

## THE EFFECTIVENESS OF RISK MANAGEMENT IMPLEMENTATION IN RUSSIAN COMPANIES

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### ABSTRACT

This study is dedicated to features of risk management implementation for Russian companies preparing to become public. Methodology approach is based upon the idea that the levels of company governance may create a strong value oriented risk management system, while the standards provide the matching of stock exchange requirements. We made the assumption that not all Russian companies are equally exposed to the risks, the level of exposure estimates by measurement of differences between the actual value-basic indicators and forecasted. Also the problem of effectiveness assessment of risk-management is unsolved. This paper is an attempt to fill this gap.

**Keywords:** risk management implementation, levels of corporate governance, gradual restructuring of company management, risk-management standards, value-oriented risk management, effectiveness assessment of risk-management

### INTRODUCTION

Enterprise – wide risk management usually considered as the element of the Corporate Governance process, which has a special mission to provide the most effective capital turnover and to increase market value of assets.

The modern economic environment differs from the economics of the past. Now there is the need for the identification and assessment of risk and an understanding of the effects of its implementation. In general, it takes an opportunity to minimize risks, avoid them or to transfer them to the third party of a financial agreement.

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

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

The process of risk-management is of a dual nature.

In the short term, the mechanism of risk-management can help to avoid risks to a group of stakeholders. In the long term perspective it can diminish corporate value for shareholders.

For example, the transfer costs of the next period will have a negative impact on the amount of NOPAT.

Enterprise-wide risk management is the totality of coherent elements integrated into one process in which both CEO's and the staff participate in revealing and managing potential risk factors.

Different standards demonstrate the variety of risk-management models [COSO, FERMA, ISO 31000:2009 etc.], but the role of risk management for non-public companies as the part of Business Administration process seems to be an opportune. This approach is based upon the idea that the levels of company governance may create a strong value oriented risk management system, while the standards provide the matching of stock exchange requirements.

Despite the prevalence of this vision of risk management for non-public companies, it should be mentioned that the problem of its effectiveness assessment is unsolved. Moreover, there is no single methodology of such assessment. The statistical data collected by international and Russian organizations (such as KPMG or Marsh) also does not help to elaborate the approach because it covers more the sphere of the risk management performance than the effectiveness. This paper is an attempt to fill this gap.

We also made the assumption that not all Russian companies are equally exposed to the risks, and to estimate the level of exposure is possible by measurement of differences between the actual indicators BV, ROE, EVA and forecasted.

**The literature review.** The economic literature reviews revealed a tendency to define risk management as skills of managing both financial and non-financial risk aggregation [1,2,3, etc.]

In addition, the attention is paid to the integrated risk degree measured on the base of SNW, PEST, and SWOP methodology and the final risk degree is only the software product result. So, the key problem has not been solved and yet remains the problem of risk management effectiveness, but not of its implementation. This approach rises the problem of bureaucracy. From all the companies which applied international standards the most successful are those that use their own methodology.

Furthermore, the existing risk-management standards [4,5,6,7, etc.] provide an advanced model which is recommended to be applied to an already existing management system. There is a huge science discussion around the concept of risk management of a company [2,8,9]. The initial goal of risk management in practice of financial institutions is very simple - to reserve as much capital as it needs to cover any fluctuation in the market, to prevent losses and to keep interest of investors [10]. For the purpose of regulatory capital and banks' own economic capital is used some well-established risk, in particular Value-at-risk (VaR), that has become the industry standard because of its practical simplicity and a lack of agreeable alternatives [11].

The economic and managerial science literature defines enterprise-wide risk management as a concept with many definitions that are usually tied to particular consultancy services or software products. Basically though an ERM system is a deliberate attempt to break through the tendency of firms to operate in risk management silos and to ignore the enterprise risk, to attempt to take risk into consideration in business decisions much more explicitly than has been done in the past [1].

Professionals define the risk management concept as the core activity designed to help organizations maximize the risk-adjusted return on capital whilst, at the same time

transforming uncertainty, which is unmanageable and immeasurable, into risk, which can be identified, assessed and may be measurable.

A recent survey by management consultant Deloitte states that enterprise-wide risk management “continues to generate interest among risk managers. It seems intuitive that risk management might be the final “destination” for companies wanting to demonstrate advanced capabilities [1]. However, ERM continues to be an elusive concept that varies widely in definition and implementation, and reaching full maturity may take several years’.

Taking into account all these statements we will define risk management as one of the indispensable function of corporate governance aimed at a sustainable, trustworthy value oriented activity of a company. The current research logic is based on this definition.

**Aim and methodology.** Risk management is not well developed enough in the practice of Russian companies, even though it is consider being a part of the Corporate Governance process.

One of the problems of risk management which involves the everyday activity of a company is the integration of risk management techniques into the process of corporate economic governance.

It should be noted that the process of risk management is about preserving money to cover one group of risks, to insure others, to diminish a third one, or to assume all the remaining risks. All this activity is very important, but also a time and money consuming process.

So, the main problem is how to integrate effective risk management into a company’s management process. Which raises the question: “what is the most appropriate risk management system for the majority of Russian companies?”

A recent study, the results of which are to be shown in this article, revealed that the existing standards cannot be fully used by Russian companies because of large differences in legislative support; economic environment, implementation objectives and conditions, such as nontransparent financial systems.

Following the system analysis methodology we provide the next research logics:

First, we suggest, that the most demonstrative measure of qualified risk management in the corporate governance process is the difference between the numbers of actual and forecasted key economic indicators, like Booking Value or Economic Value Added. We also have to conduct a research in terms of CEO’s preferences in choosing key financial indicators as a measure of risk management quality for Russian Companies. Using the economic indicators helps to avoid special risk measures, like VaR, but helps to exam risk level of corporate governance.

Second: to design the most complete list of risks those have influenced or might have a probable impact on the core activity of a company.

The existing theory provides a various toolkit of risk identification. The main goal of our methodology is to get the original information. To complete the definition of the term risk we provide a special methodology, based on projection of business processes,

areas of governance and management environment. This methodology has to prevent formal approach in the process of risk identifying.

Third: to organize the risk oriented corporate governance by endowing each level of corporate governance with authorities to manage exact risks. The existing standards are oriented to creating a special risk department that detaches risk management from corporate governance.

To improve our statement we studied random group of companies, which have already implemented some risk management standard. Analysed companies are already implementing the international risk management standard in their corporate governance process.

What's more, the practice research helps to reveal the effectiveness of existing risk management practice. Also outlays of implementation in compare with further probable growth of chosen financial indicators show the effectiveness of management core activity.

**Research results.** Nowadays, a public company is able to provide information about risks to shareholders and potential investors. That is the requirement of the majority of stock markets regulators. Such companies have quite well-developed tools for risk assessment and risk management. So, if the implementation of risk management is necessary only to match stock exchange requirements, the application of the existing standards would be sufficient. The choice of the standards used depends on the listing requirements of each particular stock exchange.

At the same time, the management of non-public companies is interested in ERM implementation in governance process issues because it is the necessary element of managerial control [12]. 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 [13].

As can be seen, if a company wants to improve its core activity, it is necessary to provide original enterprise-wide risk management which might be based upon existing standards. Therefore, it is necessary to adjust the standard system for each specific company on the basis of the market in which it operates.

Different companies are affected by a variety of risks, and at the same time it also depends on the company's life-cycle stage. It is very important to understand what the risks are that most affect a company which operates in the Russian market.

For the purposes of research, the criteria the traditional classifications of risks (financial, operational, strategic, legal and compliance risks) used where.

To get the results of the questionnaire, 120 Directors of different Russian companies were interviewed. Venture Capital companies were not included in the survey due to specificity.

The results of research reveal that companies can be classified into four groups as follows (table 1). Risk groups are arranged according to the degree of influence from highest to lowest.

Table 1.

## Four groups of enterprises

Company groups	Risks	Features
Major mining corporations	Strategic risks Legal and compliance risks Operational risks Financial risks	As usual these companies have implemented severe risk management systems, but none of them are insured against the emergence of strategic risks and hazards
Medium-sized companies focused on the domestic market	Strategic risks, Operational risks , Financial risks, Legal and compliance risks	As a rule, such companies suffer from a lack of money, but this is caused by weaknesses of management strategy
Young companies	Financial risks, especially liquidity risk. Operational risks Strategic risks, Legal and compliance risks	The main goal of such companies is to achieve a break-even point and ensure profitable growth. Such companies usually don't have permanent customers and their cash flow is not consistent
Small companies	Operational risks Legal and compliance risks Financial risks, Strategic risks	The main distinctive features of this group of companies are the high costs and small number of clients. The financial results of operational risks can destroy sustainable activity of such companies.

The differences in answers reveal four groups of companies. Medium-sized companies focused on the domestic market are the most in need of risk management implementation. This is because their core activities are most affected by fluctuations in the domestic market.

The results provided in table 1 are similar to the results presented by the Audit Director Roundtable in 2009. It was shown that the influence of risk always has a financial result. Therefore non-financial risks can reduce the value of a company much more than financial risks.

The results of the Audit Director Roundtable research of companies of developed Western countries [2] are in Fig 1.

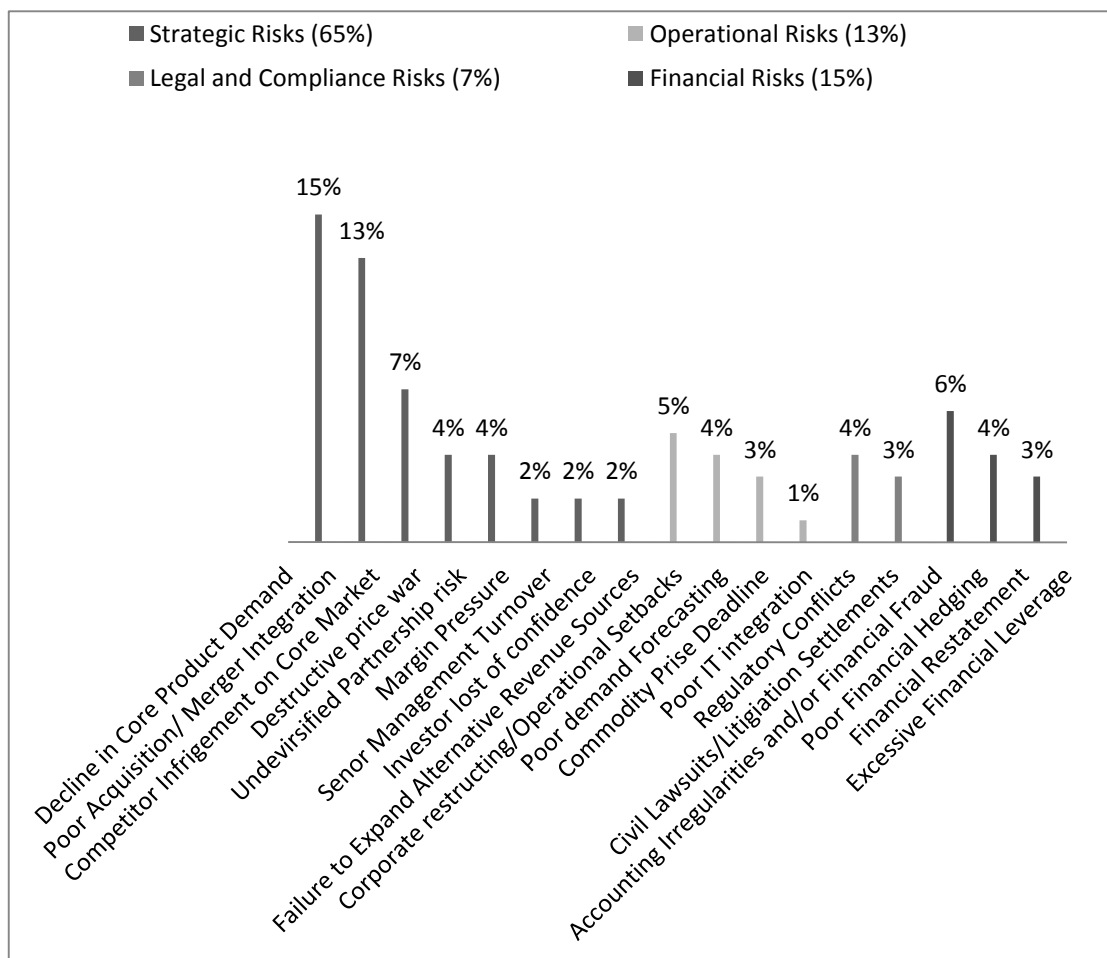


Figure 1. Drivers of Market Capitalization Decline.

Top 20% of Fortune 1000 (1988-2005)

The degree of influence of exposure in the company was also studied with an opinion survey of CFOs of several Russian companies. The degree of influence is measured as the change in company value depending on the group risk impact. The results are the following: strategic risks have the greatest impact (up to 65% in the real sector of the economy, and up to 53% in financial), financial risks are much less (16% in the real sector of the economy and 26% - in the financial sector).

The next question is about the integration of a risk management system. The main purpose of such integration is to involve all the divisions of a company in the risk management process and not to destroy everyday activity. A company whose management is very interested in the implementation of a risk management system usually does not have sufficient understanding of what risks are the most influential and how to identify the most crucial risks.

The fullest representation of the risks can be obtained after having examined the mutual influences of the business processes on the areas of governances and the management environment. Four groups of risk are formed as a result of this projection: Planning risks; Procurement and Logistics risks; Production and Property risks and Trade Service risks. Each is influenced by the levels of corporate governance. The mutual influence on the business processes in the areas of governances and management environment allows

managers to create the most complete picture of the risks. The suggested method allows to take into account each of the sources of volatility of non-public company revenues and expenses [2,10].

The research on the specific risks for Russian companies revealed the following dynamics, as shown in Fig.2.

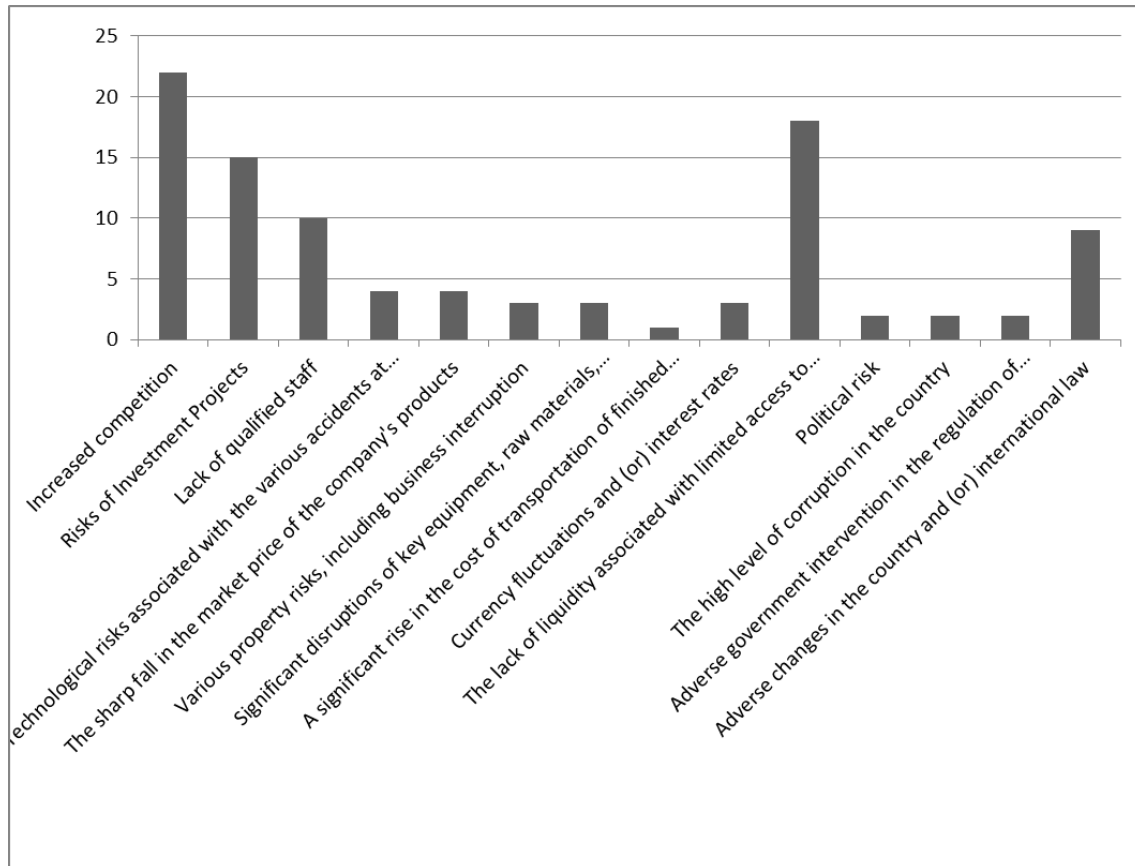


Figure 2. Specific risks for Russian companies

The dynamics in Fig. 1 is approximately consistent with the dynamics in Fig. 2. The comparison of dynamics revealed that:

1. Strategic risk are the most influential in both cases, but strategic risk list less for Russian companies, than for foreign companies.
2. List of operational risk is much broader for domestic market companies.

The reasons for this situation are the following: economic uncertainty and the inability of implementation long-term planning; lack of effective internal controls systems; poor corporate governance.

To get an idea of how much a company is exposed to risk, can be obtained by comparing actual valuations with the expected value of the company. Deviations from the predicted value show the level of risk in the course of the company's current activity.

When we studied the organizational experience of Russian companies, we revealed, that each administrative level is responsible for a certain group of risks. For example, the highest level – CFO's, takes strategic decisions. So, the quality of strategic decisions

can be measured by the deviation of the actual Book Value from the forecast Book Value. The next level – the risk management department, is responsible for the risks at the tactical level. This level is represented by a majority of the financial risks, legal and compliance risks. The quality of tactical decisions can be measured by the deviation of the actual EVA from the forecast EVA.

And the last level, managers in departments who are responsible for operational risks, the quality of operational decisions can be measured by the deviation of the actual ROE from the forecast ROE.

See this list of risks as classified according to the level of management presented in Table 2.

Table 2.

**The degree of significance for risk management levels (percentage)**

Level of Management	Groups	Risks	Percentage	
Strategic Risk Management	Strategic	Increased competition	22	
		Risk levels of Investment Projects	15	
	Legal and Compliance	Political risk	2	
		The high level of corruption in the country	2	
		Adverse government intervention in the regulation of business (tariff, regulation, etc.)	2	
		Adverse changes in the country and (or) international law	9	
Tactical Risk Management	Operational	Lack of qualified staff	10	
		Technical risks at various stages of production	4	
		The sharp fall in the market price of the company's products	4	
		Various property risks, including business interruption	3	
		Significant disruptions of key equipment, raw materials, energy	3	
		A significant rise in the cost of transportation of finished products	1	
		Currency fluctuations and (or) interest rates	3	
		Financial	The lack of liquidity associated with limited access to sources of loan capital	18

So, as we can see, risk management is a multi-level issue, which involves all employees in the process of risk assessment. Risk management is the summary of coherent elements integrated in one process in which both the CEO and the staff participate in revealing and managing potential risk factors.

The differences between actual and forecast figures for a number of Russian companies are shown in Table 3. This table represents the indicators and their deviations according to the 2011 year. All companies listed in the table are using one of the international standards of risk management.



Table 3.

The differences between actual and forecast indicators for Russian companies (million rubles)\*

Company	ROE	Difference from forecast	BV	Difference from forecast	EVA	Difference from forecast
Nomos bank	13,3	-2,9	75,7	-12,87	8,21	-9,48
Tatneft	13,5	-1,8	403,4	-48,41	8,66	-4,02
Bashneft	21,5	4,6	211,4	90,90	16,65	2,09
Inter RAO ES	8,3	-8,6	390,7	-132,84	1386	-7282
Sberbank	17,8	0,9	1286	565,84	7639	2219
RusAl	13,4	-1,9	316,3	47,45	7,43	1,67
Uralkali	32,2	15,3	241,8	427,99	12875	4122
Raspadskaja	19,5	2,6	31,9	22,01	12,97	4,21
Rusgidro	5,4	-10,5	525,7	-278,62	2862	-3590
Nornikel	17,5	0,6	494,6	464,92	9843	2306
MTS	36,2	19,3	104,5	327,09	2977	539
VTB	7,1	-9,4	625	-37,5	6,71	-2,95
FSK	2,3	-14,6	898	-610,64	4643	-2590
OGK 4	8,2	-8,7	101,1	37,41	6,74	0,86
Severstal	10,6	-6,3	200,4	166,33	2354	798
Rostelekom	8,1	-8,8	268	109,88	55,66	38,21
Novatek	19,4	2,5	262,5	700,88	543	196
Magnit	20	3,1	73,3	248,49	2547	1090

\* Table compiled by the author. Indicators were calculated on the basis of the financial statements of companies

So, for some companies, such as Nomos Bank, Tatneft, Inter RAO ES, RusGidro and others, the quality of risk management is not satisfactory at all levels of company management. These companies belong to the group of Medium-sized companies focused on the domestic market, and, as we see, are candidates for the implementation of risk management immediately.

These companies do not have any adopted risk management systems, but most of them were formally certified on formal grounds, which do not guarantee the quality of the risk management process.

The involvement of an external specialist helps to create a standard system of risk management. But, this would not solve the problem of the low quality of risk management in the long term. The only way to establish good governance is the construction of a three-tier risk management system: strategically oriented at the highest level; tactically oriented at the middle level; operationally oriented at the lowest level.

It is important to not allow risk management to run the company, but only to support its good progress. The division of the highest level of management into two parts (The Board of Directors and the Risk Committee) also helps to prevent this problem.

A Board of Director's responsibilities include: the adoption of risk management strategies; determination of acceptable levels of risk, monitoring of all value indicators within the company and motivation for effective risk management.

A Risk Committee's responsibilities includes: threats and risks descriptions and monitoring; development of enforcement procedures and VBM decisions. RM implementation is not required by law for Russian companies however the creation of a Risk Committee does enable a sharp improvement in business efficiency.

Implementation of risk management entails costs. The Russian market does not have experts in the field of risk management therefore company managers are forced to seek the services of the Big Four or Marsh. It is impossible to roll-out risk management programs without any external assistance.

The Questionnaire revealed the following results [12]:

- a) thirty percent of surveyed companies spent 350,000 euros on the introduction of a risk management system;
- b) twenty five percent – from 80,000 euros up to 350,000 euros;
- c) thirty two percent did not specify the amount of expenses,
- d) other companies wrote that they had spent nothing and considered risk management implementation economically unfeasible. Most of the costs are consultants' fees.

Another cost item is the training of a company's own staff. It is not so expensive, but it is time consuming and does not guarantee a high level of specialist. In the early stages of risk management system implementation it is necessary to involve external consultants while training internal specialists. The gradual restructuring of a company's management and the training of internal staff will allow focusing on the specifics of the Russian business environment.

The implementation of risk management is much cheaper in absolute value in the companies of Western countries, from 7000 up to 10000 euros according to various estimates, which is less significant in the turnover structure.

However, the costs of creating risk management systems can be considered to be an investment as they are capable of bringing economic benefits in the future. So, the actual costs should be comparable with the growth of NOPAT, Book Value, EVA, ROE but after RM implementation in the short or middle term. Implementation costs should provide comparable increases in value of the company and other indicators related to each specific level of risk management. So, we can speak not about costs or expenses, but about value oriented investments in further development of each particular company

Another aspect of the cost is the time required for implementation. In Russian practice it takes from one year up to three years.

The average duration of the stages of risk management implementation are presented in Table 4.

Table 4.

The average duration of the stages of risk management implementation	
Stage	Period
Risk management policy and strategy development	3 -12 months
Key risks identification operational level	Up to one month
Internal control system setting	Up to four months
Key risks identification at the tactical and strategic level	Up to three months
Testing and correction of the risk management system	Up to one month
Key provisions of the strategy to employees	Up to one month
Risk management and operative financial planning integration	Up to three months
Trial period of risk management operation*	Up to one year

\*Depends on the operating cycle

In most cases a company spends from two to three years, before a risk management system starts to work creating added value. The process of risk-management is of a dual

nature. In the short 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.

Thus to accelerate the process of risk management implementation, and immediately technologies comparable to developed countries is impractical because this might destroy the value of a previously stable company through several planned periods.

**Summary.** The results of this research have revealed that the effectiveness of risk management in Russian companies is not very high. This is in spite of the use of the highest international standards such as: COSO, FERMA or ISO 31000:2009. Differences between actual and forecast performance indicators have been proposed as a measurement of inefficiency and exposure to risk at each level of company management.

These standards cannot be fully used by Russian companies because of large differences in legislative support; economic environment, implementation objectives and conditions, such as non-transparent financial systems. International standards cannot be applied to the variety of risks specific to Russia. The fullest representation of the risks can only be obtained by examining the mutual influences of the business processes on the areas of governances and management environment.

This method allows for the compiling of the most complete map of the risks as well as identifying the most influential of these.

The gradual restructuring of a companies' management with its divisions at the strategic, operational and tactical level will help solve the problem of effective risk management.

This process is impossible without the engagement of an external expert. The Russian market does not have experts in the field of risk management.

The involvement of international professionals would create risk management systems acceptable for the international market. The gradual restructuring of a company's management and the training of internal staff will allow for the focusing on the specifics of the Russian context.

This process is very costly and can be lengthy. The average term of risk management implementation takes from 2 to 3 years in Russian companies. The average costs of implementation are from 80 up to 350 thousand euros, but if they are considered as an investment in the future competitiveness of the company, these costs are completely justifiable.

**In Conclusion:** the theoretical contribution of a paper is in identifying the most at-risk companies, as well as in determining the degree of exposure based on deviations between actual and forecast performance indicators. For example, the quality of strategic decisions can be measured by the deviation of the actual Book Value from the forecast Book Value. The quality of tactical decisions can be measured by the deviation of the actual EVA from the forecast EVA and the quality of operational decisions can be measured by the deviation of the actual ROE from the forecast ROE.

The practical contribution is in proposal to restructure of a companies' management with its divisions at the strategic, operational and tactical level, which will help solve

the problem of effectiveness of risk management. Furthermore, the results of the measurements show that the quality of risk management is not satisfactory at all levels of company management. The suggested method of revealing risks allows to take into account each of the sources of volatility of non-public company revenues and expenses and to improve the quality of risk management.

## REFERENCES

- [1] House Linacre, Jordan c. Hill, The professional handbook of financial risk management. Reed Education and Professional Publishing LTD, 2000.
- [2] Stephen Ward, Exploring the role of the Corporate Risk Manager, Risk Management. Vol. 3, No. 1, pp. 7-25. - Palgrave Macmillan Journals, 2001.
- [3] Badalova A. G, Methodological approach to developing balanced risk classification of the enterprise. Russian Entrepreneurship. № 11 (3). pp. 92- 99. Moscow, 2010.
- [4] IEC 31010: Risk Management - Risk Assessment Techniques. International Organization for Standardization, 2009.
- [5] ISO/IEC 73: Risk Management - Vocabulary. International Organization for Standardization, 2009.
- [6] AS/NZS 4360:2004: Risk Management Standard. Standards Australia and Standards New Zealand, 1995.
- [7] Risk Management Standard. AIRMIC, ALARM, IRM. 2002.
- [8] Ronald L. Meier, 2000, Integrating Enterprise-Wide Risk Management Concepts into Industrial Technology Curricula. Journal of Industrial Technology. Volume 16, Number 4. pp. 2-15, 08.2000.
- [9] Brown B., Enterprise risk management. Date Views 01.11.2010 www.resourcesusa.com, 2008.
- [10] Makarova V. A., The methodology for the risk detection in non-public companies. Brno. Czeck; European Financial System - 2012. Issue 1st edition. Brno: Masaryk University, p. 136-142, 2012.
- [11] Wong, M. , Market BuVaR: A countercyclical risk metric, Journal of Risk Management in Financial Institutions, Vol 4(4), pp. 1-14, 2011.
- [12] RusRisk, 2008, Status and development of corporate risk management in Russia. Date Views 21.12. 2010, from [http://rrms.ru/upload/common/doc/briefing\\_issledovaniya.pdf](http://rrms.ru/upload/common/doc/briefing_issledovaniya.pdf)
- [13] KPMG, 2012, Market Risk Management at Russian Power Companies. Date Views 21.03.2012, from <http://www.kpmg.com/RU/ru/IssuesAndInsights/ArticlesPublications/Pages/Market-Risk-Management-at-Russian-Power-Companies.aspx>.