BUSINESS RISK MANAGEMENT: FEATURES AND PROBLEMS IN SMALL AND MEDIUM-SIZED TRADING AND MANUFACTURING ENTERPRISES

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Abstract

SMEs are generally recognised as the engine of economic development, and their development becomes a precondition for the international competitiveness and the economic growth of the state. Business risk management is a specific management sphere that requires a deep understanding of economic activity, decision optimisation, insurance activities, and knowledge of economics, law, psychology and many other fields. In countries with deep-rooted business traditions, business risk management starts with the creation of the company. Currently Lithuania has no consensus on how to encourage and support the entrepreneurship in SMEs, minimizing the danger of possible risk. The main research tasks of the article are as follows: we analyse the related literature and information about SME risk management, and its application, generalizing this topic, and then we examine and evaluate the practical applications of business risk management instruments to SME companies in trading and manufacturing sectors in Lithuania. The data analysis of empirical studies carried out with the managers and experts of the Lithuanian SMEs, using the survey and interview methods, revealed a greatly varying capacity of the respondents to identify business risk and manage it accordingly. Such differences are particularly noticeable when examining SME CEOs understanding of what risk mitigation instruments can be applied to their business.

Keywords: Risk management, small and medium sized enterprises, trading and manufacturing

Introduction

The existence of a risk, as an integral and inevitable part of the human economic activity, had led to risk management becoming an urgent and even fashion activity on enterprise level, as what appears to be stable today, may change tomorrow. In the last decades, many scholars - Jordan, (2013), Woolfson (2007), Pickett (2005), Tepman (2002), Stulz (2003), Chanse (2001) paid special attention to the risk management in industry field. These authors argue that risk management is a part of every company's daily work, however, both the business executives and company employees insufficiently understand the modern methods of risk assessment. The main reason for this phenomenon is the lack of knowledge, because risk management is a relatively new area of activity, especially in small and medium-sized enterprises. The possibility of various losses is always inherent in a business environment of uncertainty and indeterminacy. SMEs are particularly vulnerable due to lack of capital or lack of human resources that in the event of loss could ensure the coverage of company's financial losses or even avoid of bankruptcy. As stated by Skipper and Kwon (2007), reducing the long-term financial volatility, risk management increases the competitiveness of the company, reduces its cost of funding risk and capital costs. In addition, in the macroeconomic point of view, risk management may reduce the number of insolvent companies in the country's economy, which in turn expands the credit and capital markets and has a favourable effect on the country's trade and entrepreneurship.

It is reasonable to say that there is a number of scientific publications published on the topic of the general business risk management, however the lack of consistent studies or research on risk mitigation instruments that are or should be used in the SME business risk management process and which could be applied to small and medium-sized trading and manufacturing companies. When collecting, analysing and describing knowledge and information about SME risk management, instruments used and their application, it was observed that this topic calls for theoretical generalizations. This requires to analyse and evaluate the behaviour of SMEs in business risk management, which, if applied to practice, could be used to determine what risk management instruments reduce the probability of business risk in SMEs in trading and manufacturing sectors and enable them to sustain their business running profitably.

The research methodology is based on a comprehensive approach to the object and its components. To obtain theoretical and practical results, general scientific and special methods were used, e.g. a systematic literature review and analysis, synthesis of scientific findings, publicly available surveys and statistical data analysis and assessment: grouping, comparison, specification, interpretation, summary and graphical modelling. To summarize gathered information the following programs were used "IBM SPSS statistics 17" (International Business machines Corporation Statistical Package for Social Sciences) and MS Office Excel.

The purpose of this paper is twofold. First, we analyze the concepts of business risk and business environment risk classification with possible application to manufacturing and trading industries. Second, we explore empirical research and used results to clarify the risk management instruments' (no)use in Lithuania's SMEs and identify the internal and external risk management factors affecting business development.

The structure of this paper is as follows. In the section 1, we review the literature connected with interpretation of concept of business risk and peculiarities of risk classification and interpretation in trading and manufacturing industries. The section 2 then present the empirical research, it's interpretation, and it's results. The last section provides some concluding remarks, estimation results of the analysis.and recommendations for manufacturing and trading enterprises.

Some Reflections on the Concept of Business Risk and its Features in Trading and Manufacturing Sectors:

In today's extremely dynamic business environment, dominated by global trends and rising level of uncertainty, the concept of risk is becoming increasingly important. When making every day strategic business decisions, entrepreneurs are faced with economic, social and political changes in the market, consumer consumption changes, unforeseen competitors' actions, entrepreneurship encouragement peculiarities and other factors influencing their business environment. Moreover, corporate activity is becoming more and more complex, so risk in this area and uncertainty assessment becomes critically important.

In the scientific literature, risk is defined and measured in different ways, but the primary and inherent meaning of risk is considered danger and threat. In their works, many authors - Rejda (1998, 2013), Williams and Heins (1985), Shahov (2003), Cepinskis et al. (1999), Rutkauskas (2001), Belinskaja et al. (2001) emphasize that one and unanimous definition of risk cannot be offered. As a result, a variety of risk concepts exist. Despite the fact that the definition of the concept of risk tends to have negative – danger and threat – connotation, some authors also describe the probability of occurrence of positive results (Garskiene (1997), Schieg (2006), Rejda (1998, 2013), Ritholtz (2012)).

Also, in describing the risk as a variety of results - Williams and Heins (1985), Dowd (1999), Nilsen (2002), Wilson and Summers (2002), Wilson et al. (2003), Berlin (2003), - do not specifically define if the expected results may have a positive connotation. The authors have a different understanding of the risk analysis process and its management. Economic risk management is generally examined from the financial risk perspective (Harvard Business Review, 2011). Furthermore, Trieschmann et al. (2001), claim that the risk should not only be linked to potential of loss, but with expected benefits as well. These scientists define risk as the deviation from the expected result, and this deviation can be as detrimental as well as beneficial.

The reviewed works by Borovkova (2004), and Sarkisova (2009), examine in depth the risk management in trade sector. Trapani (2012), Grath (2012), Fraser and Simkins (2010), Lam et al. (2014) examine risk management in the international trade and/or the international financial market as well as the general management instruments applied in a hypothetical company, regardless of its specificity and economic sector.

Kacalov (2002), focused on the risk management in manufacturing sector in general, while the authors Wilson and McCutcheon (2003) went deep only into the security risk management in production. Other authors, such as Cretu et al. (2011), Edwards (1995), Burtonshaw–Gunn (2009), or Anders Garth, 2012; Fraser and Simkins (2010), Lam (2003), analysed the risk management process and applied instruments in the construction, engineering and design sectors. The authors Belinskaja et al. (2001), Utkin and Frolov (2003), Shapkin (2003), Cepinskis and Raskinis (2005); Vageris (2005), Jashina (2006), Kaleininkaite and Trumpaite (2007), Startiene and Remeikiene (2007), Tamosiuniene and Savcuk (2007), Damodaran (2008), Buskeviciute and Leskeviciutė (2008), Kouns and Minoli (2010), Mylrea and Lattimore (2010), Aabo et al.m (2010), Rutkauskas (2011), Jasinavicius et al. (2011), Duckert et al. (2011), did not examine thoroughly the individual business risk management model and instruments that can be applied to trading or manufacturing companies, so a limited attention is given to these types of economical activity.

It can be noted that the scholars pay more attention to the risk management, as identification and detection of the specifics of insurance services and complexity aspects, understanding the insurance aspects, evaluating them, comparing, choosing, acquiring and using this service as one of the ways to reduce business risk (Skipper and Kwon, 2007; Reida, 1998, 2013; Trieschmann, 2001; Tamosiuniene and Savcuk, 2007; Damodaran, 2008; Buskeviciute and Leskeviciute, 2008; Kouns and Minoli, 2010; Mylrea and Lattimore, 2010; Aabo et al. 2010; Rutkauskas, 2011; Jasinavicius, 2001, 2011; Duckert, 2011).

Giving the occurrence of the field of business, risks can be divided into two: *internal risks and external risks. External sources* of risk are environmental factors, which may influence the quality of business. As an entrepreneur cannot influence external risks, he can only anticipate and take into account their potential threats to his business. Here are discussed the unforeseen changes in laws governing business activity, unstable political regime in the country and other situations, and entrepreneurs losses resulting from the outbreak of war, nationalization, strike and publication of embargoes. Due to state-led financial, credit, currency, structural policies, even the most gifted and the most qualified entrepreneur may find him/herself on the brink of bankruptcy.

The internal and external business environment of the enterprise may be affected by business risk factors. The *external environment* consists of the economic, social and political conditions in which the firm operates, and the dynamics of which it is forced to adapt to. The uncertainty of external risks depends on many factors and/or on individuals whose actions may be unpredictable. The setting of objectives, criteria and their evaluation indicators of these risks (societal needs and shifts in consumer demand, technical and technological innovation, changes in market conditions and unexpected natural events (disasters) is difficult to understand.

The indirect factors of impact are classified in many different ways. However, the direct factors of impact, which are most common in literature, are: customers, competitors, suppliers, corruption, unexpected change in domestic and foreign market conditions, labour resources, laws, revolutionary scientific and technical progress, and other state regulatory forms. In contrast, the indirect factors of impact are: political, legal, economic, technological, social/psychological and other factors from the outside world. The external environment presents itself through factor, which affects the company's business and its results.

The sources of internal risk arrive from the business itself. This risk arises from ineffective management, false marketing policies as well as abuse of position within the company. The main internal risk is personnel risk, which is associated with company's employees' professionalism and character. The main internal risks are: incompetence, experience, lack of knowledge and business-operational inactivity, venturesome, excessive confidence in business partners and reach for instant profit while ignoring development opportunities and so on.

When developing a business, it is also important to arrange the greatest risks to the company into internal and external risks (see Figure 1)

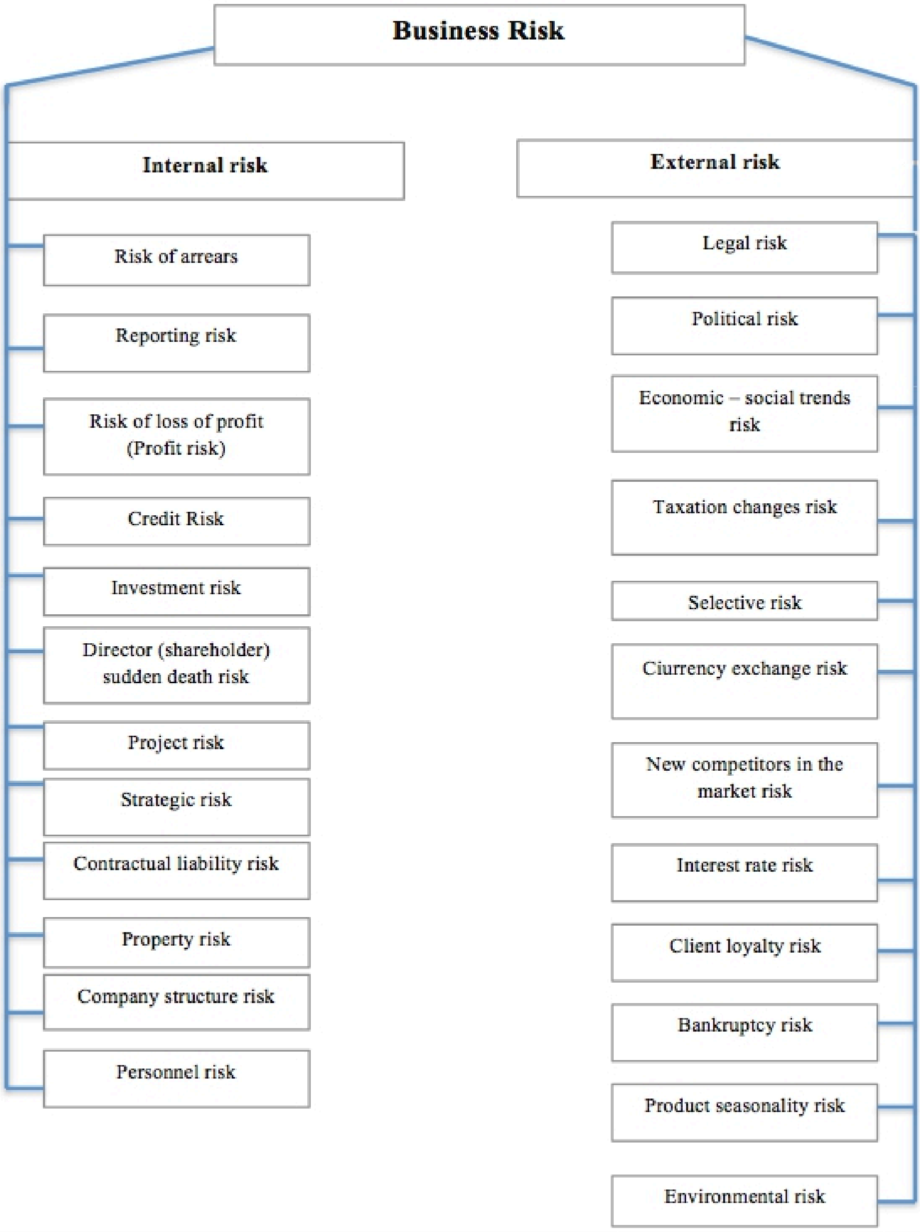

Figure 1. Business risk determined by the internal and external environment, prepared by the authors.

The objective side of risk in business is associated with real economic and independent factors and processes. As we can see, the combination of external and internal risks made a unique risk profile for each company, and influence on risk management policy and instruments used. Even though the influence of internal and external business risks is often declared in literature, it still lacks a comprehensive risk management process for identification and its impact on the business environment, which would allow increase the quality and effectiveness of business decisions.

A review of the scientific literature and related sources shows that business risk is researched globally by a lot of scholars, but a single concept and classification of risk does not exist, as the authors interpret and classify it very differently. A unified and clear risk profiles and business risk management model that would be designed for SME trading and manufacturing companies is not presented in the examined literature.

The increasing pace of change in the global business environment and the political challenges of business environment raises the necessity to rediscover the benefits of integrated risk management in SME trading and manufacturing companies and to assess the specificity of individual businesses in the long-term perspective.

Possibly and even rationally, the risk management concept must include the psychological risk element, i.e., it must emphasize the aspects of company manager’s perception and tolerance of risks. These properties of a leader play a very important role in making the business risk management decisions. However, this article does not analyse the influence of the psychological characteristics of CEOs on the business risk management process, because it is believed that it is an area of psychological research and moreover interdisciplinary studies that could be taken in future researches.

The risk, as the chance of potential losses can be classified according to various criteria (distinctions): by causes; according to the functional type of business and the economy; according to the scale; the resolution phases; according to the duration of exposure; by insurance options; permissible level, etc. Interpreting the opinions of various authors (Martinkute, 2006; Cepinskis and Raskinis, 2005; Damodaran, 2008; Kaupys, 2003; Dowd, 1999; Wilson and Summers, 2002; Wilson and McCutcheon, 2003; Nilsen, 2002; Berlin, 2003) and aiming to find the inherent risks, as well as define its specifics in the trading and manufacturing business environment, it is possible to distinguish sole definitions of risk by individual authors as such: in recent decades, the companies mainly deal with these financial sub-risks: foreign exchange risk; credit risk; production risks; inflationary risks; risk of changes in interest rates; market risk; investment risk; yield decrease risk and others. Unpredictable changes in foreign exchange rates may affect not only the company's financial performance, but may also threaten its further existence in the market.

One of the most used in economic theory and practice risk classification method is to separate pure and speculative risks (Rejda, 2007, 2013; Dorfman, 1994; Dickson, 1995; Trieschmann et al., 2001; Belinskaja et al., 2001; Cepinskis and Raskinis, 2005; Williams, 1989). Simplifying such division, possible to conclude that pure risks have no positive results, i.e. the realizations of pure risks are always a loss. But as to speculative risk's realization, here could be two results – the same negative (loss), and in contrary – positive (profit). In addition, we can consider also zero result (no loss, no profit), that possible to apply both as to pure and to speculative risks as well.

Other authors draw attention to the fact that sometimes a business risk has both; the pure and speculative evidence of risk, thus to strictly divide them into speculative or pure risk is impossible. (Rejda, 1998, 2013; Dorfman, 1994; Trieschmann et al., 2001; Skipper and Kwon, 2007; Cepinskis and Raskinis, 2005; Cernova, 2007, 2010). As an example, legal risk, political or country risk, operational risk, cannot be strictly synonymous with pure and speculative risk types.

We can observe in business environment increasing significantly such types of risks, which have both as pure as speculative features. Those risks are evaluated and manageable only partly, and we can see it obviously in activity of insurance companies on a global market, when insurance companies before rapid globalization of business environment classically insured only pure risks, then transfer their supply of protection also to risks, which have partly speculative nature as in modern business environment could be partly managed, i.e. predicted, calculated, and financed and partly unmanageable (for exp., currency risks, country risk, market risk and many others). Looking from position of business risk and estimating the possibilities to manage risks properly in trading and manufacturing small and medium sized enterprises, we offer to modify mostly traditional and dominated risks classification method, and propose to classify risk into three categories: pure, speculative and partly speculative risk. Such classification reflect modern business environment and its rapid development, and also help to manage risk properly, i.e. to make much more less mistakes in assessment of risk, selection of risk management tools and methods, financing of risks etc. Such classification is a dynamic one, as are dynamic all risks. Also important that the division of risks under three categories is very much depends on geographical criteria (for exp., in one country political or legal risks could be speculative, in other country – only partly speculative). Below you can see the example of risks under the mentioned classification and using some related traditional business risks categories that, by our opinion, could be applicable both to trading and manufacturing small and medium sized enterprises (Figure 2).

Speculative risk	Investment risk; Yield reduction risk; Inflation risk; Deflation risk; Currency exchange risk; Liquidity risk; Interest rate risk; Market risk; Selective risk
Partly speculative risk	Political or country risk; Legal risk; Operational risk; Risk of loss of profit; Commercial risk; Bankruptcy risk; Credit risk; Systematic risk; Export credit risk
Pure risk	Property risk; Production risk; Natural disasters; Personal risk; Civil liability risk; Third party liability risk

Figure 2. **Business risk distribution.** Author's risk classification that divides business risks into the speculative, pure and partly speculative risks.

Trading enterprise – is a complex dynamic system that functions in a constantly changing social and economic global environment, and its strategic management based on risky decisions (Sarkisova, 2009). Trading business is always facing with changes that cause a number of new risks. First, the new trade regulation rules and norms are coming into business environment with globalization, region's integration and disintegration processes. Secondly, trading companies are forced to look for new innovative strategic management and capital raising solutions. And finally, the trading company operating in the nowadays-international market should to create not only the medium but also of long-term plans of good's realization.

Researches from McKinsey company - Jan Ascher, Paul Laszlo and Guillaume Quivige in paper "Commodity trading at a strategic crossroad" (Ascher et al., 2012) indicated that in the next 2-3 years, those main three trends affect trade: 1) increasing competition and related consumer empowerment will lead to decrease of profitability of trading enterprises. Recent decade decline in trade barriers stimulates the emergence of many new market players, such as example - only in Geneva during the year 2006-2011 the number of trading companies has doubled (from 200 to 400). On the other hand, there is increasing trend of manufacturers to set up their own points of sales, and less to cooperate with the traders. Also during the last 5-10 years, financial institutions began actively involved in a variety of goods on sale, and not directly connected with their core business lines; 2) volatility in the markets requires trading companies to dispose of an increasing working capital, which strongly affects their balance and encourages trading companies to seek new sources of capital or financing; 3) regulatory changes in banking services trade increases transaction costs, which leads to the same banks to engage in trade of various additional services and goods.

Summarizing, all these tendencies increase the business risk of trading companies, encourages them to seek proper management decisions, thus finding out new and combine with known risk definition, assessment, calculation, financing methods, as well to apply adequate risk management instruments and tools to keep companies on the balance edge.

The production risk is formed by combining the resources used in production (labour, capital, land) and the same manufacturing process of goods. It depends on the company and production potential, technical support, technical level of security, work safety compliance etc. In the event of unforeseen changes in manufacturing, for exp., due to adverse natural conditions (poor business processes organization in company or accidents), the company will suffer losses and difficulties in the commitment to the market partners.

Describing the type of trading or manufacturing enterprise from a risk management analysis point of view, depending on the area of occurrence, risk factors also can be divided into external and internal as it shown before (see Figure 1).

In consideration to estimations mentioned above it could be stated, that it is necessary to identify the essential and specific external and internal risks of trade and manufacturing enterprises, which usually and the most often are indicated in different sources of the theoretical literature (Allen, 2003, Bard et al., 2003; Belinskaja et al., 2001, Bertinetti et al., 2013; Cepinskis and Raskinis, 2005; Banks and Dunn, 2003, Kacalov, 2002; Rejda, 1998, 2007, 2013; Skipper and Kwon, 2007; Williams, 1989; Chapman, 2011; Lam, 2003, 2014; Doherty, 2000; Urniezius, 2001; Taylor, 2014; Williams, 1989 and oth.) , and also have been mentioned by various experts and practioners in our research study.

The dominated types of external risks both to trading and manufacturing enterprises are the follows: political risk; new competitors risk; changes in socio-economic trends; negative information about enterprise risk; terrorism risk; mass strikes; interest rate risk; inflation; currency exchange risk; investment risk; non-compliance with state regulation; electrical disturbances; fuel disorders; natural disasters; changes in global market conditions; sector risk.

The dominated types of internal risks both to trading and manufacturing enterprises are the follows: volatility of cash flows and settlement risk; unpredictable expenditures; risk of arrears; liquidity risk; credit risk; loss of profit; rental price increase risk; personnel risk; the risk of accidents; employers illegal actions; strategic risk; company structure risk; the risk of spreading of responsibility and accountability in company; third part liability; the risk of non-compliance contractual obligations; the employee's negligence or intentional fraud; CEO (shareholder) the risk of sudden death; employers liability; property risk; storage risk; risk of bankruptcy.

While talking about **the differences in risk profiles of trading and manufacturing risks,** let us summarize the main listed in reviewed literature (see Table 1)

Table 1. Trading and Manufacturing companies internal and external specific risks.

Trading company specific risks		**Manufacturing specific risk**	
Internal	**External**	**Internal**	**External**
Acceptance of goods and services by consumers	Changes in customers preferences	Technological risk and risk of innovations	Expansion into foreign markets
Realization of goods at the market	Customer loyalty	Product demand forecasting	New regulation requirements for product composition
Goods transportation	Foreign trade risk	Defected product and product liability	Changes in prices of raw materials
No effective order of good's portfolio	Transport costs fluctuations due to increased fuel cost	Lack of raw materials	Decreasing of public sector buyers or their orders
Location of trading spots	Decline in the prices of goods on the global market	Failure or depreciation of machines or equipment	Public sector buyers risk of delayed settlements
Failed goods arrangement in sale premises	Goods seasonality	Production time risk and decrease of labour productivity	Product withdrawal/ cancellation from the market
Failed advertising	The emergence of substitutable goods	Professional diseases	Legal expenses risk
	Changes in tariffs and duties	Project risk	New regulation requirements for employers safety
		Business interruption	Ecological risk

Compiled and developed by the authors.

Looking from position separate risk type, it's worth to note that under the same common title of risk sometimes cover different interpretation of specific risk for different type of activity. For example, negative information about enterprise as an external risk, both for trading and manufacturing activity has a different sources and sometimes meaning, i.e. for trading company it could be actions of customers because of bad service, and for manufacturing companies it could be public opinion of media in frame of lack of social responsibility. Or, other example, internal personnel risk in trading enterprise could be more influenced by employee's personal character, and in manufacturing enterprise – by employee's qualification.

In summary, it may be asserted that both trading and manufacturing risk profile, assessment of risk and risk management have common features, but there is also quite enough specificity to one or other type of activity. This depends on the variety of risk and on its unique composition in these areas of business. This implies a different risk management in relation to the selection of different activities.

Concluding, we agree that any individual trading or manufacturing enterprise has its own risk profile, but at the same time we can state that this risk profile should be define by specialists, and possibly using cross-combination of internal and external risks reviewed and described previously in this article.

A survey in Lithuania SME trading and manufacturing companies performed by the authors and presented below, provide the opportunity to see the results and refine the understanding of risk management in these sectors in Lithuania, the application of risk management in its corporate activities, instruments used and their compliance with specific and most dangerous risks, risk management specifics in these sectors as it stated in theory, and could be useful for appropriate risk management models developing in future.

Small and medium business risk management application in Lithuanian trading and manufacturing companies: research methodology, analysis, evaluation and interpretation.

We maintained several research objectives: to find out how SMEs assess business security; to determine how SMEs define, describe and evaluate business risk; to identify, reveal and validate the operating specifics of SME risk management instruments; to set the applications, their potential and trends of SME risk management instruments in trading and manufacturing enterprises in Lithuania.

This research study is based on two methods – quantitative and qualitative. A quantitative study achieves a much higher number of respondents, thus comparing the anonymous questionnaire responses with the open answers of the in-depth interview respondents will help to get a more thorough and comprehensive understanding of the object of investigation, to confirm the research problem and purpose as well as fulfil the research objectives. Qualitative research helped to reveal each respondent's personal experience, his/her perceived reality and an approach to certain events, which allowed investigating in details the intended phenomena. This research method helped to reveal Lithuanian SMEs' level of understanding of risk management and their ability to predict and manage as well as to reveal the instruments used for the management process and their practical application.

The questionnaire revealed Lithuanian small and medium-sized trading and manufacturing enterprises' ability to identify business risk, risk management features and its management instruments. Target enterprises are Lithuanian trading and manufacturing companies, having up to 250 employees, and with yearly turnover not more than 138 mln. Litas (approx. 40 mln. Euro) or value of assets in the balance sheet not exceeds 93 mln. Litas (or 27 mln. Euro). The study surveyed 418 respondents. Fully completed questionnaires received from: 126 small and medium-sized manufacturing enterprises and 292 small and medium-sized trading enterprises. This number does not include partially completed or rejected questionnaires. The questionnaires were designed for CEOs, owners and other management decision makers. In accordance with the customer data storage, professional ethics and confidentiality reasons, the names and other data of the companies participating and not participating in the study are not disclosed. The authors express gratitude to JS Insurance Company "Lietuvos draudimas" for great and inestimable possibility to use its online survey creation tool "Sinopticom" and Intranet page for location of questionnaire. Methods and tools of statistical data analysis and assessment: grouping, comparison, specification, interpretation, summary and graphical modelling, calculation of selected response incidence and percentage frequency distributions, average and statistical significance tests, factor analysis. To summarize gathered information the following programs were used "IBM SPSS statistics 17" (International Business machines Corporation Statistical Package for Social Sciences) and MS Office Excel.

A selection of purposive samples has been used for the qualitative research, since, according to Bitinas et al. (2008, p.98), the most informative cases in terms of research perspective – and in this study individuals – are the most suitable for qualitative research. The qualitative study refers to its research subjects as informants or respondents. This research study refers to its research subjects as experts, because they represent the small and medium-sized business sectors (manufacturing and trading) and in a way summarize in their responses SME representatives' opinions, attitudes, evaluations and insights about business risk and its management instruments. Using the random target selection method, eight directors, representing small and medium-sized enterprises in trading and manufacturing sectors and four risk management professionals, working in the insurance and banking sectors, were selected and voluntarily agreed to be the experts.

The individual, semi-structured, otherwise known as purposeful or partly-structured interview method was used for the data collection, during which the researcher has the opportunity to not only listen to respondents, but also see them, monitor their mood, emotions, reaction to questions and answers that the informants provide in their own words, as "every person uses certain terms to describe the life events, to express their views" (Bitinas, et al., 2008, p. 98). All interviews are strictly **confidential** and **anonymous**, as required by the research principles (Trochim, 2006, cit. Bitinas et al., 2008). The interviews were recorded with the consent of respondents. Each respondent received the main questions that were drafted taking into account the objectives of the study. However, during the interview the questions were expanded and the responses were free and unlimited. The interviews were informal and took a conversational form. Responses received during the interviews were analysed using the qualitative content analysis. In this way, the essential aspects of the investigated phenomenon were determined, and the data obtained were analysed precisely in the context of a specific text. In the process of analysing the text, categories and sub-categories are formed, which are interpreted and in such way the answers to survey questions are obtained. The methodological paradigm of ethnographic research was selected on the basis of analysis methodology – the study result can be described, interpreted and construed hypothetically.

Due to restricted volume, and limitations for article, here is not possible to attach all supporting data, i.e. questionnaires, respondent's answers, calculations, analysis and interpretations of interviews made by authors etc., so here authors ensure and take a responsibility, that all information used for analysis, calculation and interpretations in their research is original and properly treated.

In order to better demonstrate the research purpose and answer the questions raised in the research objectives, as well as analyse in detail and present the research results, four areas that share a common aspect of the research – the risk associated with SMEs, its management instruments and the understanding of it – are identified: business security and its identification in SMEs; the understanding and identification of business risk in SMEs; the understanding of the risk management process in SMEs; risk management instruments and their application in SMEs.

Summary of the results of quantitative research

1.Business Security and Identification in SME: an analysis conducted formulates conclusion: Lithuania SME manufacturing and marketing of directors believes that both the production risk, which is mainly characterized by the production companies and the risk of human-induced, such as stealing, bullying, vandalism, errors and omissions, accidents, and other man-made risk, has the lowest impact on business and corporate development. *External security:* analyzing macro (external) factors, mainly affecting the company's activities, the majority of CEOs mentioned the following factors: the economic situation in the country, the legal and tax system weaknesses and / or change, a large concentration of competitors and

/or change, the economic environment (which, in turn, associated with fluctuations in the purchasing power of the population and therefore affect the company. Production companies often than trading company said that the company's activities have an impact on the legal and tax system weaknesses) and political-legal business environment. Generally these macroeconomic factors, mainly affecting the activities of the company, are the country's economic situation; legal and tax system weaknesses and/or change them; high concentration of competitors and/or their change; economic environment and the political-legal business environment. *Internal security:* The analysis revealed that the respondents do not see the contact points between business and production risk, and the production risk imposes a minimal effect or does not absolutely exist in business. The analysis of the data revealed that the human-made unexpected risks, such as theft, hooliganism, vandalism, intentional or unintentional negligence and others could also affect the company's business and its stability. Respondents' opinion on this point split in half. *Business risk perception and identification of the SME:* as to **pure risk,** part of the survey respondents completely agree (42 percent) or agree (39 percent) that employees lack the competence or qualifications affect a company's reputation. Many (41 percent) of the companies surveyed completely agree that the chances of a major business risk is when the client cannot paid on time or go bankrupt and default on payments to the company. These factors may have a strong influence on the financial stability of the company. 43 percent of respondents say that the partner default pose a serious threat to their corporate cash flows. **Operational risks:** speaking about the internal factors, mainly affecting the company's operations, corporate executives participating in the survey most often mentioned staff competence or lack of qualification, the possibility that the customer may go bankrupt or has not been paid, partner defaults and difficulties in obtaining a loan from the bank. **Financial risks:** in response to the question of whether large bank debt would affect the activities of the company, 28 percent of respondents said that disagree with this statement, and 21 percent completely disagree. This means that almost half of the survey respondents said that any debts, liabilities or collateral to the bank should not affect the company's activities. More than half of the respondents completely agree (35 percent) or agree (29 percent) with the statement that the possibility of getting a loan from a bank for small and medium enterprises are often not considered due to the fact that the company does not meet the lender's requirements. Even 41 percent companies are not sure that the product or service substitutes raised in the market would create incentives to change the company's maintained strategy and objectives.

2. Risk management in SME's. **Risk identification:** a small number (27 per cent) of the surveyed companies use the company's financial audit services with purposes of verification of financial statements or the consolidated financial statements and which audit the company's financial condition, operating results and cash flows. According the results of research, financial audits the most often use the company, which is engaged in medium sized business and managed by senior executives up to 29 years old. **Risk analysis and assessment of the company:** the analysis of the respondent's survey answers, by the use of risk instruments for its purpose and content, can be divided into several groups. For example, one group includes "physical" risk reduction measures: safety organization and control, property "physical" protection and installation of fire alarm system. This risk management instruments used most - an average of 68 percent of all companies (the total use of all of these instruments was calculated), often small and medium-sized enterprises, which has been in existence for more than 10 years, insured the potential business risks, and claiming that they have enough information about insurance. **Choice of risk management instruments in company:** when asked whether the company used as a risk mitigation tool fire and property safety alarm "yes" answered even 77 percent surveyed medium sized business companies which has existed for over 10 years. Respondents to the questions about risk management instruments requiring "higher understanding", such as financial audit, investment management, loss control system establishment and improvement of the recruitment of skilled employees, said that these kind of instruments used by an average of 38 percent of all companies, and generally they formed a self-insurance fund. Manufacturing companies, according to research statistics, much more frequently than trading companies use such instrument as the recruitment of skilled employees, and medium enterprises are more likely than small businesses prefer the following measures: fire alarm and property protection, physical protection of objects and consultancy of brokers, insurance managers and other consultants. **Economic Risk Control**: respondents mentioned the following risk control instruments: the financial audit, investment management, loss control system establishment and improvement of the recruitment of skilled employees. This group of instruments used by an average of 38 percent of all companies, and also they used a self-insurance fund. **Risk monitoring and supervision:** after analysis of the distinguishing factors in risk management of manufacturing and trading, it became clear that factors, both the general and separate analysis by corporate activity, is almost exactly the same, but the main difference between trading and manufacturing companies - an importance of factors' row. Trading companies associate the most important risk factors with the partner and customer defaults, economic, political, legal situation, and only then highlights the risk of human resources or demographic aspect. And manufacturing companies, on the contrary as a higher risk called the human aspect -this factor is placed in the first ranking, and then the maximum weight is given for the economic situation, demographic, political and legal environment, and the last factor is associated with partners and customers in default (this trading firms ranked on the first place).

3. Risk management instruments used by SME. **Risk avoidance:** Most (60 percent) of the respondents confirmed that investments, as well as fund-accumulating are one of the most popular tools for companies to manage and reduce business risk. Most SME trading and manufacturing companies representatives answered "yes" (63 and 74 percent). Physical protection of the object (the area or premises, the property therein and the protection of employees, when the protected object continuously or at a certain time secured by guards) used by 46 percent respondents. Consultancy from JS „Creditinfo Lietuva“ used 26 percent of surveyed companies (this company collect information about partners - other Lithuanian and foreign companies or customer's creditworthiness, debt recovery from private and commercial persons in Lithuania, provide a legal advice and consultancy to solve problems of the company financial troubles). This instrument used both by medium and small manufacturing and trading sector companies, but most of them operate not only in Lithuania, but also in other countries. **Dangerous factors change by less dangerous:** the majority (82 percent) of the companies surveyed indicated that one of the major risk instruments used by the company - safe organization and management in the company guided by occupational safety and health regulatory legislation, technical documentation for processes and work equipment, assessment of the potential risks of employees safety and health, regularly organized improvements of safety and health measures. **Risk retention:** such risk mitigation instrument mainly selects companies that carry out their activities in Lithuania and abroad and they are led by up to middle age - from 30 to 49 years - executives (46 and 43 percent trading and manufacturing companies respectively). **Risk transfer:** insurance strategy formed by brokers, insurance managers or consultants used by only 30 percent of surveyed companies: most of them medium-sized manufacturing and trade companies (respectively 64 and 33 percent). More than half (57 percent) are not covering their property - it is more common for small companies and companies that operate only in Lithuania. Small companies, which carry out activities both in Lithuania and abroad, and is engaged only in export or in import, between the insured and uninsured distributed in half. It is observed that the various types of insurance are more frequently used by medium sized companies, has existed at market for more than a decade, and conduct business in Lithuania and abroad, and with a self-insurance fund and a longtime CEO of the company (headed the company a decade or more). **Risk instruments alternatives:** The question whether the self-insurance (reserve fund formation) could be one of the most common business risk mitigation instruments, 39 percent of SME trading and manufacturing companies indicate that agree on this, which dominated activity is trade, and many of which are small firms. The majority (82 percent) of the companies surveyed indicated that one of the major risk instruments used by the company - organization and management of safe working environment.

Summary of the results of qualitative research

Target of researches was concentrated to four areas that share a common aspect of the study - SME risk perceptions and management: business security and identification in SMEs; business risk perception and identification in SME; perception of risk management process in SMEs; risk management tools and their use in SMEs.

1. Business security and identification in SMEs. Most of the experts unanimously recognize the business that Lithuania is not safe due to the unstable political and economic situation and constantly variable and uncertain tax environment. Experts participating in the survey identified two business security/risk aspects, which can be identified as internal and external security. **External:** business security is directly dependent on the country's economic, political, legal and tax environment and the existing regulations and restrictions. This environment, as assessed by all the experts, is unsafe and unable to provide a secure business development. "Such environment not only does not help companies to increase their business, but, on the contrary, - promote the shadow economy "..., notes one of the experts. **Internal:** In this regard, the experts identified a broad variety of company's internal management, emphasizing that the small business depends on its directors' tactical and strategic decisions. Internal security, according to experts, initiated from the business idea, that it must be well thought out, measured and analyzed with a proper business plan creation, together with planning measures for manage crisis situations as well. Summarizing the risk of security in Lithuanian SME, respondents see the main following: reckless or ill-founded business plan development; human resources (deficiency of skilled employees, especially in the periphery); shadow economy; tax evasion; untimely payment for goods or services.

2. *Business risk perception and identification in SME.* **Pure risk:** entrepreneurs are most afraid of instability, any political and economic change in the situation since then and frequently changing tax environment Experts say that the biggest business risk - high taxes and very confusing tax system, also a significant influence on their businesses brings inflation and deflation. Most experts tend to compare the business situation by the year before 2008-2009 crises, during and after the crisis. However, according to experts, the crisis has affected the business, but also has brought new

knowledge as disclosure the hidden risks and hazards of this economic activity. In case of natural disasters, the CEO of the company determines the survival, and if has the understanding about insurance mechanism and possibilities for his/her business. Experts stress that risk of accidents at work places has a very significant impact on business security, especially when there are injured or even died employees. Experts point out that managers' awareness in this area really increasing in companies and more and more attention is paid to the employee training and safety protection. **Operational risk:** According to experts, one of the biggest threats to company's' property is unexpected situation where the company's premises devastated by fire or water accident. Unfortunately, even 95 percent small companies that are not experienced such unexpected disasters, not conscious of the potential threats and their consequences, and take measures to avoid this risk only when unexpected events already happen. Saving their in many cases limited resources, such companies, even understand the extent of risk, does not insure property as suppose that insurance is too expensive for them. By all experts' opinions, there are some similarities in trading and manufacturing activity as to operational risks, as both companies meet the human-made risks, seasonality of operations, untimely payments or cancellation, irregular and inconsistent orders. But also there are essential differences, as to manufacturing plant, most probably affect the following risks: manufacturing defect; untrained staff; theft; customer's refusal to pay for improper output, currency exchange fluctuations, and for trading companies: changes in political and economic environment, affecting the purchasing power of the population, natural disasters (earthquake, storm, flood, etc.), but the most – customer' insolvency. Assessing the causes of customer' insolvency, experts say about tax environment, unstable political and economic situation, accidents at work place and so on. **Financial risk:** describing the financial risks, experts stress that most companies incur foreign exchange risk, and it is an impact of the global economic developments, but this type of risk is dominated in trading companies, especially for exporting firms. According to experts, the majority of small and medium-sized companies do not trust the hedging proposed by banks as do not understand properly this service and simply have an assumption, that such kind of assurance is profitable only for banks. Experts say that companies are unable to protect themselves from banks and other credit institutions' liquidity risk, and even it is still important in Lithuania (after several latest banks bankruptcies and nationalization), cannot to buy related expensive consultancy from experienced audit or other firms. Also credit risk refers by the experts as one of the greatest, because late financing, deficiency of working capital cause many difficulties for companies, especially with planes to expand productive capacity or to participate in public procurement. Interviewed experts didn't like to disclose the information about credit risk that already realized in their companies, probably because is very much connected with company reputation and image.

3. *Perception of risk management process in SMEs.* **Risk identification:** Experts pointed out that the international companies are aware of the risks and its realization and are able to manage it properly, that cannot be said about the Lithuanian firms, and particularly in SME sector. However, experts admit that the SMEs, however, in his own way try to identify business risks as rely on CEO knowledge and using its limited financial resources necessary for identification techniques. Almost all leaders convinced themselves that are able to manage even the most unexpected threats, but none of the respondents mentioned that company has professional employee responsible for managing of crisis situations. **Risk analysis and assessment**: many experts say that small and medium-sized enterprises rarely analyze and evaluate their business risks, mainly consulting with some friends and colleagues who have experienced more. No risk maps, no risk analysis plans, and even one specialist in the area of SME sector companies do not have. However, medium-sized manufacturing enterprises analyze and assess risk in some extent, in contrary of typical commercial enterprises. But, in manufacturing plants for risk analysis are usually responsible only technical managers, no other specific staff. **Choice of risk management instruments:** there are companies that use at least the simplest and the least cheap risk management instruments – following by safety instructions, fire protection and fire extinguishers in the workplace, some types of insurance. **Economical risk control**: according the experts, it is generally aware of companies CEO and complies with the high professional competence of them. **Risk monitoring and supervision:** Experts say that there is plenty of information about how to do business more safety and not depends on any risks' realization, but most entrepreneurs are too optimistic about risks, or don't like to make additional investments into supervision by outsourcing such activity just because often expect to be able "not to meet" the risk.

4. *Risk management instruments and their use in SMEs.* **Risk avoidance:** Possibly safely assume that risk avoidance as a preventive measure, the country's manufacturing and trading SMEs' use very rarely. In other words, if entrepreneur simply feels that some very risky decision could bring more profit, so just takes it. Only one expert referred to the case of the acquisition of own premises for a lot of money, which the company and its owner does not have, and for this had to put under the risk all of its assets to obtain a bank loan to buy these premises, but then decided to avoid this risk, because didn't like to lose everything in case of fail. **Removal the sources of risk:** Experts believe that the risk is not relevant to small business in the

same extent as to big corporations. To think about possible sources of risk for them is unbearable, and what to say about additional costs to finance removal of sourses of risks. However, it is noted that over the past decade, interest in potential business threats increases. **Replacing the dangerous factors by less dangerous:** Experts emphasize that for the majority of SMEs to install even fire-extinguishing system is too expensive. However, the majority of SMEs have contracts with security companies, mostly for property risk protection. All experts without exception said that security services is inevitable riks managemet instrument for manufacturing and trading SMEs. **Risk retention**: when experts talk about self insurance as a form of risk-retention, they say that companies often have their own accumulated funds and keep them in bank deposits. Some CEOs put their personal funds in a self-insurance funds, if necessary, to the rescue of their business. They agree to put aside at least 10 percent of annual turnover that would be sufficient for an initial decision in the event of a disaster, but in order to reduce business risk and to protect third parties, self-insurance programs must be perfectly aligned with well-managed cost control program. **Risk transfer:** Experts recognize that insurance - one of the most favorable business risk management instrument that provide the security for a company and its owner. Especially it could be said about manufacturing medium-sized enterprises whose activities are at higher risk segments: woodworking; furniture, plastic products, peatlands; pharmaceutical companies and the like. But, as have heard in interviews, entrepreneurs representing such activities and CEOs are more likely not to insure company's risksk, but, their private property and other risks. Experts say that the majority of small businesses count insurance only as expenditures, and only few are aware that it may be a certain psychological comfort, and future risk financing at the cost of transfer. According to experts, risk transfer to insurance company in this sectors is happening because of their own, friends, colleagues painful experience, or requirements from banks, and the media or publically spreaded information about accidents, disasters, and other threats happened in their environment. According to experts, there is still a lack of confidence in insurance companies, that in Lithuania there is not developed yet an insurance culture. **Risk instruments alternatives:** Experts confirm that the services of risk management specialist are not popular among companies. This is due to the lack of confidence of the consultants and the high price of their services. Even with additional resources, many CEOs to designate an employee training and development, rather than hired consultants. Most business leaders, experts say, more confident in their, their friends, relatives knowledge and experience than the advice of the consultant from outsourse. Experts point out that SMEs do not trust also services of auditing companies, because do not trust the quality of service and responsibility of audit firms, and such services are usually too expensive for SMEs. According to experts, the state-level consulting business could be really valuable and necessary, as it is likely that it would have a positive impact on the decline of SME bankruptcies.

Conclusion

The analysis of scientific literature showed that there is no general treatment and approach to risk and showed that authors classify business risk very differently; there is incoherent terminology and a lack of general business risk classification for trading and manufacturing business risk. A version of such classification, as proposed by the authors, offers to separate risk into three main types: pure risk; speculative risk; partly speculative risk. The essential difference between the pure and speculative risk is that a person voluntarily accepts the speculative risk, hoping for a positive result (profit), even though he knows that the result can be a loss. It should be noted that sometimes risk has characteristics of both pure and speculative risk. It is claimed that such business risk distribution is more suitable to changing conditions of business and its environment.

Traditional management theory only partially explains the conditions for successful business performance. Risk management, which originated in the seventh-eighth decades of the 20th century as a result of the Western business practices, has long been regarded as the opposite concept of business "success" management, and only in the recent years has become an important part of the company's integrated management and professional activity that leads to the continuation of the business not less than traditional business management models. In addition, sources of theoretical studies have shown that integrated risk management is a new field of science, and that it needs further in-depth research and assessment, particularly in the small and medium business environment, where many gaps are found and the risk management process and its instruments are understood differently, unevenly and inadequately in respect of the company-specific and/or dominant risk.

The scientific literature study showed that SMEs should choose the right risk management instruments, which are unique to each company, taking into account the risk determined by internal and external environment, the operations specifics, uniqueness, and the stage of business development and volume. Quite an important condition for the adoption of risk-taking and avoiding decisions is to evaluate the economic benefits that the company will gain by choosing to avoid the risk or, on the contrary, by deciding to take it.

Although the development conditions for the SMEs in Lithuania are quite favourable, on the basis of empirical studies it can be claimed that the macroeconomic (external) risk factors that affect the development of SMEs and have the most impact on the operations of enterprises in Lithuanian, are the following: economic situation in the country, changes and limitations to the legal and tax systems; high concentration of competitors and / or their rapid change; economic environment (which in turn is associated with fluctuations in the purchasing power of population and therefore affects the company); as well as the political and legal environment for business.

Empirical studies' data show that exposed in the SME environment is not only the external, but also the internal (microeconomic) factors, affecting the development and scalability of SMEs. The most frequently mentioned risk factors affecting the company's activities in Lithuania are as follows: lack of employee's competence or qualification; probability that the client may not pay or go bankrupt; failure to comply with contractual obligations and difficulties obtaining a loan.

On the basis of empirical research data analysis, it should be noted that the business executives of Lithuanian small and medium-sized trading and manufacturing enterprises believe that both manufacturing and human-induced risk (theft, hooliganism, vandalism, mistakes and negligence, accidents, etc.) have the lowest impact on the company's development. Work accidents, which usually occur due to inadequate assessment or lack of assessment whatsoever of the hazards and the risks they cause, could be costly for the enterprise that does not have a risk management and does not realize its necessity. In conclusion, the business development is often hindered by business managers' lack of ability to understand, recognize and anticipate business risks, lack of expertise in using risk management instruments and failure to anticipate and develop a long-term business risk management strategy.

On the basis of empirical research data analysis, it must be concluded that the business executives of the Lithuanian small and medium-sized trading and manufacturing enterprises perceive the business environment as risky, *a priori* understand the importance of business management, but in their company's management processes apply episodic and fragmented risk management. In other words, risk management is not a planned, consistent and continuous process, integrated into the company's (success) plan, as various periodic risk management actions are taken on the fragmentary identified "more familiar" risk, such as operational, market, credit, etc. This situation stems from the fact that the businesses lack experience and skills, business executives lack knowledge and competence, there is a lack of specialists and organisations providing specialised risk management services for business, and there is institutional void of information databases.

On the basis of empirical research data analysis, it should be noted that unfortunately, the business executives of the Lithuanian small and medium-sized trading and manufacturing enterprises do not have a risk management strategy (appropriate risk identification, assessment, selection of risk management instruments, risk control and monitoring), without which the business can not only be temporarily disrupted, but even fail.

In the authors' opinion, the fact that an incredibly small number of Lithuanian SMEs use insurance services, apart from financial reasons, is quite closely related to the belief of companies' executives that nothing bad can happen and even if it does, the business will not collapse. Such a belief can often cost ten or a hundred times more than insurance services, which in the small and medium business segment are used to a very limited extent, because their benefits are not trusted. The authors believe that the insurance companies' educational activity in this business segment is insufficient.

Having evaluated risk management gaps in small and medium-sized trading and manufacturing enterprises during the empirical study, specific theoretical assumptions for the application of risk management instruments inherent in small businesses have been revealed. It can be claimed that both manufacturing and trading enterprises risk management shares common features, however specific features characteristic only to one or the other sector can be distinguished. It is determined by the variety of risks and its unique composition in these areas of business, and implies a different selection of risk management instruments for different business activities.

Recommendations

The risk management process should cover the entire company's operations, should integrate into all processes, and the right choice of risk management tools will help to prevent or at least reduce the company's risks. The authors suggests to gradually integrate the risk management strategy into the company's management process according to the company's business development conception and strategic objectives as well as the company's individual characteristics, in order to make sure that risk-focused management does not become destabilizing to the company's development and that risk management is perceived in the company as an integral part of each employee's share of responsibilities and not as a separate activity. Complex integrated risk management implies the need to assess all the risk factors characteristic to the individual company – economic, organisational, legal, technological, social, ecological, human and other, and not only known to the business executives or persons responsible.

The main responsibility for the quality of risk management lies with the company's executives. The authors believes that in addition to many other personal qualities, business executives must be able to anticipate the business risks and manage them properly; the author suggests to realize, learn the business "risk management culture" and abandon the "stereotypical" thinking, mostly based on the success (the implementation of a business idea, benefits, achievements in a market segment or in the international market, etc.) planning, to be able to grow with your business, introduce new business management methods, to share responsibility with employees, partners, customers, insurance companies, and to professionally and responsibly plan and forecast the company's performance and development.

The authors proposes that the risk management functions should be distributed among the functional units, clearly stating that in the employees' job descriptions and exercising their permanent monitoring. This should lead to establishing an internal company's risk management system, which would identify the balance between the optimal share of the risk and the ability to manage it. This requires to not only ensuring the optimal interaction between the internal and external members of the enterprise, but above all, creating an effective internal communication. Since establishing separate risk management units in SMEs, especially in the early stages, is difficult due to lack of funds, and often economically inefficient, it is proposed to integrate certain risk management functions into the functions of individual employees.

Addressing the problem of lack of information, internal communications and business processes transparency, the author proposes to companies to open up a multi-level access to the information according to employees' positions, and the employees themselves, in general and on the basis of the integrated risk management concept, can be divided into employees who are directly associated with a particular risk management in respect of the nature of their duties (risk subjects), employees who control some of the processes carried out by the above-mentioned employees and help them make risk management decisions, and other level employees (information users), who are not directly related to risk management in the enterprise, but they need the information to ensure the business process efficiency.

Business executives are recommended to use the services of certain experts in the development and implementation of risk management program in the enterprise, and integrating it into the company's business plan. The outside assistance is needed in order to constitute a unique concept of self-assumed risks depending on the specific company's risk management environment and to avoid management mistakes, while ensuring the development and dissemination of the risk management culture in the company. It can be claimed that currently in the environment of the Lithuanian small and medium-sized trading and manufacturing enterprises such experts could be:

Company's shareholders (if they do not involved in the management of the company); state institutions (Tax Office, municipality, etc.); banks (financial advisers); investors; the company's customers (e.g., ensuring the quality of goods or services); company's suppliers; business partners (joint project development and participation); various external consultants; insurance companies and insurance brokers.

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