely, not narrowly, distributed in the population and that under particular conditions, " ...people usually accept and often seek responsibility".

In self-determination theory (SDT) of human motivation and personality of Edward L. Deci and Richard M. Ryan, a person's ability to experience interest is considered to be fundamental in his nature. (Ryan R., Deci E., 2000) According to scientists this ability should be only developed and strengthened. Universality of human needs in the competence, autonomy and relationship satisfaction are of priority need. Only in this case we are motivated, most productive and happy.

Similar empirical results were obtained by researchers at Cornell University who studied 320 small businesses, half of which were based on the internal interest of the workers , provided them with greater autonomy, while the other half was based on the rigid vertical management. Indicators of growth - oriented enterprises interest of workers, were four times higher than the corresponding figures of firms focused on monitoring. Indicators of labor turnover were three times less. (Baard P., Deci E., Ryan R., 2004)

The well-known G. Hamel's book has the following ideas: "Joint-stock companies with employees involved in their work earn 5 times more than ones with workers having the lowest rate of involvement in what they do". (Hamel G., 2000) His work conclusively proved "…being interested in the work stimulates enthusiasm, creativity and ingenuity". (Hamel G., 2013)

The fundamental work of D. Schultz and S. Schultz about industrial-organizational psychology the category of interest in job performance using the ambiguity the notion "job satisfaction" is examined. (Schultz D., Schultz S., 2006) They consider that individual features of the labor productivity that are able to influence the attitude of the executives. They note that job satisfaction does not depend on the cognitive abilities as long as this job provides a worker with the opportunities enough to put himself on trial. While a number of factors affecting the job contentment and interest in it in general include congruence, fair organization and opportunity to utilize a man's skills and personality characteristics. The latter factor implies the need for professional growth and development, belief in job ethic and the degree of participation of the worker in the decision-making in job performance.

Modern organizational pattern tends to establish a working environment. It has already changed traditional bureaucracy of organization management. A number of organizations with 'high' employee engagement that means getting to participate in the planning process and having some role in decision-making is increasing. This change of organizational style led to the radical changes in the organization and job performance. Hence the standard of living has improved greatly. It focuses on activities to implement the organizational goals as organizational justice provision and workforce support in continuing professional development. (Dessler G., 1999)

Interference of professional interest and business ethics to the entrepreneurial and managerial occupations is studied in our research. According to the results of experiment business ethics is reliably correlated in a negative way with the business professional preferences. (Berings D., Adriaenssens S., 2012)

There are a lot of researches denoted to the interest of employees in job performance. And most of them are connected with the labor efficiency. (Markova A., 1996) It is evident, that modern approach directs product of labor activity efficiency is not so important. Labor can't be efficient unless the employees are not satisfied with job, wages, employee morale and if employees contribute to achieving company objectives. All these actualize subjective perception of the Labor Effectiveness. This perception in its turn has such characteristics of this process as interest, job satisfaction with the process and its results, employee's involvement, tension level of emotional and psychological functions, necessary to achieve the goal etc.

This is a key aspect of our research. It is explained by specifics of healthcare institution. Firstly it can be difficult to implement the conception of maximum achievable results. Secondly it's problematically to define "pre-planned result". Finally the term "pre-planned result" is not often differentiated. Hence the interest will be considered as the main criterion of work performance of Health Care workforce.

Besides the assessment of employees' imagination about their own interest degree, their point of view about colleagues' performance is of great importance. Therefore there were used questionnaires as a Research Method to determine relationships, interactions and conflicts in the workplace with co-workers.

Moreover this factor becomes basic when you speak about types of professions of "person to person", because it is connected with human relations. Subjective criteria of work performance efficiency significantly change under the influence of teamwork. Relationships between a healthcare team member's communication skills and a patient's capacity also affect these criteria. (Bogacheva E., Shalagina. T, 2011)

Thus there is a close relationship between subjective criteria of work performance efficiency of individuals and their interactions in this social group. They are job satisfaction, work interest, conformity the subject of work with personal qualities requirements.

According to A. Cherkasov and A. Sarajeva researches with the passing of the years the material interest becomes a major factor of motivation and interest of nursing staff and paramedical personnel, and enthusiasm for work is reduced. (Cherkasov A., Sarajeva A., 2009) Younger employees don't take material revenue as work objective. They take job as a temporary before more prestigious and qualified one.

Interest and job satisfaction, in terms of temporary employees is researched by Ellingson J. E., Gruys M. L. and Sackett P. R. Analysing specifics of the factors influencing job satisfaction of temporary workers,

they come to the conclusion that first of all it is caused, by the degree of voluntary or involuntary consent for temporary work. (Ellingson J., Gruys M., Sackett P., 1998)

"Happy worker" theory has been developed by researchers. From the psychological viewpoint the analysing the "happiness", well-being and job satisfaction with workforce productivity they came to the conclusion that "happy worker" in itself is productive worker. (Wright T., Cropanzano R., 2000)

Taking employees interest as a form of effective and energetic connection with workforce activity and as satisfaction with job requirements scientists C.Moliner, V.Martinez-Tur, J.M.Peiro, J.Ramos and R.Cropanzano analyzed workers imagination on relationships with colleagues, their boss and the reality at work. Scientists proceeded from the fact that employees enjoy the process of work more when they feel the support from their colleagues and superiors, which help to not burn out quickly. (Moliner C., Martinez-Tur V., Peiro J., Ramos J., Cropanzano R., 2013)

They came to conclusion those employees that participate in the development of ethical rules and organization policies make the process of socializing easier. So employee feels the output from the effort he makes and that is the highest level of well-being. On the other hand when employee gets much more than he deserves and seeks to minimize their losses and to maximize their well-being it creates disbalance which makes them feel guilty and obligated.

Socio-economic researches about employee involvement as a key component in employee motivation in work performance are divided according to the research methods as macroeconomic, microeconomic and Agent-Based Models.

Macroeconomic approach is provided through research and theory of socio-economic systems Ehrenberg R.G., Smith R.S., (1996) Frank J. (1986) etc. In its term microeconomic approach focuses on stimulation of economic activity on the particular organization, firm, institution, department etc. (Mayo E., 1933, Perlman R., 1969, Simon H., 1970, Intriligator M., 1975, Kleiner G., 1986 etc).

When considering assessment as the motivation element of job performance some scientists use "agent-based model" which emphasizes researches on satisfying the requirements and interests of individual, group and team. This model involves the following special approaches to study.

- management, which has the characteristics of generalization, empirical and intuitive characteristics. (Karlof B., 1991, Glueck W., 1979, Herzberg F., 1966, Vroom V., 1969)

- "psycho-sociological" research, studying the motives of human and group activity, we considered earlier. (Velitchenko A., Podmarkov V., 1976, Kiknadze D., 1968, Leontyev A., 1971, Maslow A., 1943)

- "mathematical" research, studying, as a rule, mathematical analogs of a real system (Formal models). (Novikov B, 1998, Burkov B., 1971, Arrow K., 1951, Sen A., 1986)

Thus the work interest is the measure of identification of workforce work performance. The work considered to be high-priority one. It means taking the work as the most important thing, high degree of employer's responsibility, using skills and creativeness, aim to optimise work performance and to be perfect, sizeable work contribution and material incentive.

The economists outline a lot of factors, which affects the work interest and the degree of involvement: the presence of incentives, autonomy, diversity of performance, opportunity to assess the end product of work, feedback, corporativity and corporate culture, organisational identification, team performance, employee involvement in decision making , job satisfaction etc.

Studying the factors of employee interest is the target to identify problems and to improve perspectives. Using the results of research of degree interest in job performance, the employer corrects activities in organisation, develops new techniques of staff, business partners and other stakeholders interaction.

In 2011 global research of employee engagement conducted by the GfK get adverse results about the low degree of employee's interest among working-age population. 30,556 working adults from 29 European and American countries, including Russia and the United States, were surveyed by GfK. Demographic data of each country (industry, gender, age) were obtained. According to the results young workers all over the world are not interested in employment: it is not only engagement, they are stressed at work, what can lead to problems in the management and to slower development, both for companies and for economics in general. (http://www.gallup.com)

Survey results showed polarization of the labor market around the world. On the one hand, there; disappointed people of ages 18-29 and on the other, their senior co-workers. Although younger employees usually are not responsible at work, it is this group that has the highest percentage of

employees "often" or "almost always" feeling anxious about work–life balance, overtime work and their health.

Confirmation of this research is the data of consulting firm McKinsey&Co. These results show that only 2-3 % of labor force actively involved and interested in work. (Kirkland R., 2009)

Research Hypotheses

To achieve the research objectives it is necessary to solve the following problems:

- to assess health care workforce interest in job performance, in terms of gender and age of the respondents,

- to analyze interest in job performance of the health care workforce according to their marital status,

- to analyze interest in job performance of the health care workforce according to their education,

- to identify and analyze the factors of interest in jobl performance of the health care workforce,

The subject of research is the interest in professional performance of the health workers.

Research objects are Almetjevsk Municipal Clinical Hospital employees, the Republic of Tatarstan.

The hypothesis 1. Reaching age 35-45 has positive influence to the interest of job performance both men and women. Employees of the age from 35 to 45 years are satisfied by job performance more than younger and older people (because of restrictions in professional growth for young employees and job burnout for older employees).

The hypothesis 2. If men don't have interest in results of job performance, they don't use to work in health care institutions. We consider that the men use to work in health care institutions following calling. Alternatively the women may perform their job without any interest in results.

The hypothesis 3. Being married has positive influence to the interest of job performance. If an employee has a husband (a wife), most likely that he or she feels himself more confident and happy. Therefore he or she will be more satisfied with the job performance.

The hypothesis 4. To have higher education has positive influence to the interest of professional performance. It is expected that employees having higher education degree are more interested in the process of the professional activities, because level of their professional training is higher and it is easier to meet professional requirements, improve their qualification and apply for high salary.

Data and Methodology

Information base and research methods are presented. The basis of the data analysis was employee survey data of Almetievsk city hospital in the Republic of Tatarstan. Data were combined into one array and used as a basis for calculations of regressions. Total number of observations is 152.

In our research health care workforce interest in job performance is analyzed by the following question: "Are you interested what you do at work?" (five-point scale, where 1-yes, 2-more yes than not, 3-is difficult to answer , 4-more no than yes, 5-no). We consider that this question allows assessing the adequacy of the content of job performance and professional interests. This means we assess workforce interest in the content and effectiveness of job performance.

Model. To estimate the parameters of interest in professional performance the following equation was used:

$$YJS = \alpha + \beta \cdot (x_i) + u^*$$
(1)

where YJS — the interest in professional performance;

α — constant

$\beta \cdot (x_i)$ — matrix of characteristics

u^* — components, reflecting the influence of factors not accounted for in the model.

Matrix of characteristics of the interest in professional performance $\beta \cdot (x_i)$ includes information of Table 1.

Table 1. Indicators of characteristics of workforce interest in job performance

Variable	Measurement procedure
Do you have a good relationship with the members workforce (colleagues)?	where 1-yes, 2-more yes than not, 3-is difficult to answer , 4-more no than yes, 5-no
Are you satisfied with the value of your sala (remuneration of labour)?	where 1-yes, 2-more yes than not, 3-is difficult to answer , 4-more no than yes, 5-no
Do you get uplifts apart from your salary (premiun bonuses)?	where 1-yes, 2-more yes than not, 3-is difficult to answer , 4-more no than yes, 5-no
Does professional activity give you pleasure?	where 1-yes, 2-more yes than not, 3-is difficult to answer , 4-more no than yes, 5-no
Do you often have disagreements with colleagues abc work process?	where 1-yes, 2-more yes than not, 3-is difficult to answer , 4-more no than yes, 5-no
Are you satisfied with job performance in workplace??	where 1-yes, 2-more yes than not, 3-is difficult to answer , 4-more no than yes, 5-no
How do you assess the relation of your organizati employees to their work conditions?	where 1-yes, 2-more yes than not, 3-is difficult to answer , 4-more no than yes, 5-no
Did the need of extra work hours appear in yc organization last half a year?	where 1-yes, 2-more yes than not, 3-is difficult to answer , 4-more no than yes, 5-no
Are these extra work hours paid?	where 1-yes, 2-more yes than not, 3-is difficult to answer , 4-more no than yes, 5-no

Discussion

We studied the assessment of health care workforce interest in job performance according the gender. Among 152 interviewed of Almetievsks clinical hospital workforce 69, 7% (106 people) were women and 30.3% (46 people) were men. Table 2 shows the data in terms of age groups.

Table 2. Assessment of workforce interest in job performance according to gender and age groups

Assessment	Up to 25 years		from 25 to 35		from 35 to 45		from 45 to 55		over 55 years		Total
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	
1	3	0	17	3	9	8	10	3	6	1	60
2	4	2	15	4	10	10	1	3	0	1	50
3	1	0	8	2	2	6	5	1	0	0	25
4	3	0	2	0	0	1	2	1	2	0	11
5	0	0	2	0	4	0	0	0	0	0	6
Total	11	2	44	9	25	25	18	8	8	2	152

Thus, 38,6% (25-30 years) of women are fully interested in job performance, 34,1% decided to give a positive answer, so 72, 7% of women are interested in their job performance. In the age group up to 35 years it's 63, 6%, from 35 to 45 – 76%, from 45 to 55 – 61, 1%, over 55 years – 75%. Among women up to 25 years – 27, 3%, from 25 to 35 – 9, 1%, from 35 to 45 – 16%, from 45 to 55 – 11, 1%, over 55 years – 25% are not interested in in job performance.

Among men of all age groups there were no negative answers. Only 2 of 46 men replied "Rather No than Yes" to the question "Are you interested what you do at work?" Men, on the contrary, prefer not to work according to their major (in health care), if they work only for money without pleasure. It confirmed our hypothesis.

The study of workforce interest and their marital status is of interest (table 3). The largest part of doctors has a spouse (57, 9%). But 66 from 88 workers approved the interest of job performance. And 8 from 88 married workers didn't approve the interest of job performance (9, 1%). Unusual results were obtained from employees in "a civil marriage": 94, 1% workers have the interest of job performance.

Unmarried staff: 55, 6% workers have interest in job performance and 22, 2% workers have not. 13, 8% of divorced are not interested in job performance. We consider single workers are not very interested in job performance.

Table 3. Assessment of the health care workforce interest degree in job performance according their marital status

Assessment	Not married		Married		Divorced		Civil marriage		Total	
	persons	%	persons	%	persons	%	persons	%	persons	%
1	2	1,3	42	27,6	8	5,3	8	5,3	60	39,5
2	8	5,3	24	15,8	10	6,6	8	5,3	50	32,9
3	4	2,6	14	9,2	7	4,6	0	0	25	16,5
4	4	2,6	4	2,6	2	1,3	1	0,7	11	7,2
5	0	0	4	2,6	2	1,3	0	0	6	3,9
Total	18	11,8	88	57,9	29	19,1	17	11,2	152	100

Let's examine employees' particular interest in job performance according their level of education (men and women of Health Care institution (Table 4).

Table 4. Assessment of the health care workforce interest degree in job performance according their level of education

Assessment	Education								Total	
	secondary		special professional		incomplete higher		higher			
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
1	3	0	14	0	5	4	23	11	45	15
2	5	0	8	9	3	4	14	7	30	20
3	4	0	4	5	3	1	5	3	16	9
4	6	0	2	0	1	0	0	2	9	2
5	3	0	1	0	0	0	2	0	6	0
Total	21	0	29	14	12	9	44	23	106	46

The largest part of employees has higher and special professional education. This structure is specifics for health care institutions; the staff has higher qualification (higher education), nurses (special professional education), and caretaking personnel (secondary education). The analysis shows that the interest degree of women is directly dependent on to their education. Men with special professional education have either average or relatively high degree of interest. Men with higher education or incomplete higher education have high and relatively high interest degree in job performance. Thus, the hypothesis of a direct connection of level of education and motivation of health care workforces in job performance was confirmed in practice. The difference in assessment of men and women is that a estimates range for men is lower than for women.

Factors of interest in job performance.

We examine how different factors affect the interest of health care workforce interest degree in job performance

Table 5 provides an assessment of the importance of factors affecting interest.

Table 5. OLS model of employee job satisfaction. We used 152 observations.

Variables	Coefficient	Standard Error	t-statistics	P-value	
const	0,620925	0,321703	1,9301	0,05557	*
Do you have a good relationship with the members of workforce (colleagues)? (v12)	0,398013	0,0700059	5,6854	<0,00001	***
Are you satisfied with the value of your salary (remuneration of labour)? (v14)	0,211384	0,0584685	3,6153	0,00041	***
Do you get uplifts apart from your salary (premiums, bonuses)? (v15)	0,284193	0,0589848	4,8181	<0,00001	***
Does professional activity give you pleasure? (v16)	0,364985	0,0692929	5,2673	<0,00001	***
Do you often have disagreements with colleagues about work process? (v24)	-0,254001	0,0612698	-4,1456	0,00006	***
Are you satisfied with job performance in workplace? (v26)	-0,264937	0,067084	-3,9493	0,00012	***
Did the need of extra work hours appear in your organization last half a year? (v2	0,172935	0,0550002	3,1443	0,00203	***
Are these extra work hours paid? (v30)	-0,221865	0,0580263	-3,8235	0,00020	***

Table 6. Analysis of the model parameters

Indicators	Value
Mean of Dependent Variable	2,032895
Residual Sum of Squares	85,68193
R-squared	0,531372
F(8, 143)	20,26822
log likelihood	-172,1125
Schwarz criterion	389,4400
St. Deviate of Dep. Variable	1,100378
Model bug	0,774064
Corrected R-squared	0,505155
P-value (F)	3,00e-20
Akaike Information Criteria	362,2251
Hannan-Quinn Criterion	373,2807

We conducted a White's test for heteroskedasticity. Null hypothesis: heteroskedasticity is missing.
Test statistic: LM = 66, 4961.
P-value = P (Chi-square (44)> 66.4961) = 0.0158387.
Model analysis for multicollinearity showed its absence.

Table 5 data shows the importance of good interrelations of workforce. Data prove that stable, conflict-free and smooth relationship with co-workers is very important. This most important factor defines interest degree of employee in job performance (question 12). The analyses of the frequency of disagreements with co-workers shows complete picture of influence of intercollegiate relation on interest (v24). We found that frequent conflicts with co-workers affect negatively the employees interest in the workplace. That means the relationship between employees of health care institutions is a significant factor to form their interest in job performance. This is confirmed by the correlation coefficients (Table 7).

Table 7. Correlation matrix, observations 1 - 152
5% critical value (two-sided) = 0.1593 for n = 152

v9	v12	v14	v15	v16	v24	v26	v29	v30	
1,0000	0,4250	0,3308	0,2268	0,4881	-0,1869	0,2061	0,1629	0,0304	**v9**
	1,0000	0,1662	-0,1713	0,4241	-0,0642	0,4265	0,0976	0,0904	**v12**
		1,0000	0,4369	0,4362	0,1380	0,5427	-0,0102	0,4916	**v14**
			1,0000	0,1772	0,2792	0,1978	-0,0455	0,3528	**v15**
				1,0000	0,0458	0,5513	0,0928	0,3157	**v16**
					1,0000	0,0368	0,0115	0,2013	**v24**
						1,0000	0,0765	0,3412	**v26**
							1,0000	0,1998	**v29**
								1,0000	**v30**

Now we discuss the factor of the job management (v26). According to results obtained, this factor contributes positively to workforce interest in job performance. In other words, the better is the teamwork management (schedule, task overload, workplace equipment, etc.) the higher is the workforce interest rate in the content and the results of their work.

Salary is a significant factor when forming the workforce interest in job performance. There is a direct connection between the salary and its size (v9 и v14).

According to the data obtained, job satisfaction in a greater degree defines workforce interest in job performance than any other factors. We consider this is a result of the efficient management in Health Care workforce interest development and the factor of self-appraisal of their work. In this regard it is attractive in the practical application.

Extra bonuses (v15 – 0,2268), overwork (v29 – 0,1629) and its payment define the workforce interest in job performance in a less degree.

Conclusion

We described the Health Care workforce interest in job performance in terms of their sex, age, marital status, education and defined factors that affect the interest. Major tasks that were initially staged were solved during the model building.

Our research reflects the most important aspect of Health Care workforce life, their interest in job performance.

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Impact Assessment of State of Technology & the WTO Trade Related Intellectual Property Rights (TRIPs) Agreement upon the Export Intensity of Textile Sector Exporters in Pakistan

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Abstract

This research is an attempt to investigate factors affecting the export performance of textile exporters in Pakistan based on a cross sectional study. The sample includes 30 firms involved in the export of textile products in Pakistan. Firms were selected from Lahore and Faisalabad, as both cities are well renowned for the business of textiles. Dependent variable in the research is export performance, which is measured by intensity to export after consulting literature. Various independent variables used in the study include State of technology, subsidized loans, fund rating, Pakistan's image and compliance with TRIPS agreement. OLS regression technique was used for analysing the data. State of technology and compliance with TRIPs agreement are key independent variables in the study as mentioned in the title as well. The results indicate that, state of technology, subsidized loans, fund rating and Pakistan's image have a significant and positive relation with export performance of textile exporters in Pakistan and results are found to be significant. Compliance with TRIPs agreement showed an expected sign but is not significant because currently textile exporters are not complying with TRIPs agreement. Even most of the firms in our sample were not having copyrights and said that compliance with such agreements will impose huge costs on them in the form of purchasing copyrights.

Keywords: State of Technology; TRIPs; Export performance; Textile sector

Introduction

State of Technology, Technological Adoption and Adaption and R&D Initiative: Cross Country Comparison of Textile Sector in Pakistan

Whenever it comes about the textile sector in Pakistan, it is the backbone of the country contributing lot to the economic growth. It has always been an incentive to invest in the textile sector as such investments promotes economic activity. This paper discusses that whether a good state of technology within the firms in textile sector could lead to an increase in the export performance of the textile exporters in Pakistan. The first chapter forms the hypothesis where different factors can affect the export performance of textile exporters in Pakistan especially state of technology and compliance with TRIPs. Two other important aspects are included to see their impact on the export performance and it include subsidized credit by the government for the textile sector and fund rating of the firms, which focuses on the internal sources of finance. In addition, we glance at the effect of Pakistan's image for textile on the export performance. The current export situation of the sector is analyzed by carrying out a cross sectional study. Different reports from different data vendors were also consulted for incorporating numbers.

Textile industry is the mainstay of Pakistan because of three main reasons. Firstly, it has a sheer strong backward linkage with the agricultural sector of the economy. Secondly, a large portion of countries investment is accounted for the textile sector. Thirdly, products made by the textile sector are one of the most important exporting commodities in Pakistan. Pakistan is the fourth biggest cotton producer as well as one of the most cardinal cotton producing nations in the World. The basic raw material in textiles is cotton and excess availability of cotton is one of the factors, which is responsible for the growth of the industry. The industry is continuously seeking high tech facilities for improving the quality of the products to enhance the share in the global market. This industry contributes around 60% to the total exports by Pakistan and is responsible for providing employment to almost 38% of the labor force in the country. In addition, it has a contribution of around 8.5% in the country's GDP. Now looking at the exports of Pakistan Textiles over a period of 2006-2012 as follows:

Table 2: Textile Sector Exports in Pakistan

Textile Sector Exports in Pakistan (USD Millions)						
	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Cotton and cotton textiles	10390	10071	9308	9754	13104	8513
Synthetic textiles	430	490	319	446	670	395
Wool & Woolen textiles	233	216	145	137	132	95
Total Textiles	11053	10777	9772	10337	13906	9063
Total Exports	17011	19224	17782	19290	24827	16913
Textiles as %age of total	65%	56%	55%	54%	56%	54%

Source: Economic Survey of Pakistan 2011-2012

Developing countries like Pakistan have poor technologies because of shortage of capital, lack of resources, poor managerial and technical skills. There is a problem of illiteracy as well in countries like Pakistan where people are not educated enough to be aware of the benefits reaped from advance technologies. One important reason is that there is misallocation of resources. Population is very big and there is fear that advance technologies will result in unemployment. In addition, people lack necessary skills for opting with latest technologies. Incentives to develop technologies are also less since all the technologies imported from abroad are quite expensive. Therefore, Pakistan is ranked 118 out of 148 countries in technological readiness. As far as innovation is, concerned Pakistan is ranked 77 out of 148 countries. (World Economic Forum, 2013-2014)

Better state of technology can bring multifarious benefits for the textile sector. Labor productivity increases as result of latest technology because machine is always more efficient than a human being. Human capital also increases because technology is used by educated and skilled labor force. Supply increases under better technologies, which enhances international trade. Furthermore, there is a minimal wastage of resources if better technologies are used. Latest technologies also bring the advantage of specialization in international trade and cost minimization as well. One of the most cardinal advantages of better technologies is that it improves the quality of products, which can further enhance their competitiveness in international markets.

When we compare Pakistan with the most competing countries in textile including china and India, Pakistan is way behind. The main success behind the successful textile sector of China and India is advance technologies, better R&D facilities and ability to innovate. China is ranked 85 out of 148 countries and is given a score of 3.4 in technological readiness where as India is ranked 98 and is given a score of 3.2. In business innovation China is ranked 32 out of 148 countries and is given a score of 3.9 where as India is ranked 41 with a score of 3.6. This shows that both China and India has an edge over Pakistan in technological readiness and business innovation.

Total quality management systems are not given that immense importance in the textile sector of Pakistan because of which goods produced are relatively low value added. On the other hand, quality control systems used by the international competitors of Pakistan in textiles are more efficient, because of which they do not have to face issues like late delivery, poor quality, inconsistencies etc. Most of the companies in the textile sector of Pakistan are using on ISO 9000 Quality management system.(Shafiq, 2012)

Technology adoption is a very vital phenomenon for export-oriented firms, as they have to face intense competition in the foreign markets so they have to use latest technologies to produce goods to meet global requirements. It is dependent on the number of firm level characteristics and prevailing economic situation. Technology adoption is influenced by the age of firm, type of ownership, firm size, volume of sales and certification to standards. Bigger firms are easier to adopt technology and it is easy for those firms, which are already complying with international standards. Furthermore, domestically owned firms are more able to adopt technology then foreign owned firms. (Mahmood, Musleh-ud-Din, & Ghani, 2009)

Research and development is of sheer necessity for enhancing competitiveness in foreign markets. R&D has a very important role in every sector of the economy. As textile sector is one of the main driving forces for the economy of Pakistan, there is a need to develop technologies and enhance R&D facilities within the sector for enhancing its competitiveness. A large unskilled labor in the sector is working on obsolete machinery, because of which working hours of labor increases, which reduces their efficiency. Not only this but the products produced by such machinery are often of low quality. Machinery used in the sector is not homegrown machinery and all is imported from abroad, because of which they are not able to get appropriate maintenance because of deficiency in the technical expertise.

There are three institutes for R&D in the public sector for textiles in Pakistan including Pakistan Cotton standard institute, Textiles Commissioner organization and Central cotton committee. Pakistan already have a very narrow export base and products are also not much specialized ones therefore there is a need for proper R&D. Declining exports are signal to the government they have to enhance the R&D facilities for the sector. At firm level, not many firms in the sector are interested in spending on R&D because whenever we go through the financial statements of these companies it is surprising to see that R&D has no value or a very less value under the head of expenses.

The WTO Regime, Trade Related Intellectual Property Rights (TRIPs): Issues of Compliance & Non Compliance

Pakistan became a member of WTO in 1994 and the reason behind this was to join our textiles with general agreement on trade and tariff (GATT) so that those countries that have imposed restrictions on the import of textiles from Pakistan will be removed. The condition for this was that Pakistan would have been producing all the textile products to show compliance with WTO. Then MFA (Multi fibre agreement era) removed and free trade started. Pakistan is now facing a lot of competition from countries like China and India after the removal of MFA. Pakistan is facing intense competition because of lack of technology, higher costs of production, institutional ineffectiveness and lack of trained human resource.

Most of the analysis on textile sector exports of Pakistan talks about the problems regarding access to foreign markets and export competitiveness. After removal of export quotas on the textile sector of Pakistan after the end of MFA in 2005, there has been an opportunity for Pakistan to increase her textile exports. On the other hand, it also enabled the access of other countries and when quota on china will be removed in 2007-08 then Pakistan will have to face more intense competition. (Chaudhry & Bukhari, 2013)

We have included a very important variable, which is compliance with TRIPs agreements. These agreements are aimed at protecting the interests of the member countries to protect the intellectual assets in trade. Therefore, they provide protection against the thefts of designs in the form of copyrights, patents, etc. We have included it because many developing countries like Pakistan are not showing good compliance with such agreements so we want to see its impact on the export performance. The main reason behind this is that they have to borne out heavy costs in case of compliance with such international agreements and institutions ensuring their compliance are weak. Pakistan is ranked 114th out of 130 countries in intellectual property rights (IPRI, 2013). This shows that implementation of such international agreements is weak enough in Pakistan.

Theory/ Issues

An Overview of Instruments & Indices for Assessing Export Performance

Export performance in the foreign markets can be measured using different proxies such as export sales, growth of export sales, profitability in the international markets, and ratio of total exports to total sales of a firm. There are problems in measuring export profitability therefore; we chose intensity to export for measuring export performance. According to some studies, there are problems in measuring the export profitability of the firms in the foreign markets because owners of the firms are reluctant to reveal true information about their profits (Cavusgil, 1984). Similarly Madsen (1989) concluded the same.

There are several different indicators of export performance present in the literature such as growth in export sales, export intensity (ratio of total exports to total sales), share of export market and export profitability. Among these variables, the most important is export intensity, which is the ratio of exports to sales. This indicator is considered important because it can be used for making comparisons among firms of different sizes, industries and countries (Wanga, Cao, Zhou, & Ning, 2012).

Reaping the Benefits of Technology and Innovation

According to Greenhalgh, Taylor, & Wilson (1994), technology-based perspective concluded that innovative industries would be the net exporters. She considers innovation effects on the trade prices and trade volume using patents SPRU database of innovation for technology indicators. She concluded with a positive effect of innovation on trade volume. Another research found that imported machinery from abroad results in a boosted aggregate export competiveness of developing economies (Mody & Yilmaz, 2001).

Navaretti, Galeotti, & Mattozzi (2004) talks about the relation between export performance and imported technologies, which is measured by the quality of products in textiles. They concluded that import of technology have a positive effect on the export performance of the selected countries in the sample.

According to Filatotchev, Liu, Buck, & Wright (2009) technological invention is reliably related to export intensity, which we in our research have used for measuring the export performance.

Serra, Pointon, & Abdou (2012) talks about the impact of technology strength on the propensity to export and it was found that firms with a good technology profile have a high intensity to export.

Technological capacity of firms involved in exports is greater than those, which are not involved. Technology capacity is the one of the key factors, which determines the export competitiveness of a firm in the international market and according to the results concluded by a study, process innovations, patents and product innovations as part of technological capacity have a significant positive influence on the intensity to export (Rodrı´guez & Rodrı´guez, 2005).

Montobbio (2005) published a paper, which focuses on the nine developing countries to look at the impact of technological activity and structural change on the export performance. Technological activity has a positive impact on the export performance in high technology sectors if countries expand the process of industrialization with increasing technological opportunities. Asian countries including china, Malaysia, Singapore and Thailand have high technological capacity, which improves their export performance in the world markets.

Export Performance as a Function of Subsidized Credit

Availability of credit has an impact on firm productivity. Private firms faced constraints from credit market so they have to use their internal sources for investment and sometimes have to stick with short-term borrowings. They concluded that availability of external credit has a significant positive effect on the productivity of the firms. So credit market access is positively related to the productivity of firms. (Caglayan, 2014)

The interbank interest rates jumped to a very high figure during the crisis of 2004. Due to the weak uncertainty, highly indebted firms have to declare their bankruptcy. Therefore, access to credit is very important. (Arteta & Hale, 2008)

Financial subsidy helps to improve allocative distortions in those markets, which lack credit facilities and hence can enhance the export progress. There model suggested that such programs should be directed towards financially constrained firms to improve the efficiency of credit subsidy program but it may not be easily possible. (Banerjee & Newman, 2004)

Empirical findings suggest that permanent cost of exporting directly affects the gains from trade. Such subsidies permit some unproductive businesses to enter the export market, which previously was unprofitable for them because production costs are reduced. Removing subsidies will lead to same firms leaving the market. Therefore, because of fixed cost removal of subsidy will lead to a heterogeneous response by these firms (Melitz, 2003).

The elimination of subsidized credit results in a substantial decrease in the exports of private firms but the exports of big public limited firms and firms in a group have their exports unchanged. However, their profitability has reduced (Zia, 2008).

Credit restricting has a negative impact on the domestic as well as foreign sales of the firms. Probability of exporting decreases for the credit rationed firm. Credit restricting is a hindrance to export for the firms which are part of high tech industries and which actually have a heavy reliance on the external credit. However, the impact on the firm with domestic sales is not that significant as compare to those with foreign sales (Minetti & Zhu, 2011). Trade finance constraints resulted in a decrease in the exports of Japanese firms in the financial crisis of 1990s (Amiti & Weinstein, 2011).

Aisen, Lvarez, Sagner, & Ture´n (2013) found that credit tightness affects both intensive margin (quantity of each product exported) and extensive margin (variety of goods exported) of firms involved in exporting goods. Deteriorating financial conditions discourage both variety and volume of goods exported. Exporters are more sensitive to financial constraints as they face large fixed costs therefore a credit crunch reduces the exports of individual firms.

An Overview of Spillover Effects of TRIPs

The November 2005 extension of WTO to extend the obligation that LDC's should follow the trips agreement was a failure and decision was inevitable. Developed countries failed to fulfill their promise of helping LDC's by providing adequate technical assistance for fulfilling WTO obligations (Kennedy, 2006).

McCalman (2005) found that fixed cost of patent protection result in the transfer of income between countries and it is normally net payment to abroad by different countries and US benefits from it. Study concluded that there are incentives for countries to innovate in the long run under the trips agreements but these benefits are bowed towards developed countries which means that developing countries cannot benefit much under such international agreements.

According to Dickson & Coles (2000), CAD on one hand provides textile sector with a better designing tool and on the other hand, it is enhancing the speed of illegal copying which shows the fragmentary nature of legal protection measures such as copyrights. So we can say that implementation of trips agreements is still not sound enough.

According to Schneider & Higino (2005), intellectual property rights benefits the developed countries in the form of domestic innovation but when it comes to developing countries, they are negatively affected. Innovations in developing countries under IPR are imitation and overseas firms benefit at the cost of domestic firms. Therefore, there is evidence that in countries like Pakistan, compliance with TRIPs agreements can have a negative impact on the innovation, which in turn can affect the export performance.

Patents were used to determine the patentable innovations and the study concluded that patents enhance growth in developed countries but when it comes to developing countries, there are no signs of growth. However, in developing countries minor form of IPR in the form of utility models is used. Patent enhances economic growth and innovation in countries, which have a good environment to conduct innovative research. (Kim, Lee, Park, & Choo, 2012)

According to Mahmood Z. (1998), Pakistan will not be able to comply with TRIPs agreements as signed with WTO. Pakistan will have to make further payments for royalty and license fees and this can have balance of payment consequences. It will not be easily possible to export counterfeit products if compliance has to be shown to TRIPs agreements.

Empirical evidence is weak in case of Mexico that IPR lead to technological innovations in case of maize breeding industry. Hypothesis proved to be wrong in this case because IPR has no role to play in this industry. Breeders did not observe stronger IPR as given those incentives for maize breeding, nor did they invest in these activities due to presence of IPR. Therefore, IPR should be revised to incorporate the features of developing countries for the proper working of IPR and this case can play smaller role in other developing countries as well. (Le´Ger & Andre´Anne, 2005)

Internal Funding as a Mean to Financial Sustainability

Faiz, Mahmood, & Shafiq (2010) conducted a cross sectional study by taking data from 30 firms in the textile industry of Pakistan. Results were analyzed using software called E views. To measure the performance of firms in the textile sector. Study concluded that the industry is in crucial need of technological and financial investments.

Those countries, which were having high bank interest rates, exported less to US during the financial global crisis because of constraints on credit. Industries, which have a high reliance on the external credit, were affected more. Exports of financially susceptible firms were subtle to rising cost of borrowing as compare to those firms, which were not financially vulnerable. (Chor & Manova, 2012)

Based on literature different independent variables have been taken to check their effect on the export performance of textile exporters in Pakistan. Export performance can be measured by exports or intensity to export but I have used intensity to export for measuring it. Of all the independent variables, state of technology and compliance with TRIPs agreements are the important ones. Other independent variables include subsidized credit, fund rating of the firm and image of Pakistan. I could not find any literature regarding image of Pakistan so I have included it in the model on my own knowledge. Remaining independent variables have been chosen by consulting the literature.

A model has been developed to cover the thesis title. The linkage between export performance and different independent variables has developed by considering literature as well as their postulated signs.

Methods/Procedures

Statement of Research Hypothesis

In this section, we will discuss our main hypothesis based on our research title keeping in view the theoretical framework we have defined in previous section. Our model as predicted in figure 1 has five independent variables.

The variable technology is measure of state of technology and is proposed to have a direct association with export performance because improvement in state of technology means that exports will increase. Subsidized credit represents any subsidy given by the government on the lending rate to textile sector and it is expected to have a positive coefficient as it encourages exporters to export more. Fund rating represents the internal sources of finance for the firm engaged in exporting and we expect to have a positive sign with it because higher fund rating means exports will increase. Pakistan's image represents the image of Pakistan's textile sector abroad and it is expected to have a positive sign because a better image for Pakistan's textile sector means that exports will increase and so the Intensity to export. Compliance with TRIPs agreements can have both positive or negative impact as explained by the literature but in case of Pakistan we expect a negative sign because compliance with such international agreements is weak in case of Pakistan.

We have two hypotheses as we have to main variables mentioned in the title. Our hypothesis is as follows:

Hypothesis 1:

H_0: There is no significant positive relationship between state of technology and export performance

H_A: There is a significant positive relationship between state of technology and export performance

Hypothesis 2:

H_0: There is no significant negative relationship between TRIPs compliance and export performance

H_A: There is a significant negative relationship between TRIPs compliance and export performance

Elements of Research Design

This study is at micro level to gauge responses from individual firms in our sample involved in the export of textile commodities in Pakistan to look at the overall trend within the industry. The questionnaire was conducted in the year 2014. The dependent variable is quantified by taking the ratio of average annual exports to average annual sales in million rupees by consulting literature. However some researchers have taken the absolute value of exports for measuring export performance. Independent variables are quantified using a scale of 1 to 5 in questionnaire. In case of technology, 1 means it is obsolete and 5 means it is advance. In case of subsidized credit, 1 means no subsidy at all and 5 means a high subsidy is given on the lending rate to textile sector. In case of fund rating 1 means short of funds and 5 means enough funds. When it comes to Pakistan's image 1 means a very bad image and 5 means a very good image. In case of TRIPs compliance, 1 means no compliance at all with TRIPs agreements and 5 means a good compliance.

Data Collection Preferences and Related Procedures

Since the research is on micro level data is collected using a cross sectional research. Time series data is not taken because it was not available for the textile industry in Pakistan and study is not on the macro level. In addition we found some literature in which study with the same nature was conducted using a cross sectional approach. We have tried our best to incorporate as many questions in the questionnaire to obtain more and more information for improving our knowledge for this research project.

As we were not able to find out any time series data regarding the research we are conducting, we used a cross sectional approach. Therefore, questionnaires were floated to look into different factors influencing the export performance of textile exporters in Pakistan. The sample includes 30 firms involved in the export of textile products in Pakistan. Firms were selected from Lahore and Faisalabad, as both cities are well renowned for the business of textiles and most of textile exporters are operating their operations in these cities. Different sections were included in the questionnaire to obtain information on different factors affecting the export performance. To get better results we did not left the questionnaire as a self-administered one. Infect it was just like an interview where there was a face to face contact with the respondent in order to get a better information by explaining them each and every question. The sample size is small because we were not having enough time.

Statement of Analytical Approach, Methodology and Mathematical Derivation of the Model

Our model is simple linear regression. Ordinary least squares is used for analyzing the data we have collected by conducting a cross sectional research. We run the model using a statistical package named as STATA. We used this model because it gives consistent results when errors are homoscedastic and there is no perfect multicollinearity in the independent variables. It is a technique of approximating unidentified parameters in a linear regression. Then we applied OLS regression. Significance is checked using a p value at 1%, 5% and 10% level of significance.

Based on the theoretical framework, an OLS regression is performed ant its functional and mathematical form is as follows:

Export performance = f (technology, subsidized credit, fund rating, Pakistan's image, TRIPs Compliance)

$Export\ performance = \beta_0 + \beta_1 technology + \beta_2 subsidized\ credit + \beta_3 fund\ rating + \beta_4 Pakistan's\ image + \beta_5 TRIPs\ Compliance + e$

Mathematical derivation is as follows

Suppose $exportintensity_i = \beta_0 + \beta_1 technology_i + u_i$

E(u)=0 and Cov($technology, u$)= E($technology u$)=0

- E($exportintensity - \beta_0 - \beta_1 technology$) = 0
- E[$technology(exportintensity - \beta_0 - \beta_1 technology)$] = 0
1. $n^{-1} \sum_{i=1}^{n} (exportintensity_i - \hat{\beta}_0 - \hat{\beta}_1 technology_i) = 0$
2. $n^{-1} \sum_{i=1}^{n} technology_i (exportintensity_i - \hat{\beta}_0 - \hat{\beta}_1 technology_i) = 0$

$$\overline{exportintensity_i} = \hat{\beta}_0 + \hat{\beta}_1 \overline{technology_i}$$

Where $\overline{exportintensity_i} = n^{-1} \sum_{i=1}^{n} exportintensity_i$

Now we can write $\hat{\beta}_0 = \overline{exportintensity_i} - \hat{\beta}_1 \overline{technology_i}$

Now putting this equation in equation 2 gives

$$\sum_{i=1}^{n} technology_i (exportintensity_i - (\overline{exportintensity_i} - \hat{\beta}_1 \overline{technology_i}) - \hat{\beta}_1 technology_i) = 0$$

Which, can also be rearranged as

$$\sum_{i=1}^{n} technology_i (exportintensity_i - \overline{exportintensity})$$
$$= \hat{\beta}_1 \sum_{i=1}^{n} technology_i (technology_i - \overline{technology})$$

We get $\hat{\beta}_1$.

$$\hat{\beta}_1 = \frac{\sum_{i=1}^{n} (technology_i - \overline{technology})(exportintensity_i - \overline{exportintensity})}{\sum_{i=1}^{n} (technology_i - \overline{technology})^2}$$

Results

Experimental Econometric Modelling and Other Control Variables

Table 3: Regression Results

Independent Variables (Quantification)	Coefficients (T-Values)
Technology (Scale of 1 to 5, where 1 means obsolete technology and 5 means latest technology)	0.0368987*** (1.76)
Subsidized Credit (Scale of 1 to 5, where 1 means no subsidy and 5 means a high subsidy)	0.0664876* (2.88)
Fund Rating (Scale of 1 to 5, where 1 means short of funds and 5 means enough funds)	0.067427* (2.84)
Pakistan's Image (Scale of 1 to 5, where 1 means a very bad image and 5 means a very good image)	0.0479091** (2.27)
TRIPs Compliance (Scale of 1 to 5, where 1 means no compliance and 5 means good compliance)	-0.0288069 (-1.33)

*significant at 1%, **significant at 5%, ***significant at 10%

We have appropriate sign for every variable and results are significant for all the variables except for compliance with TRIPs agreements, which means that our previously stated hypothesis no 2 is not proved but hypothesis no 1 is proved.

Impact of State of Technology on Export Performance: Technology used by any business in its working is one of the main factors determining its performance. According to our results if technology improves by 1 more unit on a scale of 1 to 5, export performance of textile exporters will increase by 3.6%. Therefore, there is a direct and positive relationship between state of technology and export performance at 10% level of significance. This means that if processes are more automated than labor intensive, export performance of textile exporters will increase.

Impact of TRIPs Compliance on Export Performance: It appeared to be insignificant because it was not even significant at 10% level of significance. On a scale of 1 to 5, if textile exporters in Pakistan show more compliance to TRIPS agreements their export performance will fall by 2.8%. It is not significant because currently they are not complying with such international agreements because it is weaker in developing countries like Pakistan. We have already supplemented it in literature. In addition, most of the firms in our sample were not having copyrights and were afraid that compliance with such international agreements will impose huge costs on them.

Impact of Subsidized Credit on Export Performance. If the government gives a subsidy on the lending rates to textile sector, it will be an incentive for them. On a scale of 1to 5, if subsidy on the lending rates to the textile sector increases by 1 more unit export performance of the textile exporters will increase by 6.6%. Therefore, there is a direct relationship between the two and results shows that it appeared to be highly significant at 1% level of significance

Impact of Fund Rating on Export Performance. Sufficient funds are the lifeblood of almost every business. More the funds they will be having better will be their cash flow and their performance. An increase in the funds of a firm by 1 more unit on a scale of 1 to 5, export performance of the textile exporters will increase by 6.7%. Therefore, there is a direct relationship between the two and results shows that it is highly significant at 1% level of significance.

Impact of Pakistan's Image on Export Performance. We can say that good image of any country's particular industry in the global world can be a key factor in enhancing the export performance of the domestic firms in that industry. On a scale of 1 to 5 if image of Pakistan's textile industry improves by 1 more unit in the global world, export performance of the textile exporters will increase by 4.6%. Therefore, there is a direct relationship between the two and results shows that it is highly significant at 5% level of significance.

Conclusion

The aim of this study was to look at different factors, which affects the export performance of textile exporters in Pakistan because it is one of the main sectors in the county contributing to most of foreign exchange earnings and employment in the country. In addition, exports of the sector are also decreasing as we make comparisons with the past. State of technology and compliance with TRIPs agreements are the main variables discussed in the study and we have mentioned in the title. However, some other variables include subsidized credit to the textile sector, fund rating of the firm involved in exporting textile products and image of Pakistan were included. According to literature, we have consulted improvements in technology, giving subsidy on credit and a good fund rating of the firm can have a positive impact on the export performance of the firms. When it comes to compliance with TRIPs, it can have a negative impact on developing countries like Pakistan. It is because of the fact that compliance with TRIPs agreements can impose huge costs on the firms in the form of purchasing copyrights and all the licensing fees goes to abroad so developing countries benefit by this.

OLS was used for testing the hypothesis because of the nature of the dependent variable. We found that improvement in technology, subsidized credit to the textile sector, fund rating of the firm and Pakistan's image were significant in improving the export performance at different levels of significance. On the other hand, compliance with TRIPs agreements have a negative sign and it came out to be insignificant because implementation of TRIPs is weaker in many developing countries like Pakistan. Even most of the firms in our sample were not having copyrights and they said that having copyrights would impose huge costs on them, which can have a negative impact. They also said that even after having copyrights they can find copies of their designs in the market because of weak institutions ensuring compliance with such international agreements. In addition, they were afraid that they would not be able to counterfeit products, which they are currently exporting.

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Market Efficiency of Refined Soy Oil Futures: Evidence from India

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Abstract

Although the socio-economic sensitivity has made market efficiency of agri-commodity futures a compelling subject for policy makers, traders and farmers in India, little research exists on it in the Indian context. An attempt has been made in this paper to examine the efficiency of the futures market of Refined Soy Oil which is the top most traded (in terms of volume) agri-commodity in NCDEX - India's leading agri-commodity exchange. Market data of NCDEX' Refined Soy Oil contract were used for this study. Closing prices of 60 three-month future contracts considering only their delivery months, with expiry date starting from 20th January 2009 to expiry date of 20th December 2013, were used. After correcting for holidays (including all Saturdays and Sundays) and non-availability of corresponding spot prices, 1430 matched observations (spot price and the corresponding futures price of the delivery month of the respective contract) have been used as the data for econometric analyses. The unit of trading as per this contract was 10 MT and the delivery center was Indore, India. Market efficiency was examined by testing the null hypothesis that futures price of NCDEX Refined Soy Oil contracts are not unbiased predictors future spot price of Refined Soy Oil. The hypothesis was tested by Johansen Cointegration and Granger Causality Tests. In Augmented Dickey-Fuller Test, it was found that the null hypothesis of the existence of a unit autoregressive root could be rejected at 5% significance level for the First Difference series. After satisfying this precondition, it was possible to proceed with the cointegration test. Johansen Cointegration Test of reduced rank regression using the vector error correction model was employed next. Johansen λ_{trace} (trace statistics) and λ_{max} (maximal eigenvalue) analysis revealed that null hypothesis of non-cointegration is rejected at 5% level of significance. After ascertaining that price series are stationary, Granger Causality Test was conducted which showed that causality is bi-directional. Both the Johansen Cointegration and Granger Causality Test results suggest that NCDEX Refined Soy Oil futures market is efficient.

Keywords: Agri- Commodity Futures, Indian Agri - Commodity Futures, Market Efficiency, Refined Soy Oil.

The Draft of the System Supporting Purchasing Decisions Making in Project Management Processes

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Abstract

In this paper we introduce the concept of the decision support system, which formalizes the contract/procurement management processes described in the Project Management Institute handbook – The PMBoK Guide by mathematical modelling methods and quantitative optimization. Proposed system focuses on two dimensions: methodological - using quantitative and optimization methods and computer processing power and functionality - providing the opportunity to effective use by users not versed in the theory and tools of decision making. This system will act as a support for decision making based on user preferences, not their knowledge of mathematical tools.

Keywords: Procurement Management; Decision Support System; Project Procurement; Process based Approach;

Introduction

The Project Management Body Of Knowledge (The PMBoK Guide) by Project Management Institute (PMI, 2012) is an project management methodology that describes the decision-making processes in the nine knowledge areas of project management. One of them is a group of project procurement management processes. From the point of view of the project contractual relationship may exist when it is both client and contracting supplier of goods or services. In the first of these cases, we will talk about contract management processes, while in the second one of procurement management processes. In a situation when the contract seems to be beneficial to the contractor but he is not able to provide sufficient resources for its execution, or possessed the knowledge, experience and technology is not sufficient a contractor will certainly be considered buying some selected scopes of work from external sub-contractors. The PMBoK Guide processes structure is constructed based on a systems approach, which defines the scope of the input data, the realm of tool implementation of individual processes and their outcomes. Issues related to the tool are formulated in a general manner and they are providing guidance for project managers and project teams to show the general methodology of the proceedings. However they don't contain precise indications of the methods and tools that the implementation of these processes can be used.

In this paper we will discuss the basic problem area of decision-making, which has to do a project manager using the services of subcontracting in the terms of the PMBoK Guide methodology and propose a comprehensive outline of the system supporting the processes of making optimal decision. However, the PMBoK Guide accurately describes the procurement processes, but that is not based on the assumption that the contractor of the project is also a provider of project and/or services to external customers.

The issues of procurement management were discussed in number of paper. For example Bajari, McMillan & Radelis (2009) compare the advantages and disadvantages resulting from the use of auctions and negotiations. They conclude that when ex ante information is valuable and when ex post change is anticipated, the use of auctions, which often requires fixed-price contracts, may be inefficient. Eriksson and Laan (2006) Ericsson investigate how construction clients deal with procurement and to analyse how the choices made during the buying process stages affect the combination of governance mechanisms and control types in client-contractor relationships. Currently there are also a research work on the architecture of procurement decision support systems including the web-based applications. One of the recent work were conducted by Liu, Sun, Wang & Zhao (2011). As a result they proposed a framework for multi-agent based system for e-procurement.

Let's begin our consideration when the prospective contractor of the project receives an inquiry from the customer - the owner of the project. Certainly, the reasonably progressive contracting before making the procurement decision will recognize the market in order to identify potential contractors and their listings. Everyone potential contractor must therefore decide to make an offer (or not) and its parameters acting in a situation of uncertainty. This uncertainty stems from both a lack of knowledge of competitive offers and the actual conditions in which the project will be implemented. Therefore, the contractor cannot measure the cost of service in a way that it cover any consequences arising from the identified risks because such an offer would certainly be worse than others, whose authors estimate the expected level of costs under conditions of incomplete information.

Information on qualified suppliers, completed orders, the course of previous projects are usually stored in internal enterprise databases (eg. ERP/MRPII systems). If such a systems are not used locally, a wide range of data may be obtained directly from potential contractors enterprise registries, public procurement databases, and the WorldWideWeb in general. Nowadays, the number of available data makes the comparison of variants of decision-making, and a sensitivity analysis of the optimum solution impossible without the use of software support. Here we propose the implementation of a decision support system (DSS) that facilitates analyzes of decision-making, but allows to maintain full control of the decision maker on the data collection, filtration and decision-making process. Such a system should also offers the possibility of taking expert judgements into account (postulated by the PMBoK Guide, too), as they are supported by knowledge, experience and intuition of professionals who are not necessarily fluent in the DSS software, or even the methodology of optimal decision-making. An example of such experts may be lawyers and marketing specialists, because it is impossible to model the legal system and the preferences and decision making processes of customers in terms of mathematical and logic completely. Market analysis led to the conclusion that there is a general lack of software-applied methods for purchasing decision support. This is probably due to the fact that these methods are seen as complicated by what appear to be too difficult to use.

Decision support systems represents an important feature which, depending on the circumstances may be considered as a disadvantage or advantage. This is an objective evaluation of options for decision making, which prevents the influence of decision-maker's emotions on decision-making process on the one hand. But does not allow the inclusion of intuition decision maker in the decision-making process. The intuition may "prompt" the choice of the solution, which in terms of the analyzed quantitative data or parameterized quality characteristics would not be considered to be optimal in terms of "known" to the decision support system. On the other hand, as indicated by the DSS solution as optimal, can be intuitively regarded as unfavorable, as such is subject to some risk not quantified before. Merits of this thesis demonstrate, inter alia, Research conducted by Snijders *et al.* (2003). Despite this, decision support systems are widely implemented in many professional areas including, among others, in making make or buy decisions (Humphreys, McIvor R & Huang, 2002; Humphreys & McIvor, 2005).

In this paper we will show the draft and the functionality of the system which have to support managerial decision-making. Created system will complement the gap between the functionality of programs for project management and functionality of advanced decision support systems.

Many of the projects of the tourism and the entertainment business are performed by the entity organizing the work of many performers of various specialties. The key to the successful implementation of such projects is the technical and financial ability to provide for achieving results ordered correctly, the observance of the established qualitative and quantitative parameters, at an agreed time and at the cost of ensuring the development of a satisfactory margin.

Methods

The proposed model is based on the assumptions made in The PMBoK Guide 5th Edition and uses processes and data ranges described therein. Adopting it to the situation in which the optimal decision-making requires taking both sides - the client and the subcontractor into account, also proposed some modifications, extensions and proposals of exact decision-aiding methods. The proposed system should be functional for the user throughout the life cycle of the project - since its inception notification till final closure and clearing. According to the Project Life Cycle model should cover the following phases:

1. Conceptual phase – a preparation for the contract acquisition,

2. Planning phase – a preparation for contract execution,,

3. Realization phase - an execution of the contracted project scope,

4. Termination phase – contract closure.

In contrast to classical projects, where the decision-making is continuous by the same authority throughout the whole life cycle - in the case of projects where the contractor has yet to be chosen, it is uncertain whether the bidder does not complete the project as soon take a unfavorable decision the choice of the other bidder as a contractor. However, beginning of the planning phase usually must begin before receiving notification of the contractor selection (see Figure 1), because of the need of resources reservation, providing funds and compliance with other projects in portfolio.
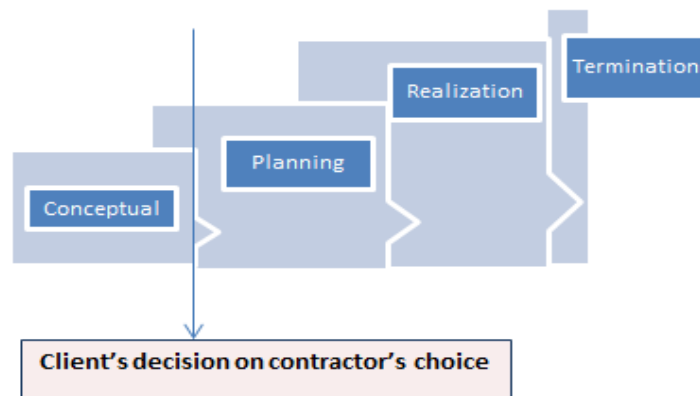
Fig. 1. The contracted project Life cycle and the moment of the selection of the contractor.

During this period of time the bidder, before becoming the contractor has to work both conceptually in the solutions for the bid which was requested for the client, and organizationally at the beginning of the planning phase when the procurement issues for the future realization should be generally prepared.

The first, conceptual, phase is generally not covered by the PMBoK Guide processes. Therefore, its composition should be described more closely.

Client who is seeking a potential contractor can maintain a list of qualified suppliers, who are already pre-evaluated positively and to those that are on this list an inquiry type RFx (Request For Bid, Request For Quotation, Request for Proposal, ...). If the list of qualified suppliers is not conducted a customer makes a full assessment of the contractor and his bid / proposal /... . Maintaining the list of qualified contractors is an efficient solution for clients who buys goods or outsources services regularly. It improves the selection process by making it faster and minimizing risks related to uncertainty of not known contractor. However, list of qualified contractors requires periodical verification and updating, but it also can be automated, as demonstrated in the paper of Błaszczyk & Błaszczyk (2013). From the bidder's point of view, efforts must be made to become included in such a list, which will allow both the RFx sourcing, but also reduce the risk of sending worse offer than other, unrecognized competitor.

The problem of choice of the offer is usually the multi-criteria decision-making (MCDM) problem, and therefore except in special cases when the potential qualified contractors are indifferent in terms of the client preferences (only if the offer price is the single criterion for selection) for its solution tools of the multi-criteria analysis should be used.

In terms of contract management and the bidding procedure bidder has to send as good offer as only he can having regard to project feasibility, contractual risk and expected contract profitability.

Intending to preserve the universality of the proposed DSS it can not be assumed that the potential customer uses the same system of evaluation and selection of contractors. It is possible that the client, rather than as a formalized procedure uses an interactive approach - negotiation or auction. Due to the detailed descriptions in the literature (see Nowak, 2011, Nowak & Błaszczyk, 2009, and Kersten et al., 2012), they are not analyzed in this paper as well as public procurement issues (see Thai, 2001). For the purposes of the proposed system, it is assumed that the process of selecting a contractor for external client runs as described in Figure 2.
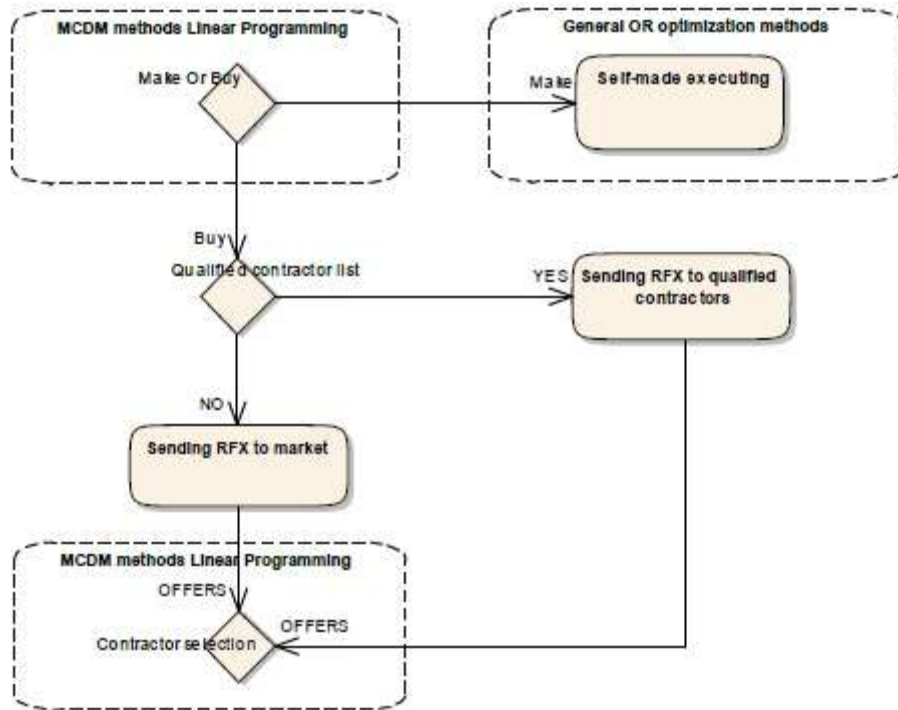
Fig. 2. Contractor selection process

In conclusion, from the methodical point of view of this process will fit therein indescribable process "contract acquisition" and each area of the PMBoK Guide "procurement plan management" and "conduct procurement".

Whereby the action taken will have exploratory, aimed at determining the feasibility and profitability of the contract, and made arrangements with potential contractors will be conditional in nature, addictive agreements in the case of obtaining the contract. For the purposes of carrying out the process of decision-making by the bidder, the following data and actions are required:

- External data (from the client):
    - Scope statement
    - Project Schedule
    - Quality requirements
    - Time limitations
    - Enterprise environmental factors
    - Contract documents templates
- External data (from bidders/potential sub-contractors):
    - Bids
    - Bidders data
- Internal data:
    - Organizational Process Assets
    - Previous client cooperation reports (if any)
    - Previous sub-contractors qualifications
    - Previous sub-contractors performance reports

On the basis of the data listed above, there are a need to made a set of decisions to be made by bidder:

- Design of the work breakdown structure

- Method of scheduling (CPM/PERT/CCPM/…)

- Make-or-buy-analysis for the whole project or parts of the scope/WBS

- Staff acquisition

- Selection of the contract type (with sub-contractors)

- sub-contractors selection criteria and their weights

- Bid selection criteria and their weights

- Definitions of risk probability and impact

- Strategies for risks (proactive and reactive)

- Methods of the quality assurance

- Tender quotation or no-tendering decision

In this process a number of well-known and frequently used Operations Research methods and tools can be applied to improve the decision-making process and make optimal or near-to-optimal decisions. In the described DSS some of them are planned to implement as a software supporting individual and group decision making. The data and problem structure in the project contract/procurement process make MCDM methods suitable for aiding most od required decisions. Among other, the Analytical Hierarchy Process (AHP) by Saaty (1980) is a very good method supporting the multi-criterial decision making or problems with quantitative and qualitative criteria with multiple decision makers as well what is an strong advantage when expert judgements are collected. This approach is also widely used for procurement issues (see e.g. Cheung *et al*., 2001, and *Kahraman et al.*, 2003). To support achieving optimal decisions by the negotiation or auction procedures implementation of another MCDM methods is planned. TOPSIS method was already used as a such a auctions supporting tool (Wachowicz & Błaszczyk, 2012) as well as the interactive procedure by Nowak & Błaszczyk (2009) for negotiations. Another well known optimization method – the Linear Programming is planned in this system as a tool for portfolio optimization (compare with Ogryczak, 2000) and make-or-buy analysis. The statistical approach of Partial Least Squares in the modified version (Błaszczyk & Błaszczyk, 2013b) is planned to aid the composition and updates of the list of qualified contractors. To reduce the risk of delays and contractual penalties the implementation of Goldratt's (1997) Critical Chain – based approaches (described by Błaszczyk & Błaszczyk, 2013a) is also to be performed. To finalize the process of contract acquisition decision maker needs to achieve the following outputs:

- Presence on the list of client's qualified contractors (if provided),

- Contract acquired,

- Make-or-buy decisions,

- Preliminary (conditional) agreement with potential sub-contractors,

After successful bidding and obtaining a contract other PMBoK Guide's Project procurement management processes may be activated:

- Conduct procurements (update and finalize)
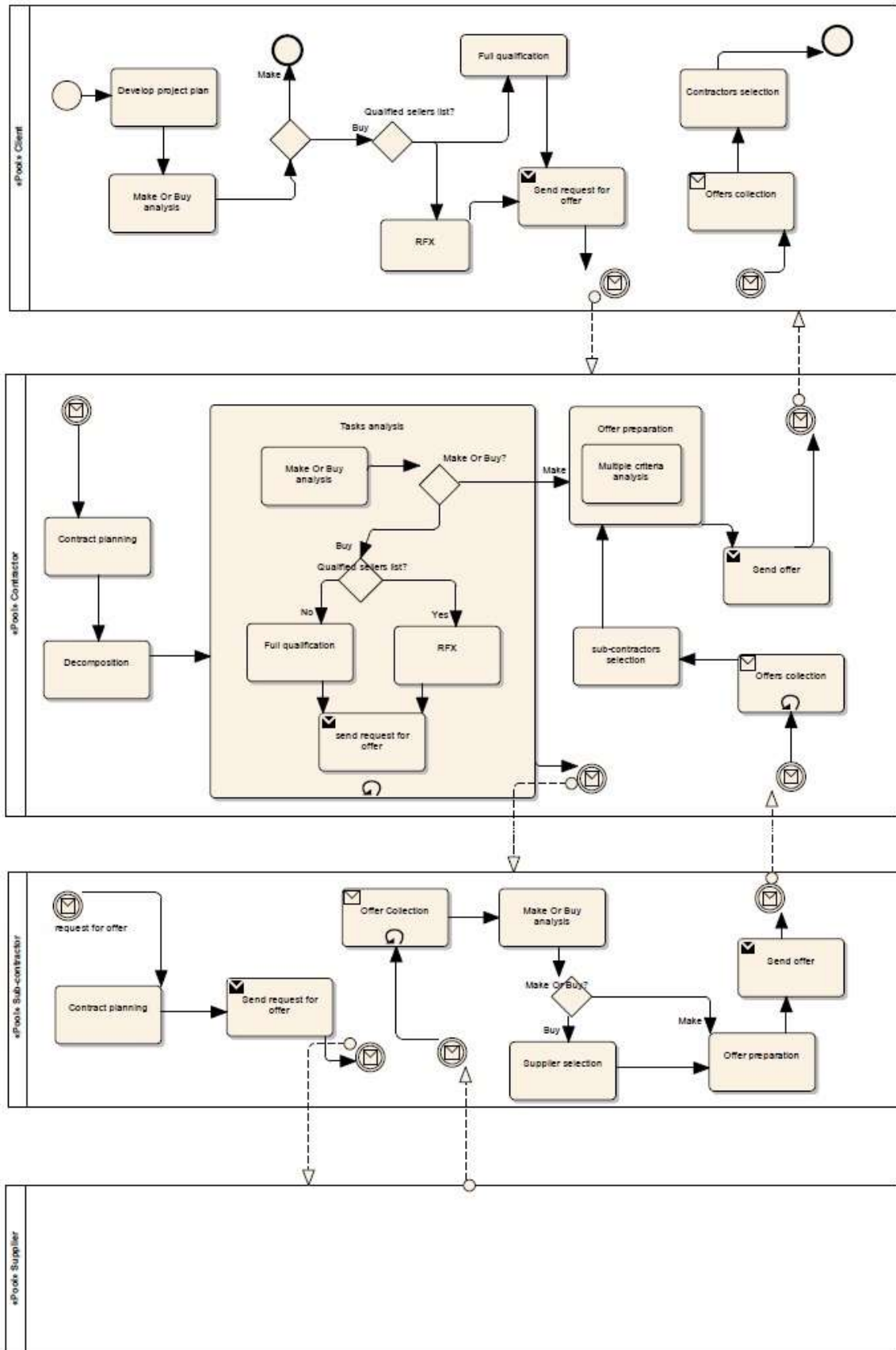
- Control Procurement

- Close procurements

Fig. 3. The Business Process Model for contractor-aiding DSS

Conclusion

The PMBoK Guide methodology currently provides a methodological standard of international project management. This methodology describes ten knowledge areas. One of them respects to the project procurement management. PMI's approach a system-based and define the scope of the input data, the realm of tool implementation of individual processes and their outcomes. Unfortunately, issues related to the tools are formulated only in a general manner, providing guidance for project managers and project teams about the general methodology understood but does not provide a precise indication of methods and tools that the implementation of these processes can be used. In this article we proposed a supplement process for the project procurement management area called contract acquisition. This area requires making many decisions, including also multi-criteria decisions. For example, the PMBoK methodology confirms the need for multi-criteria evaluation of suppliers and their offers however does not give answers to the question of how to effectively implement the process, taking into account the complex preferences. To deal with these decisions we suggest to develop a procurement decision support system. In the literature there are number of methods (for example Operations Research methods) which are already used in many areas and can also be successfully applied in the proposed decision support system.

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Acknowledgements

The Submissions on Information Technology Auditing and Auditing Profession for Public Organizations in Turkey

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Abstract

The study aims to have a different look on the information technologies auditing profession and to provide a systematic approach to the preparation of the carrier steps of a information technology auditor in similar organizations in Turkey. First part of the study will include audit of the information technologies, variable roles of IT auditor in the organizations, career management processes and steps of an IT auditor with regard to related literature and practices on international professional civil society organizations. As a field study, the strategy, regulation and activities of Internal Audit Coordination Board on IT audit that regulates the activities of the Internal Audit Units which have been established since 2000 in public organizations as it was deemed necessary in Turkey, and Internal Audit Department of and the Guidance and Inspection Department the Social Security Institution that is the institution having the largest information technology infrastructure in Turkey will be included in terms of their activities in the field of information technologies. In the conclusion and assessment part, a strategic road map and a submission set based on human resources and career management will be developed for the countries, institutions and organizations which aim to develop the IT audit profession as a career profession like Turkey, in addition to the summary of the study.

Keywords: Internal Audit; Information Technology Auditing; Information Technology Auditor; Career Management, Human Resource Management, Internal Audit Coordination Board, Social Security Institution of Turkey, World Bank

Introduction

Computers rapidly change the world. The information technology has become necessary for all organizations not only private but also public institutions. Both of them need to establish IT processes including auditing.

Banking Regulation and Supervision Agency (BRSA) was established in June 1999 according to Banks Act, No 4389. (www.bddk.org.tr [April,23.2014] It increased the awareness on the risk management, internal controls, information technologies auditing, international organization such as Information System Audit and Control Association (ISACA) and The Institute of Internal Auditors (TheIIA).

This study presents the profession of information technology auditing, human resources and IT auditor's career management perspectives. The activities of the Internal Audit Coordination Board of Turkey that regulates and coordinates the internal audit and the advancements in social security institutions in Turkey will be evaluated in terms of their conformity with the international practices.

In the conclusion and assessment part, a strategic roadmap and a submission set based on human resources and career management will be developed for the countries, institutions and organizations which aim to develop the IT audit profession as a career profession like Turkey, in addition to the summary of the study.

The methods of this study is to examine international literature, the standards, guidelines and curriculum of the international authority like Information Systems Audit and Control Association (ISACA) and The Intitute of Internal Auditors. Morever, the regulations related Turkish public internal audit and the guides, annual reports and data which are published by The Internal Auditor Coordination of Turkey. It is analyzed and evaluated the Turkish internal auditor practices on IT Audit from the point of international perspective. This study submited a roadmap and submissions for internal audit units not only public but also private organizations.

IT Auditor's Career Management

Auditing profession is the one of the career professions in the world. IT auditing is the most important area of the auditing. IT auditing has got its own auditing standards, ethics code, governance and auditing frameworks, certifications and international institutions like ISACA and The Institution of Internal Audit (IIA) etc. It is a chance to have the independent organizations for not only the IT auditors but also the private and public institutions all over the world.

IT auditor's career management is one of the challenging subjects for the organization in the progressively and rapidly changing world. Every organization should define the content of the IT auditor's career management plan according to their unique organizational and individual needs. They need to have the clear vision on career development in the long term.

A career development plan is essential to developing and retaining information technology (IT) auditing expertise in an organization. The career development planning involves an integrated consideration of the individual's and the organization's needs. Every organization can successfully train its own IT auditor through training and development of knowledge, skills, and abilities and provide a career path for this professional.

A functional and fully successful career development plan consists of six major elements, which must be integrated into an established process within the organization. The components of the career development plan (CDP) are (Sandra and Frederic, 2009:130-136):
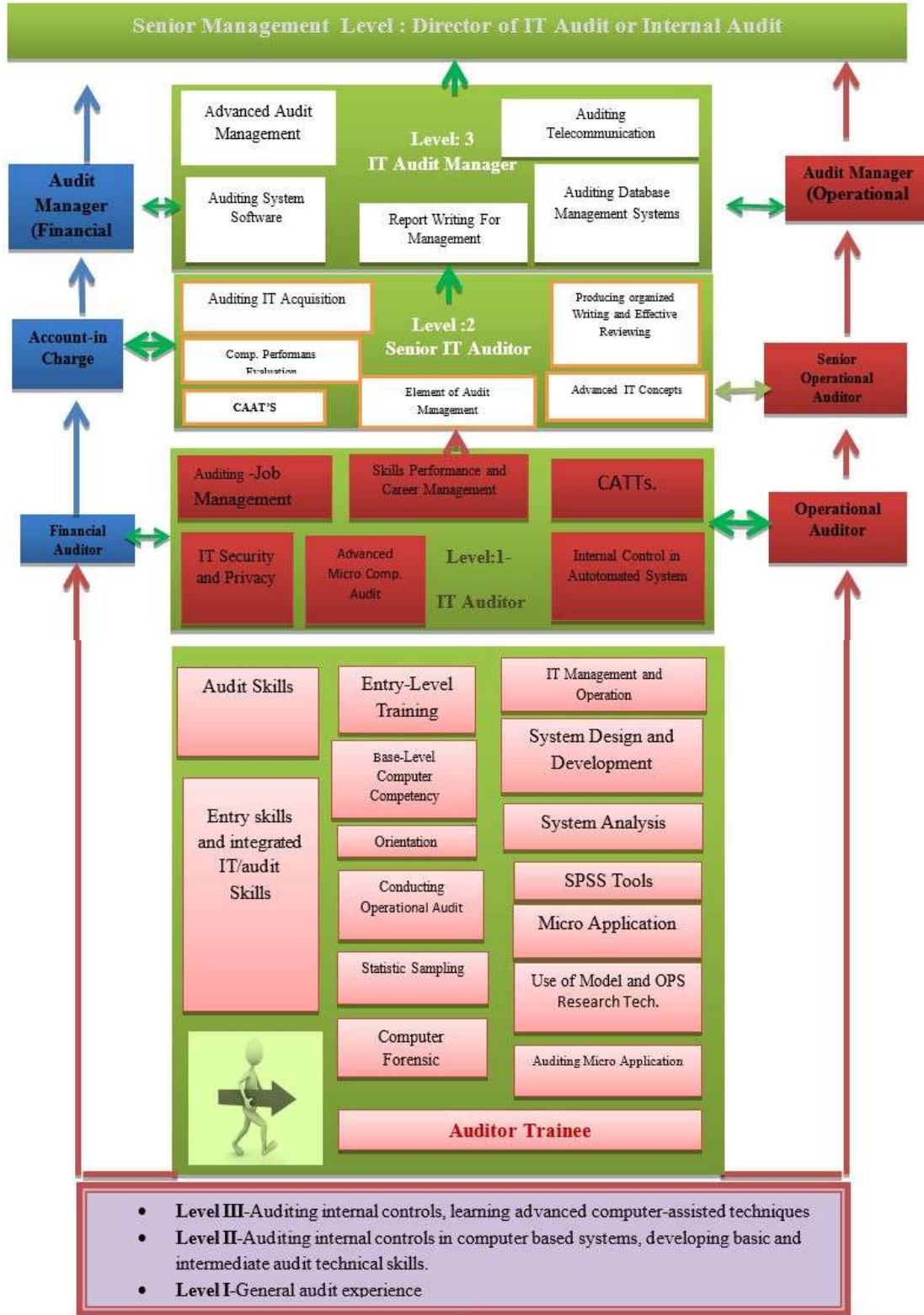
- Career path planning with management support
- Definition of knowledge, skills, and abilities
- Performance assessment
- Performance counselling and feedback
- Training
- Professional development

First component of the CDP would be unthinkable without the support of management. Management support is essential for the successful career management for IT auditors. All steps of IT auditors' career path must be defined from the IT audit trainee to IT auditor, senior IT auditor, audit manager of IT to the director of IT audit or internal audit.

Second component of the CDP is defining the level of knowledge, skills, and abilities necessary for each position level is a key step in a career development plan. The benefits of the identification of these components are:

- To determine the organization's expectation for an IT auditor's performance in specified areas of responsibilities and duties.
- To determine the proficiency level of the auditors to perform.
- To adapt the auditor's responsibility and ability according to the rapidly changing technology, easily.
- To assess the auditor's performance easily.

Exhibit: 1- The Model Curriculum for IT Auditor's Career Path

- **Level III**-Auditing internal controls, learning advanced computer-assisted techniques
- **Level II**-Auditing internal controls in computer based systems, developing basic and intermediate audit technical skills.
- **Level I**-General audit experience

Third of the CDP is performance assessment and to integrate organizational goals and objectives. The management must prepare and declare the career path of IT audit and auditors. As the result of the IT auditor's performance assessment, the management should provide horizontal or vertical movement in the organization. Management must be sincere and fair to the IT auditor who is successful in his career.

There are many opportunities for IT auditors in organizations. The support of management should provide these opportunities for the successful human resource management to the IT auditors. The more IT auditors gain experience, the more effective IT audit can be performed. They should be able to be

candidate senior IT auditor, financial auditor and operational auditor. According to IT auditors' experience and performance, their level of the title should open their path to be appointed as the senior lT auditor. IT auditors should continue their career development in both horizontal and vertical axis according to the experience, interest and success. Organizations need to take all the steps of career training which should be carefully planned, if the certificate needs to be taken at a desired stage intake, the certificate should be encouraged, should allocate adequate budgetary resources and continuing professional development to continue.

Fourth of CDP is the performance of counselling and feedback. It is important to give feedback to IT auditor for developing career management. This can be continuous by using audit management program, today. In case the positive feedback during auditing task will increase auditor's performance and minimize the audit risk.

Fifth of the CDP is training. IT auditors need to have educated, knowledgeable and experienced staff for successful performance and results. According to the snowflake theory, each organization is unique. Because, the content of the IT auditor's training program must be designed according to the organization's unique needs and specifications. The information on IT auditor's prior education, related certifications and other work experiences would be very useful for planning training program. During the planning of the training program, it would be useful to gather request and suggestion from IT auditor and benchmark the similar organizations.

Sandra and Frederic (2009:132) suggested the comprehensive training program for IT auditors in the Exhibit: 1. Information technology auditors from the beginning of his career to the end of the stage and at this stage of the proposed IT auditor training curriculum are shown in the following figure.

The Sixth of CDP is professional development. It is a fact that professionalism is the key of the IT auditing. IT auditors should develop their professionalism by obtaining the internationally accepted certificates. Besides, continuous professional development of the IT auditors must be compulsory for their career development plan. There are many certifications related with IT audit. Technological change improves and evolves in parallel with new certificate is natural. On the other hand, certain technologies in specific certificates may be obsoleted with technology obsolescence. For example, today cloud computing and green technology is becoming very popular. If the organization uses these technologies, IT auditor needs to have related certifications. Surviving the status of the IT certificate can be a performance goal for IT auditor. On the other hand, lifetime learning is becoming personal and organizational philosophy and strategy.

Evaluation of the Public Internal Audit System and It Audit In Turkey

There have recently been many significant changes in the social security area. In the past decade, the previous law cannot give respond effectively to the needs of today's societal life and corporate structure. This necessity makes the audit function changes inevitable for both the public and private sector in Turkey.

It can be mentioned that there are two important changes on IT Auditing in Turkey. The Public Financial Management and Control Law (5018) was issued on 10/12/2003 in the Official Gazette. According to the arrangement, internal audit and Internal Audit Coordination Board became the current issue for the administrator of the Public Institutions in 2003. (www.mevzuat.gov.tr [April 23, 2014])

Public Administration and Internal Audit

The internal audit is the occurrence of an independent, objective assurance and consultancy activity performed in order to improve and add value to the activities of the public administrations by evaluating whether the resources are managed in conformity with the principles of effectiveness, economy and efficiency and providing guidance. These activities are performed with a continuous and disciplined approach in accordance with the generally accepted standards in order to evaluate and improve the efficiency of the risk management, management and control processes of administrative and control structures and of financial transactions. Internal audit activity is performed by internal auditors. Internal audit practices are the compliance audit, the performance audit, the financial audit, the information technology audit and the system audit (www.mevzuat.gov.tr [April 23, 2014]).

The structure of the Internal Auditing Function and the Role of the Internal Audit Coordination Board in Turkey

Internal audit's central harmonization duty is executed by the Internal Audit Coordination Board of Ministry of Finance within the framework of tasks in the Article 67 of the Law No 5018. Within the function of internal audit central harmonization, following tasks are performed. (www.mevzuat.gov.tr [April 23, 2014]);

- To make the necessary arrangements in order to ensure the establishment of the internal audit system in accordance with the international standards and EU practices,

- To disseminate the good practices,

- To ensure the coordination among the public administrations regarding the internal audit activities,

- To monitor the internal audit system,

- To organize the training programs for internal auditors.

The Internal Audit Coordination Board has realized important activities since its establishment in 2006. According to annual report, it has many improvements on IT Auditing in Turkey. The regulations on internal audit have been completed up to now. Some heads of internal audit have separately realized many activities for the last years. Social Security Institution (SSI) is one of the pioneers on IT audit.

The Republic of Turkey has received a grant from the World Bank's Institutional Development Fund (IDF) in an amount not to exceed four hundred eighty thousand United States Dollars (USD 494,000) toward the cost of the Strengthening the Public Internal Audit Function Project, and it intends to apply the proceeds of this grant to payments for non-consulting services and consultants' services to be procured under this project. The objective of the Project is to strengthen the capacity of the internal audit function of the recipient for increased accountability and effective performance in the public sector. The Project consists of the following parts: Part 1 is to enhance the Institutional Capacity of the Internal Audit Coordination Board (IACB) for the implementation of the Quality Assurance and Improvement Program (QAIP). Part 2 is to enhance the Technical and Practical Capacity of Public Internal Audit Units. Consultants' services and training and workshops to enhance the technical and practical capacity of public internal audit units by providing: (i) on-the-job training to internal auditors on performance audits; (ii) on-the-job training to internal auditors on IT. (www.idkk.gov.tr [April 23, 2014]).

During the second phase, the head of Internal Audit of The Social Security Institution and The Undersecretarait of The Treasury were selected as the pilot areas by The IACB. During this project, the internal auditors in these organizations had on-job training on IT audit. They performed IT audit with the support of IT specialist. After completion of the pilot IT auditing, the contractor company gave one day course IT auditing to all internal auditors in Antalya. During this course, the survey on IT auditing was applied by The IACB for determining the voluntary internal auditors who wanted to take IT audit course. The contractor firm prepared the Draft Information Technology Guideline. Following days, IT audit course was arranged by The Board in Ankara.

In the scope of the project, "Public Information Technology Audit Guide" was published by The IACB in 23/03/2014. (www.idkk.gov.tr [April 23, 2014]). World Bank Institutional Development Fund with the financial support of the internal auditing and internal auditors has made significant progress in IT auditing. Internal auditors gained the opportunity for gaining practice and experience. Public IT Audit Guide was prepared to guide for internal auditors. In particular, internal auditors who do not have sufficient knowledge of foreign languages have a great opportunity provided by The IACB. But, none of public institutions have established The IT Audit Unit at The Head of Internal Audit.

The Terms of The Internal Auditor, Training and Certification and IT Auditor in Turkish Public Sector

The Internal Audit Coordination Board has issued the Regulation on the Term of Internal Auditor, Training and Certification on the Official Gazette dated 08.10.2005 (www.idkk.gov.tr [April 23, 2014]). This regulation covers the candidates of internal auditor who will be appointed in the extent of the general public administration. The new regulation is given a chance for the computer engineer and the other technical specialist to apply for being the internal auditor at the public institutions till the end of 2015. (www.resmigazete.gov.tr [April 23, 2014)])

According to The Term of Internal Auditor, Training and Certification on The Official Journal internal auditors' model curriculum is below in the Table:1.

Table1: Turkish model curriculum for internal auditor

COURSE NAME	
A- CORPORATE GOVERNANCE, RISK MANAGEMENT AND INTERNAL CONTROL;	C- ACCOUNTING
1) Corporate governance and principles, 2) Enterprise risk management, 3) Internal control models, 4) International internal control standards, 5) Public internal control standards, 6) External audit (Supreme Audit).	1) Government Accounting Standards, 2) Public Accounting, 3) Financial Statement Analysis 4) Public Accounting Regulations
B-CONTROL METHODS AND APPLICATIONS	D- LEGISLATION
1) The internal audit standards and professional ethics 2) Internal audit types and techniques, 3) Internal audit planning (risk-based inspection) 4) Field work 5) Reporting and monitoring of results 6) Statistical methods 7) Contact management and skills 8) Internal audit case study.	1) 5018 Public Financial Management and Control Law and other relevant legislation, 2) Budget legislation, 3) public procurement legislation, 4) Public property law, 5) Public spending legislation, 6) Public personnel legislation, 7) Constitutional and administrative law, 8) European Union financial legislation.

The table shows that there is not enough IT audit course for internal auditors. New content on information technology auditing adding more will be useful. Because of Public IT audit guidelines have been prepared; IACB is expected to reassess the future of training program.

Turkish IT Audit Competency Model for Public Internal Auditors

Internal auditors need to have specific competencies for IT auditing according to the Public Information Technology Audit Guide which was published The IACB in 2014. This competencies is defined "The IT Audit Competency Model". This model can be classy by two categories. The main characteristics are summarized in the table below from this guide. It is stated that *"Recommended by ISACA Information Systems Audit and Control Curriculum Model (Model Curriculum for IS Audit and Control), the person who will perform IT audits are expected to have technical competencies"* (www.idkk.gov.tr [April 23, 2014]) . It can be seen that technical competencies come from ISACA and Certified Information Systems Auditor's manual book.

Non-technical of IT audit Competency Model comes from The Institute of Internal Auditors (TheIIA). It is stated that "Non-technical competencies expected from internal auditors, IIA's **Internal Auditor Competency Framework** in the model is determined as follows Table 2". (www.idkk.gov.tr [April 23, 2014]).

Table: 2 Turkish IT Audit Competency Model for Public Internal Auditors

Technical Competencies	Non-Technical Competencies
1. The Process of Auditing Information Systems 2. Governance and Management of IT 3. Information System Acquisition, Development and Implementation 3. Information Systems Operations, Maintenance and Support 4. Protection of Information Assets	1.Persuasion and communication : • Use the power of persuasion and develops effective ; • By clear and convincing messages and active listening, communicates effectively, • Leadership and teamwork ; • Corporate policies and procedures are effectively applied • Recruitment, selection and staff retention policies effectively uses; • Effectively make a plan, set priorities and manage the performance of the rest of the team ; • For the formation of loyalty to the team and encourages and shows the direction • Builds relationships in pursuit of common goals and work together • Cooperate effectively works 2. Creates synergies in the team towards common goals. 3. Change Management : Open to change and innovation 4. Dispute resolution and negotiations : Effectively manage disputes through negotiations and solutions

In our opinion, New IT Audit Competency Model try to synthesize both ISACA and TheIIA models and suggest a new model for The Turkish IT auditors of Turkish Public Administrations. On the other hand,

it is recommended that the certification of ISACA (CISA, CISM, CRISC and CGEIT), TheIIA (CIA and CRMA), International Information Systems Security Certification (CISSP) and etc. confirms our opinion.

ISACA suggests that universities are required a minimum of 250 hours training for IT auditors according to ISACA Model Curriculum for IT Auditor. (www.isaca.org [April 23, 2014]) Turkish IT Audit Competency Model for Public Internal Auditors overlaps ISACA' Model Curriculum for IT Auditor. Turkish model accepts CISA's domains. In addition to this, non-technical competencies come from TheIIA.

Internal auditors consider and use the Public Information Systems Guide. The guide and level of competency relation is shown in the Table 4.

Table 3: Turkish IT Auditor Competency Model For Internal Auditors

While internal auditors are realizing audit test; they must assess their competency level for audit test. If it is insufficient, he should inform the head of internal audit for providing the expert for completion of the audit. He must increase his competency with the continuous professional education, special course etc.

Conclusion

 Internal audit unit and auditors are responsible for IT auditing in Turkey according to The Regulation on Working Principles and Procedures of Internal Auditors. Internal auditors must be given the special education on IT auditing by The IACB. There has been pleasing improvements in IT auditing services in public sector by the financial support of   The World Bank's Institutional Development Fund. The World Bank's support is remarkable for the Turkish Internal Audit System. The IACB developed the internal audit quality assurance system and manual, on-the job training on IT audits, seminar and finally Public IT Audit Guide with the support of The World Bank.

This study assesses IT auditing from the point of the human resource and career management perspective. Indeed, all organizations like a snowflake are unique. They need to establish their IT auditor's career management program according to their specific situation, necessities and conditions.

This study shows that there are lots of opportunities and activities for developing IT auditing in TURKEY. It is briefly summarized item by item:

- IT auditing is a new profession which is supported it is supported by a common body of knowledge, certification, continuing education, code of ethics and standards, an educational curriculum, and a professional association. Certified Information System Auditor Certificate (CISA) is the most accepted certificate by many organizations in the World.
- It is imperative to employ IT auditor in the organizations which intensively use the technology in both public and private sector.
- Corporate human resource policy must include IT auditors' career and program management.
- IT auditing need to be applied appropriately international auditing standards, ethic codes, IT framework, and certification.
- The organizations need to establish IT auditor's career development plan with integrated their human resource policy. This plan must successfully develop IT auditor' knowledge, skills, abilities for constructing professionalism.
- IT auditor's career path must be defined clearly.
- The managements supports the IT auditors career development,
- The organizations define clearly all job definitions, and reassess the job definition annually. In addition to this, the employees must actively participate in their career development process.
- IT auditors' career management must integrate and support the corporate strategy and goals.
- The organizations must prepare the IT auditors' career management program in accordance with the International certificates such as CISA, CISM, CIA, CRISC, CGFM, CISSP, CA, CPA etc.
- IT auditors' performance must be assessed regularly.
- The organizations need to create the formal IT auditors' education program in accordance with IT auditing methodology.
- IT auditors should develop their professional development by having the certifications on IT, IT auditing, IT security and etc.
- In the last seven years, The Head of The Internal Audit of SSI has gained important experience on IT auditing, project management and framework (PMBOK), information security, computer assisted audit techniques, software project management, data warehouse, process management, IT risk management, IT security management, IT governance framework (Cobit, ITIL, 27001 ISMS, 15504 SPICE), continuous auditing and the monitoring system of the Internal audit report. It can be a practical model for both the private and the other public institutions.

The Internal Audit Coordination Board has the decisive role and responsibility for all internal audit units. There have been many improvement on internal audit like completed many regulations and e-learning. But, IT auditing initiatives are not sufficient for the head of the internal audit units. There is no certain road map on the IT auditing, IT auditing human resource policy, IT auditing career management, IT auditing training program on IT auditing standards, IT security and privacy auditing. The coordination board needs to establish a certain road map for all internal audit units in Turkey as soon as possible. All the regulations must be revised for developing IT auditing and IT auditor's career management. It can urgently prepare the formal education program for the internal auditors and IT specialist with the coordination of the all the public internal audit units and all the IT management of public institutions. The new regulation on transferring IT auditors from private sector to public sector must be prepared as soon as possible. In addition to these, the coordination board should make a suggestion to The Council of Higher Education and all universities for developing curriculum on IT governance, IT controls, IT security and IT auditing Turkey. In the context of the component of IT auditors' career management, there are many opportunities for developing IT auditing services in the public institution. To support and improve the IT auditing career management program The Internal Auditor Coordination Board, the top manager of public institution, the head of internal audit unit, the department of the human resource management department and information technologies management, internal auditors and international or national associations on working IT governance, IT security, IT governance should participate in the process of career management and make contribution positively.

In the end word, there is a long way for developing information technology auditing and auditors. All stakeholders think about these issues and find out the way out altogether. This produces synergy for all public institutions. Public institutions need to outsource the IT auditing services in the IT management area till developing and building IT audit capacity in near future.

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Environmental Settings, Fast Eaters and Changing Dining Patterns

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Abstract

Environment and the environmental settings are important factors that in which human beings exist. These settings have a strong effect on their social interactions, mentality, physical health, personality and their ability to form relations. Environmental psychology looks at how our surroundings affect our behavior and actions. Traditional Mediterranean diet is an excellent model of healthy eating and eating together. Eating with family and friends is a common traditional ceremony in Mediterranean culture, and it may be best described as the dietary pattern and ceremonial eating habit found in the olive growing areas of the Mediterranean region. Since after the fast food culture and increasing meat consumption started influencing our nutritional habits, eating patterns are also changing in all Mediterranean countries. As a result of changing socio- demographics, the number of meals eaten at home is decreasing. Unfortunately, dietary habits at present show more westernized. Slow food attempts are not enough to slow down the fast spread of fast food culture. The slow food program in Italy is promoting small, local restaurants. These restaurants, known as Osterias and Tattorias serve traditional local cuisine, are usually family owned, serve good quality food, local wine and charge affordable prices. The movement began to emphasize the importance of these family-owned restaurants to urban life as a response to fast spread of McDonald's in Italy and to support small business owners.Interior space design is the art of applying knowledge to an interior space with the manipulation of spatial volume. It draws on aspects of environmental psychology, interior architecture and furniture design in addition to traditional interior decoration. The full service restaurants do not just sell food, additionally; customers actually rent a space to eat. Therefore, atmosphere and theme of restaurant interior design is crucial and has an impact on the type of guests that restaurants attract. Successful restaurant design ideas come from the understanding of the different experiences your customers are looking for. Designers should know what type of menu the customers seek for and what type of restaurant design ideas and furniture choice and layout create an atmosphere that will convince them to come back.Emotion is process of information exchange between user and everything in surrounding world, and emotional design looks at how our environment affects our actions. Therefore, emotional interaction is one of the key features of furniture design and furniture layout in an interior volume. With the gradual improvement of living standards, people begin to pay more attention to their psychological and emotional demands rather than function. It has been known that different colors, textural qualities and forms affect both mood and behavior. The colors have an impact on what we choose, buy and even on our eating habits. There are also researches focus on how form as a visual characteristic of the environment influences our emotional reactions. Understanding restaurant customers on an emotional level is an important point to make them keep coming back. Furniture and its form can inspire people to think about where they are and what they are doing but value of furniture is widely ignored since that is so into our daily lives. More and more consumers are no longer enough satisfied by function and beauty of the form of products. Products can communicate different kind of things; restaurant furniture for instance can communicate reliability as well as being in a home like environment. Required personal space in between furniture for a person varies on individual, gender and culture. People usually need greater personal space with strangers. Gender was also a factor; women are much less comfortable than men in tight areas. However, men and older people, Asians and Mediterraneans are used to closer distances than those from North America and Europe. Uncomfortable chairs, floating tables arranged in the space and in the line of food traffic make diners annoyed. Many business owners attempt to maximize their potential by only moving furniture around without a new space planning. This approach may increase the capacity, generate negative attitudes and a dissatisfied meal experience because of the reduced personal space.On the other hand, fast food restaurants are extremely common in our daily lives. These are not only a space to eat but also for a space for relaxing and gathering with friends to enjoy free time.*The way of design and structure of the interior environment has an influence on human behavior. The design and arrangement of furniture, the inclusion of household equipments and several other factors affect certain characteristics in human beings. The furniture industry is also adapting to these changing dining patterns.* Form, texture and color in furniture and product design are important features and have dramatic effect on individuals. *The solution may be rethinking of the sit-down environments and also adding new generation handy furniture to these eating areas considering all these features in order to turn the eating action into more desirable event.*

Therefore, further studies may be conducted about the emotional contribution of color, textural and constructional qualities to the form of furniture in different living environments.

Keywords: Furniture Design, Interior Design, Restaurants, Fast Food

Revealing the Secret Relationship between Associative Networks and Destination Image

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Abstract

Despite the increasing popularity of memory-related studies focusing on associative networks in the psychology, cognitive neuroscience and marketing disciplines, there are only a few memory related studies in the tourism and hospitality research field. The purpose of the proposed study is to explore in what ways associative networks might influence the image of a tourism destination. An associative network could be defined as a generic network that is composed of information items and relationships between and/or among these information items. The rationale behind the associative networks concept is related to the spreading activation theory of memory. In terms of the methodological approach, the author of the study proposes to engage with phenomenology. Phenomenological research usually starts with identifying the phenomenon that will define the shared experience. Travelling to a medium-sized city located in the Southeastern region of the U.S., as a phenomenon of the study, will define the shared experience of the tourists. Conducting interviews will allow author to generate a description of a shared experience for this particular phenomenon. The number of the participants will be between 12 and 15 for the proposed study. In addition to the theoretical contributions of the study, it is also believed that obtained associative networks will be used in the creation of marketing strategies, campaigns and positioning approaches for tourism destinations in a way that has never done before.

Keywords: Associative Networks; Destination Image; Phenomenology; Information Items

Customer Relationship Management Practices in the UK Retail Industry

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Abstract

This paper reviews how Customer Relationship practices impacts the overall performance of firms in the retail industry. The study is undertaken to help investigate what kind of CRM practices is dominant in the retail industry. Hence, considering how it impacts customer service delivery; how it impacts customer satisfaction and customer loyalty in general. It also investigate what CRM practices can improve the overall service delivery process. In achieving its objectives and answering the research questions, the study used the mixed method research approach. It was imperative that an in-depth interview was needed to be carried out to help understand the rationale for CRM practices from the firms' perspective. questionnaires were distributed amongst customers within the retail industry to help ascertain how some of these practices found from theory impact the customer, hence determining what best practice is.The study found that there are best CRM practices that can positively impact the firm in terms of growth, market share, and customer share and customer loyalty. It found that organisations within the retail industry that practice CRM tend to gain competitive advantage as compared to organisations that does not practice CRM. It also found that CRM helps the organisation to deliver value to both existing and potential customers. The study concluded that CRM practice is essential for business growth within the retail industry. It also concludes that CRM practice if carried out effectively and efficiently will help organisations within the retail industry gain and sustain competitive advantage. There were several limitations to the study which includes the time frame at which the study was conducted as well as the utilisation of sample from same geographical location. It can be understood that the results might differ if the customer sample is drawn from different cultures and geographical locations.

Keywords: Customer Relationship, Customer Service Delivery, Retail Industry

Responsible Actors for Sustainable Air Transport

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Abstract

Transport services and goods has been one of the principal factors in this century's economic and social development. However, transport is also recognized as a problem sector for the numerous impacts it has on health and the environment. Present mobility patterns in passenger and freight transport do not correspond with the objectives of sustainable development. Air transport has a very important role to play in the economic, social development and physical integration of the continents. Globally, the air transport industry is steering in a direction that seeks to create an enabling environment, which is conducive for a viable, efficient and sustainable air transport system. Air traffic has grown rapidly and geometrically over the past 50 years. Clearly this growth has been associated over much of that time with significant economic benefits. The manufacture of aircraft, the operations of the aviation industry and all the associated services have provided direct economic benefits to those employed in these sectors. The services provided have given the growing volumes of passengers the opportunity to travel for business and pleasure to more and more distant places. The movement of people and freight has been a major contributor to the growth of world trade. But disbenefits are now growing rapidly as well. Noise from air flight is becoming increasingly unacceptable to those impacted by flight paths. Congestion around airports is becoming more acute. Mass travel is having serious impacts on local communities and local environments at favorite destinations. Air pollution around airports and at the sensitive boundary between the troposphere and the stratosphere is. The contribution of air traffic to this crucial global problem must no longer be disregarded. Sustainability requires the engagement, commitment and cooperation of groups and organizations at all levels of society. The governance of aviation poses particularly acute problems in this regard. Many of the basic rules and standards under which aviation operates derive from international agreements and bodies – necessarily so, because of the international character of aviation. On the other hand many of the environmental and social impacts and problems arise very locally. This mismatch of scale has led to many of the conflicts of the past between the global economic drivers of the expansion of aviation worldwide and local protest and resistance from those most immediately affected. This paper aims to stress the importance of all aviation-related actors' roles and responsibilities for the sustainability of air transport. All groups of actors –users, operators, manufacturers, governments, aviation organizations and the public- should aware of how to deal with sustainability of air transport system depending on their objectives and preferences for the future of aviation. The major actors in the aviation system have to achieve their sustainability by minimizing environmental emissions, maximizing economic benefits, and contributing to social welfare.

Key words: Air Transportation, Sustainable Development.

Game Theory in Safety Management: Do I Report or Not?

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Abstract

In today's very rapidly changing World, global competition about almost everything increases the importance of quick decision making. In fact these decisions come out in a very short time must also be true. Aviation is one of the very important areas of them. Air transportation is an important sub system of whole transportation system. Also air transportation is formed up sub systems. Every system has a lot of parameters that can be controlled or not. These certainties or uncertainties can both effect aviation safety. Besides there are numerous limitations that these certainties or uncertainties are effected. Operation research is a beneficial approach such kind of problems. If output of a system is the input of another a decision which will effect both of them may overcome a problem occurs when self-decisions are made. Game theory is a better approach that every player makes own decisions while knowing the others decision. In this paper Safety Management System will be introduced and the reporting, key aspect of the SMS system, try to be discussed from the point of game theory. Game theory is a study of decision making that is mathematical models of conflict and cooperation between intelligent rational decision-makers. General mathematical techniques are provided for analyzing situations that is individuals' decisions effect each other [Myerson, 1991]. Today, however, game theory applies to a wide range of behavioral relations, and has developed into an umbrella term for the logical side of decision science. Safety Management System (SMS) is the formal, top-down business-like approach to managing safety risk. It includes systematic procedures, practices, and policies for the management of safety including safety policy, safety risk management, safety assurance and safety promotion [FAA, 2007]. Management can support SMS by setting the safety standards and policies for the airport organization. Policy describes the organization's overall approach to safety. Objectives identify specific outcomes that SMS is trying to achieve. An objective is a desired end point to a specific activity or safety process. Usually, an organization will want to achieve objectives within a finite period of time and will set deadlines for each objective. SMS Organization aims at the appointment of key aviation safety personnel, definition of safety accountability and organization of safety committees. These aspects should all be documented [ACRP, 2008]. Non-punitive reporting is a key element of SMS It is important to understand that this element is potentially one of the greatest "killers" of a strong safety culture. Building employee confidence and trust in a system that encourages reporting of even their own mistakes, without fear of reprisal, takes time and unfaltering efforts. Destroying this trust takes one minute. With SMS and a strong safety culture to support it, airport employees gain self-confidence to report hazards, incidents, accidents, and errors. There are additional benefits generated with SMS reporting. Workers are willing to share their errors and experiences. They become more knowledgeable regarding SMS as a whole. People become motivated to learn new lessons and are more comfortable and helpful when implementing new approaches to improve safety. They are aware of what is considered acceptable and unacceptable behavior [ACRP, 2008]. As a conclusion, it is not hard to say that trying to apply zero-sum game results to airport employees can courage them to believe in whole SMS system and to report incidents. This can improve safety.

Keywords: Decision Making; Zero-Sum Games; Safety Management System; Safety reporting.

Cultural Perceptions of Managerial Style: Is the perfect "high-high" manager an American stereotype?

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Abstract

This study investigated the generalizability of assumptions regarding preferred leadership styles, exhibited by emerging managers from four cultures: Australia, India, Ireland, and the United States. Leveraging the Leading Dimensions Profile (LDP), a psychometric survey of leadership styles, the study identified cultural perceptions regarding the leadership styles expected of a perfect manager. In so doing, this study sought to evaluate the prevalence of a long-assumed stereotype (often referred to as the "high-high myth"), whereby the ideal manager would exhibit a high desire for achievement, combined with a high concern for people and relationships. The results suggest that such a stereotype may extend beyond what was previously assumed to be an American stereotype.

Introduction

Effective leadership is a vital component in the acquisition, development, and management of human capital, a primary source of competitive advantage in the modern workplace (Pfeffer, 1994). For generations, beginning formally in the early 1900s, researchers have sought to uncover a definitive set of personality attributes that would describe the ideal leader (Northouse, 2013). Among the most recognized products of such research was a behavioral approach, where effective leadership was defined by a set of behaviors which could be observed (Behling & Schriesheim, 1976). Over time, researchers began to explore how leaders' behaviors impacted individual and group behaviors. For example, Scheinder (1985) examined the behavioral approach and its link to specific work outcomes and performance measures. Extending this research to consider contextual factors, Neuman and Kickul (1998) found that the most effective leader behaviors may not be universally defined, but rather, may be best understood within the context of specific work roles (whereby the combination of task and people-centric behaviors may differ from one workplace to the next).

As theorists explored the composition and context of leader behaviors, McClelland (1961) contended that leadership style was influenced primarily by leaders' psychological needs. His research found that leaders would seek to fulfill specific needs for achievement, power, and affiliation within their specific roles, and that their style would ultimately depend significantly on the domination of any of these three needs. As leaders address these needs through their work, certain work values may be evident to both peers and followers. For example, if a leader pursues a strong need for achievement, this drive would likely be conveyed as an urgent, competitive, or intense focus on achieving specific goals (Waldo, 2010). Neuman and Kickul (1998) stated, "values can act as standards or guides that can be a motivating force in determining individual actions, attitudes towards objects and situations, ideology, and justifications" (p.274).

Considerable research has been devoted to exploring the link between specific value orientations and measurable personality dimensions exhibited by leaders, such as achievement drive (the expressed need to achieve) and relational drive (the expressed concern for people). Repeated studies have found connections between such dimensions and relevant criteria, such as work commitment, job satisfaction, job choice decisions, and corporate culture (Lazarus & Folkman, 1984; Ravlin & Meglino, 1987; Judge

& Bretz, 1992; Meglino et al., 1989). In their research, Neuman and Kickul (1998) found a link between a high value for achievement (achievement drive) and job satisfaction. Similarly, Nystrom (1978) found a link between a high concern (value) for people and job satisfaction. This echoes Nandi's (2008) conclusion that employment relations may rival compensation in influencing employee motivation.

While Brooks (1955) pointed out the difficulty in determining the extent performance outcomes are influenced by specific managerial actions, the prevailing trend among leadership training programs is to teach emerging managers to model specific behaviors which are thought to influence employee motivation constructively. These behaviors have emerged over time, undoubtedly influenced by the research reviewed herein, to reflect a preference for leaders who exhibit a strong concern for accomplishment (high achievement drive), combined with a strong concern for people (high relational drive). While Haas et al., (1969) expressed concern over how environmental factors, such as differences between industries and cultures, might impact how leadership is perceived, Bradley and Parker (2001) argued that perceptions of ideal workplace interactions would tend to reflect contemporary beliefs about how leadership should be exercised. Such a finding offers promise to researchers seeking to identify universally-accepted preferences for leadership styles in the modern workplace.

Within this body of research, much debate has surrounded the influence of leadership styles on individual and team performance. The debate not only focused on whether leadership styles impact managerial performance, but also whether perceptions of an ideal leadership style would impact performance evaluations and job satisfaction (Nystrom, 1978). Powell & Butterfield (1984) found that higher team performance was related to perceptions of the managers exhibiting a "high-high" leadership style, regardless of whether or not the managers actually adopted such a style. Specifically, they found that for each leadership style observed, followers attributed higher initiating structure (a derivative of achievement drive) and higher consideration (a derivative of relational drive) to managers of higher performing teams, even if managers actually exhibited a different leadership style. These and other studies contributed to the earliest research on what was eventually labeled the "high-high myth" (Stogdill, 1963; Larson et al., 1976; Nystrom, 1978; Schriesheim,1982; Butterfield, 1978), whereby the expectation of ideal managers being driven by both achievement and relationships had disproportionately impacted generations of leadership training programs.

While much of the prevailing literature on leadership styles has emerged from studies of American managers, studies in Central and Eastern European nations have shown that the increasing influences of globalization have promoted a convergence of values and leadership preferences across cultures and countries (Steger & Winkler, 2003; Steyrer et al., 2006; Lang et al., 2008). However, some studies have argued that, because of the observed high levels of power distance and low levels of participative leadership behavior, cultural differences may yet restrict a generalizable assumption of preferred leadership styles (Edwards & Lawrence, 2000). To this point, Mujtaba et al. (2011) asserted that the cultural factors (consisting of traditional ideas and their attached values) may tend to influence manager behavior more so than prevailing leadership trends emerging in other cultures, thus presenting challenges for global collaboration among managers (such as in expatriate assignments, multi-national teams, and mergers of global organizational units).

Researchers have extensively covered the use of professionally-developed personality inventories in the workplace, especially within the domain of managerial positions (Aksu et al., 2009; Yildiz et al., 2009; and Lucas et al., 2012). Personality inventories have been utilized in many different studies to examine causal relationships between personality attributes (such as traits, behaviors, and characteristics) and specific performance outcomes, with significant implications for recruiting, selecting, training, and coaching managers (Oswald et al., 2004; Guion & Gottier, 2006; Marcus et al., 2013).

Within the literature review, studies involving leadership style stereotypes were evaluated based on analyses of both perceptions and performance outcomes of American managers. Schriesheim (1982) went so far as to label the preference for high Achievement Drive, high Relational Drive managers as a uniquely American stereotype (or myth). The current study seeks to extend such research by evaluating the perceptions of managers from diverse cultural perspectives. Specifically, the current study employs a personality inventory specifically developed to measure leadership styles within the modern global workplace, the Leading Dimensions Profile (LDP), to explore how managers perceive the ideal leadership style within four cultures (Australia, India, Ireland, and the United States). Consistent with the literature reviewed herein, leadership style preferences will be evaluated based on the interaction of two factors: achievement drive and relational drive. The following hypotheses were evaluated this study:

H1: When compared to their peers from Ireland, India, and Australia, American managers will indicate higher combinations ("high-high") of achievement drive and relational drive are expected within

the perfect leadership style.

H2: When compared to their peers from Ireland, India, and Australia, American managers will indicate the highest preference for achievement drive when describing the perfect leadership style.

H3: When compared to their peers from Ireland, India, and Australia, American managers will indicate the highest preference for relational drive when describing the perfect leadership style.

H4: When compared to their peers from Ireland, India, and Australia, American managers will indicate the highest preference for a leadership style combining high achievement drive and high relational drive.

Materials and Methods

Participants

Participants for this study included 870 managers from Australia (n=254), India (n=42), Ireland (n=295) and the United States (n=279). Participants were included in the study after having completed management training programs within their respective countries. Training program coordinators provided data to researchers for the purposes of studying similarities in leadership styles among managers from diverse cultural backgrounds.

Instrumentation

Data were collected using the Leading Dimensions Profile (LDP), a 95-item psychometric inventory yielding results based on a two-factor model (the two factors being achievement drive and relational drive). The items were administered via forced-choice model, whereby participants indicated whether each statement was "mostly true" or "mostly false" based on their preference regarding specific workplace behaviors. Further, each item was presented using a dual response format, in which participants answer each question twice, the first time revealing their perception of the perfect manager and the second time revealing their actual response. Such a format was specifically intended to diminish participants' inclination to provide socially desirable answers in their "actual" responses, while at the same time indicating their perceptions of the perfect manager.

The formation of the model was influenced by the extensive body of research on the concern for production, tasks and goals (such as the need to achieve), and the concern for people (such as the need to relate) (McClelland, 1978; Blake & Mouton, 1978). Reliability for the instrument, exhibited by Cronbach's Alpha of .84 for Achievement Drive and .80 for Relational Drive, indicated the LDP offered acceptable internal consistency within a sample of 759 managers (Waldo, 2010). The achievement drive and relational drive scores did not exhibit considerable intercorrelation (r=-.084, p<.01), suggesting more unique variance available for predicting a third variable (Waldo, 2010; Schriesheim, 1982).

Both achievement drive and relational drive scores were reported based on a 0-100% scale, reflecting normative scores (meaning scores are reported based on how each individual responds in comparison to a normative distribution of all test-takers, where the mean score equals 50%). Within the analysis and discussion that follows, each factor is classified as being low or high, based on a participant's score being below or above the 50th percentile. Further, leadership styles were conveyed based on a grid, whereby achievement drive scores were graphed on the horizontal axis and relational drive scores were graphed on the vertical access. In this manner, participants' leadership styles were compared based on four quadrants: high achievement drive – high relational drive; low achievement drive – high relational drive; high achievement drive – low relational drive; and, low achievement drive – low relational drive.

Procedure

The LDP inventory was administered to managers prior to attending leadership training programs within each culture indicated above. Participating managers completed the LDP independently and results were provided during their respective training events. Professional trainers, certified in the use of the LDP, administered the survey and later, presented results to participants. Participants did not interact with one another during the administration of the inventory, as the LDP was distributed prior to the actual training events. As each participant completed the LDP, they provided responses to indicate their perception of an ideal or perfect managers' leadership style, and subsequently provided responses to indicate their own, actual leadership style. To address the research hypotheses, researchers utilized ANOVA and Chi-square analyses.

Results

Table 1. Descriptive statistics and ANOVA comparison of achievement drive

Leadership Style Measure	US Managers n=279		Australian, Indian, Irish Managers n=591		
	M	SD	M	SD	t, df
Perfect Achievement Drive	65.58	26.51	62.09	27.23	1.78, 868
Actual Achievement Drive	46.37	27.94	45.68	29.12	.33, 868

The ANOVA indicated no significant difference between US managers and their peers in their perceptions of how achievement drive would be exhibited by the perfect manager. Similarly, there was no significant difference in how managers from participating cultures indicated their actual achievement drive. Interestingly, managers across the cultures studied tended to indicate higher levels of achievement drive would be expected in describing the perfect manager. This process was repeated for the relational drive factor, as reflected in Table 2.

Table 2. Descriptive statistics and ANOVA comparison of relational drive

Leadership Style Measure	US Managers n=279		Australian, Indian, Irish Managers n=591		
	M	SD	M	SD	t, df
Perfect Relational Drive	71.23	23.89	69.91	25.70	.72, 868
Actual Relational Drive	50.08	27.86	61.75	28.01	-5.74, 868**

** $p<.01$, all others not significant

The ANOVA indicated no significant difference between US managers and their peers in their perceptions of how relational drive would be exhibited by the perfect manager. However, there was a significant difference in how managers from participating cultures indicated their actual relational drive, with US managers revealing a significantly lower concern for relationships than their counterparts. As in the analysis of achievement drive shown in Table 1, managers from each culture studied tended to indicate higher levels of relational Drive would be expected in describing the perfect manager.

Managers' perceptions of the perfect leadership style were grouped within four quadrants, representing the interactions of achievement drive and relational drive. As indicated previously, these quadrants included: high achievement drive – high relational drive; low achievement drive – high relational drive; high achievement drive – low relational drive; and, low achievement drive – low relational drive. In each quadrant, low would be indicative of a score lower than the 50th percentile, while high (shown as "hi" in Table 3) would reflect a score at or above the 50th percentile. The results of this grouping are shown in Table 3.

Table 3. Perfect leadership style perceptions by culture group

Cultural Group	Perfect Leadership Style Quadrant			
	Hi AchDr – Hi Rel Dr	Low AchDr – Hi Rel Dr	Hi AchDr – Low Rel Dr	Low AchDr – Low RelDr
Australia	42.9%	31.9%	18.1%	7.1%
India	47.6%	26.2%	16.7%	9.5%
Ireland	63.4%	19.6%	13.6%	3.4%
US	60.6%	20.1%	12.1%	7.2%

Pearson Chi-Square Value = 32.12; df = 9; Sig. (2-sided) =.000

The results indicate there were significant differences among the cultural groups regarding the frequency with which each quadrant was identified as the perfect style. Despite this finding, Table 3 does show general agreement across the cultural groups, with each group revealing the greatest preference for the high achievement drive – high relational drive quadrant in describing the perfect leadership style. Managers across all cultural groups also tended to agree on the least preferred leadership style, which was reflected in the low achievement drive – low relational drive quadrant.

Discussion

The primary objective of this study was to investigate whether the high-high leadership style was a uniquely American stereotype. Based on the data analysis, it appears the US managers did in fact indicate that as a preference, as did their international counterparts. The actual results for both groups, however, indicated that both US managers and the non-US group were really "average" (mean scores hovering around the 50% mark).

Looking first at the actual results, the achievement drive between groups was not significantly different. The relational drive between the US group and the managers from Australia, India and Ireland, however, was significantly different. Though all countries would likely be considered a 'western culture', by most standards, it is not surprising to see the relational divide. Historically, the influence of non-western cultures in India and Australia, in particular, may be swaying these results. It would be tentative to make too broad of a generalization but the location of Australia and India, coupled with the general mix of their populations, might explain the nod towards a greater emphasis on relational leadership.

The perfect leadership preferences expressed in Table 3 by the managers from Australia, India, Ireland and the US tell a different but somewhat related story. When combining the achievement and relational drives, there are several noteworthy trends. The first is that, relatively speaking, all nations 'ranked' their perfect leadership preferences similarly (as a % of the total) going from the highest percentages given to the high achievement drive –high relational drive (HiAch - HiRel Drive) down to the lowest percentages given to the low achievement drive – low relational drive (LowAch - LowRel Drive). What is also interesting is that all managers, regardless of nation, placed a relatively greater value on a high relational drive (HiRel Drive) as compared to a high achievement drive (HiAch Drive), as noted in columns 2 and 3. Aside from the cultural work differences that exist between those nations, there appears to be an acknowledgement of the value relational drive can play in contributing to more effective leadership.

Of particular note is the 'split' between Australia, India, Ireland and the US regarding the high achievement drive – high relational drive (HiAch and HiRel Drive) percentages in the first column. Clearly Ireland and the US place a greater emphasis on the value of high-high leaders as exhibited by their percentages of 63.4% and 60.6%, respectively. The significantly different percentages of 42.9% and 47.6% for Australia and India, respectively, point to a much stronger emphasis on the relational piece. Again, this points to the likely impact of non-western cultures in those countries reflecting a more heterogeneous cultural population than one would find in Ireland and the US.

The implications for these findings touch a number of fields, each offering promise for future research and practice, including: management selection, training, succession planning, global work groups and even expatriate assignments. Moving forward, it will be interesting to note the growth of populations becoming more homogeneous and the impact on a preferred leadership style, perhaps, and the potential impact, if any, on overall economic growth and development.

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Understanding the Factors Influencing the Customers' Purchase Intention from Social Commerce Websites: A Case of Deal-of-the-Day Websites in Thailand

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Abstract

Nowadays, "E-Commerce" has grown dramatically and has become a multi-billion U.S. dollar business due to the widespread of the internet usage and its continuingly improving connection speed. With the arrival of online social network a several years ago, many "E-Commerce" have evolved to take advantage of its ability to connect customers with their friends, to update and to shares news, events or products and promotion online. These fascinating features bring about the birth of "Social Commerce". The paper aims to empirically investigate the relationship between trust in product recommendations from customers' online social network and their intention to purchase products or services from deal-of-the-day website that features discounted gift certificates usable at local or national companies. A survey method approach was employed in this study. 400 questionnaires were used to gather information from 400 respondents who were using both online social network and deal-of-the-day websites in Thailand, whilst the hypotheses in the proposed model were tested using the structural equations modeling. The results revealed that antecedents of trust in product recommendation from online social network were perceived benevolence/integrity, perceived ability, and perceived critical mass. The trust in product recommendations was found to have an important impact on customers' intention to purchase products/services from deal-of-the-day websites. Customers' trust in deal-of-the-day websites was also found to be an important intervening variable between trust in product recommendations and customers' intention to purchase products/services. From a practical perspective, companies can increase their customers' purchase intention by encouraging trustworthy and powerful members in customers' online social communities to provide positive product recommendations. They should also emphasize on improving the trustworthiness of their social commerce websites. The major contribution of this study is that it is the first attempt to investigate the impact of online social network on customers' intention to purchase products/services from deal-of-the-day websites in emerging economies.

Keywords: Social Commerce; Deal-of-the-day websites; Online Social Network

Predicting Turning Points in Financial Markets Using a Wave Smoothing Algorithm

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Abstract

We expand upon an algorithm that we have developed to smooth waves by filtering out "noise" until the base case is reached (Ait Hellal O., Meyer H. G. (2013)). Unlike other wave smoothing algorithms, such as least squares method that consider extrema as outliers or noise, our wave smoothing algorithm considers extrema, such as daily high or low, to be essential. As an application of the algorithm, we devised a trend-following trading system that is profitable over multiple markets. In this paper, we enhance the trading system to improve profitability by including a measure of the strength of the trend determined by the number of sub-waves. Most importantly, we present a probabilistic model to predict a significant change in trend over different timeframes.

Keywords: Market Trends, Smoothing Algorithm, Fibonacci Retracement, Waves, Trading System, Change of Trend.

External Debt Accumulation in Sub-Saharan African Countries: How Fast Is Safe?

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Abstract

This paper empirically examines the rate of debt accumulation that limits the probability of debt distress. The estimations are based on a panel of 45 sub-Saharan African countries over the period 1972–2011 using the dynamic probit estimation techniques. The results from the estimations suggest that the rate of external debt accumulation, the overall debt burden, governance performance, and shocks are highly significant determinants of the probability of debt distress. Countries with poor governance rating can sustain a lower rate of debt accumulation while those with a good governance rating will be able to sustain a higher rate of debt accumulation for a given probability of debt distress. Given its current status, sub-Saharan African countries' rate of debt accumulation is regarded as being unsustainable. This study has extended the debate on external debt sustainability and provides a benchmark for determining the financial commitments that should be offered to these countries

Keywords: Debt Accumulation, Debt Distress, Debt Sustainability, Governance, Sub-Saharan Africa

An Evaluation of the Psychometric Properties of Brief Fear of Negative Evaluation Scale

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Abstract

The fear of negative evaluation (FNE), a construct that is highly related to social anxiety, is defined as apprehension about others' evaluations, distress over their negative evaluations, avoidance of evaluative situations, and the expectation that others would evaluate oneself negatively (Watson and Friend, 1969). To measure the level of individuals' fear of receiving negative evaluations from others, Watson and Friend (1969) developed the Fear of Negative Evaluation Scale. The original FNE scale consists of 30 items in a true–false response format. Leary (1983) developed Brief Fear of Negative Evaluation (BFNE) Scale, which comprises 12 items that were all selected from the original FNE scale items. Unlike the original FNE, in the BFNE scale, items were rated on a 5-point Likert-type scale (1= "not at all characteristic of me"; 5= "extremely characteristic of me"). Besides the great deal of attention received within the fields of psychology and social psychology, fear of negative evaluation has been also investigated in relation to managerial and organizational behavior concepts. For instance, it was found to be indirectly related to higher levels of stress and to have a positive effect on sensitivity and consideration for co-workers (Motowidlo et al., 1986). FNE was also reported to be strongly related to the employees' fear of communicating with others (Winiecki and Ayres, 1999), to overall managerial performance (Young et al., 2000), and to have a moderating effect on the relationship between employees' justice perceptions and organizational citizenship behavior (Zellars et al., 2003). In this study we aim to establish the psychometric properties of the BFNE and to investigate the possible impact of using different number of Likert-type response categories on BFNE Scale's dimensional structure and its reliability. In particular, the effects of removing the neutral response alternative (middle category) were assessed by comparing the 5-point Likert-type scale with the 4-point Likert-type scale where a neutral mid-point was not offered to the respondents as an option.

Keywords: Fear of Negative Evaluation, Number of Response Categories, Middle Response Alternative, Reliability, Validity

Decentralized Model of Governance: A Study about Governance of Local Councils in Rural Areas of Brazil

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Abstract

The Programme for Sustainable Development of Rural Areas (space, geographically defined, consisting of group of municipalities with shared identities), executed by the Ministry of Agrarian Development - MDA in Brazil, is structured from in a decentralized model of governance, with participation of local populations. To guarantee participation, stimulate socio-economic and political development, the program envisages the creation of Local Councils in the territories. The objective of this paper is to analyze the correlation between the indicators of Local Council governance and indices of living conditions of local populations. To evaluate the management of local boards the research used the following indicators: i) organizational capabilities, ii) institutional services available, iii) municipal management tools, iv) mechanisms for conflict resolution, v) initiatives and vi) social participation. To assess living conditions, the following indicators were used : i) Labor family, ii) Area used for production, Schooling, iii) Housing conditions, iv) access to government programs, v) access to credit, vi) Access to technical assistance, vii) family income, viii) Labor productivity, ix) Productivity of the land, x) diversification of agricultural production, xi) diversifying the sources of income, xii) Conservation of water sources, xii) Conservation productive soil xiii) Preservation of native vegetation, xiv) Conditions for food and nutrition, xv) health conditions, xvi) Stay at the family home, xvii) Participation in community organizations, xviii) political Participation, xix) Participation in cultural activities. It is analyzed data collected by 27 universities in 37 different territories, which had their projects approved in the Public Notice MDA/CNPq/005/2009. The results indicate that social participation in collegiate is still not enough to impact territorial dynamics. It was noted that the effectiveness of boards depends primarily on their organizational capabilities and institutional services available which have great impact on the living conditions of the inhabitants of the territories, because they facilitate access to markets, credit and technical assistance, in addition to providing better health and education.

Keywords: Governance, Housing Conditions, Social Participation, Multivariate Statistical

Processual Model of Consumption: a Building from the Meanings of Products and Values and Consumption Patterns of Individuals

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Abstract

Supported by the General Systems Theory, which suggests consumption as a process fed back, and the concept of value - rational action, which considers the values of the individual beyond economic utility, we elaborated the Processual Model Consumption - MPC. The objective of this study is to demonstrate the phases of this model considering the relationship between the individual values, the meanings attributed to products consumed by the individual and their consumption patterns. i) cultural values (ideologies), ii) individual values, iii) judgment and meaning of the product and iv) frequency of consumption: empirical verification for four validated questionnaires in the literature, in a population of 240 elements were applied. From the use of multivariate statistical methods (factor analysis and structural equation) considering the phases of the MPC was able to verify that individualistic people judge products by symbolic meanings and have higher frequency of consumption of superfluous items compared to commercial products collective use. Collectivist people demonstrated judge products by their utility, but also indicated increased frequency of consumption of superfluous items, however, with less intensity than individualists.

Keywords: Consumption, Individual Values, Cultural Values, Multivariate Statistical

A Multi-Criteria Approach for Attracting Movie Industry to a City as an Economic Leverage

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Abstract

Film-making industry, along with the film production and the related sectors provides a significant recognition and added value to the economies of countries and cities. Economic indicators show a growing trend for the cinema industry locally and globally both. The vast majority of films in Turkey are being made in Istanbul. With the accelerated development of the sector, the creation of alternative centres of the cinema industry is inevitable. In this study, it has been aimed to design action plans to support Eskisehir as a complementary alternative to Istanbul in filmmaking. In achieving the stated objective, the city's authenticated and/or ready-to-improve opportunities are given priorities. Being host to the film-making industry may bring an undeniable added value and numerous benefits to the city. A series of interviews and surveys have been conducted to discover alternatives for attracting movie industry to Eskisehir. Three alternatives that are classified as the most critical ones are: (i) building a movie making campus or village, (ii) building some studios, and (iii) establishing a city-wide film support office. The relative importance of these alternatives have been analysed by three methods. SAW (Simple Additive Weighting), BOCR-ANP, and fuzzy TOSIS. Therefore, the unstructured strategic problem has been transformed into an action plan.

Keywords: Movie Industry, Multi-Criteria Decision Making, Analytical Network Process, Simple Additive Weighting, BOCR, Fuzzy TOPSIS.

Introduction

Eskisehir is a city located in central western part of Anatolia. It has a population of 700,000 with two large universities near 50,000 students on campus. The educated and young population of the city has built a dynamic and open-to-innovation ambience. The city has the department of movie and television, first founded in the country, unique then but with fading reputation and lost competition power in the last decade. On the other hand, the city is known with its smoky industries such as machine, sugar, alcohols, ceramics and brick manufacturing and the like. The economic power of the city was used to be the sixth roughly two decades ago with a steady decline since then. The high-speed train project that will facilitate an effective and efficient commuting between the two cities appears to eliminate certain downsides of the proposal. Hence, the idea to boost the city's socio-economic power has led to investigate several alternatives, one is to attract the movie industry as an economic leverage.

The Approach Proposed for Strategic Decision Making

One of the leading institutions of the city has initiated the research on how to attract the movie industry from Istanbul, the movie mogul of Turkey. The initial investigations has revealed that the good strategy is to place a supplementary and complementary role to Eskisehir. The research team has determined the stakeholders of this strategic issue first. They appeared to be the movie directors, the movie producers, the actors, the two universities located in the city, the chamber of commerce, the chamber of industry, the city mayor, the Ministry of Culture and Tourism, and numerous non-governmental organizations. The directors and the producers have been interviewed and surveyed for the difficulties they used to face, and the opportunities they would appreciate at the onset. Then, the alternatives have been designed to eliminate the problems and to provide certain advantages to those producers and directors who choose to work in Eskisehir. They are (i) build a movie-making campus or village, (ii) build some studios, and (iii) establish a movie-making support office.

(i)   **Building a Movie-Making Campus or Village**: They are the especially designed outdoor or indoor areas that provide studio facilities as well as hosting, accommodation, lodging, lounging, technical equipment and personnel to support all kind of studio modifications and setting studios. Movie campuses provide fast and cost-effective solutions to TV series, and time-consuming film projects. This includes many studios and all technical support

personnel. These villages eases coordination efforts and cooperation, and improves acting concentration. The village option is the costliest among the alternatives.

(ii) **Building Some Studios**: Studios are supposed to support movie-making activities with no any other efficiencies and facilities beyond that. Therefore, these are similar to movie villages with limited support. Unlike villages, they require personnel commuting.

(iii) **Initiating Film Support Office**: They act like liaison office between the movie producers, directors, the crew and the city agencies. The demands of the movie producers and directors are evaluated in this office. They offer help for shooting areas, obtain required permissions, take security measures, inform the parties as it seems appropriate, seek financial support from various resources, help coordinating the crew and the governor's office, the mayor's office, the national police, the universities, and the citizens. In a larger perspective, they seek opportunities for hosting film festivals.

The impacts, effectiveness and efficiencies of these three alternatives have been surveyed first, and then analysed by certain multi-criteria methods for cross-check. In the following sections, these methods have been introduced briefly.

Simple Additive Weighting (SAW) Method

Among three, the SAW method seems to be one of the best known and the most widely used. It ranks the alternatives like the other two methods by obtaining weights for each alternative as follows:

$$SAW_i = \sum_{j=1}^{n} w_j r_{ij} \qquad (1)$$

Where SAW_i is the weight for alternative j, r_{ij} is the jth attribute of the ith alternative, and w_j is weight assigned to attribute j. The analysis performed and the decision matrix has been obtained is presented in Table.1. The columns legends are as follows: Dir: Directors, Uni: Universities, Act: Actors, Non-G: Non-governmantal organizations, Min.: Ministry of Culture and Tourism, EMO: Mayor's Office, ECC: Chamber of Commerce, ECI: Chamber of Industry, Prod: Producers. The row legends are: A1: Building movie making campus or village, A2: Building some studios, A3: Initiating movie support office. The table also presents the normalized values in parenthesis.

Table 1. Decision Matrix for SAW and for Normalized Values

	Dir.		Uni.		Act.		Non-G		Min.		EMO		ECC		ECI		Prod.	
A1	4	0.5	5,1	1	4	0.66	2	0.33	5	1	4	0.57	3	0.38	2	0.33	4	0.44
A2	5	0.62	4,7	0.92	3	0.5	4	0.66	3	0.6	6	0.86	3	0.38	5	0.83	6	0.66
A3	8	1	4,6	0.9	6	1	6	1	4	0.8	7	1	8	1	6	1	9	1

After evaluating the relative importance of the stakeholders, the computational results are presented in **Table 2**. In the table Si's stand for the stakeholder i's credit obtained by multiplying the relative importance values with normalization.

Table 2.

| S_i	0.379	0.245	0.088	0.0372	0.088	0.048	0.050	0.026	0.033	=1

After SAW computations, the most important and hence urgent alternative has been found as *initiating the movie agency* (0.937), followed by *building a movie campus or village* (0.671), and *building studios* (0.428).

Analytic Hierarchy Process with BOCR

Analytical Hierarchy Process (ANP) is one of the most comprehensive yet practical multi-actor multi-criteria decision making methods (1). The method enables decision makers to process benefits, opportunities, cost and risk for the alternatives that will be evaluated. The benefit sub-network creates linkage between the possible benefits with the alternatives and the stakeholders. The possible benefits considered are: *the new jobs, the practice and the participation of students, the city promotion, and the improvement in transportation improvement, the contribution to the socio-economy of the city, the contribution to the national movie industry, the economic contribution, the improved city image, and the contribution to city tourism.* Another sub-network has been built to establish relations between the opportunities with the alternatives and the stakeholders. The possible opportunities evaluated are: *the*

adequacy of the socio-cultural structure, the positively improving trend in movie industry, the stakeholder's attitude towards the movie industry, the experience, the existence of the Department of the Movie and Television, young and dynamic population, none previously established alternative studio, the location of the city, the reputation of the city. The cost criteria included are: *The labour, the promotion, the lodgings, the construction, the feasibility analysis, the infrastructure rebuilding, the landings, and the equipment*. The risk factors associated with the goal are: *The other cities with similar projects, the less competitive natural features, the decline in the future of the movie industry, an economic crisis, cost effective emerging cities, inability to incorporate the new technology, the demands of the actors and actresses, the lack of experienced personnel*. The ANP model built is presented in **Figure 1**.
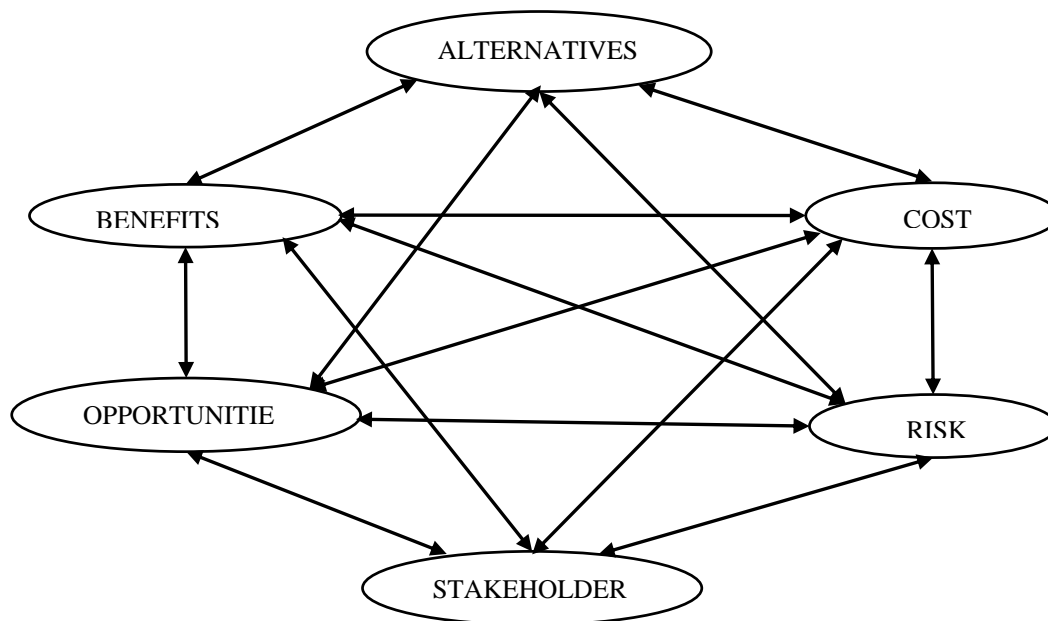
Fig. 1. ANP Model

As a result of the BOCR-ANP, the scores of Istanbul and Eskisehir 51.7 and 49.3 respectively. However, the prioritized factors that should be considered can be used as guiding principles. **Table.3** has been prepared for the teachings of the analysis. The top significant factors will be used in achieving the goal of attracting movie industry to the city by putting a realistic road map. **Table.3** reveals the actions that should be taken towards the goal.

Table 3. Top significant factors

Criteria	1	2	3
Benefit	Economic development	Image of the city	Contribution to Students
Opportunity	Cost efficiency	Trend in movie industry	Young population
Cost	Labour cost	Promotion	Equipment
Risk	Competition	Technologic Advances	Demands of actors

Fuzzy TOPSIS

TOPSIS stands for The Technique for Order Preference by Similarity to Ideal Solution. Fuzzy TOPSIS permits the decision maker express their opinions not necessarily with crispy numbers but instead with verbal expressions such as "very good", "somehow low" and the like. Fuzzy numbers can be expressed as membership functions as follows (Chen, 2000):

$$\mu_n(x) = \begin{cases} 0 & \text{if } x \leq n_1 \\ \dfrac{x - n_1}{n_2 - n_1} & \text{if } n_1 \leq x \leq n_2 \\ \dfrac{x - n_3}{n_2 - n_3} & \text{if } n_2 \leq x \leq n_3 \\ 0 & \text{if } x \geq n_3 \end{cases} \tag{2}$$

Let m and n are two fuzzy numbers. Then, their distance can be computed based on the vertex method as follows (Chen, 2000):

$$d(m,n) = \sqrt{\frac{1}{3}\left[(m_1 - n_1)^2 + (m_2 - n_2)^2 + (m_3 - n_3)^2\right]} \qquad (3)$$

The triangular fuzzy number for verbal some verbal expressions are given in **Table.4**.

Table 4. Verbal expressions and the corresponding triangular fuzzy numbers for importance (Chen, 2000)

Very Low (VL)	(0, 0, 0.1)
Low (L)	(0, 0.1, 0.3)
Medium Low (ML)	(0.1, 0.3, 0.5)
Medium (M)	(0.3, 0.5, 0.7)
Medium High (MH)	(0.5, 0.7, 0.9)
High (H)	(0.7, 0.9, 1)
Very High (VH)	(0.9, 1, 1)

The fuzzy TOPSIS approach has been used in comparing some of the alternatives such as A1: Accommodation, A2: Appropriate working conditions, and A3: Ease of coordination. Based on the computations proposed by Chen (Chen, 2000), the decision matrix was obtained as in **Table.5**.

Table 5. Fuzzy decision matrix

	Liaison Office			Movie Village			Film Studio		
Accommodation	1.56	2.89	4.67	4.22	6.00	7.56	0.44	1.44	3.22
Working Conditions	3.56	5.44	7.22	3.00	4.67	6.33	4.89	6.56	7.78
Ease of Coordination	7.00	8.56	9.33	2.44	4.00	5.78	0.67	2.11	4.11

Based on **Table 5,** the distances to positive ideal and negative ideal solutions have been obtained (**Table 6**.)

Table 6. Distance to positive and negative ideals and closeness coefficients

	d*	d-	Coefficient
Liaison Office	1.986109225	1.161079793	0.37
Movie Village	1.981558012	1.221470715	0.38
Film Studio	2.356429604	0.788079892	0.25

Based on the alternatives and the criteria considered, *building movie village and liaison office* appeared to be the two actions that should be given the highest priority and urgency to address the problems of the movie industry.

Result and Conclusion

This research deals with creating a complementary and supplementary alternative to Istanbul that has been the only home base to the Turkish movie industry over a century. The alternative actions have been addressed to obtain a viable business model. As a long-term strategic decision for a city, attracting the movie industry is an unstructured problem. This challenge has been handled by applying surveys and interviews partly. Based on the alternatives to consider and the BOCR analysis, the problem has been modeled as a semi-structured decision problem. The methods of SAW and ANP has been adopted to solve the semi-structured problem obtained. The possible contribution of verbal evaluations has been looked into for a setting of the problem by using fuzzy TOPSIS method. The result indicates to *initiate a liaison film office or agency*, and then *build a movie-making village or campus* would be best actions that can be taken by the stakeholders of the city. It may be found interesting that these are two alternatives that don't exist in Istanbul among the three. On the other hand, comparing close scores between the two cities may be construed as the time for Eskisehir to support Istanbul to host the incessantly bulging movie industry.

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A Preference-Based Bottleneck Assignment Problem

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Abstract

Assignment of people to tasks, students to projects, students to faculty members, personnel to duties may be realized based on their preferences. Taking preferences into consideration might improve the quality of the performances especially for those who are assigned to their preferences. Therefore, preference-based bottleneck assignment problem may be used to minimize the number people who are not assigned to their preferences. In the literature, bottleneck assignment has been used for single criteria; i.e. one-sided preferences. In this study, the assignment of university students to their senior projects and to the advising faculty has been addressed. First, a bi-criteria, and marriage-like assignment-model is presented. A novel, education-oriented method is proposed and developed. The method enables students and professors to make their preferences for improving project's success. A comparison of the bottleneck assignment and marriage-like assignment problems has been discussed in the same context. A decision support system has been designed and developed.

Keywords: Bottleneck Assignment Problem, Marriage Problem, Student-Faculty Assignment

Introduction

A senior project (also known as culminating project, graduation project, exit project) appears to have strong impact on the students' educational and professional confidence as well as self-perception towards success. Failing a senior project might mean waste of time and money along with a postponed graduation with low self-esteem. Therefore, any educational effort, precaution and measures should be taken to improve the performance of the senior projects. However, due to differing popularity of professors among students, it is hardly possible to assign all students to professors they prefer. On the other hand, professors naturally expect "good" students to work with. Hence, an objective and fair approach must be taken to present an equal opportunity for all. This approach might help reduce the complaints from students and faculty both.

Related Studies and Motivation

One of the first studies dealing with the assignment of students to senior projects belongs to Proll (1972). Proll (1972) takes only students' preferences for the projects and solves using bottleneck assignment model. Kapanoglu (1985) showed that bottleneck assignment model as used by Proll has a limited optimization capacity. Instead, an algorithm incorporating preference based bottleneck assignment model has been proposed. Increase in the demand of higher education has caused more number of students to appear in the system. High technology helped meeting this demand for mass education up to certain degree. Student information required for some decisions can easily be accessed. Experience show that students who can have full control of their choices feel more satisfied and act more responsibly. Professors who are supposed to supervise students' projects would like to be part of a successful project experience. Here, mutual preferences are taken not only from students but also from professors to set a cooperating, collaborating and contributing project team.

Current State in Project Assignment: Case of College of Engineering

The departments of College of Engineering, Eskisehir Osmangazi University, Turkey have adopted different policies in assigning students to senior projects. Most of the departments gather a preference list from students and perform the assignment solely based on students' preferences manually. Professors are not allowed to pick the best-fitting student for their projects. Indeed, the capability and the profile of students may fit better to some projects than the others. For example, some students can be very talented in dealing with software and computer programming while some others may excel in innovative, creative design or entrepreneurial skills. Therefore, a survey has been conducted to highlight the expectations of students and professors both. The summary of the results is as follows:

- High majority of students (81%) believe that their performance and the quality of the project will depend on the advising faculty they are assigned to.

- High majority of students (82%) believe that they would be fully satisfied if they are assigned to anyone from the top three of their favorite professors.

- All faculty believe that the performances of students in a project is directly linked to the fact that if they are on the preference list of those students or not.

- Majority of the faculty (67%) expressed that they would work with high GPA students if they could choose.

- Top three reasons behind a student's preference:

  o   Professor's track on the previous Projects

  o   Their favorite topics match with that of the professor's interests

  o   Positive and friendly attitude toward a student

Therefore, the preference-based assignment system has been designed with respect to the teachings of the survey.

Proposed Method

Assumptions:

i.   Students must be given the opportunity to prefer some professors to the others who is going to advise them in their graduation project.

ii.   Professors as well must be given the opportunity to prefer some students to others if they would like to.

iii.   A preference list is asked from students and faculty.

iv.   A suggested number of preferences are announced to inform students and professors.

v.   Submitting a preference list may improve the chances in matching students and professors however it should not be mandatory.

vi.   A preference list may not be submitted at all in one hand (empty list) or may sort all students or all professors in the other end (full list).

vii.   Number of students to be assigned to each professor is limited, known, and not necessarily the same.

viii.   Students must be given the opportunity to prefer some professors to the others who is going to advise them in their graduation project.

ix.   Professors as well must be given the opportunity to prefer some students to others if they would like to.

x.   A preference list is asked from students and faculty.

xi.   A suggested number of preferences are announced to inform students and professors.

xii.   Submitting a preference list may improve the chances in matching students and professors however it should not be mandatory.

xiii.   A preference list may not be submitted at all in one hand (empty list) or may sort all students or all professors in the other end (full list).

xiv.   Number of students to be assigned to each professor is limited, known, and not necessarily the same.

The variables and parameters are defined as follows:

$p_i(j) = k$: If student i preferred professor j with k^{th} priority

$0 \leq p_i^{max} = length[p_i(j)] \leq N$ where N is the number of professors

$$r_{ij} = \begin{cases} p_i(j), & \text{if student i listed professor j} \\ p_i^{max} + 1, & \text{otherwise} \end{cases}$$

$s_j(i) = k$: If the professor j preferred student i with k^{th} priority

$0 \leq s_j^{max} = length[s_j(i)] \leq M$ where M is the number of students

$$t_{ij} = \begin{cases} s_j(i), & \text{if student i is listed by professor j} \\ s_j^{max} + 1, & \text{otherwise} \end{cases}$$

q_j = Number of students to be assigned to professor j

Based on these definitions, the classical assignment model with mutual preferences can be given as follows:

$$\textit{Minimize } Z = \sum_{i=1}^{M} \sum_{j=1}^{N} (r_{ij} x_{ij} + t_{ij} x_{ij})$$

subject to

$$\sum_{i=1}^{M} x_{ij} = 1 \quad \forall j \tag{1}$$

$$\sum_{j=1}^{N} x_{ij} = 1 \quad \forall i$$

Consider these two pairs of assignments {1, 4} and {2, 3} in terms of $r_{ij}x_{ij}$ expresssion. While the pair {1, 4} satisfies one assignee by assigning to the first choice, leave the other assignee with the fourth choice. On the other hand, the pair {2, 3} assigns one assignee to the second choice and the other to the third choice. The second pair appears to be a fairer treat because show a care for someone with relatively remote choice. However the model (1) with mutual preferences may not distinguish the difference between these pairs, since it will have 5 as an additive objective function value for both {1,4} and {2,3}. Model (1) will be called as AMP for Assignment with Mutual Preferences. The challenge the model (1) faces can be overcome with a model as presented below:

$$\textit{Minimize } Z = \text{Max} \{r_{ij} \cdot x_{ij}, t_{ij} \cdot x_{ij}\}$$

subject to

$$\sum_{j=1}^{N} x_{ij} = 1 \quad \text{for i=1..M} \tag{2}$$

$$\sum_{i=1}^{M} x_{ij} \leq q_j \quad \text{for j=1..N}$$

$$x_{ij} = 0\text{-}1 \quad \text{i=1..M; j=1..N}$$

This model (2) will be called as BAMP for Bottleneck Assignment with Mutual Preferences.

The proposed method based on BAMP and AMP is presented below.

Step.1 MODELING: Set iteration index to 1; v=1. Build BAMP.v.

Step.2 SOLUTION: Solve BAMP.v as an integer optimization problem. Z(t)=Z*.

Step.3 EXTEND MODEL: Add the following constraints to BAMP.v

$$r_{ij} \cdot x_{ij} \le Z^* - 1 \quad \forall i, j$$

$$t_{ij} \cdot x_{ij} \le Z^* - 1 \quad \forall i, j$$

(3)

Step.4 SOLUTION with BOTTLENECK CONSTRAINTS: Solve BAMP.v obtained in Step.3. If it is infeasible, then Z* is the bottleneck value. Go To Step.5. If an optimal solution is found, then Go To Step.3

Step.5 MINIMIZE ASSIGNMENTS with BOTTLENECK VALUE: Use AMP's objective function to solve BAMP.v. This will minimize number of assignments with Z*.

Step.6 MODEL REDUCTION: These assignments with Z* cannot be improved further. Finalize those assignments and remove them from the model. v=v+1. GoTo Step.2

The proposed algorithm can be exemplified in the following case. 14 students and 14 professors have submitted their preference lists (**Table 1-2**).

Table 1 Students' Preference Matrix

	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14
S1	5	4	13	6	11	10	12	9	8	14	3	7	1	2
S2	1	4	13	2	5	7	3	6	8	11	12	9	10	14
S3	6	9	1	10	11	8	7	2	12	3	14	4	13	5
S4	14	1	5	12	6	4	8	11	3	7	2	13	9	10
S5	7	11	4	14	13	1	6	5	2	8	3	10	12	9
S6	4	10	2	5	14	13	8	12	1	6	7	11	3	9
S7	7	14	8	4	13	9	2	1	5	12	10	11	6	3
S8	11	13	14	1	5	3	8	10	6	9	4	7	12	2
S9	6	10	12	4	8	1	11	3	13	5	9	14	2	7
S10	10	5	13	9	4	3	7	8	6	12	2	11	1	14
S11	5	14	8	1	9	2	7	3	10	6	12	4	13	11
S12	9	7	5	2	4	14	10	6	8	3	1	13	12	11
S13	10	13	14	8	6	12	9	5	7	11	4	3	1	2
S14	7	10	8	2	9	4	11	6	5	13	3	14	12	1

Table 2 Professors' Preference Matrix

	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14
S1	8	13	3	7	7	5	11	5	10	7	12	6	5	11
S2	5	3	1	10	11	4	13	14	13	11	13	9	14	13
S3	14	14	12	8	4	13	14	8	14	4	3	1	8	14
S4	9	10	10	2	14	6	1	1	8	14	14	10	1	1
S5	10	12	14	9	13	11	5	9	6	13	7	11	9	5
S6	4	9	11	4	1	10	3	2	12	1	5	8	2	3
S7	3	6	6	11	6	12	8	7	9	6	1	7	7	8
S8	2	1	13	6	5	9	10	3	5	5	4	2	3	10
S9	12	8	5	5	2	8	6	10	7	2	6	12	10	6
S10	6	11	7	13	8	14	9	6	11	8	9	3	6	9
S11	13	4	9	3	3	3	4	12	4	3	2	14	12	4
S12	1	2	2	14	10	7	7	4	3	10	8	4	4	7
S13	11	7	8	12	12	1	12	13	1	12	10	13	13	12
S14	7	5	4	1	9	2	2	11	2	9	11	5	11	2

Table 3 Comparison of Proposed Algorithm and BAMP alone

Preference	1	2	3	4	5	6	7
BAMP alone	3	1	3	5	4	4	8
Proposed Algorithm	5	3	2	6	4	3	5
Improvement	+2	+2	-1	+1	0	-1	-3

Table 3 shows that number of students assigned to their first and second preferences improved by 2 with the proposed method. In the same token, assignees who are assigned to their 7th preferences improved

by 3. Departments usually have nearly 190 students at the senior year and around 20 to 25 faculty advisors. Therefore, the problem seems to be challenging without a decision support system.

Results and Conclusions

The following are some teachings and certain research issues.

- Senior projects appear to be a significant milestone at the college education.

- Assignment of students to advisors may encourage or discourage students as well as professors.

- Proposed method treats this issue within the frame of a survey representing students and professors expectations one from the other.

- Classical mathematical models don't match the reality.

- Our proposed method outperform similar other approaches.

- Crisp preferences versus fuzzy preferences must be analyzed to represent deeper perceptions on preferences.

- Mobile and internet based decision support system can be very instrumental in deployment level as a follow-up study.

- Impacts of shorter and longer preferences should be further researched.

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Leadership Challenges of Charter School Principals

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Abstract

There are different kinds of schools for pupils to attend and get educated. Charter schools are one those options, which are "publicly funded elementary and secondary schools that have been freed some of the rules, regulations, and statutes that apply to other public schools, in exchange for some type of accountability for producing certain results, which are set forth in each charter school's charter" (www.nea.org). In this article, firstly, a brief explanation of the importance of education is presented as the introduction which states, many studies indicate that there is an increase in the enrollment of the schools, however, there are studies demonstrating that not all public school pupils are successful enough. Second, the background of charter schools in the U.S. and charter school financing are identified. This study are presents that there is a significance increase of the enrollment of charter schools. Following this, the overall principal issues (both charter and public school principals) are discussed. This study is also highlighted that, the leadership of charter school principals is an essential aspect of the success of charter school. Finally, although the overall success of charter schools is much better than public school, transformational leadership is suggested as the position of the authors which is argued to improve the overall success of charter schools.

Keywords: Charter Schools, Public Schools, Principals, Transformational Leadership

Modeling the Repurchase Option on Equity

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Abstract

Stock repurchases have generated significant interest among academics and made headlines in the news in the last two decades. In order to gain deeper insight into the impact of repurchases on the concerned parties, we model the interaction between these parties using game theory. We consider a tri-party scenario that involves the manager, the corporation, and an uninformed independent investor. The manager, who holds the repurchase option, may or may not choose to exercise this option. We construct the pay-offs for the three parties for two cases: option is exercised; and option is allowed to expire without exercise. We then proceed to empirically test our model using a sample of U.S. firms over a period of thirty years.

Keywords: Share Repurchase, Game Theory, Option Modeling

Comparing the Academic Success of Community College Transfer Students versus Traditional Four Year Students

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Abstract

Community College student enrollment has increased more than 53% over the last 20 years (National Association of College and University Business Officers). Some reasons for this trend may include cost reduction and general preparedness for post-secondary education. Our study analyzes the characteristics of transfers versus traditional students in terms of: GPA, number of courses/credits each semester, work status and enrollment (full-time or part-time). This research aims at comparing the academic performance of transfer students versus traditional 4 year students at a singular university, in the areas of graduation rates and overall grades in upper division courses.

Keywords: Community Colleges, Transfers, Academic Success, Graduation Rates

Do Popular Management Techniques Improve Firm Performance? Evidence from Turkish Firms

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Abstract

Relying on the premises of Darwin's evolutionary theory, this study essentially investigates the relevance of strategic fit and its applicability to firms operating in a key emerging market, Turkey. To this end, we examine the relative use of popular management techniques and their impact on improving firm performance. Drawing on a sample of 223 large scale manufacturing firms in Turkey, we first measure the implementation level of a large set of management techniques and how their use varies with respect to firm specific characteristics. Then, we measure the effects of these techniques on firm performance. Our findings indicate that there exist some significant differences between indigenous and foreign owned firms in terms of the relative use of popular management techniques. We also tend to corroborate our view that implementation level of these techniques would enhance firm performance for this sample of firms. Finally, our findings provide some important managerial implications for firms operating in other key emerging markets.

Investigating Forensic Science's Bumpy Transition from Small Scientific Field to Large, Dynamic Industry

Kevin Lothridge

Abstract

In an era where customer-centric businesses pride themselves on providing top-notch customer service, clear customer expectations, a transparent environment and rapid turnaround times, forensic service providers are far behind the curve. (The next time your car is broken into, try tracking the evidence like you would a package at the Post Office). But it's not just customer service issues that are weighing down the industry, forensic science is facing numerous cultural and oversight challenges as well. The field has few established governing bodies, in most states, laboratory accreditation is voluntary, analysts may or may not need certification, licenses are generally not required, nor is continuing education – if it's even available. Under all these challenges, now it's not just the crimes that make the headlines. A single unethical analyst can put at risk the outcome of tens of thousands of cases, creating a PR crisis that outweighs all the hard work the laboratory has ever produced. All this is happening as the public is more focused on forensics than ever before. Sensational cases broadcast on television and shows like CSI captured the public's attention, forcing forensic science into the spotlight. And under the microscope. How is the forensic science industry handling its massive growth and clear challenges? What changes are being proposed at the Federal level? What innovative solutions can be implemented now? What cultural challenges come with changing business as usual in a scientific laboratory context? This proposed presentation features the Chief Executive Officer of the National Forensic Science Technology Center. He will investigate these pressing questions as we take a look at the bumpy ride that the field of forensic science is experiencing as it transitions from a small field of scientific professionals into a dynamic industry of its own.

Keywords: Forensic, Transition, Industry

Household Level Determinants of Food Insecurity and Coping Strategies in Rural Areas of Ethiopia: A Cross-Sectional Approach (Evidence from Tigray Regional State)

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Abstract

Even though the struggle to achieve food security at the household level in the rural areas of Ethiopia dated back a long period, the problem remained as a challenging goal to date. To intervene the problem, the need to understand the livelihood strategies of the rural households and identify the main factors which influence food insecurity at household level have got paramount importance to development practitioners and policy makers to come up with the best intervention programs. In light of this, the main objective of this study was to describe the current status of food insecurity and identify its major determinants in rural households of Tigray region with special focus on Kilte-Awlaelo and Gulomekeda Weredas. The data used in this study was obtained from household socio-economic baseline survey conducted in Kilte-Awlaelo and Gulomekeda Weredas under the supervision of Relief Society of Tigray,REST in 2011/12. To analyze the data, descriptive statistics like mean, standard deviation, percentage, and frequency distribution were used to describe the socio economic characteristics of the sample households. To identify the food insecurity status of households, food poverty line was developed using cost of basic needs approach and this was found to be ETB142/month. In order to analyze the incidence and extent of food insecurity in the study area, three of the FGT indices (head count index, food poverty gap index and food poverty severity index) were used. Accordingly, the incidence of food insecurity, food insecurity gap and severity of food insecurity in the study area were found to be 49.86%, 16.6% and 7.8% respectively.To identify factors determining food insecurity of households in the study area, a binary logit model was used. A total of thirteen explanatory variables were identified and included in the empirical model out of which family size, education of household head, land size owned, technology adoption, access to irrigation, access to credit and access to off-farm activities were found to be statistically significant. In times of food shortage, seventeen major coping strategies were identified to be adopted by rural households in the study area and index was calculated for each individual strategy the sum of which was used as the final computation of Coping Strategy Index,CSI. Accordingly, the coping strategy index computed for the food secure and food insecure households were found to be 88.13 and 112.33 respectively. The findings of the study imply that improvement in food security situation needs to promote effective family planning methods, adult literacy, access to irrigation, household technology adoption and off-farm labor income.

Keywords: Food Insecurity, Logit Model, Kilte-Awlaelo, Gulomekeda

Exploring the Financial Sustainability of International Non-Government Organizations

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Abstract

Non-government organizations exist for various purposes including, but are not limited to, charity, education, culture, religion, public health and safety, sports, advocacy, politics, philanthropy, fraternity, and civil rights. Non-government organizations represent a significant and growing sector not only in the United States, but also throughout the world. Because they are publicly funded, non-government organizations are faced with new demands for accountability, especially in times of financial crisis. The purpose of the presentation is to share findings from a study that assessed the impact of managerial decisions on the efficiency and effectiveness of international non-government organizations. The findings revealed trends in profitability, liquidity, solvency, and efficiency in such organizations. The presentation will include recommendations for improving the financial sustainability of international non-government organizations, and strategies for greater accountability to the public.

Keywords: Financial Sustainability, Non-Government Organizations, Non-Profit Organizations, Financial Decision

Digital Ecosystems: an Evaluation of Innovation and Economic Impacts

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Abstract

Business ecosystems and their information technology variant, the digital ecosystem, are defined as groups of business enterprises which cooperate for mutual advantage. Business research has suggested that these structured and restricted environments yield innovation, but this term is rarely defined in this research. Technology businesses operating in these business ecosystem environments often imply or state that they are technology innovators and that these technology ecosystems are the incubators of this innovation, but there has been little research to determine whether business ecosystems actually foster technology innovation, what this technology innovation entails, or whether protectionist restrictions inherent in these environments in fact hinder it. This paper examines business technology ecosystems in relation to information technology innovations. Using theoretical and historical analysis and examination of statistical data, the period of computing technology development from 1981 through 2011 is examined. This analysis examines the prominent technology ecosystems of this time period including the IBM PC, the French Minitel, Microsoft MS-DOS and Windows, the World Wide Web, the Apple IPhone and the Google Android smart phone. Analysis of business ecosystems and technology innovation is based on a theoretical model of innovation which distinguishes types and levels of innovation. Ecosystem controls, methods, structures and sources are also examined and categorized in this analysis. Success of the ecosystems is reviewed using available statistics and includes both economic measures of success, and measures of technology development, diffusion and impacts of network effects on potential markets. A model of information technology innovation and development within ecosystems is formulated. This model identifies criteria for technology innovation and is used to rate the prominent technology ecosystems of the time period addressed. Results provide some evidence of incremental innovation both within and external to these ecosystems, and provides some evidence that the type of technology ecosystem, and the structure and controls of the ecosystem impact technology innovation

Keywords: Digital Ecosystems, Technology Innovation, Business Ecosystem, Business Entrepreneurship

Implications of Market Uncertainty on Sustainable Bioenergy Development

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Abstract

Current study analyzes the impact of market uncertainty on farmers' willingness-to-grow energy crops in Missouri and Iowa. The results of study show that current level of farmers' willingness-to-grow energy crops is low due to high market uncertainty and aversion to risk. Hence, there are barriers to accomplishing the goal of producing 21 billion gallons of cellulosic biofuel by 2022, as set by the Energy Independence and Security Act of 2007. The results of the ordered probit regressions show that farmers with higher education levels and lower farm sales are more willing to grow energy crops. The results of this study show that currently growing energy crops is more attractive to small farms as a source of risk diversification, rather than an alternative crop production in the big scale by large farms.

Keywords: Bioenergy, Energy Crops, Market Unverstainty, Ordered Probit

A Mature Reflection on Hofstede's Cultural Dimensions

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Abstract

Geert Hofstede, who is a remarkable organizational psychologist whose research is based on a large questionnaire survey of IBM employees working in 53 different countries, which was conducted between 1967 through 1973, theorized that there were four main dimensions, which could diversify the cultures of our world. The purpose of this paper is provide a mature reflection upon the work of Hofstede by focusing on evolution of cross cultural studies and the origin of Hofstede's theory, relevance to today's organizations, applications which have been implemented, the purpose of the research and other theories may affected by Hoftede's work. In this respect, within this study the evolution is cross-cultural study has been demonstrated and previous cross-cultural studies have been explained briefly. Secondly, the origin and purpose of Hofstede research have been identified. Following this, the core and the validity of Hofstede's research have been argued by identifying the cultural dimensions. Thereafter, the significance of Hofstede's theory has been identified. Finally the application of Hosftede's theory (GLOBE Study) has been described by comparing with some other cross-cultural studies since Hofstede's contribution in cross-cultural studies is not only being a pioneer, additionally his work has been an inspiration source to other empirical studies such as GLOBE study.

Keywords: Geert Hofstede, Cross Cultural, Study Cultural, Dimensions GLOBE Study

Labor Force Creativity and Economic Growth: A Panel Study

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Abstract

Human capital has a growing importance on economic growth in the last decade. Innovation, entrepreneurship and one more step ahead the creativity of labor force are the main properties to be analyzed. This paper tests the endogenous relationship between creative industries export volume and economic growth using a panel dataset for OECD countries for the period 2001-2012. We employed the creative goods export volume/Labor force as a proxy for creativity of labor force. In particular we apply unit-root tests and causality methods that look for the causality between economic growth and creative industries export volume.

Keywords: Creativity, Human Capital, Economic Growth, Panel Data Analysis

Tourism Industry Stock Performance: A Comparative Investigation

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Abstract

Stock price performances (returns) of listed companies in tourism industry, specifically hotels, will be examined in detail. After finding performances, these values will be compared to the market performance. As the next step, factors such as tourist arrival numbers will be used to investigate if the stock performance can be attributed to factors that are not market related. The investigation will than be replicated for companies listed in BIST (Borsa Istanbul) for comparing the Turkish peers to their US peers. Resulst will be useful in determining characteristics of the tourism industry stocks, and evaluating their financial performances.

Keywords: Stock Price Performance, Hospitality Industry Performance, Performance Comparison

Visitor Satisfaction of Muziris Heritage Site in Kerala

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## Abstract

Heritage tourism is a concept, which can be used as a tool to replenish tourism and also help out to preserve heritage which were inherited from our predecessor to the future generation. Muziris is an ancient port town in Kerala, which slept in the bosom of the earth for two thousand years and it is one of the important part of the Kerala history. As a part of the excavations many things like utensils, clothes, coins, agricultural tools and many inscriptions on plates or papyrus were found. Relics were unearthed at various sites in Northern Parur and Kodungalloor regions of Kerala, and these objet d'art enlighten us the way of life of people of the bygone era. This study aims to find the significance and potentials of Muziris Heritage Site on the society and to identify the relationship between cultural and heritage destinations attributes and the satisfaction of tourists who visit Muziris Heritage site. The study has acknowledged on the various aspects of visitor's satisfaction in Muziris Heritage Site. The findings bring to light that, the Muziris Heritage Project area is an outstanding example of buildings and archaeological sites and landscape which illustrates a significant phase in the human history of Kerala. The intangible heritage helps the visitor to gain a deeper understanding about the place and the culture. Oral traditions and expressions, including language, performing arts, social practices, rituals and festive events; knowledge and practices concerning nature and the universe; traditional craftsmanship, are all various aspects of the intangible cultural heritage. The suggestions of the study are to improve the infrastructural facilities at the destination, so that it will add to the satisfaction level of the tourists and in turn provide employment opportunities to the local community as guides.

Keywords: Muziris Heritage Site, Heritage Tourism, Visitor Satisfaction

Introduction to Heritage Tourism

Culture, Heritage and the arts have long contributed to appeal of tourist destination (Weiler & Hall). The heritage tourism includes various historical monuments, archaeological sites, railways, battle grounds etc. The objective of the heritage tourism is to preserve the historical monuments for the future generation. The importance of cultural heritage tourism is innumerable, it can create employment opportunities as well as economic opportunities and it also helps to preserve the past culture of a civilization or the culture which created a harmony among the people in the past. Another important advantage of heritage tourism is that it can be used as a tool for renewing the tourism and to preserve the important cultural aspects for the future generation. The heritage tourism possesses a number of objectives that must be met with the sustainable development, preservation and conservation and also helps to earn revenues for the host community. The heritage tourism not only means the tourism related to monuments and historical sites, but it also includes intangible products too.
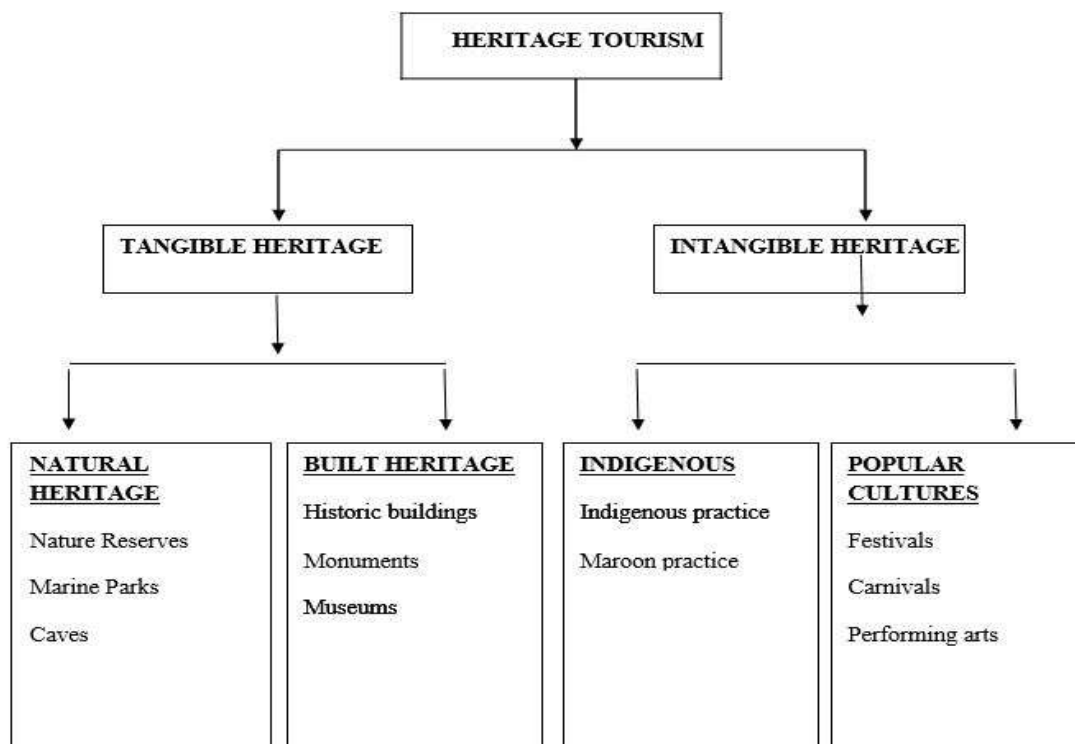
(Fig 1.1)

Heritage Tourism in India

Tourism in India is one most revenue earning industry. Among various tourisms in India heritage tourism is emerged as one of the most important segments that attract tourists to India. Heritage tourism can be combined with the any other tourism like religious tourism, cultural tourism, wildlife, ecotourism etc. Heritage tourism is also known as the cultural tourism is an important element of the overall tourism system in India. It is used as tool of appreciation for the past that we got in legacy. Heritage tourism is one of the oldest forms of tourism and travel which includes all kind of heritage. For example a visit to the jail in Andaman or the Ajanta caves in Maharashtra etc comprises of heritage tourism in Indian context. It is very difficult to differentiate the heritage tourism from other tourism because, the tourists who are visiting other destinations like adventure destinations, hill stations, and other leisure places will also visit the heritage sites like Tajmahal,Redfort, Tirupati etc. In India UNESCO has identified 27 world heritage sites and with the support of the state government these places were developed as heritage circuits. The statistics shows that the number of tourists visiting heritage sites is increasing year by year.
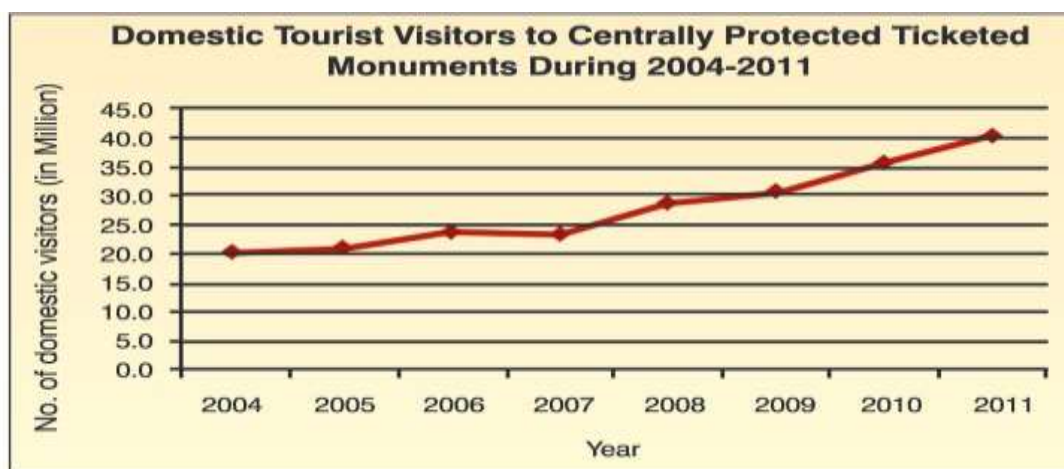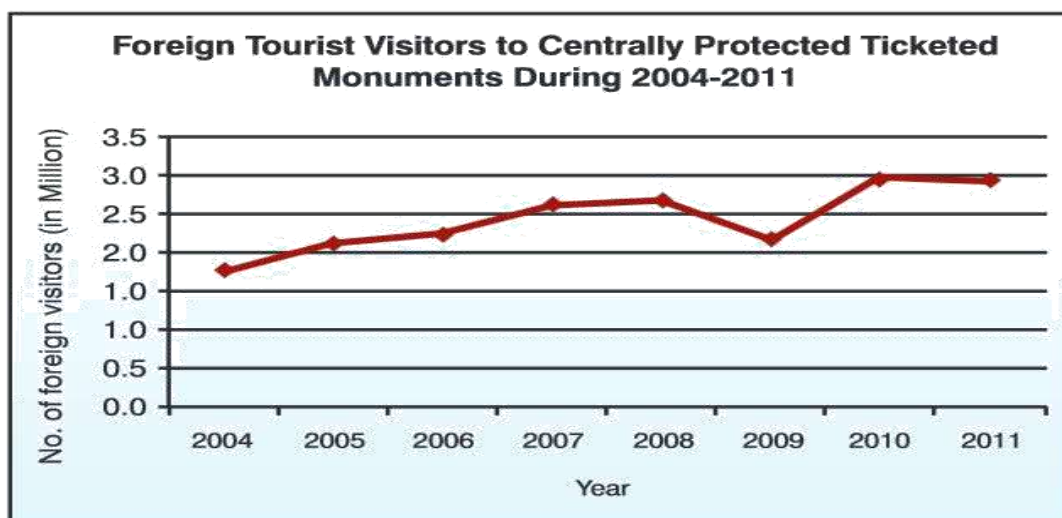

Fig 1.2)
Source: - Archaeological Survey of India (ASI)

(Fig 1.3)
Source: - Archaeological Survey of India (ASI)

Heritage Tourism in Kerala

Kerala the God's own country the southernmost state in India, The name Kerala was originated from two words "Kera" and "Alam", which means Coconut and land respectively so that Kerala means the land of coconut trees. Kerala was a part of old Thamizhagam which was ruled by Chola, Chera and Pandya Kings so that the language, arts, music, dance etc had an influence of Tamil. Kerala had rich culture and heritage which was influenced by three religions of Hinduism, Islam and Christianity and it has a great tradition of culture and tradition which were displayed through the monuments Bekal Fort, Ananthapur Lake Temple, Chandragiri Fort and the Lake Temple in Kasargod; St. Angelo's Fort and Thalassery Fort in Kannur; Pazhassi Tomb and Edakkal Caves in Wayanad; Tippu's Fort and Thrithala Temple in Palakkad; Cheramman Juma Masjid (The first mosque in India), Kalamandalam, The Thrissur Pooram, St. Thomas memorial in Thrissur; St. Francis church, Jewish synagogue, Dutch palace, Hill palace, the Cherai Beach in Ernakulam; The Hill Station in Munnar; The Bird sanctuary in Thattekkad; Marayoor Caves and The Arch dam in Idukki; The back waters of Alappuzha and Kumarakom; The bird sanctuary in Kumarakom; Kaviyoor rock cut temple and Niranam Church in Pathanamthitta; Thangassery fort in Kollam; Wild life sanctuaries of Neyyar and Periyar; Padmanabhapuram palace, Vizhinjam rock cut temple, Kanakakkunnu palace, Koikkal palace, Kuthiramalika palace Kovalam Beach in Thiruvananthapuram.

Muziris Heritage Site

Muziris is one of the important part of the Kerala history, many remains have been unearthed at various sites in Northern Parur and Kodungalloor regions of Kerala. As a part of the excavations many things like utensils, clothes, coins, agricultural tools and many inscriptions on plates or papyrus were found. And these artefacts tell us the lifestyle of people of that time. The Chinese items, coins and Arabian pottery pieces etc showed that Muziris had a trade contact with these countries. It was considered as the focal point of commerce for over 2500 years. It traded various items ranging from spices to precious stones with the Greeks, Arabs, Chinese and other parts of the world.

Pattanam Archaeological Site

Pattanam Archaeological Site is one of the prominent location of the Muziris Heritage Project. Pattanam was a site which was included in the first phase of the Muziris Heritage excavation on which the Kerala Council For Historical Research has undertaken a massive research project. It is one of the multidisciplinary excavation conducted by the Government of Kerala. The objective of the excavation was to identify the historic settlement patterns and to find the ancient Indo-Roman port of Muziris on the Malabar Coast. Government of Kerala has initiated the Muziris Heritahe project in order to identify the historical and cultural significance of the port of Muziris. The entire project was designed in such a way that the local community can involve and integrate in all the developmental initiatives.

Project Highlights

Its the largest heritage conservation project in India, the first Green Project of the Government of Kerala, there was the involvement of multiple Government Departments and convergence of more than 25 museums to appreciate the Muziris Heritage. A research and academic institution established to support the project, where major improvements in infrastructure were made and there was integration with local communities through native resource persons for data collection, survey etc.

Project Area

The Muziris Heriatge project area was launched in the two municipalities as project Phase 1in Kodungalloor and Chendamangalam. Later the project extended to other neighbouring municipalities.

Need for Study

Since Muziris is a heritage site there are so many tourists and visitors who are interested to study and know about the culture and heritage of Muziris. The need for my study is find out the attitudes of these tourists and visitors towards the Muziris Project and in what perspective are they visiting these places. Since Muziris Heritage site was involved the participation of the local community it has certain impact on the local community in terms of monetary as well as cultural benefits too. There are certain attributes that can influence the visitors satisfaction of the heritage destinations, so that in Muziris project also there will be such attributes which made this project a successful one.

Statement of the Problem

Heritage tourism in Kerala plays an important role in attracting tourists to the state. The Muziris Heritage Site was an old port in ancient times. The problem of the study is to analyse the visitor's satisfaction of Muziris Heritage site. Most of the visitors who are visiting the destination did not have much idea about the importance of the destination. The mainly focused to find out the factors that give satisfaction to the visitors and to find out what all developments they need in a heritage destination to improve the visitor's satisfaction.

Scope of the Study

The Muziris Heritage Site (MHS) stretches across from the municipality of North Paravur in Ernakulam district to that of Kodungalloor in Thrissur district. It includes four panchayats in Ernakulam district Chennamangalam, Chittatukara, Vadakekkara, Pallippuram, and three panchayats in Thrissur district Eriyad, Mathilakam and Sreenarayanapuram.

Objectives of the Study

- To examine the significance and potentials of Muziris Heritage Site on the society.

- To identify the relationship between cultural and heritage destinations attribute and the satisfaction of tourists who visit Muziris Heritage site.

Review of Literature

Kumar, A.K., Manjunath, S.J., & Lakshmi, P. (2012). In their study 'Tourist perception towards service quality in Bandipur national park' explains that consumer perception is an important aspect in the service industry. Manjula Chaudhary and Abhishek Aggarwal (2012). This paper mainly focused on the tourism satisfaction which refers to the emotional state of tourists after exposure to the experience. It is the post-purchase evaluative judgment and is the outcome of the customer's needs, wants and expectations throughout the product life, resulting in subsequent repurchase and loyalty. Of late, visitor interest in heritage sites has been increasing the world over and tourists are becoming more demanding also. It is pertinent on the part of the heritage destination planners to provide maximum satisfaction to the visitors so that they are the repeat visitors. In this paper it has been strived to find out the attributes of attraction sites which were above the expectation score of the tourists and the attributes which need immediate attention. Perunjodi Naidoo, Prabha Ramseook-Munhurrun and Premita Seegoolam (2011). This article aimed to identify the visitor satisfaction among the nature based tourists. The nature based tourists plays an important role for the economic development of the host community as well as for the tourism business. In order to retain the satisfied customers it is important to maintain the nature based tourism

destinations. The main objective of the study is to analyse the factors that influence the satisfaction level of the visitor and also it aims to identify the link between the nature based tourism attractions and overall satisfaction and the loyalty among the visitors the findings of the study was that training must be given to the staffs it is a crucial part in the success of the destination and also found that there is a relationship between the nature based tourism attractions and satisfaction of the tourists and their loyalty towards the destination. Fullerton, Leanne, McGettigan, Kathleen, Stephens and Simon (2010) aims to examine the integration of management and marketing practices at heritage sites in Ireland. A combined commitment to visitor research by the individual heritage sites could provide information to the representative organizations to facilitate target marketing and improved onsite management. Arabatzis&Grigoroudis (2010) states that the National Park of Dadia– Lefkimi–Souflion is one of the 27 protected areas of Greece, for which a management authority has been established. It is of major ecological value, due to the existence of a large number of birds of prey. Today, the protection status of the area does not exclude the continuation of human activities, particularly in relation to outdoor recreation activities. Kolar,Tomaz,Zabkar and Vesna (2007) investigates the concept of authenticity that represents one of the driving forces of cultural tourism and an important feature of a tourist offer, which makes it interesting for the marketing of cultural heritage sites. An explication of its theoretical background shows that authenticity is an important but problematic concept which is insufficiently explored in the field of tourism marketing. Henkel, Agrusa and Tanner (2006) stated that in the tourism industry, the perceptions of a tourist destination are critical to its image. Image can be either a mental image of a product created by a marketing department or an associative image of a product that is developed by the consumer. Tourism destinations must be careful about their image so the perception that they have is not different from the way that they are perceived by potential travellers. Wendy Spinks (2005) through the article mentions the destination branding techniques and the other tour promotional strategies used by the national tourism boards of various countries including Australia and USA. The article suggests improving destination branding and promotion techniques through PPP. Black Rosemary and Weiler Betty (2005) examine a range of quality assurance and regulatory mechanisms that have the potential to enhance the performance of tour guides with respect to the key roles they are expected to perform. The article revealed that guides are underperforming in some areas.

Methods of Data Collection

Primary and secondary data have been used for collecting information for the study. Primary data was collected with the help of an online questionnaire which was sent to members of Kodungalloor groups in social networking sites as well as distributing copies to tourists at the site. An unstructured questionnaire was also used to collect information from government officials.

The secondary data for the topic under study was collected from various books, articles from journals, magazines, newspapers and the internet and partly by recording the observations made during personal site visits.

Tools Adopted for the Study

Two sets of questionnaires have been used for the study. One structured five point scale questionnaires were administered to the tourists. The questionnaire consisted of nominal scale, which was used to collect demographic information from the respondents and also a 5 point Likert Scale has been used to understand their preferences and features where a scale of 1 (irrelevant) and up to 5 (very important) has been used. The questionnaire was standardized with the help of a pilot study. A pre-test was done on the questionnaire with a sample size of 30 before the final use in the study. The objective of pre-testing is done to determine the suitability of the type of questions, their content, order and length of questionnaire. A Cronbach alpha inter item test was conducted to determine the reliability of the data. A score of 0.785 was obtained.

The government officials, tourist guides were interviewed through an unstructured questionnaire.

		N	%
Cases	Valid	20	100.0
	Excluded[a]	0	.0
	Total	20	100.0

a. List wise deletion based on all variables in the procedure.
Reliability Statistics .785

Technique used in analysis of data Technique is used in analysing the data is:

Correlation Method: It is a descriptive statistics to understand and possibly one of the most widely used. The term correlation literally means co-relate and refer to the measurement of a relationship between two or more variables. A correlational coefficient is used to represent this relationship and is often abbreviated with the letter 'r.' A correlational coefficient typically ranges between −1.0 and +1.0 and provides two important pieces of information regarding the relationship: Intensity refers to the strength of the relationship and is expressed as a number between zero (meaning no correlation) and one (meaning a perfect correlation). And Direction refers to how one variable moves in relation to the other. A positive correlation (or direct relationship) means that two variables move in the same direction, either both moving up or both moving down.

Hypothesis

H0 - There is no relation between cultural and heritage destination attributes and the satisfaction of tourists who visit Muziris Heritage Site

H1- There is relation between cultural and heritage destination attributes and the satisfaction of tourists who visit Muziris Heritage Site

Findings

The statistics shows that the respondents have a positive image on the Muziris Heritage site ie, 65 respondents are agreed to the positive image of the site. While only a few percent of the respondents are strongly agreed to the positive image of the site. And a few fells that Muziris did not give much influence to them

The staffs have a positive attitude to the guests, 60 respondents are neither agreed nor disagreed to the attitude of the staffs. While only a few percent of the respondents are strongly agreed to the attitude of the staffs. And a few feels that staff did not show positive attitude towards the guest.

The visitors who visited the destination were satisfied with the overall product of the Muziris Heritage site.The statistics shows that only a few visitors were dissatisfied with the visit to the heritage site.

Most of the tourists had an opinion to conserve the Muziris Heritage site in a better way, The preservation of the heritage sites are satisfactory,but more and more methods can be adopted to preserve the culture and heritage and to create awareness to the public.

Correlations

		Satisfaction	No satisfaction
Satisfaction	Pearson Correlation	1	.408[*]
	Sig. (2-tailed)		.025
	N	30	30
Nosatisfaction	Pearson Correlation	.408[*]	1
	Sig. (2-tailed)	.025	
	N	30	30

*. Correlation is significant at the 0.05 level (2-tailed).

From the correlation table we can observe that values in the correlation table are standardized and range 0 to 1. And all the variables are highly correlated to each other. This shows that we have chosen a fair good set of independent variable to correlate with the dependent variables. So we can say that null hypothesis is rejected and alternate hypothesis is accepted. i.e. there is significant relation between the cultural and heritage destination attributes and the satisfaction of tourists who visits the destination.

Conclusion

Muziris is one of the important part of the Kerala history, many remains have been unearthed at various sites in Northern Parur and Kodungalloor regions of Kerala.Muziris Heritage Project area is an outstanding example of buildings and archaeological sites and landscape which illustrates a significant

stage in the human history of Kerala .The natural environment is of great importance to the status of Muziris Heritage Project. The networks of waterways have influenced and inspired the architecture and growth of the built heritage.

The intangible heritage helps the visitor to gain a deeper understanding about the place and the culture. All the intangible elements will be made visible to the tourist in their natural setting. Oral traditions and expressions, including language, performingarts, social practices, rituals and festive events; knowledge and practices concerning nature and the universe; traditional craftsmanship, are all various aspects of the intangible cultural heritage.

From these studies, it has been emphasized that the identification of tourists' characteristics and an investigation of the relationship between the attributes and tourists' satisfaction are needed. It is argued that such research efforts would help tourism practitioners and planners to have a better understanding of cultural heritage tourism and to formulate better strategy and planning about cultural heritage tourism. With these observations in mind, this current study was conducted. That means, tourists are satisfied in Muziris Heritage site and we have to act smart here and first, we have to create more information outlets in various markets. Second, Indian tourism industry and governments should work more closely with the cultural heritage areas to spread the awareness and remove hurdles. Finally, we have to work towards getting tie-up with various travel agencies & tour operators to build up awareness of quality among domestic and international tourists. There is no doubt that Muziris Heritage has immense potential and will receive more domestic and international tourists in future also to be the leader in providing cultural heritage tourism in the world.

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