



ISSN 1648-0627 print

ISSN 1822-4202 online

VERSLAS: TEORIJA IR PRAKTIKA  
BUSINESS: THEORY AND PRACTICE

<http://www.btp.vgtu.lt>; <http://www.btp.vgtu.lt/en>

2007, Vol VIII, No 4, 204–213

---

## RISK MANAGEMENT IN LITHUANIAN ORGANIZATIONS – RELATION WITH INTERNAL AUDIT AND FINANCIAL STATEMENTS QUALITY

Rima Tamošiūnienė<sup>1</sup>, Olga Savčuk<sup>2</sup>

*Vilnius Gediminas Technical University, Saulėtekio al. 11, LT-10223 Vilnius, Lithuania*

*E-mail: <sup>1</sup>rima.tamosiuniene@vv.vtu.lt; <sup>2</sup>olga.savcuk@lt.ey.com*

*Received 20 March 2007; accepted 24 October 2007*

**Abstract.** Over the last few years the importance to the strong corporate governance of managing risk has been increasingly acknowledged. There is more opportunity and risk in today's complex, dynamic and fast changing environment. The new reality is that risks are swift, sudden and relentless; the sources of risks being less predictable, which not only adds to the challenge of managing, but forces businesses to review their approach to risk management and control. Organizations are under pressure to identify all the business risks they face: social, ethical and environmental as well as financial and operational, and to explain how they manage them to an acceptable level. Organizations operate in the environments where factors such as globalization, technology, regulation, restructurings, changing markets, and competition create uncertainty. Uncertainty is caused by an inability to precisely determine the likelihood that potential events will occur and their associated outcomes. Risk usually can be understood as an uncertainty about the events and their outcomes that could have material effect on the goals and objectives of the organization. Risk is the threat that the organization will not reach its objectives both facing the negative circumstances and also failing to utilize the opportunities, i.e. risk is a set of circumstances that hinder the achievement of the determined objectives. Therefore in order to reach its objectives each organization has to develop and implement an approach to assessing and managing the uncertainties and opportunities it faces in the pursuit of its business strategy, with the intention of maximizing shareholder value and performance, i.e. meeting the determined objectives. The underlying meaning of the risk management is that every organization, whether for-profit, not-for-profit, or a governmental body, exists to provide value for its stakeholders. All organizations face uncertainty, and the challenge for management is to determine how much uncertainty the organization is prepared to accept as it seeks to grow stakeholder value. Risk management of the organization provides a framework for management to effectively deal with the uncertainty and associated risk and opportunity and thereby enhance its capacity to build value. Any change in stakeholder value sooner or later must be reflected in the financial statements of the company. Only quality financial statements presenting true and fair view of the company's activities can be used by stakeholders in decision making process. Effective risk management process ensures both increasing stakeholders value and quality of the financial statements, together supporting stakeholders trust. In case quality of financial reports is poor, companies might lose financial sources, trust of the investors, public, customers and suppliers. In current environment top and senior management of the organization more and more rely on the internal audit to evaluate whether controls are sufficient to manage risks and uncertainties. That is a tremendous responsibility, and over the years, leading internal audit functions have strived to meet this challenge. This developing role of the internal auditing is also reflected in its current definition, i.e. internal auditing is "an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control and governance processes". Efficient internal audit assisting the company in improving risk management and governance systems takes an active role in assuring high quality financial statements. Therefore internal audit is an important value added function each company should use to gain competitive advantage. These developments are very important for Lithuanian companies due to growing economy, increase in foreign investments and stronger pressure from business environment to improve risk management and governance systems. The purpose of this article is to research efficiency of the risk management systems in Lithuanian companies from the perspective of the quality of the financial statements and also to research whether the existence of the internal audit function impacts the risk management system efficiency through the quality of the financial statements, i.e. researching whether internal audit is effective in Lithuanian companies.

**Keywords:** risk, internal auditing, corporate governance, risk management, quality of financial statements, adjustments.

## 1. Introduction

Recently, all companies all over the world have been challenged to find a robust way to qualify, quantify and manage business risks and improve governance processes. The main reasons for such developments were growing competition and development of information technologies, accounting scandals, corporate disasters and their significance, changes in the legal environment.

The main reasons that caused requirement to improve corporate governance were accounting scandals and corporate disasters (Enron (US), WorldCom (US), Parmalat (Italy) [1]), which were significant in scope, continuing to occur with an enormous regularity (e.g., financial frauds, bankruptcies, manipulations with earnings, accounting principles, etc.), and these disasters often were accompanied by questioning where members of the board, auditors, regulators were.

The other reason causing questioning of corporate governance quality and requiring improvement of its efficiency were changes in legal environment, which has raised the penalties and increased responsibility for the directors and chief executives of public companies. Such increases in responsibility reflect the greater legal risk of corporate director service, as well as the need for ever-improved governance practices.

Also it is very important that current business environment being extremely quick and dynamic require companies improve risk management and governance systems to be competitive, survive and develop.

Governance improvement initiative also reached Lithuania. The above reasons, constantly growing economy, increasing direct foreign investments caused that in August, 2006 JSC “Vilniaus vertybinių popierių birža“ has issued Lithuanian Governance Code for companies listed on the Lithuanian Stock Exchange requiring certain improvements of the governance processes, including establishment and operation of effective risk management system and establishment of internal audit function. Additionally, in April 2007 changes in Lithuanian Law on Audit were provided for analysis to organizations of interest. These changes require improvement in governance processes of listed companies, including efficient risk management systems and establishment of audit committees.

This indicates that poor governance is not welcomed anymore as among a lot of negative consequences of poor governance processes are bankruptcies, frauds, earnings restatements, quickly diminishing in value stocks, loss of credibility, loss of business partners, loss of customers, loss of careers and many other negative impacts on the activities of organizations. It is obvious that none of the organizations can afford the cost of governance failures. It is obvious that in current days and circumstances it is not sufficient to establish a formal corporate governance pro-

cess within an organization. It is extremely important to ensure the efficiency of this process.

Talking about corporate governance it is necessary to provide how we can understand what is meant by this concept. We suggest this definition, i.e. corporate governance is as a structure including stakeholders, the board and the management, through which the objectives of an organization are set and with a certain means, which ensure the risks facing the organization in achieving its goals are being identified, assessed and managed, are attained and this attainment is being properly monitored [2]. It is obvious that this definition clearly emphasizes risk management importance.

*Aim of the research.* This article aims to analyze what is meant by concept risk and its management and what particular frameworks can be implemented in order for the risk management process to be efficient, also ensuring quality and reliability of the financial statements, including support from efficient internal audit function. The research covers analysis of the efficiency of risk management systems including internal audit in the biggest Lithuanian companies with respect to the quality of the financial statements.

*Research methods.* Comparative analysis of theories and studies was applied to analyze risk management methodologies, identify steps necessary for the risk management system efficiency, determine place of internal audit in this system, also referring to the quality of the financial statements. Analysis of the adjustments to the financial statements in the biggest Lithuanian companies and statistical tests were performed to evaluate risk management system efficiency in these companies and estimate impact of the internal audit on the quality of the financial statements.

## 2. Concept of the risk management in organization

Before elaborating on the concept and essence of the enterprise risk management and actions it includes or has to include to be efficient, the term “risk” should be explained. Traditionally, risk management focused solely on financial risk, i.e. mismatching of assets and liability. This might be supported by the definition of the risk provided by Wikipedia, i.e. “risk is the potential impact (positive or negative) on an asset or some characteristic of value that may arise from some present process or from some future event. In everyday usage, “risk” is often used synonymously with “probability” and restricted to negative risk or threat” [3]. The question is whether this is sufficient in the current business environment, whether the risk might cover only the possibility of the losses the organization might face, i.e. only negative unfavorable circumstances. Clearly not.

The other more broad definition of the risk is suggested by Selim and McNamee [4] defining risk as “a concept used to express uncertainty about the events and/or their outcomes that could have a material effect on the goals and objectives of the organization”. The other at first sight simple

definition of the risk provided by David Griffiths [5] defines a risk “as a set of circumstances that hinder the achievement of objectives”.

These definitions require existence of the objectives. If there are no objectives, there is no risk. Therefore circumstances affecting the organization and ability to meet its objectives can be both unfavorable and favorable. Unfavorable circumstances create obstacles for the organization to meet its objectives, however in the current fast changing business environment with the intense competition only those organizations which are able to exploit favorable circumstances and achieve competitive advantage simultaneously meeting its objectives can survive and flourish. Therefore when analyzing risk management in the organization it is necessary to bear in mind that risk management must include both the means to cope with unfavorable circumstances and ability to fully exploit favorable circumstances for the organization to achieve its objectives. It is necessary not to limit these circumstances only to the financial factors, but take into account various factors that have an effect on the organization.

Therefore in this article we suggest to understand risk as an uncertainty about the events and their outcomes that could have material effect on the goals and objectives of the organization. Risk is the threat that the organization will not reach its objectives both facing the negative circumstances and also failing to utilize the opportunities. Understanding of risk and its broadened concept further requires identification of the process which might be used to manage the risks and ensure the organization achieves its objectives and also to determine what particular and the most efficient framework the organizations must implement in order to manage the risk effectively.

The organization risk management approach began to emerge in the late 1990s. Early adopters recognized that changes in technology, globalization, corporate financing, and numerous other risk drivers were increasing the complexity and volume of risks. They also began to realize that traditional approaches were no longer effective ways to identify, assess, and respond to the growing variety of risks across a complex organization. Now organization risk management has become a hot topic, representing more than just another management means. In fact, as Patrick Stroth wrote in the July 2005 Strategic Finance article “Enterprise Risk Management at United Health Group”: “Enterprise risk management is quickly becoming the new minimum standard, and it may well be the key to survival for many companies” [6].

This shift in risk management trends led the Committee of Sponsoring Organizations of the Treadway Commission (COSO) to develop a conceptual framework for enterprise risk management. *Enterprise Risk Management—Integrated Framework*, released in September 2004 [7], which defines enterprise risk management as follows: “*Enterprise risk*

*management is a process, effected by an entity’s board of directors, management, and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives.”*

The Institute of Internal auditors determines that risk management is “*a structured, consistent and continuous process across the whole organization for identifying, assessing, deciding on responses to and reporting on opportunities and threats that affect the achievement of its objectives*”[8].

Both definitions emphasize that risk management is the process of planning, organizing, leading, and controlling the activities of an organization to minimize the effects of risk on an organization’s capital and earnings. Risk management also expands the process to embrace not just risks associated with accidental losses but also financial, strategic, operational, and other risks. Risk management goes beyond normal accounting rules for writing down the assets and liabilities of an organization, working further to place a value both on the true market value of an item as well as on the risk associated with that item.

It is necessary to understand that any risk impact on the organization impacts its financial results either positively or negatively. Efficient risk management framework must ensure that risk impact correctly and on timely basis is accounted in the financial statements of the company, thus company presents quality financial statements depicting true and fair view of its activities and risk impact. In case risk management system is not efficient, quality of the financial statements cannot be guaranteed.

### 3. Risk management framework

There is a number of ways the organization can manage risks to bring them to an acceptable level. The organization can avoid the risks, however this may mean giving up significant opportunities. The organization can transfer risks (e.g. insurance), the organization can tolerate risks, without planning any contingencies. This does not mean that no-one will address this risk, but the means for its management will be created and implemented only when the organization faces the risk actually. Also it is possible to tolerate risk and plan contingencies, i.e. create management means if the risk becomes reality. Also it is possible to introduce some processes to reduce the consequence or likelihood of the risk. These processes are usually referred to as ‘controls’ and include everything from having a clear strategy to installing an alarm system. However certain framework must be in place to decide which particular way of the risk management has to be selected and implemented. Without such a framework it is not possible to decide whether the risk should be avoided or whether it should be managed, or its consequences or likelihood should be re-

duced. Supporting the importance of risk management for the organization in order to determine what particular role in it must be attributed to the internal audit it is necessary to identify what steps this process must include and what particular activities must be done at each particular step in order for this process to be efficient.

It is obvious that there is no one single and universal risk management framework to be adopted in all cases, however summarizing analysis of risk management methodologies [9], in our opinion the below steps are in common and as it is depicted in Fig. 1, must be present in each organization when implementing risk management process:

- *Analysis of the internal environment and determining risk management context* – the internal environment encompasses the tone of an organization, and sets the basis for how risk is viewed and addressed by an entity's people, including risk management philosophy and risk appetite, integrity and ethical values, and the environment in which they operate. It is necessary to obtain a comprehensive understanding of the organization, focusing on overall strategy, vision, mission, objective setting, risk appetite, risk tolerances, and the interrelationships therein. It is critical to only understand what the company does, how it buys, from whom it buys, how it sells, where it manufactures, etc.
- *Objective Setting* – Objectives must exist before management can identify potential events affecting their achievement. Enterprise risk management ensures that management has in place a process to set objectives and that the chosen objectives support and align with the entity's mission and are consistent with its risk appetite. Objective setting and company background in conjunction with an understanding of the internal environment provides perspective on the business so that the risk identification process can begin. Objective setting includes the strategic and business objectives and the relationship between each of these and the company's overall vision and mission.
- *Identification and description of risks* – internal and external events affecting achievement of the entity's objectives must be identified, distinguishing between risks and opportunities. Opportunities are channeled back to management's strategy or objective-setting processes. It is important not to limit this process to financial factors, i.e. it is necessary to take into account strategic risk, business risk, operational risk, market risk, credit risk and other.
- *Risk Assessment (prioritization)* – risks are analyzed, considering likelihood and impact, as a basis for determining how they should be managed. Risks are assessed on an inherent and a residual basis.
- *Risk Response* – the management selects risk re-

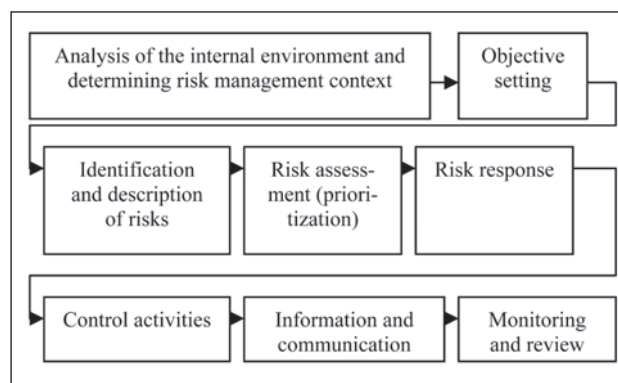


Fig. 1. Joint risk management framework

sponses – avoiding, accepting, reducing, or sharing risk – developing a set of actions to align risks with the entity's risk tolerances and risk appetite.

- *Control Activities* – policies and procedures are established and implemented to help ensure the risk responses are effectively carried out.
- *Information and Communication* – relevant information on risk management process is identified, captured, and communicated in a form and timeframe that enable people to carry out their responsibilities. Effective communication also occurs in a broader sense, flowing down, across, and up the entity.
- *Monitoring and review* – the entirety of enterprise risk management is monitored and modifications made as necessary. Monitoring is accomplished through ongoing management activities, separate evaluations, or both. Implementing an effective risk monitoring process involves several components.

It is necessary to have in mind that the board has overall responsibility for ensuring that risks are managed. In practice, the board will delegate the operation of the risk management framework to the management team, who will be responsible for completing the activities below. Everyone in the organization plays a role in ensuring successful organization risk management but the primary responsibility for identifying risks and managing them lies with management. Risk management can make a major contribution towards helping an organization manage the risks to achieving its objectives, i.e. the organization has greater likelihood of achieving objectives, improved understanding of the key risks and their wider implications, greater management focus on the issues that really matter, fewer surprises or crises, more focus internally on doing the right things in the right way and more informed risk-taking and decision-making.

Obviously efficient risk management methodology allows ensuring preparation and presentation to the stakeholders qualitative financial statements providing true and fair view of the activities of the organization. Taking into

account these main risk management implementation issues it is necessary to analyze what place internal audit has in risk management process and what its role in this process is.

#### 4. Role of internal auditing in risk management

These days internal audit provides a variety of services to the organization, which include conducting financial, performance, compliance, system security and due diligence audits, participating in committees to select new accounting software, revising the organization's code of conduct, organizing training courses in internal control to new managers. Therefore it is a very narrow approach to limit internal auditing activities only to the assurance services.

In the year 2002 the new definition of internal auditing was designed to accommodate the profession's expanding role and responsibilities [10]: *“Internal auditing is an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes.”*

So what is the main purpose of the internal audit taking into account risk management of the organization? The main aim of internal auditing is to assist the organization to achieve its objectives. Looking at the latest definition in detail taking into account only those parts which directly talk about risk management allows outlining how internal audit is seen in the risk management context, i.e.:

- *Independent*: the function carrying out the internal auditing activity should be outside the normal management hierarchy, ideally responsible to a board executive, or similar, with a strong reporting line to the chairman of the audit committee.
- *Opinion*: This is the keyword in the definition. The objective of the internal auditing is all about telling management, and through them the stakeholders, whether risks are being managed. The word ‘assurance’ is often used but it doesn't allow for the circumstances where assurance can not be given. An opinion can be good or bad.
- *Managed*: Risks are managed by using the response processes: avoid, transfer, tolerate, treat.
- *Acceptable*: This means that the response processes are managing risks to a level that management consider reasonable. This level is known as the ‘risk appetite’ of the organization. Thus internal auditors have to understand this risk appetite, against which the significance of risks can then be measured. It also implies that, when management is assuring the board that it is controlling risks, the risk appetite must be understood by all. It is the board that defines the risk appetite, which the internal audit ac-

tivity must accept, even if it considers it is set too high or low. However, the board has a responsibility to its stakeholders and probably has to comply with legislation that requires it to maintain a proper system of internal control.

It is clear that internal audit must provide an assurance for the risk management in the organization. It is clear that managers own risks and it is their responsibility to control them. Internal auditing in its turn provides an opinion for management, as to whether risks are properly managed. By stating that the internal audit activity should evaluate and contribute to the improvement of risk management, control and governance, the Institute of Internal Auditors in the year 2004 recognized [8] the assurance and consulting role of internal auditors in corporate governance.

Also it is worth noting that as one of the aims of risk management system is to ensure quality of the financial statements of the company, internal audit ensuring risk management system efficiency also plays an important role in impacting on quality of the financial statements. This can be supported by research made in 2004 by Jeffrey Cohen, Ganesh Krishnamoorthy and Arnie Wright [11] who proved that existence of efficient audit causes higher quality of the financial statements in the companies. Also in the year 2004 US Association of Certified Fraud Examiners researched 508 fraud cases in the companies, 57 % of which had internal audit functions and it was proved that losses suffered because of fraud were lower in the companies with internal audit function.

It is also important that the specific role of internal auditors in risk management for all cases is a very time specific aspect and can change very quickly, especially as a consequence of the implementation of new corporate governance regulations. Moreover, their role in risk management is also country specific, thus different for both groups of cases. Secondly, it becomes clear that the constantly emerging changes in the business environment (e.g. tendency towards further globalization, new technologies) can be considered as an important basis for the role of internal auditors in risk management. Changes in the environment lead to new risks, which create the need for new internal controls to manage these risks. Each change creates opportunities for internal auditors to play an influencing role. Internal auditors can work in a risk – based way, i.e. a regular update of their own risk assessments allows them to anticipate new risks and adjust their audit planning and assurance efforts to these new risks. Internal auditors also can actively contribute to the adjustment of the internal controls to these newly emerged or changed risks.

It might seem that there are no obstacles for the implementation of the risk management and involvement of the internal auditor in his process, however certain issues must be taken into account in order to ensure efficient implementation. It might happen that the board members want

and must be aware of what risk management is, why they need to be involved and how it can benefit the company financially and strategically. Without effective top down, ongoing board support, no risk management initiative can be successful, particularly if sufficient ongoing resources are not provided. Risk management is a long-term investment that needs involvement of board members, executives and employees at all levels.

### 5. Risk management in Lithuanian organizations

Referring to the conclusion that risk management system efficiency ensures quality of the financial statements and presentation of true and fair view of the financial position of the company and internal audit ensures that risk management system operates efficiently, which can also be related to the quality of the financial statements, we have performed the research of the financial statements for the year 2006 in 30 Lithuanian companies, selected from 300 biggest companies based on the turnover for the year 2006 [12].

During the research the quality of the financial statements was analyzed, i.e. estimating the value and significance of the adjustments made to the profits and equity of the companies analyzed during the external audit performed

in the year 2006. Also during the research statistical analysis of the significance in adjustments in companies with internal audit and without internal audit were analyzed to research whether internal audit in Lithuanian companies is efficient with respect to ensuring efficient risk management system, the efficiency of which is measured by quality of financial statements.

The results of the research are provided in Table 1. There is a summary of the adjustments made to profit and equity of the analyzed companies during the external audit for the year 2006. The adjustments indicate quantified risk impact on the financial statements of the company and reflect inefficiency of the risk management system, which allowed mistakes or even deliberate misstatements to be omitted in the financial statements thus overstating or understating operational results and value of equity in the companies analyzed.

Table 1 provides groups of adjustments to profit and equity combined by separate type. Frequency and significance of such adjustments is provided, i.e. how many times the adjustment of a particular type was made by 30 companies during the audit and the significance of each adjustment group comparing to profit and equity, i.e. adjustment

**Table 1.** Analysis of the adjustments to the financial statements of Lithuanian companies

Type of adjustment	Profit	Frequency	Sign., %	Equity	Frequency	Sign., %
Non-adjusted financial statements*	566,099,404			7,035,890,989		
Long-term accounts receivable discounting	2,708,015	3	0.48	-4,318,160	1	0.06
Vacation pay accrual	-5,314,423	6	0.94	-1,694,958	3	0.02
Additional revenue accrual	7,758,571	5	1.37	153,874	1	0.00
Additional expenses accrual (decrease in accrual)	56,624,737	25	10.00	-15,034,790	9	0.21
Depreciation adjustment	-2,338,557	9	0.41	-1,679,917	3	0.02
Accounting for deferred tax	-21,847,358	23	3.86	103,494,521	10	1.47
Provision for doubtful accounts receivable (decrease in provision)	9,097,741	15	1.61	-861,155	3	0.01
Investments' value adjustment	-1,230,937	4	0.22	3,474,864	3	0.05
Consumed inventory write off	-659,313	6	0.12	-498,194	2	0.01
Inventory value adjustment	-9,033,653	10	1.60	-628,668	3	0.01
Fixed assets value adjustment	-8,134,429	8	1.44	41,418,283	4	0.59
Adjusted audited financial statements**	593,729,799	114		7,159,716,688	42	
Total amount of adjustments	27,630,395			123,825,700		
Absolute amount of adjustments	124,747,733			173,257,384		
Change in profit (equity)	4.88 %			1.76 %		
Absolute change in profit (equity)	22.04 %			2.46 %		

percentage comparing its value to the non-audited profit or equity. Taking into account impact of the adjustments on the profit and equity in 30 companies, Table 1 provides total and absolute (sum of all absolute adjustments amounts) amount of adjustments, total and absolute change in profit and equity. Summarizing profit adjustments made during the audit, profit of all analyzed companies increased by 27,630 thousand LTL or 4.88 %, and equity increased by 123,826 thousand LTL or 1.76% respectively.

At first glance the total percentage change is not significant, however total value of separate adjustment types is significant, which indicates that risk management in the Lithuanian companies is not efficient. Such a conclusion can be supported by the analysis of absolute amount of adjustments. As separate adjustments have separate impact (negative or positive) on profit and equity, it is very important to take into account absolute amount of the adjustments, which comparing to the total amount of adjustments is very significant, i.e. 22.04 % of non-audited profit and respectively 2.46 % of non-audited equity. Respective absolute amounts of adjustments are 124,747 thousand LTL and 173,257 thousand LTL.

As it is indicated in Table 1 the most frequent and significant adjustments on profit are additional expenses accruals (decrease in accrual), accounting for deferred tax, provisions for doubtful accounts receivable, inventory value adjustment, fixed assets value and depreciation adjustments. With respect to equity, significance of adjustments is lower as external audit in the analyzed companies is performed each year and during previous years the companies already accounted for the adjustments in the financial statements.

Further there is a short description of the most significant adjustments:

*Additional expenses accruals (decrease in accrual).* Frequency and significance are 25 and 10 % with respect to profit, and with respect to equity – 9 and 0.21 %. These adjustments represent accounting for expenses not included into the financial statements or decrease of overstated expenses. With respect to profit these adjustments are very significant, it is obvious that Lithuanian companies tend to understate profit, as due to the adjustments expenses accruals are decreased, i.e. these adjustments increase profit.

*Accounting for deferred tax.* According to IFRS and BAS it is required to account for deferred tax impact, i.e. asset or liability – future decrease or increase in profit tax payable due to differences in financial accounting and tax treatment of income and expenses. In case deferred tax is not accounted for financial statements and profit is misstated – incorrect value of assets, liabilities and result. Frequency in this group is 23 from profit perspective, which means that in 23 companies such adjustment was required, from equity perspective the adjustment was made in 10 companies. As it was mentioned before, companies tend to understate profits overstating expenses, therefore during exter-

nal audit when expenses accruals are decreased, profit increases and this causes significant increase in profit tax liability and additional profit tax expenses.

*Provision for doubtful account receivable (provision decrease).* With respect to profit frequency and significance it is 15 and 1.61 %, with respect to equity – 3 and 0.01 %. It is obligatory to account for provisions in accordance with IFRS and BAS in order to provide true and fair value of accounts receivable in the financial statements. This is important not only to comply with the requirements of the accounting standards, but also for management and business decisions. Summarized amount of this type adjustments indicated that companies tend to understate profits, i.e. decrease true value of accounts receivable.

*Inventory value adjustments.* With respect to profit frequency and significance it is 10 and 1.60 %, with respect to equity – 3 and 0.01 %. These adjustments include adjustment to the value of inventory due to obsolete, damaged and slow moving items in order to estimate fair value of inventory, and also accounting for net realizable value of the inventory required when realizable value of the inventory is lower than its cost.

*Fixed assets value and depreciation adjustments.* Fixed assets value adjustments frequency and significance with respect to profit is 8 and 1.44 %, with respect to equity – 4 and 0.59 %. Depreciation adjustments frequency and significance is respectively 9 and 0.41 % and 3 and 0.02 %. Taking into account frequency approximately in 57 % of companies such adjustments were made during 2006, however with respect to all companies such adjustments are not very significant, however in case of a separate company such adjustments are very important as they are not only misstating profit, but also true value of fixed assets the company owns, which is very important to investors, creditors and owners. The main reasons due to which the frequency of this group adjustments is so high are that four companies tend to avoid estimation of fixed assets value impairment due to non-used or obsolete fixed assets, thus the value of fixed assets is overstated which misstates the users of the financial statements.

Fig. 2 provides a summary of significance of absolute adjustments with respect to profits in all the 30 companies included into the research. It can be noticed that in 5 companies the significance of the adjustments is more than 100 %, i.e. higher than the profit amount. In company No. 11 the absolute amount of adjustments 8 times exceeds the profit. According to the results of the research it is obvious that risk management in Lithuanian companies is not efficient, which can be proved by the quality of the financial statements, i.e. the financial statements of the companies with respect to profit are significantly adjusted during the external audit. Therefore efficient risk management methodology and its implementation is very important and urgent for the Lithuanian companies.

As it was mentioned above internal audit impacts on quality of financial statements, as its role is to provide assurance for the efficiency of risk management system in the company and assist the company with the improvement of this efficiency, however only efficient internal audit can properly play this role. In order to determine whether in Lithuanian companies internal audit is efficient, applying statistical tests we have compared significance of absolute adjustments in companies with and without internal audit. Out of 30 companies only 9 have internal audit. F test was applied to determine whether distribution in significance of adjustments has same shape distributions in the group of companies with internal audit and in the group of companies without internal audit. F test was performed to select further statistical tests for the purpose of the difference analysis between two groups.

In Table 2 F test results are summarized. As  $F(\text{calculated}) > F(\text{Critical})$  and  $P < 0.05$ , the significance of adjustments in the group has different shape distributions, i.e. null hypothesis that groups have same shape distributions is rejected.

Based on the F test results further in order to determine whether internal audit existence has an impact on the significance of the adjustments in the analyzed companies Median and Fisher statistical tests were applied. Table 3 summarizes the results of these tests.

Median and Fisher tests are applied to analyze groups with different shape distributions and determine whether the certain data, i.e. significance of absolute adjustments, is the same or different within the groups, which are composed based on the existence/non-existence of internal audit. Applying Median test medians in the groups are calculated, significance in the groups is combined by the criteria whether more or less than total median significance and the results are further used in Fisher test. Under Fisher test statistical significance  $P > 0.05$ , therefore the significance of absolute adjustments in the companies having internal audit is not statistically different comparing to the significance of absolute adjustments in the companies without internal audit, i.e. null hypothesis that the significance of adjustments in the groups is the same cannot be rejected. The results mean that internal audit function in Lithuanian companies is not effective as it cannot assure the quality of the financial statements, which is impacted by the risk management system, for which internal audit provided assurance. Therefore in Lithuania internal audit development and efficiency assurance methodology is necessary in order for Lithuanian companies to have a possibility to implement efficient internal function or develop the existing one and have an excellent means supporting the company in risk management processes and gaining competitive advantage in today's complex and dynamic environment.

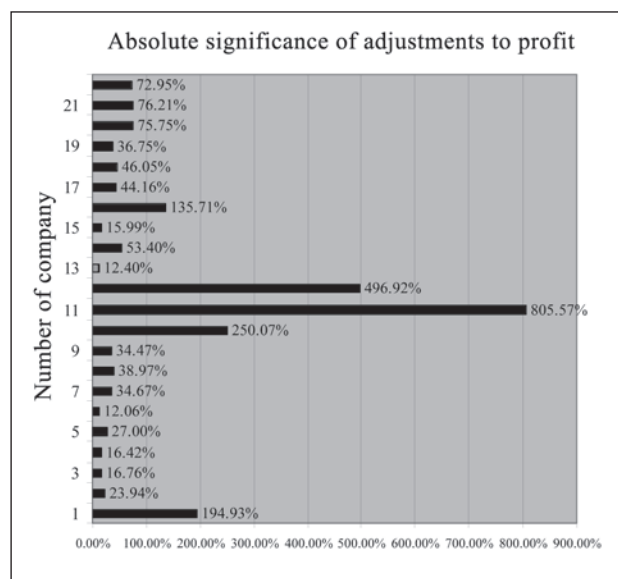


Fig. 2. Absolute significance of adjustments to profit

Table 2. F test results (comparing distribution in two groups)

	Group without internal audit	Group with internal audit
Mean	1.0230	0.4554
Standard deviation	3.7898	0.6264
No. of items in the group	21	9
Df	20	8
F (calculated)	6.0501	
P(F<=f) one-tail	0.0067	
P(F<=f) two-tail	0.0134	
F Critical one-tail	3.1503	

Table 3. Statistical tests on existence/non-existence of internal audit

Median test	No	<=	>	Median
Without IA	21	10	11	34.5 %
With IA	9	5	4	12.4 %
Total median = 30.74 %				
Fisher test	<= median	> median	Total	
Without IA	10	11	21	
With IA	5	4	9	
Total	15	15	30	
2-tailed p	1.0000	p>0.05		

## 6. Conclusions

It is obvious that currently all the organizations have been challenged to find a robust way to qualify, quantify and manage operational risks, i.e. establish and implement efficient corporate governance, which is understood as a structure through which the objectives of an organization are set and provided with certain means, which ensure the



risks facing the organization in achieving its goals are being identified, assessed and managed. It is important to understand and take into account that risk includes favorable and unfavorable circumstances which impact on the ability of the organization to meet its objectives. If there are no objectives, there is no risk. The risk is linked to the objectives of the organization. Unfavorable circumstances create obstacles for the organization to meet its objectives, however in the current fast changing business environment with intense competition only those organizations which are able to exploit favorable circumstances and achieve competitive advantage simultaneously meeting its objectives can survive and flourish.

Risk management can be understood as the process of planning, organizing, leading, and controlling the activities of an organization to minimize the effects of the risk on an organization's capital and earnings. Risk management also expands the process to embrace not just risks associated with accidental losses but also financial, strategic, operational, and other risks. Risk management goes beyond normal accounting rules for writing down the assets and liabilities of a firm, working further to place a value both on the true market value of an item as well as on the risk associated with that item. Implementing efficient risk management framework the companies gain the ability to identify, assess, measure, monitor, and report on their business risks; determine the degree to which these risks are being mitigated in accordance with established risk tolerances; and respond appropriately to the various risks. Also efficient risk management is directly related to the quality of the financial statements and companies having efficient risk management system are able to guarantee high quality of the financial statements. In this process internal audit plays a very important role by giving assurance for the risk management processes, assurance that risks are correctly evaluated, evaluating risk management process, evaluating the reporting of key risks and reviewing management of the key risks and the company is able to assure quality of the financial statements. These developments are very important for Lithuanian companies.

Based on the research performed in 30 biggest Lithuanian companies, in current dynamic and growing economy they still do not have efficient risk management, and governance processes are not able to assure quality of the financial statements, i.e. the financial statements with respect to profit and equity are being significantly adjusted

during the external audit. Also internal audit function if it exists in Lithuanian companies is not efficient and not able to assist the company in implementing proper risk management and governance system ensuring preparation and provision of high quality financial statements, which are very important for investors, creditors, suppliers, owners. Therefore for Lithuanian companies it is extremely important to implement risk management methodologies in practice, improve risk management system efficiency and develop internal audit to have a value added support assuring efficiency of risk management and quality of the financial reporting.

## References

1. BOOKAL, L. *Strengthening the internal auditor's role in the governance process*. 2003. 34 p.
2. TAMOŠIŪNIENĖ, R.; SAVČUK, O. *Role of internal audit in organizational governance*. November 2005, International Scientific Conference, Gabrovo.
3. WIKIPEDIA – Free Encyclopedia. Available from Internet: <<http://en.wikipedia.org>>.
4. SELIM, G. AND MCNAMEE, D. Risk management and internal auditing: What are the essential building blocks for a successful paradigm change. *International Journal of Auditing*, 1999, Vol. 3, No. 2, p. 147–155.
5. GRIFFITHS, D. *Risk based internal auditing – an introduction*. March, 2006. Available from Internet: <[www.internalaudit.biz](http://www.internalaudit.biz)>.
6. PETERSON, J. R. Ready for ERM? *ABA Banking Journal*, January 2006, p. 19–23.
7. COMMITTEE OF SPONSORING ORGANIZATIONS OF THE TREADWAY COMMISSION. Enterprise risk management framework, September 2004. Available from Internet: <[www.erm.coso.org](http://www.erm.coso.org)>.
8. Institute of internal auditors. *The role of internal auditing in enterprise-wide risk management*. IIA, September 29, 2004. 8 p.
9. TAMOŠIŪNIENĖ, R.; SAVČUK, O. Risk management in organization – role of internal auditing. In *4th International Scientific Conference "Business and Management 2006"*, Vilnius Gediminas Technical University, Conference Material.
10. Institute of internal auditors. *Standards for the professional practice of internal auditing*, IIA, UK, 2002. 32 p.
11. COHEN, J.; KRISHNAMORTHY, G.; WRIGHT, A. The corporate governance mosaic and financial reporting quality. *Journal of Accounting Literature*, 2004, p. 87–152.
12. AMADEUS DATABASE. Data on top 300 Lithuanian companies based on the turnover for 2006.

## RIZIKOS VALDYMAS LIETUVOS ORGANIZACIJOSE – SAŠAJOS SU VIDAUS AUDITU IR FINANSINIŲ ATASKAITŲ KOKYBE

R. Tamošiūnienė, O. Savčuk

### Santrauka

Paskutiniais metais ypatingą ir vis didėjančią svarbą įgyja įmonių rizikos valdymas bei jo efektyvumo klausimas. Šiandieninėje sudėtingoje, dinamiškoje ir sparčiai kintančioje verslo aplinkoje yra daugiau galimybių, tačiau taip pat daugiau rizikos. Rizika staigi, netikėta ir gali padaryti negrįžtamą poveikį; rizikos šaltinius vis sunkiau numatyti. Įmonės yra priverstos nustatyti visas rizikas, veikiančias jų veiklą, rūšis, kartu informuoti visuomenę apie įdiegtas rizikos valdymo priemones ir jų efektyvumą.

Įmonės vykdo veiklą tokioje aplinkoje, kurioje tokie veiksniai, kaip globalizacija, technologijų kaita, besikeičiančios rinkos, konkurencija, sukelia netikrumą dėl ateities. Netikrumas susijęs su negalėjimu tiksliai numatyti ateities įvykių tikimybę ir šių įvykių poveikį įmonės veiklai. Paprastai rizika suprantama kaip netikrumas dėl įvykių ir jų rezultato, kurie gali turėti reikšmingą įtaką įmonės siekiams ir tikslams. Rizika – tai grėsmė, kad įmonė nepasieks nustatytų tikslų tiek dėl neigiamų aplinkybių, tiek nesugebės pasinaudoti teikiama aplinkos galimybėmis.

Rizikos valdymas kiekvienoje įmonėje turi būti tapatinamas su akcininkų turto vertės didinimu. Visos įmonės susiduria su netikrumu ir iššūkiu įvertinti, kokio lygio netikrumas yra jai priimtinas siekiant didinti akcininkų turto vertę. Rizikos valdymas suteikia įmonei priemonių efektyviai valdyti netikrumą, pasinaudoti aplinkos galimybėmis, kurti ir didinti vertę. Bet koks akcininkų turto vertės pasikeitimas anksčiau ar vėliau įtraukiamas į finansines ataskaitas. Efektyvus rizikos valdymo procesas užtikrina tiek akcininkų turto vertės didinimą, tiek finansinių ataskaitų kokybę, akcininkų pasitikėjimą. Tuo atveju, jeigu finansinių ataskaitų kokybė yra prasta, įmonės gali prarasti finansavimo šaltinius, investuotojų, visuomenės, klientų ir tiekėjų pasitikėjimą.

Šiuolaikinėje aplinkoje aukščiausio lygio įmonės vadovybė vis labiau pasitiki vidaus audito funkcija norėdama įvertinti, ar rizikos valdymo priemonės yra pakankamos rizikai ir netikrumui valdyti. Tai yra didžiulė atsakomybė ir per daug metų vidaus auditas tobulėjo siekdamas tinkamai vykdyti jam priskirtas funkcijas. Vidaus auditas yra svarbi funkcija, duodanti įmonei pridėtinę vertę, kuria įmonė turėtų pasinaudoti didindama savo konkurencinį pranašumą.

Tokia vidaus audito plėtra taip pat yra svarbi Lietuvos įmonėms dėl augančios ekonomikos, didėjančios užsienio investicijų apimtys ir didesnio verslo aplinkos spaudimo tobulinti rizikos valdymo bei verslo valdymo procesus. Šio straipsnio tikslas – ištirti Lietuvos įmonių rizikos valdymo sistemų efektyvumą finansinių ataskaitų kokybės požiūriu, ištirti, ar vidaus audito funkcija veikia rizikos valdymo sistemos efektyvumą finansinių ataskaitų kokybės požiūriu, t. y. ar Lietuvos įmonių vidaus audito funkcija yra efektyvi.

**Reikšminiai žodžiai:** rizika, vidaus auditas, valdymas, rizikos valdymas, finansinių ataskaitų kokybė.

**Rima TAMOŠIŪNIENĖ.** Assoc. Prof. Dr. of Social Science (Economics), Vilnius Gediminas Technical University, Department of Financial Engineering. Research interests: preparation and management of business and investment projects, risk analysis and management of various projects, financial analysis and management.

**Olga SAVČUK.** PhD student of Social Science (Economics), Vilnius Gediminas Technical University, Faculty of Business Management, Department of Finance Engineering. Research interest: internal audit, its organization and development principles.