# The methodology for the risk detection in non-public companies. Russia, NRU HSE

#### Makarova Vasilisa

## **ANNOTATION**

Risk-management and financial management are going to become the main components of corporate economic governance, for all the existing theories of financial management consist both of financial analysis, planning, and the allowance of the implied volatile of further incomes and costs. According to the methodology of a systematic analysis, ERM system must be presented as a multi-level system, which involves all employees in the process of risk management. The process of risk identification is in the focus of implementation ERM system. Classification should be matching the theoretical requirements of organization management and be externally and internally balanced. The providing method of classification drafting allows to develop methodological base for measure risk assessment in order to further integrated and complex enterprise risk management.

### **KEY WORDS**

the requirements for the risk classification, flexible and adaptable classification, business-process risk groups

## **JEL: G34**

### INTRODUCTION

Risk-management and financial management are going to become the main components of corporate economic governance, for all the existing theories of financial management consist both of financial analysis, planning, and the allowance of the implied volatile of further incomes and costs.

The modern economic environment differs from the economics of the past by the possibilities of identification and assessment of risk and effects of it implementation. In general, it takes an opportunity to minimalize risks, avoid them or to transfer them to the third party of the financial relations.

Modern risk-management is not the temporary process of the corporate risk reduction. It is the complete methodology of taking and managing risks.

The greatest part of solutions in business is related to the losses of the specific resources in sake of further uncertain profits. The core principle in the process of corporate governance is the ability of making choice between the quality of further risk and the amount of the possible profit.

The technology of risk-management is of dual nature.

In the shot term, the mechanism of risk-management can help to avoid risks to a group of stakeholders, but in long term perspective it can diminish the value for the shareholders. For example, the transfer costs of the next period will have negative impact to the amount of NOPAT.

Risk-management has a shot history. The most recent theory of venture risk-management is the enterprise-wide risk management. The ERM (enterprise-wide risk management) is the system internal control and corporate government. The ERM ought not only to protect company, but also take into account all modern mechanisms of a creation value for stakeholders. In other words, the ERM is the activity, which targets both to protect company from indefiniteness and suspense, and to create the value for stakeholders.

## AIM AND METHODOLOGY

Nowadays, a public company is able to provide information about risks to shareholders and potential investors. That is the requirements of the majority of the stock markets regulators. Such companies have quite well-developed tools of risk assessment and risk management (Fig.1). At the same time, the management of non-public companies are interested in ERM implementation in governance process, for it is the necessary element of internal control. For such companies the methodology of risk management will be directed not only at compliance with external requirements, but at the improvement of the internal control and risk reduction measures such as NOPAT, FCF, company Market Value, Book Value or Carrying Value. The preferences in choosing a financial indicator under risk are demonstrated in fig. 2. The introduction of corporate standards of risk management is a very time-consuming process that does not allow to receive a satisfactory result. The main efforts is made to identify the risk factors related to their activities. This paper looks into the process of identification of risk factors non-public companies.

According to the methodology of a systematic analysis, ERM system must be presented as a multi-level system, which involves all employees in the process of risk management. So, the ERM is the summary of coherent elements integrated in one process in which both CEO's and the staff participate in revealing and managing potential risk factors.

The main goal of ERM is to provide the most effective capital turnover and to increase market value of assets. At the same time, the ERM is the process of detecting, understanding, measuring, monitoring, reporting risk and risk control.

So, the process of risk identification is in the focus of implementation ERM system.

First of all, it is the identification of certain risk sources and further assessment of the results. As a rule, one of the following methods is used for gathering original information. All the common methods are the next:

- 1. Questionnaire;
- 2. Analysis:
- financial statements;
- current statements:
- organizational charts;
- flow maps reflecting company business-process;
- 3. Inspector visits on industrial premises;
- 4. Consulting with inner and outside specialists.

The elements of these methods are useful in financial management (ARR, IRR, break-even point, etc.) and most of them are based on accountancy and do not include the expectations and forecasts. They are not oriented at VBM and do not take into consideration the specificity of each particular company. The result of those methods is a compilation of diverse and contradictory risk that cannot often be compared. Types of risk in the list usually are heterogeneous and disparate.

The requirements for the classification creation are based on the existing risk management theories and the result of recent research. The requirements are the following:

- Classification should be value oriented and balanced on the threat sources.
- Classification should be flexible and adaptable and should consists of fixed and adjustable parts.
- Classification should be based on a unified methodology for using in a different situations and cases.
- Classification should be compatible with the basic principles of management.

In our opinion, we can presume business processes, areas of governances and management environment as a threats, thus reduce or increase value sources. The methodology for the detection of business processes is borrowed in BSC theory.

Business processes are grouped in two groups: main and auxiliary and they are of four types: planning, supply, manufacturing and sales, after-sales services.

Auxiliary business processes are determined separately in each case individually for each company.

Marketing, organization, financing, HR-management are the areas of governance.

Environment, stakeholders, shareholders, the social environment and the state refer to management environment.

The basis of classification is a projection of the business processes on the areas of governances and management environment in accordance with proposed dividing.

The ability to define private risks is the flexibility of the classification. Private risks are identified at the intersection of business processes with areas of governances and management environment. Further private risks are arranged into groups and higher level classes. Therefore the mode is being implemented at the level of the individual enterprise with the use of private risks. General view of the classification is presented in the fig 3.

Private risks are the primary risks identified in the projection of the business processes on the areas of governances and management environment. Four groups of risk are formed as a result of the projection. First eleven risk groups (right vertical column in the table) are formed as a projection of areas of governances and management environment on the business processes. That are management and governance risks.

Risk groups formed as the projection of the business processes on the areas of governances and management environment (at the bottom of a table) are business-process risk groups. The consolidation of risks in business processes, areas of governances and management environment are the general enterprise risks (left vertical column in the table). Integral risk is determined by summing-up the all-risk groups, but that kind of risk has the theoretical meaning and does not is not suitable for use in practical purposes.

In order to form a General concept of risk management all of the identified risk factors should be split on the horizon of planning (operational, tactical, strategic). This splitting is necessary for solution of important methodical task: the formation of the spectrum of risks and risk profile.

Spectrum of risks is the static category. Spectrum of risks changes rarely and on under the influence of economic environment. The recommended composition of the spectrum of risk is about five main strategic risks. Spectrum of risk consists of only strategic risks.

Risk profile is more dynamic category and usually changes more often than once a year. Risk profile consists of operational and tactical risks, sometimes includes private risks.

### RESULTS

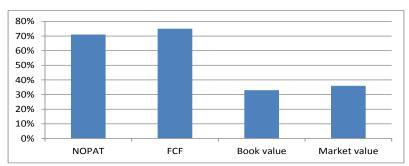
Analysing and the following implementation of the classification all the possible risks lies in the base of ERM for non-public. According to the recent principles of management, earch classification should be matching the theoretical requiments of organization management and be externally and internally balanced. The internal balance of proposed classification is between private and integrate risks, the external - between management environment and risk factors. The dividing on the planning horizons helps to achieve purposeful internal balance. The providing method of classification drafting allows to develop methodological base for measure risk assessment in order to further integrated and complex enterprise risk management.

Fig.1 Risk-management Standards

Developer	Overview	Application area
AS/NZS 4360:2004.	Purpose of the standard is the detecting, understanding, measuring, monitoring, reporting risk and risk control. Standard is useful and applicable to various enterprise and private person activities. The standard defines the main requirements to the risk management process and is not specific to a particular industry or economy.	This Standard is recommended, but not obligatory and may be applied to a very wide range of activities, decisions or operations of any public, private or community, enterprise, group or individual.
A Risk Manageme nt Standard. FERMA, 2002.	It is an optional requirement and is intended for maintains the system of risk management at any enterprise. Contains a clear sequence of actions and specific recommendations to use a specialist without any additional training	The Standard is for using in corporations or public organizations, for any activity whether short or long term.
COSO ERM - Integrated Frame- work., USA, 2004.	It is developed for using in the internal audit process in order to improve the reliability of reporting. The implementation of standard requires the involvement of an external consultant.	The application of Standard is necessary in order to meet the stock market requirements.
Basel II. 2004 Basel III. 2010 Basel Committee on Banking Supervi- sion.	It is designed to enhance the quality of risk management in the banking sector in order to strengthen the financial system as a whole. Is aimed at creating risk sensitive system, is based on quantitative risk assessment.  • Basel II focused on 'asset side' of B/S.  Basel III focused mostly on 'liability side': definition of capital, liquidity.  - Post the Global Financial crisis, focus of regulation on: longer-term/stable liquidity; leverage ratios (RWA framework can't be arbitraged); higher quality of capital (e.g. equity, CoCos, loss absorbing hybrids); higher quantity of capital.	The requirements are needed for use in the banking sector to strengthen the resilience of it.
Risk management ISO 31000:2009 ISO/ IEC 31010:2009 International organization for standardization	The most modern, international standards. Provides adaptable to the specific needs risk management. In the standard describes a program of introduction of the system of risk management. The detailed program of risk management is not provided. Enterprises should describe its scheme to support the risk management with the help of architecture risks, strategies and protocols.	It can be applied throughout the life of an organization, and to wide range of activities including strategies and decisions, operations, processes, functions, projects, products, services and assets. The International Standard can be applied to any type of risk, whatever in

nature, whether have positive or negative consequences.

Fig. 2 The preferences in choosing a financial indicator under risk



Source: Market Risk Management at Russian Power Companies. - www.kpmg.com

Fig.4 General view of the classification

	The main business processes		·ı·				
	Planning	Supply	Manufac- turing and sales	After- sales services	Auxiliary business processes	Risk groups	
Areas of governance							
1. Market-ing	$R_{mp}$	R <sub>ms</sub>	R <sub>mms</sub>	R <sub>mas</sub>	R <sub>ma</sub>	Marketing risks	
2. Organizat ion	$R_{op}$	R <sub>os</sub>	R <sub>oms</sub>	R <sub>oas</sub>	Roa	Organizational risks	
3. IT	$R_{ITp}$	R <sub>ITs</sub>	R <sub>ITms</sub>	R <sub>ITas</sub>	R <sub>ITa</sub>	IT risks	
4. Financing	$R_{\mathrm{fp}}$	$R_{fs}$	R <sub>fms</sub>	$R_{fmas}$	$R_{fma}$	Finance risks	
5. Innovatio	$R_{ip}$	R <sub>is</sub>	R <sub>HRms</sub>	R <sub>HRas</sub>	R <sub>HRa</sub>	Innovation risks	
6. HR	R <sub>hrp</sub>	R <sub>hrs</sub>				Personnel risks	
Management environment							
7. Share-holders	$R_{shp}$	$R_{shp}$	R <sub>shms</sub>	R <sub>shas</sub>	R <sub>sha</sub>	Shareholder action risks	
8. CEO's	R <sub>ceo'sp</sub>	R <sub>ceo'ss</sub>	R <sub>ceo'sms</sub>	R <sub>ceo'sas</sub>	R <sub>ceo'sa</sub>	CEO's action risks	
9. State	$R_{stp}$	R <sub>sts</sub>	$R_{sms}$	R <sub>sas</sub>	$R_{sa}$	Political risks	
10. Social environment	R <sub>sep</sub>	R <sub>ses</sub>	R <sub>sems</sub>	R <sub>seas</sub>	R <sub>sea</sub>	Social risks	
11. External (outer) environment	R <sub>eep</sub>	R <sub>ees</sub>	R <sub>eems</sub>	R <sub>eeas</sub>	R <sub>eea</sub>	External environ- ment risks	
	Planning risks	Procure- ment and logistics risks	Production and property risks	Trade- service risks			

## **CONCLUSION**

ERM system is a multi-level system, which involves all employees in the process of risk management. ERM is the summary of coherent elements integrated in one process in which both CEO's and the staff participate in revealing and managing potential risk factors.

The main goal of ERM is to provide the most effective capital turnover and to increase market value of assets. At the same time, the ERM is the process of understanding, measuring, monitoring, reporting risk, and risk control. The requirements for the classification creation are based on the existing risk management theories and the result of recent research. The requirements are the following: classification should be value oriented and balanced on the threat sources; should be flexible and adaptable; should be useful in a different situations and cases and should be compared with the using of based principles of management.

Traditional methods for gathering original information of themselves will only ever be an estimate. Additionally they can be badly parameterised, misused and built on assumptions which can quickly become out of date as markets change direction.

The offered method allows to take into account each of the sources of volatility of non-public company revenues and expenses.

## **BIBLIOGRAPHY**

- [1] Badalova Anna G. Methodological approach to developing balanced risk classification of the enterprise http://www.creativeconomy.ru
- [2] Hull John C. Risk management and financial institution. Pearson Education Inc. 2007.
- [3] Market Risk Management at Russian Power Companies. www.kpmg.com
- [4] Principles of good governance. www.prmia.org
- [5] House Linacre, Jordan C. Hill. The professional handbook of financial risk management.
- Reed Education and Professional Publishing LTD. 2000

Full name: Makarova Vasilisa

As. Prof., Dept of Financial Markets and Financial Management

Institution: National Research University Higher School of Economics

Street: 16 Sousa Pechatnikov street

City: Saint-Petersburg Email: vasilisa m@mail.ru