

**MATHEMATICAL METHODS OF FINANCIAL RISK
ANALYSIS IN COMPANY X**

Bachelor's Thesis

Maria Nesterova

Lapland University of Applied Sciences
Innovative Business Services

2016

Lapland University
of Applied Sciences
Innovative Business Services

Author	Maria Nesterova	Year	2016
Supervisor	Kaisa Lammi		
Commissioned by	Name is hidden		
Title of thesis	Mathematical Methods of Financial Risk Analysis in Company X		
No. of pages + app.	45 + 2		

The goal of this thesis is to consider relativity between theoretical and practical tools of predicting bankruptcy risks, providing the guidance for the optimal decisions, based on the economic situation in the company. The strengths and weaknesses of the organization for the formulation of various tasks of strategic development were also analysed.

Mathematical and statistical Altman's and Lis's development were used as the most reliable approach for assessing the risk of bankruptcy. The asset liquidity analysis was also done. Using the understanding of the economic situation, two and three-level structure of the corporate Risk Management System (RMS) was created.

The objective of thesis is the system of economic and organizational-administrative relations, bankruptcy risk calculations based on the financial statements for three years, the balance of liquidity analysis, ensuring the economic security of the enterprise.

Based on the purpose of writing the thesis, there are the following tasks - to identify the factors of economic security of the Company X in modern conditions, to determine the economic threat to industry, to develop mechanisms for managing the economic security of the company.

Key words – risk, bankruptcy, liquidity, ratio, asset, Z-score

TABLE OF CONTENTS

1 INTRODUCTION	7
2 THEORETICAL ASPECTS OF RISK ASSESMENT AND MANAGEMENT IN THE ENTERPRISE	10
2.1 The concept of risks and their classification	10
2.2 Tytes of financial risks.....	10
2.3 Enterprise Risk Management.....	15
2.1.1 Methods and tools for analyzing the risk of financial and economic activity of the enterprise.....	19
3 RISK ASSESSMENT OF FINANCIAL AND ECONOMIC ACTIVITY OF THE LEGAL RECRUITING COMPANY	25
3.1 General characteristics of the Legal Recruiting Company and key performance indicators	25
3.2 Analysis of the Financial Stability of the Company X.....	28
4 RISK ASSESSMENT OF BANKRUPTCY OF LEGAL RECRUITING COMPANY BASED ON FOREIGN MODELS	31
5 MECHANISMS OF NEUTRALIZATION OF FINANCIAL RISKS	35
5.1 Neutralization of financial risk mechanism system involving the usage of the following basic methods	35
5.2 Improving the technology of risk management by creating a risk management system	39
6 CONCLUSION.....	43
REFERENCES.....	46
APPENDICES	49

LIST OF TABLES

TABLE 2.2.1 QUALITATIVE RISK ASSESSMENT	21
TABLE 2.2.2 THE MODEL OF RISK ASSESSMENT OF LIQUIDITY (SOLVENCY) OF THE BALANCE USING ABSOLUTE VALUES	23
TABLE 3.1.1. ANALYSIS OF STRUCTURE AND LOCATION OF THE BUSINESS ENTITY'S ASSETS	26
TABLE 3.1.2. RISK ASSESSMENT OF FINANCIAL STABILITY	27
TABLE 3.1.3. ANALYSIS OF BALANCE LIQUIDITY	28
TABLE 4.1 TWO-FACTOR ALTMAN Z-MODEL	32
TABLE 4.2. FOUR-FACTOR LIS R. Z-MODEL	33

LIST OF FIGURES

FIGURE 2.1 THE THREE-LEVEL CLASSIFICATION OF FINANCIAL RISKS.	14
FIGURE 2.2 DESCRIPTION OF THE MAIN FUNCTIONS OF THE FINANCIAL RISK MANAGEMENT OF THE ENTERPRISE IN THE CONTEXT OF CERTAIN GROUPS.....	16
FIGURE 2.3. THE ESSENCE OF RISK MANAGEMENT	18
FIGURE 2.4. SYSTEM OF FACTORS THAT AFFECT THE LEVEL OF FINANCIAL RISKS ARISING FROM THE ACTIVITIES OF THE COMPANY ..	19
FIGURE 3.2. FINANCIAL ANALYSIS FORMULAS	29
FIGURE 5.1.1. TWO-LEVEL STRUCTURE OF THE CORPORATE RMS.....	40
FIGURE 5.1.2. THREE-LEVEL STRUCTURE OF THE CORPORATE RMS...	41

ABBREVIATIONS

A – growth rate of real assets (%)

FA – fixed assets and investments

I – inventory and cost

C – cash settlements

L – long-term liabilities

ROI – return on investment

OE – operating expenses

RMS – risk management system

TR – technological revolution

1 INTRODUCTION

Upon the conditions of market relations, the problem of estimating the risk of financial and economic activity of enterprises acquires an independent, theoretical and practical importance as an important component of the theory and practice of management (Granaturov 2011, 17–23).

The unstable economic environment requires a systematic analysis of the financial condition. Thus, the main object of this study should be the financial risks of the enterprise and possible ways to reduce them (Granaturov 2011, 17–23).

Risks associated with the economic activity of the company and generating financial threat are classified in a special group of financial risks, which plays the most significant role in the overall "risk portfolio" of the company. A significant increase of the company's financial risks according to the operating results due to the instability of the external environment (the economic situation in the country, the emergence of new innovative financial instruments, the expansion of financial relations, financial market volatility and other factors). Therefore, the identification, assessment and monitoring of the level of financial risks is one of the urgent tasks in the practice of financial management (Granaturov 2011, 17–23).

Most management decisions related to the financial activities of the company are taken according to the conditions of risk, which are based on several factors, the lack of complete information, the presence of the opposing trends and many others. It is clear that success in the business world depends critically on the accuracy and validity of the chosen strategy of the economic and business activity. The probabilities of critical situations should be taken into consideration (Granaturov 2011, 17–23).

It would be senselessly to consider business opportunities without any risks of economic security. There is no business without risk. Increased risks, in fact,

the opposite side of a free enterprise, it is a sort of payment for it. Without any knowledge about the risk, the entrepreneur is somehow insufficient. For any business it is important not to avoid risk at all (it is almost impossible), but to foresight and reduce it to the minimum level (Baturina 2009, 22–28).

Moreover, the absence of risk (the risk of unexpected and unwanted for companies, banks, enterprises consequences of the own actions) usually affects the economy because it undermines the agility and efficiency (Baturina 2009, 22–28).

The influence of financial risks affects the financial results of the company, they may lead not only to financial losses, but also to the bankruptcy of the enterprise. Therefore, one of the main tasks of financial manager is to identify precisely the financial risks that have impact on the activity of a particular company. The main goal of financial risk manager is to manage those risks, or such actions that would minimize the impact of these risks on the company's activity. This thesis focuses on one of the most important aspects of the study of financial and economic activity of the enterprise (Blank 2006, 556–600).

The object of thesis is a Legal Recruiting Company and the subject of study is the risk of financial and economic activity of the enterprise, its comprehensive assessment and neutralization. The calculations are based on the information obtained directly from the company X (the name of the company is hidden according to confidentiality agreement). The research process also relies on the use of the scientific methods, methods of systematic, structural-functional, comparative and coefficient analysis, methods of grouping and summarizing. In addition, the research method, which is a necessary condition for achieving the above goal, is to analyse the overall financial risk, which is based on carrying out a comprehensive assessment of the risks of financial and economic activity of the enterprise on an example of the Legal Recruiting Company. This work consists of five chapters, each of which is divided into sections.

The first chapter is the general theoretical part, which defines the concept of "risk", discusses its main elements and features, consideration of the main elements and risk classification with the description of its main types, the description the organization of risk management in the enterprise.

In the second chapter of the work is executed a risk assessment of the Legal Recruiting Company on the basis of the theoretical background and the dynamics of changes.

The third chapter considers the risk assessment of financial and economic activity of the Company X based on the assets of the enterprise's risk, financial risk, and the total of the enterprise for which the constant monitoring of the level of risk will significantly improve its position, using the technique of Analysing the balance liquidity. Calculations are based on the actual data.

The fourth chapter is introducing the assessment of risk of bankruptcy of Legal Recruiting Company, which includes Z-score models and comparison of their effectiveness, identifying Z-score index, comparing it with the theoretical basis.

The fifth chapter considers the improvement of the risk management system of financial and economic activity of the enterprise, also the main ways to neutralize risks, a method for improving the technology of risk management through the establishment of risk management systems, an assessment of risk of bankruptcy based on foreign models.

2 THEORETICAL ASPECTS OF RISK ASSESSMENT AND MANAGEMENT IN THE ENTERPRISE

2.1 The concept of risks and their classification

Risk is the uncertainty related with the possibility of adverse situations and consequences during the project, when the probabilities related with several effects, which can be evaluated on the basis of the preceding period. The financial risk of the enterprise is the result of the selection of its owners or managers of alternative financial solutions aimed to achieve the desired target financial performance in the probability of incurring economic damage (Gonzalez 2015, 209–211).

Financial risk is the degree of uncertainty related with the combination of debt and equity of the enterprise or property. If the share of borrowed funds is bigger, then the financial risk increases (Gonzalez 2015, 217).

Financial risks of an enterprise are characterized by a large variety in order to prepare effective management decisions require a specific risk classification such as the source of the risk, type of financial risk, characterized by a facility risk assessment, a set of research instruments, the complexity of financial risk, the nature of the possible financial consequences of risk, the nature of risk manifestation, the level of probability of the risk, level of financial losses on risk, the ability to anticipate risk, the possibility of risk insurance (Plugina 2007, 54–58).

2.2 Types of financial risks

Systematic or market risk. It characterizes the probability of financial losses related to adverse changes in conditions of different types of financial market. This type of risk is inherent in all financial activities of the participants (Plugina 2007, 54–58).

Unsystematic or specific risk. It characterizes the probability of financial losses related to ineffective activity of a particular company. This risk is caused by unqualified financial management, inefficient structure of assets and capital, excessive adherence to risk (aggressive) financial transactions with high profit margins, the underestimation of economic partners and other similar factors, the negative consequences, which can be prevented by effective management of financial risks (Plugina 2007, 54–58).

Inflation risk is a type of financial risks of devaluation of the real cost of capital (in the form of financial assets of the company), as well as the expected revenues and profits of the company from carrying out financial transactions or operations due to rising inflation. This type of risk is permanent and accompanies all financial transactions of the enterprise in the conditions of inflationary economy. Thus, the inflation risk is allocated in an independent kind of financial risks only in conditions of inflationary economy (Plugina 2007, 54–58).

Tax risk is the probability of losses, which may be incurred as a result of entrepreneurial firms, conjectural changes in tax legislation or as a result of mistakes made by the company. Thus, the tax risk at the same time refers to a group of external and internal financial risks (Plugina 2007, 54–58).

Credit risk is the probability that the partners, the participants of the contract will be unable to perform the contractual obligations as a whole and for the individual items. There are two types of credit risk - credit risk and merchant banking credit risk. Trade credit risk arises in financial activities of business firms in the case of its commodity (commercial) or consumer loan customers. Credit risk can be caused by the industry downturn, decline in demand for products produced by the company, the failure of contractual relations partner of the firm, the transformation of the firm's assets, force majeure (Plugina 2007, 54–58).

Risk of deposit. This risk reflects the possibility of non-return of deposits (non-payment of certificates of deposit). It is relatively rare and associated with misjudgement and poor choice of a commercial bank for deposit operations of the

enterprise. However, the implementations of the deposit-risk cases exist in the countries with developed market economies (Plugina 2007, 54–58).

Currency risk. This type of risk is inherent in enterprises leading foreign economic activities. It manifests itself in stipulated revenue shortfall as a result of the direct effects of changes in foreign currency exchange rates used for the operations of foreign companies (Plugina 2007, 54–58).

It characterizes the possibility of financial losses in the investment activity of the enterprise. In accordance with the views of these, activities are separated and the types of investment risk – the risk of real investment risk financial investment (Plugina 2007, 54–58).

Interest rate risk. It is unexpected change in interest rates in the financial market (both deposit and credit). The cause of this type of financial risk (if previously considered to eliminate the inflationary component of it) is changes in financial market conditions under the influence of government regulation, growth or decline offers of free money resources and other factors (Plugina 2007, 54–58).

Business risk is one of the types of financial risks associated primarily for joint-stock companies. Business risk arises as a rule, in cases where production and economic activities of entrepreneurial firms are under the influence of certain reasons less successful, when compared with what was planned (Plugina 2007, 54–58).

Price risk. This type of risk is the possibility of incurring financial losses related to unfavourable changes of the price indices for assets traded in the financial market. Stocks, derivative securities, gold and others can act as these assets (Plugina 2007, 54–58).

Reduce the risk of financial stability (or the risk of imbalance of financial development) company. This risk is generated by the imperfection of the capital

structure (shares used as excessive debt), has created an imbalance of positive and negative cash flows of the company (Plugina 2007, 54–58).

Insolvency risk (or the risk of unbalanced liquidity) of the enterprise. This risk is generated by a decrease in the level of liquidity of current assets, generating an imbalance of positive and negative cash flows of the company over time. According to its financial consequences, this kind of risk is also among the most dangerous (Plugina 2007, 54–58).

Innovative financial risk. This type of risk is associated with the introduction of new financial technologies, the use of new financial instruments. (Plugina 2007, 54–58).

Other types of risks. The Group has quite extensive risks, but the probability of occurrence or the level of financial losses, it is not as important for businesses as discussed above. These include the risks of natural disasters and other similar "force majeure risks," which can lead not only to loss of envisaged income, but also part of the company's assets (fixed assets, inventory of material assets), the risk of delays in the implementation of cash operations (related to a bad choice of service commercial bank), criminogenic risk and others (Plugina 2007, 54–58).

There are different ways to define financial risks. Financial risk determination can be divided into two sections. The first section related to the risk as hazard of potential losses. The second section considers financial risk as probability of unfavorable consequences under the influence of adverse factors. It means that financial risk is a group of risks, so far as it focuses company's risks (Voronova 2012, 436).

J.M. Keynes (1936) was one of the first economists, who suggested the risk classification. Based on Keynes's research, three-level classification of financial risks was created. This classification enables to use a financial ratios system

and it makes possible to consolidate a planning system of company and a system of risk management (Voronova 2012, 437).

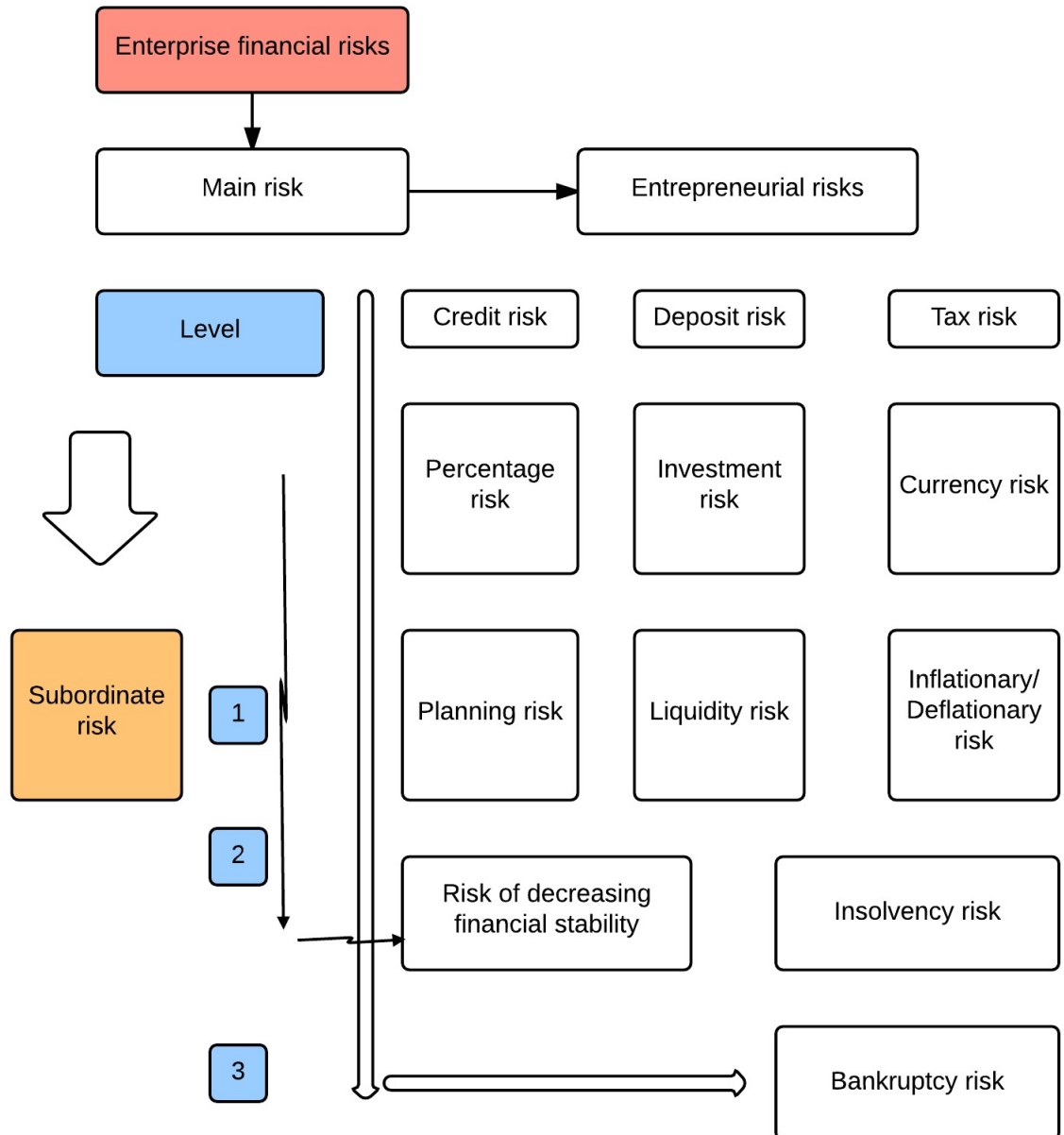


Figure 2.1. The three-level classification of financial risks (based on Voronova 2012, 437).

The first level of the introduced classification is shown by the specific risks of a company. The second level shows the risk of increasing insolvency risk. The third level represents bankruptcy risk, which is identified by financial sector in relation with credit risk monitoring.

2.3 Enterprise Risk Management

Financial Risk Management of the company is a specific area of financial management, which stood out as a special field of activity – the "risk-management". Financial risk management includes the development and implementation for the company guidelines and measures aimed at reducing the initial level of risk in financial transactions or financial transactions to an acceptable final level, which allows the company business (Horcher, Karen & Wiley 2005, 1–3).

To identify potentially possible situations associated with adverse developments for entrepreneurial firms, e.g., situations of risk, which may result in failure to achieve its goals as a result of financial activities. To receive characteristics of potential damage associated with undesirable developments, to mend in advance of the decision on the choice of financial transaction plan. If it is necessary, to reduce the financial risks to an acceptable level, to take into account the costs associated with the preliminary risk assessment and management (Plugina 2007, 54–58).

Thus, risk management is a specific area of financial management, which requires knowledge of the finance companies, insurance, analysis of economic activities of entrepreneurial firms, etc. Financial risk management implements its main goal and main objectives through the implementation of certain functions, these functions are divided into two main groups, determined by a complex content of risk management (Chernyak 2007, 414).

The financial risk management function as a special area of enterprise management (structure of these functions is determined by the specific object of this functional management system). In the most general form part of the core functions of the enterprise financial risk management in the context of these groups is shown in Figure 2.2.

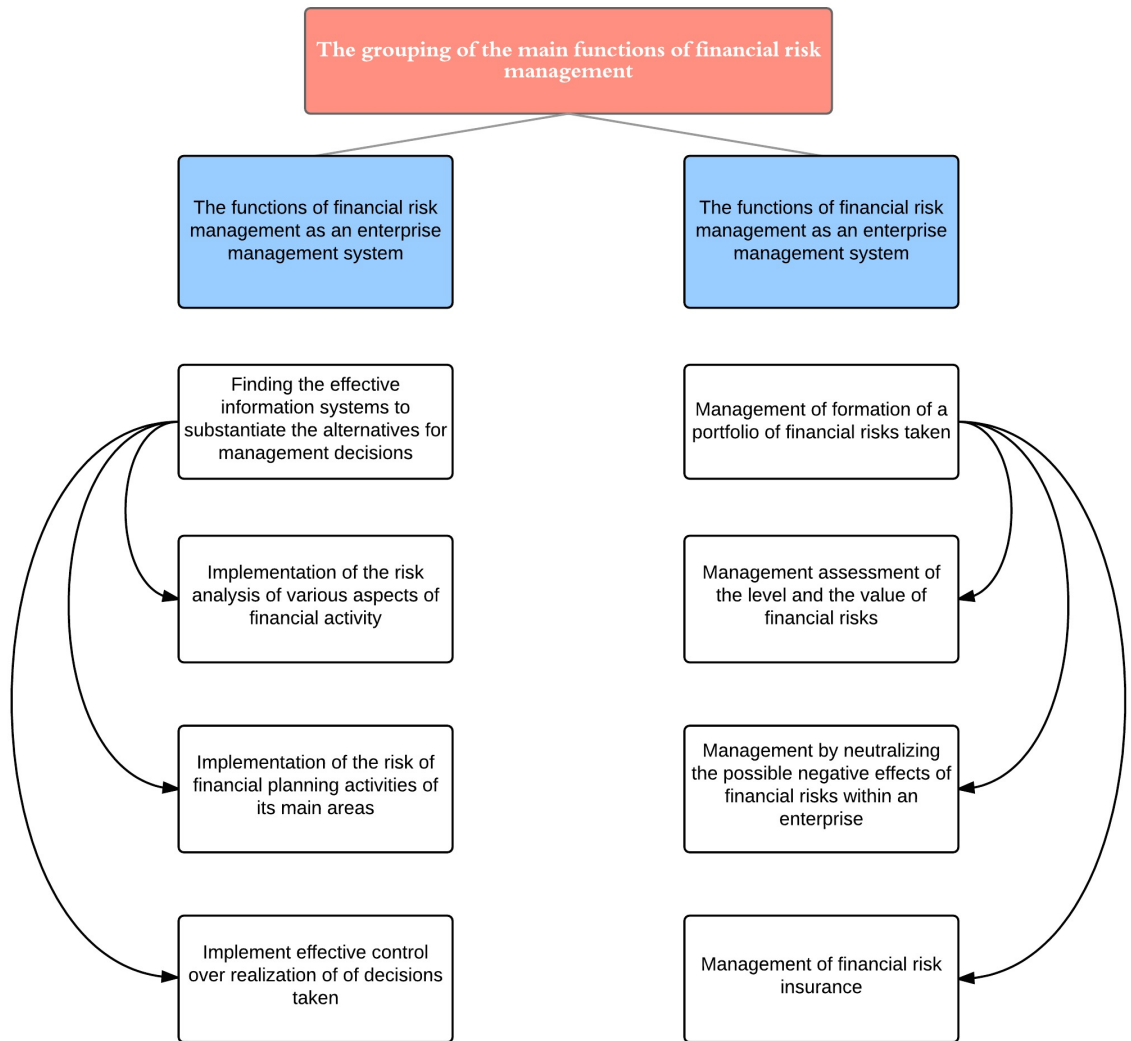


Figure 2.2. Description of the main functions of the financial risk management of the enterprise in the context of certain groups (based on Granaturov 2011, 26-59).

Within the group, the financial risk management functions of the enterprise management system are as the formation of effective information systems in order to identify the alternatives management decisions. During the implementation of this function, it should be defined scope and content of the information needs of financial risk management system, implementation of risk analysis of various aspects of financial activity. During the implementation of this function are carried out rapid and in-depth risk analysis of individual financial transactions, financial transactions and certain domestic subsidiaries “responsibility centres” of financial activity as in the context of its particular areas, implementa-

tion of risk financial planning businesses on its main directions. The implementation of the management of financial risks is associated with the development of operational plans and budgets for the main directions of the company to protect against possible financial risks of external and internal nature providing neutralization of identified financial risks. The basis of this planning strategy is developed by financial risk management, which requires specifying at each stage of its development, implementation of effective control of realization of the adopted risk decisions. The implementation of the financial risk management function is related to the establishment of appropriate internal control systems in the enterprise. The division of control responsibilities of individual services, and risk management, the definition of controlled and target periods, rapid response to the results of monitoring carried out (Grenyov 2009, 496).

Within the group of financial risk management function, which is a special management area, the main are – management of formation of a portfolio of taken financial risks (the function of this management is identifying potential financial risks of the enterprise related to its upcoming financial activities, avoiding individual financial risks by renouncing excessively risky financial operations and transactions. Determination of the final composition of individual systematic and non-systematic financial risks assumed by the company), management assessment of the level of financial risks (during the implementation of this feature is the choice of methods for assessing the individual financial risks, taking into account existing information base and skills of risk managers of the enterprise. Identifying possible scope of related financial losses in the context of individual operations and financial performance overall), management by neutralizing the possible negative effects of financial risks within an enterprise (the functions of this department are the development and implementation of measures aimed at prevention and minimization of the level and value of individual financial risks through appropriate internal mechanisms of evaluation of the effectiveness of such measures), management of financial risks insurance (during the implementation of this function the criteria for the transfer of financial risks of the enterprise insurance companies are formed, the relevant insurance companies are selected to cooperate in consideration of their specialization and the rating on

the insurance market, a system of conditions of the contract of insurance is agreed, effectiveness of the transfer of certain financial risks of the enterprise external insurer is assessed) (Hampton 2011, 14).

The main functions of financial risk management are discussed in more aggregated form. Each of these functions can be specified in a more targeted way specific to the financial activities of the enterprise and its portfolio of financial risks. Financial Risk Management of the company is based on certain principles (awareness of risky decision-making, the ability to manage the financial risk, comparable level of riskiness of on-going financial transactions or transactions with their level of profitability, comparable level of riskiness of on-going operations or financial transactions with the financial capabilities of the enterprise, efficiency of risk management, consideration of the effect of the time factor in the management of financial risks, the comparability of the financial strategy of the company's strategy of financial risk management of company) (Granaturov 2011, 26–59).

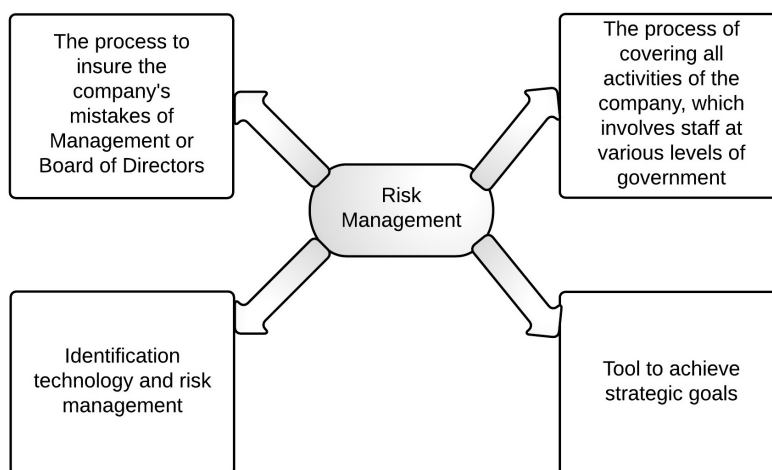


Figure 2.3. The essence of risk management (based on Granaturov 2011, 26–59)

As part of the most important factors of the financial environment indirect influence must be evaluated in the strategic financial analysis, may be the level and the rate of inflation in the country, the dynamics of exchange rates, interest rates, the practice of state regulation of the financial activities of companies, financial institutions, the dynamics of economic development, regional econom-

ic policy of the state, state regulation of individual industries, the level of support economic practices, the overall investment climate in the world and the country, the state policy of attracting and protecting investment, the state policy in the field of taxation, and other macroeconomic factors (Granaturov 2011, 26–59).

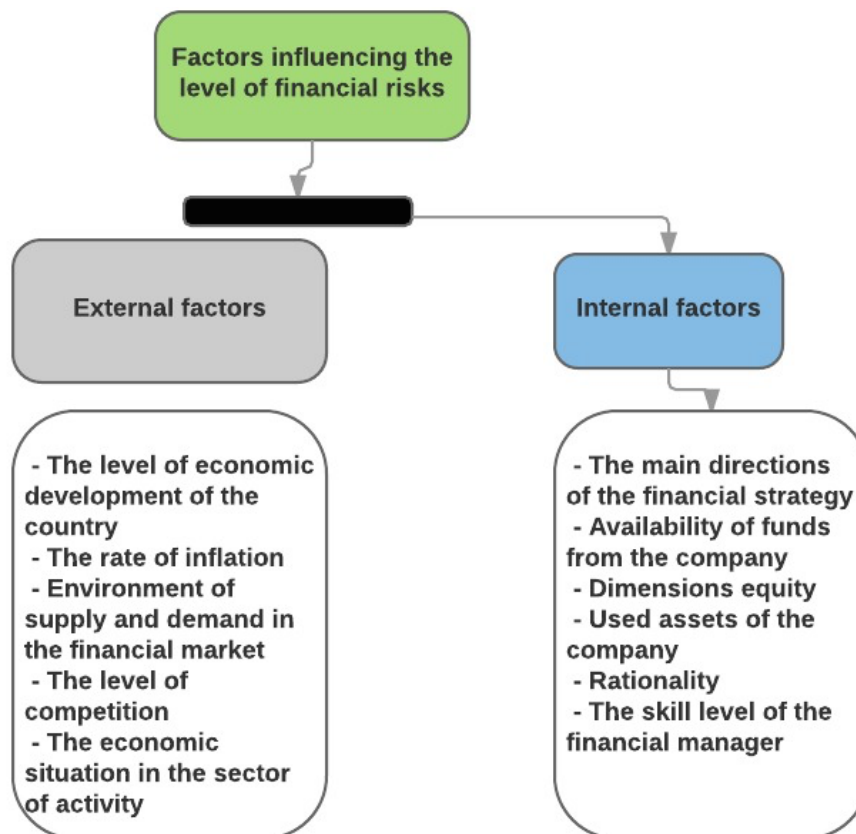


Figure 2.4. System of factors arising from the activities of the company (based on Greuning, Brajovic & Bratanovic 2000, 23–56)

2.1.1 Methods and tools for analyzing the risk of financial and economic activity of the enterprise.

The estimation of risk is one of the most important stages of risk management, for risk management it is necessary, first of all, to analyze and evaluate. There are many definitions of the term in the books on economics, but in general the risk assessment refers to the systematic process of identifying the risk factors and the types and quantitative assessment, videlicet risk analysis methodology

combines complementary quantitative and qualitative approaches (Dubinin 2007).

The objective of the qualitative risk analysis is to identify the sources and causes of risk, steps and works under which there is a risk, i.e., identification of potential risk areas, identification of the risks associated with the activities of the enterprise, prediction of practical benefits and possible adverse effects manifestations identified risks (Dubinin 2007).

For the implementation of this procedure is proposed to use the table of qualitative analysis (Table 2.2.1). This table is prepared in the vertical sequence of actions when making decisions, and the risks fixed previously are listed across. Qualitative risk assessment aims to answer the questions (what kind of risk we are expecting, what are the sources of risk, where they are, when they may be relevant, what is expressed in the risk, which parties and / or participants of the activity may be at risk). After defining the risk, as a rule, there is no problem for actualizing the sources. However, if to approach the issue of qualitative risk analysis superficially, it is quite probable that some or other sources of risk will be missed or incorrectly classified. In this case, a risk assessment would be wrong, and the consequences of a mistake are completely unpredictable (Dubinin 2007).

Table 2.2.1. Qualitative Risk Assessment (based on Dubinin 2007)

The algorithm of a decision	Type of risk													
	Transport	Political	Legislative	Organizational	Personal	Material	Current	Marketing	Industrial	Currency	Credit	Financial	Investment	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
Identification of the need to accommodate the new equipment in the area								+						
Involvement of working capital		+	+	+						+	+	+	+	
Transportation	+		+											
Equipment installation						+								

Final results of the qualitative risk analysis, in turn, serve as a source of information for quantitative analysis, that is, only those risks were evaluated which are present in the implementation of the specific operation of the algorithm decision (Dubinin 2007).

At the stage of quantitative risk analysis, numerical values of the individual risk and the whole object should be calculated. Also any damage should be identified and valuation of risk manifestation should be performed and finally, the final stage is to develop a quantitative assessment of anti-risk measures and calculation of their value equivalent. The quantitative analysis can be formalized, which use the tools of probability theory, mathematical statistics, and theory of operations research. The most common methods of quantitative risk analysis are statistical, analytical, method of expert evaluations, as well as analogy method (McNiel, Frey, Rüdiger, Embrechts, Paul 2005, 2–3).

A quantitative risk assessment is based on the data obtained from the evaluation of its quality. That is, only those risks will be evaluated that are presented in the implementation of the specific operation of the algorithm decision. For each fixed-risk, a table of risk assessment is based on data derived from statistics, research, periodic sources, and based on personal experience of the leaders.

The risk assessment data table is compiled in this way in order to determine the components of risk factors. Using this approach, a high-quality evaluation of the efficiency of financial and economic activity of the enterprise. The problem of subjectivity in the evaluation can be eliminated based on Delphi method (Dubinin 2007). There are the following methods of quantitative risk assessment.

Statistical evaluation methods allow obtaining the most complete quantitative picture of the level of risk, and often it is used in the practical activity of financial management. The essence of the statistical methods of risk assessment is to determine the probability of loss based on statistical data of the previous period and the establishment of the area (zone) of risk, risk factor, etc. The advantages of statistical methods are the ability to analyse and evaluate different scenarios and to take into account the different risk factors in a single approach. The necessity of obtaining probability characteristics for them is considered to be the main disadvantage of these methods. Perhaps, use of the following statistical methods, such as assessment of the feasibility of execution, analysis of the potential distribution of cash flow, decision trees, simulation of risks, as well as technology «Risk Metrics» (Lusnikov 2007, 32–35).

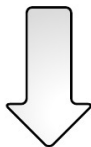
Calculation and evaluation of analytical methods can quantify the probability of financial risks through the use of internal database of the firm. In this case if the probability of individual risks is determined depending on the values of the financial targets of the company. The most widely used computational and analytical methods have in assessing the likelihood of the risk of insolvency of the company and the risk of losing financial stability of the firm. These methods are based on a survey of qualified experts in the fields of finance, insurance, followed by mathematical processing of the results of the survey. Expert evaluation methods are widely used for determining the level of probability of inflation, investment, currency and other risks (Lusnikov 2007, 32–35).

Analogy evaluation methods are allowing to define the level of probability of the risk of some of the most frequently used operations of the company. These techniques are used in the assessment of monetary, investment and credit

risks. The sources of information for risk analysis - financial statements of the company, organizational structure and staffing of the company, agreements and contracts (business and legal risks), the financial plans of the enterprise. As a source of information in evaluating the financial risks is used the financial statements of the enterprise - the balance sheet, the fixing property and financial position of an entity at the reporting date, the Profit and Loss Statement, representing the results of operations for the reporting period. The main financial risks are assessed by enterprises - the insolvency risks, risks of loss of financial stability and independence, the risks of assets and liabilities. (Yakovleva 2008, 50–54).

Table 2.2.2. The model of risk assessment of liquidity (solvency) of the balance (based on Yakovleva 2008, 50-54)

The procedure for the grouping of assets and liabilities	
The procedure for grouping liabilities extent the speed of their transformation in bankroll	The procedure for grouping liabilities urgency obligations
A ₁ - the most liquid assets	L ₁ - the most urgent obligations
A ₂ - quick assets	L ₂ - current liabilities
A ₃ - slowly realizable assets	L ₃ - long-term liabilities
A ₄ - illiquid assets	L ₄ - permanent liabilities



Type of liquidity			
Conditions			
$A_1 \geq L_1; A_2 \geq L_2; A_3 \geq L_3; A_4 \leq L_4$	$A_1 < L_1; A_2 \geq L_2; A_3 \geq L_3; A_4 \sim L_4$	$A_1 < L_1; A_2 < L_2; A_3 \geq L_3; A_4 \sim L_4$	$A_1 < L_1; A_2 < L_2; A_3 < L_3; A_4 > L_4$
The absolute liquidity	Permissible liquidity	Impaired liquidity	Liquidity Crisis

Risk assessment of financial stability is shown in Figure 3.1.2 (p. 27).

For companies engaged in the production, general indicator of financial stability is a surplus or lack of livelihood formation of reserves and costs, which is defined as the difference of the value of sources of funds and the value of stocks and costs (Yakovleva 2008, 50–54).

Furthermore, integral scoping the financial condition of the organization should be done. Among the main financial risks, it is evaluated and used in practice ratios such as Equity Ratio, Gearing Ratio, Debt/ Equity Ratio. Each technique has its own specific evaluation of the financial condition of the company, but the members of each technique include similar financial ratios. Most methods for assessing the financial condition can be used comprehensively or separately, depending on the specific goals and objectives of the analysis (Hiller, Ross, Westerfield, Jaffe, Jordan & McGraw-Hill 2010).

3. RISK ASSESSMENT OF FINANCIAL AND ECONOMIC ACTIVITY OF THE LEGAL RECRUITING COMPANY

3.1. General characteristics of the Company X and key performance indicators.

Company X is a Limited Company, which exists full service legal recruitment firm with global operations. The case company has extensive experience consulting with an advising US, UK, German, Austrian, etc. law firms, and every year they extend the market, active in emerging markets on potential regional expansion via mergers and practice group acquisitions (team moves) as well as greenfield office openings. They also assist local law firms of every size in identifying international law firms with whom they can merge or form an alliance (Company web-site).

The Legal Recruiting Company recruits Partners, Associates and CSuite law firm support functions (primarily Business Development). The consultants are based in Budapest, Vienna, Prague, Warsaw and operate across the following 36 markets (Company web-site).

As the premier legal recruitment firm in developing countries, Europe and Latin America, the Legal Recruiting Company has a solid reputation over the years in providing high quality and high profile hires, especially at the level of partner and general counsel (Company web-site).

The Company X focuses on the best legal talent. The candidates have excellent academic credentials and experience in top-tier law firms and corporations. At the same time, the recruitment process the Legal Recruiting Company is not just about qualifications according to customer needs. It is about finding people who disputed that pursue knowledge, which can be counted on, and most importantly, who find satisfaction in private that they do (Company web-site).

Financial stability is such an entity, which covers funds invested in assets at their own expense (fixed assets, intangible assets, working capital), does not

allow undue receivables and payables. The basis of financial stability is the rational organization and the use of working capital (Yakovleva 2008).

An important indicator of assessment of financial stability is the growth rate of real assets. Real assets are not intangible assets, depreciation of fixed assets and materials, usage of profits, borrowed funds. Real assets exist own property and financial investments at the fair value (Loughney 2014). The growth rate of real assets characterize the intensity and extension of the property is determined by the formula $A = \frac{(FA_1+I_1)}{(FA_0+I_0+C_0)}$, where A - the rate of growth of real assets %, FA - fixed assets and investments (excluding depreciation, trade margin for unsold goods, intangible assets used profits EUR), I - inventory and cost, C - cash settlements and other assets excluding utilized leverage, 0 - previous reference year (Yakovleva 2008).

Table 3.1.1. Analysis of structure and location of the business entity's assets (based on Yakovleva 2008).

Assets	2011	2011	2012	2012	2013	2013	Changes	Changes
	EUR	%	EUR	%	EUR	%	EUR	%
Non-material assets	0	0	2606	2.869	1097	1.098	1097	2.869
Fixed assets	3084	3.211	17855	19.655	18639	18663	15555	16.444
Capital investment	26885	27.989	15365	16.914	10572	10.585	-16313	-11.076
Long-term investments	0	0	0	0	0	0	0	0
Current assets	66085	68.8	55018	60.563	69564	69.653	3479	-8.237
Balance currency	96054	100	75479	100	89300	100	-6754	

Graphical analysis of structure and location of the business entity's assets is shown in Appendix 1.

Table 3.1.2. Risk assessment of financial stability (based on Yakovleva 2008)
(Graphical risk assessment of financial stability is shown in Appendix 2).

Indicators	Calculation procedure	2011	2012	2013	Structure, %	2012	2013
The most urgent liabilities (L1)	1520	0	0	0	0	0	0
Short-term liabilities (L2)	1500 – 1520 – 1530	37953	29196	37597	39.512	32.139	37.645
Long-term liabilities (L3)	1400	96044	90844	99872	99.99	100	100
Own capital of the company (L4)	1300+1530	0	0	0	0	0	0
Balance	1700	133997	120040	137469	100	100	100

The table shows that the company's assets decreased for two years to 6754 EUR. - From 96054 to 75479 EUR, in percentages it is 7,031%. Funds are placed in assets as follows, intangible assets amount to 1.098%, current assets 69,653%. An important indicator is the rate of growth of real assets. Real Assets is the existing real estate and own financial investments at their fair value. The growth rate of real assets characterize the intensity and extension of the property is determined by the formula $A = \left(\frac{17855+55018}{3084+66085} - 1 \right) \times 100\% = 27.518\%$

Thus the intensity of growth of real assets increased on 27,518% for two years.

In the structure of liabilities for 2013 is dominated by long-term liabilities (L_3)

In the structure of liabilities can be seen, the company attract short-term borrowings ($L_2 > 0$).

Absolute liquidity balance

$$A_1 \geq L_1$$

$$A_2 \geq L_2$$

$$A_3 \geq A_3$$

$$A_4 \leq A_4$$

Table 3.1.3. Analysis of balance liquidity (based on Yakovleva 2008)

2011	2012	2013
$A_1 \leq L_1$	$A_1 \leq L_1$	$A_1 \leq L_1$
$A_2 \leq L_2$	$A_2 \leq L_2$	$A_2 \leq L_2$
$A_3 \leq L_3$	$A_3 \leq L_3$	$A_3 \leq L_3$
$A_4 > L_4$	$A_4 > L_4$	$A_4 > L_4$

The balance of the organization in the analysed period is not completely liquid. Comparison of the most liquid assets and quick assets with the most urgent obligations and short-term liabilities reveals the current liquidity and current solvency. The situation of the analysed enterprise for the nearest future is unstable. It is necessary to attract slowly realizable assets for settlement of short-term debt. Prospective liquidity can be determined by comparing the slow-moving assets with long-term liabilities, namely the future revenue and payments. Balance liquidity for several periods gives an indication of directions of entity's financial changes. Using the balance liquidity it is possible to conduct the forecast calculations in case of company's liquidation. (Yakovleva 2008)

3.2 Analysis of the Financial Stability of the company X.

In this subchapter are submitted general formulas how to calculate the Financial Stability of the company (the currency is hidden according to confidentiality agreement, assume that the calculations are made in EUR).

(Source: Investopedia 2016)

Equity Ratio	=	$\frac{\text{Owner's Equity}}{\text{Total Asset}}$
Gearing Ratio	=	$\frac{\text{Liability}}{\text{Total Assets}}$
Debt/Equity Ratio	=	$\frac{\text{Liability}}{\text{Owner's Equity}}$

Figure 3.2. Financial analysis formulas

For the calculation of Equity ration, it's needed to make the mathematical calculation for the Owner's Equity (Averkamp 2004).

$$\text{Owner's Equity} = \text{Assets} - \text{Liabilities}$$

$$\text{€58,101} = \text{€96,054} - \text{€37,953}$$

Equity ratio (financial independence ratio) is the ratio of equity the total amount of capital (assets) of the organization. Ratio indicates as far as the organization independent from the creditors. A low ratio of the organization shows the higher dependency on borrowed funds (Averkamp 2004).

$$\text{Equity Ratio} = \text{€58,101} / \text{€96,054} \approx 0,6$$

Looking at the calculation above, it obviously means 60% of assets is the property of owner. Therefore 40% of assets are fund by creditors. In case, if the Equity Ratio is decreasing, it is a "red flag" for the signal of instability (Claire Boyte-White 2016).

$$\text{Gearing Ratio} = \text{€37,953} / \text{€96,054} \approx 0,4$$

The property of the creditors is 40% of the assets. This is a sign of mid-level of stability. Meanwhile a lower gearing ratio means higher financial stability. It can be considered as the advantages, however, if enterprise is able show that it can sustain this type of funding arrangement. This condition enhances profitability. Owner's equity return is higher (Claire Boyte-White 2016).

$$\text{Debt/Equity ratio} = \text{€}37,953 / \text{€}58,101 \approx 0,6$$

The debt is 60%. For every euro of OE, there is €0,6 of liabilities what means, that the company X has a high leverage as well as the high Debt Ratio indicates low borrowing capacity of the enterprise (based on Hiller, Ross, Westerfield, Jaffe, Jordan & McGraw-Hill 2010).

These three ratios above are calculated to indicate the risk of financial problems, which the Company X will possibly exist. To help to facilitate the possible problems there are the following recommendations - reducing ROI to contribute the additional funds, better Gross profit ratio, better Return of Sales, better Efficiency Ratios, reducing the liability from the cash.

The numerical calculations used above were made, using the numbers from the Balance Sheet of 2011. To submit the more clear picture of the latest progress of financial stability of the Company X, the indicators between year 2011 and year 2013.

$$\text{Equity Ratio} = \text{€}62,279 / \text{€}99,872 \approx 0,6$$

$$\text{Gearing Ratio} = \text{€}37,597 / \text{€}99,872 \approx 0,4$$

$$\text{Debt/Equity ratio} = \text{€}37,597 / \text{€}62,279 \approx 0,6$$

These Ratios clearly show, that the situation in the company did not change at all, according to the financial indicators. Current situation of the company can be developed, using recommendations above.

4. RISK ASSESSMENT OF BANKRUPTCY OF LEGAL RECRUITING COMPANY

Currently, there are a lot of models predicting bankruptcy of companies. Two of them will be considered in this chapter. The most widely used techniques in the western bankruptcy risk prediction model, created by famous economist Edward Altman, however Lis R.'s model will submit a better picture (Hussain, Diacon & Toms 2001, 3–13).

General economic sense of model is a function of several parameters describing the economic potential of the company and the results of the work during this period. In developing its own model of Altman examined the financial position of the 66 enterprises, half of which went bankrupt, and the other half continued to work successfully. Nowadays the economic literature mentions four Altman models, consider the formula for calculating them, however in case of the company X, two-factor model of Altman is the most relevant (Hussain, Diacon & Toms 2001, 3–13).

The first one is one of the simplest and most intuitive methods of predicting the probability of bankruptcy, using this formula it is possible to calculate the effect of only two indicators, such as current ratio and the proportion of borrowed funds in liabilities (Hussain, Diacon & Toms 2001, 3–13).

Altman model takes the form $(Z = -0.3877 - 1.073 * X_1 + 0.0579 * X_2)$, where Z - index of probability of bankruptcy, X_1 - Current ratio, X_2 - Capitalization ratio. Interpretation of the results takes the form if $Z < 0$ - the probability of bankruptcy is less than 50% and further reduced with decreasing Z, if $Z = 0$, the probability of bankruptcy is 50%, if $Z > 0$, the probability of bankruptcy is more than 50%, and increases as the rating of Z (Hussain, Diacon & Toms 2001, 3–13).

Table 4.1. Two-factor Altman Z-model (The currency is hidden according to confidentiality agreement, assume that the calculations are made in EUR)

Indicator	31.12.2012	31.12.2013
	The index value	The index value
Current assets	55,018	69,564
Short-term liabilities	29,196	37,597
Long-term liabilities	0	24,741
Total Liabilities	Short-term liabilities + Long-term liabilities	62,338
Equity	58,537	54,509

For year 2012, the Z-value of the account is

$$Z = -0.3877 - 1.0736 \cdot 55018 / 29196 + 0.0579 \cdot 29196 / 58537 = -2.12$$

It is obvious, the probability of bankruptcy of the enterprise is less than 50%.

For year 2013, the Z-value of the account is

$$Z = -0.3877 - 1.0736 \cdot 69564 / 37597 + 0.0579 \cdot 62338 / 54509 = -2.31$$

Calculated indicators are based on the given Financial Statements. At the end of the analysis for the prediction of insolvency (bankruptcy) on the basis of foreign multifactor model, it can be concluded that, in accordance with international forecasting techniques, the likelihood of bankruptcy is on minimum level.

The following model for risk assessment of bankruptcy – Lis R. Model. In general, the content and a set of factors-features of Lis R. model is closer to the local reality of the country, where the Company X is located, than the Altman model, however Lis R. model is not that popular, as Altman model (Hussain, Diacon & Toms 2001, 6–8).

Lis R. Z-score model

$$Z = 0,063X_1 + 0,092X_2 + 0,057X_3 + 0,0014X_4$$

Where

X_1 = Working capital / Total assets

X_2 = Earnings before interest and tax / Total assets

X_3 = Retained earnings / Total assets

X_4 = Net worth / Total debt

If the index Z-score takes a value higher than 0,037, the company has a small risk of bankruptcy for a year, if the value is lower than 0,037, then there is a high risk of enterprise bankruptcy (Hussain, Diacon & Toms 2001, 6–8).

Table 4.2. Four-factor Lis R. Z-model (The currency is hidden according to confidentiality agreement, assume that the calculations are made in EUR)

Indicator	31.12.2012	31.12.2013
Current assets	55,018	69,564
Total assets	87,733	116,847
Revenue from sales	0	0
Net profit	1,563	5,972
Equity	58,537	54,509
Borrowed capital	29,196	62,338

The limit value for this model is 0.037

In this case, the Z-value of the account is $Z = 0.063 \cdot 55018 / 87733 + 0.092 \cdot 0 / 87733 + 0.057 \cdot 1563 / 87733 + 0.001 \cdot 58537 / 29196 = 0.04$. In year 2012, Z-score indicator is higher than 0,037, what means that risk of bankruptcy is low.

In year 2013, the Z-value of the account is $Z = 0.063 \cdot 69564 / 116847 + 0.092 \cdot 0 / 116847 + 0.057 \cdot 5972 / 116847 + 0.001 \cdot 54509 / 62338 = 0.04$. In year 2013 Z-score indicator is also above 0,037, what means that risk of bankruptcy is low (Hussain, Diacon & Toms 2001, 6-8).

Despite the absence of indicators of risk of bankruptcy, the management company requires constant monitoring of the financial condition of the company. The range of external factors, the risks inherent in the local conditions is wide, the financial situation in the country, inflation, credit conditions, particularly the tax system, require continuous tracking of financial risks, taking measures for their prevention and neutralization (Chernyak, 2007, 414).

5 MECHANISMS OF NEUTRALIZATION OF FINANCIAL RISKS

5.1 Neutralization of financial risk mechanism system involving the usage of the following basic methods.

The system of neutralization of the financial risk involves the usage of the following basic methods to avoid the risk. This direction to neutralize financial risks is the most radical. It lies at the development of activities of an internal character, which completely exclude a specific type of financial risk. The main of these measures include - rejection of financial transactions, the level of risk that is extremely high (avoiding the usage of huge amounts of borrowed capital), reducing the share of borrowed funds in the economic circulation (avoids one of the most significant financial risks - the loss of financial stability), avoiding excessive usage of circulating assets in illiquid forms, increasing the liquidity of these assets in order to avoid the risk of insolvency in the future period, avoiding the usage of temporarily free cash assets in short-term investments. This measure avoids the deposit and interest rate risk, however, gives rise to the risk of loss from inflation, as well as the risk of loss of profits (Moskvin 2008).

Decreasing the concentration of risk. The mechanism of decreasing the concentration of financial risks is usually used for financial transactions, executed in the area of critical or catastrophic risk. This reduction is implemented through the establishment of the company relevant internal financial regulations in the process of policy implementation of the various aspects of financial activity (Moskvin 2008).

The system of financial regulations to ensure limiting risk concentration, may include size limit (specific gravity) of borrowed funds used in the company (this is set of separately operating and investing activities of the enterprise, and in some cases for certain financial transactions such as finance real investment project, financing the formation of current assets, etc.), the minimum size (specific gravity) of assets in highly liquid form (this reduction ensures the formation of the so-called "liquidity cushion", which characterizes the size of the redundancy of highly liquid assets with a view to the upcoming maturity of urgent fi-

nancial obligations of the enterprise), the maximum size of commodity (the size of the credit limit, aiming at reducing the concentration of credit risk, set in policy of trade credit to buyers of products), the maximum size of the deposit, located in the same bank (limiting deposit concentration risk in this form is executed during usage of the instrument business capital investment), maximum period of diversion of funds in accounts receivable (due to this limitation is provided by standard financial insolvency risk, inflation risk and credit risk) (Moskvin 2008).

Reducing the concentration of financial risks is one of the most common mechanisms for internal risk management, implementing the company's financial ideology of the adoption of these risks and do not require high costs (Moskvin 2008).

Diversification. This mechanism is used primarily to neutralize the negative financial consequences of non-systematic (specific) types of risk. First of all it allows minimizing the risk portfolio. The operating principle of diversification mechanism is based on risk sharing that prevents its concentration. In following directions it can be used as the main forms of enterprise diversification of financial risks - diversification of financial activities, diversification of the currency portfolio ("currency basket") of the enterprise, diversification of the deposit portfolio, diversification of the loan portfolio, real investment program diversification (Moskvin 2008).

Diversification effect is the basis of most theories of choosing an effective marketing strategy. Combined with the effects of hedging, it became the main option pricing theory (Moskvin 2008).

Risk allocation. This type of mechanisms considers several dimensions of risk and return trade-offs creating portfolios and evaluates the outcomes of risk allocation decisions during normal and unstable markets (Shapkin, 2008, 880).

The degree of risks sharing, and the level of neutralization of the negative financial consequences for the company is the subject of its contract negotiations

with. Domestic insurance is the mechanism in order to neutralize financial risks based on the part of the financial resources, which allows to overcome the negative financial consequences for the financial transactions where the risks are not related to the actions of contractors (Shapkin, 2008, 880).

The establishment of reserve (insurance) fund of the enterprise should be created in accordance with the requirements of the law and the company charter. It is necessary to reserve at least 5% of the profits earned by the enterprise during the reporting period. Talking about insurance, it is the first thing the company is facing in the management activities of the firm (the risk identification that needs insurance protection). As a rule, the most common types of insurance in the business environment is the insurance of the company's property, insurance of responsibility of managers and employees, insurance of the company's employees from accidents at work and credit risk's insurance (Shapkin, 2008, 880).

For effective development of the Company X and successful operations on the market, company personnel must quickly address emerging issues and problems, as well as to take into account at the same time the nature of the influence of these factors on the hard-working process and personal activity and motivation of the employees and interns.

However for holding position, the organization should have a certain fixed amount of funds, covering possible costs of risk reduction and elimination of the consequences of those accidents that cannot be prevented. Particular attention here should be to focus on those situations that may pose a serious threat to the business. For example, it may be elements of the environment (other organizations and individuals, state agencies, economic situation, etc.) or internal (staff, facilities and resources, and so on) (Shapkin, 2008, 880).

It should not be forgotten that the statements is an integral part of the risk management process. There is external and internal reporting. In contrast to the financial statements, it combines the past, present and future confidence. The process of managing the financial risks of the enterprise should be an integral

part of the financial policy of the company and should be directed to the organization of procedures to reduce the risks of the results, combined with the vital functions of the company (Shapkin, 2008, 880).

There are several stages, each of which is significantly different from the previous one (the development of the situation analysis stage to the risk, direct analysis, collection of optimization tools, risk optimization, analysis of the effectiveness of measures). At the initial stage it is necessary to find and understand the types of risks that are due to the specifics may threaten the company or certain departments and business units, unite them in a common structure and classification. The next step is an action of risk dimensions that reflects the concentration and the degree of risk and the causes affecting them. In analyzing the causes reveals the impact of each of them on the production and processing chain. The criteria by which examines risk dimensions and consequences, shows a linear dependence on the goals of the company in the future of the management company's policy in the field of resources and funds (Shapkin, 2008, 880).

The mechanism of balancing the risk points in the organization consists of several sets of actions, such as maneuvering, avoiding the risk, risk reduction, elimination of major hazards, risks and reflection transfer to other market participants. These actions are very ambiguous and ways to implement them are constantly increasing. For example, the rejection of loan capital in the liabilities of the company helps to minimize the risk of financial instability of the organization. Nevertheless, the withdrawal of funds from the company reduces the effectiveness of financial leverage and mechanisms, which is, increasing the profitability of the company-borrowed funds. Another way to avoid risk situations is to transfer the current assets with less liquidity to the more liquid. The main advantage is that if in the future there will be some difficulties with payment in cash. It is always possible to find quickly the means with the help of more liquid assets (Shapkin, 2008, 880).

5.2. Improving the technology of risk management by creating a risk management system

Risk management is a process of preparation and implementation of measures that reduce the risk of making a wrong decision. In the context of the industrial enterprise risk management is based on the concept of acceptable risk, postulates the possibility of a rational influence on the level of risk, and bring it to an acceptable level (Shapkin, 2008, 880).

The risk management functions of the company are the most appropriate to carry out with the help of a specialized unit or a special subsystem in the enterprise management system, which would obviously fit into the traditional set of independent functional subsystems of the enterprise. Thus, the draft risk management system at the Company X provides for the most effective implementation of this function, the selection in the enterprise management system - risk management system (RMS). The currently available risk management system (RMS) is needed in order to restructure the adaptation to the new macro and microenvironment. With the right approach to risk management, all risks can be a sort of opportunities for business development. It is obvious, that the absence of the RMS in companies is a serious strategic risk (Shapkin, 2008, 880).

It is known, for example, that in the United States in accordance with the Sarbanes-Oxley Act presence of RMS is one of the mandatory requirements of companies. In preparing the financial statements and annual company must certify that it has a system of internal control and risk management. Therefore, the creation of its own system of management of financial and operational risks companies should pay particular attention (An Act for investors' protection 2002 116 Art. 745, 107–204).

In the Legal Recruiting Company it is proposed to determine the principles and approaches to the risk management process, milestones, identify stakeholders. The main objectives of formation RMS identified increased operational efficiency by reducing the risk of expected losses, increasing the investment attractive-

ness and capitalization growth. To achieve these objectives it is necessary to solve the following problems, identification and analysis of potential risks develop timely measures to reduce risks, ensuring continuous monitoring of the risk environment, timely updating of the risk model of the company, better management by making decisions based on analysis of the risk environment. On the basis of some models it is determined that the most efficient is the formation of the corporate RMS based on a two-level approach (Moskvin, 2008).

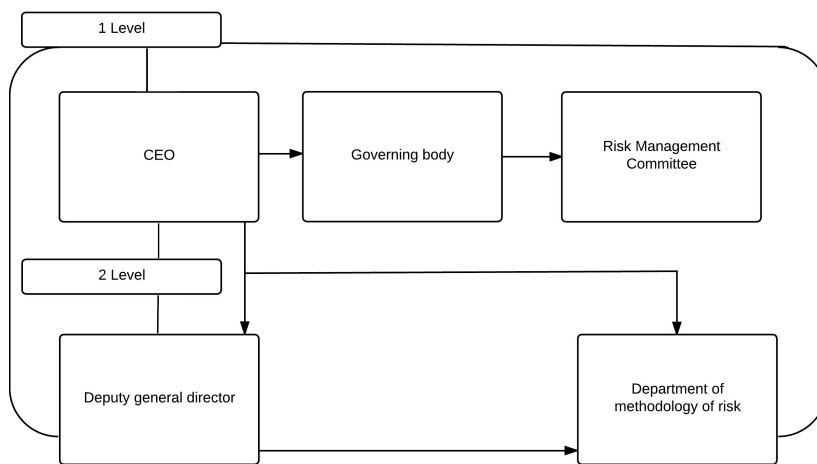


Figure 5.1.1. Two-level structure of the corporate RMS

All divisions of the company involved in a two-tier system for effective risk management should have an appropriate methodological support, which includes the local regulations governing the RMS procedure, risks of diagnostic procedures of business processes, methods of quantitative and qualitative evaluation and ranking risks, processes of formation of the list of control procedures, control systems, monitoring and risk analysis (Moskvin, 2008).

During the trial operation of the system have been refined methods for diagnosis, identification and assessment procedures in the field of risk management (Figure 5.1.2). The monitoring data should be consolidated in the consolidated list of risks with preliminary risk ranking according to the degree of importance (high, medium and low) and the probability of their occurrence. The usage of reliable data allows timely supplement and adjust the list of identified risks. Significant risks with a high level of importance and probability should be subject to the Risk Committee for the development of action plans to minimize them. The

Committee should send information about the results of the implementation of measures to minimize the risks with a high level of importance for Risk and Audit Committee at the Board of Directors (Moskvin, 2008).

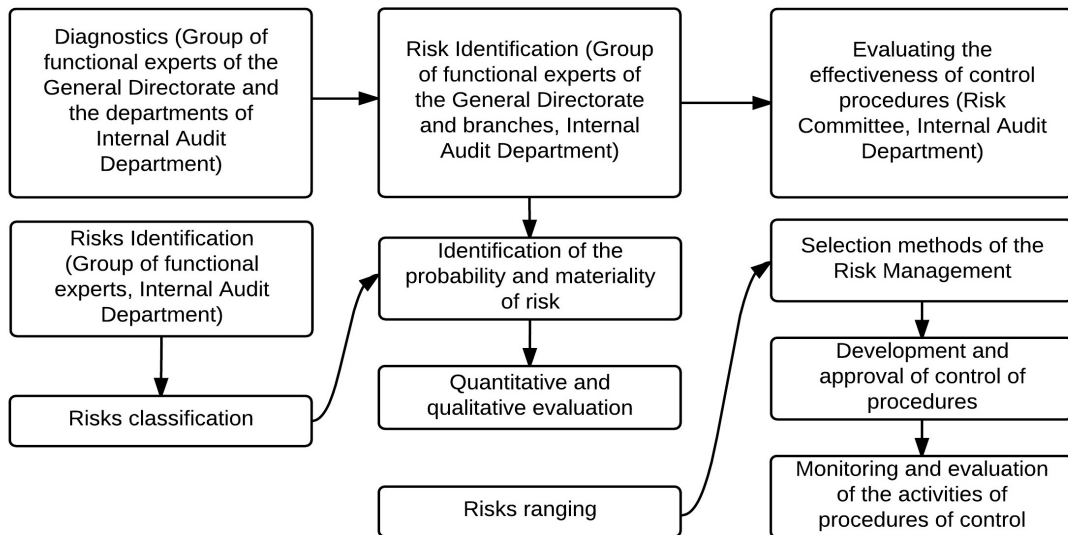


Figure 5.1.2. Three-level structure of the corporate RMS in the Company (based on Moskvin, 2008).

Activities implemented in the framework of reducing the likelihood of risk events should include the development and improvement of regulations, development of methods and standards, development and maintenance of policies and development priorities, operational control over the implementation of regulations and methodologies, monitoring functions, staff recruitment and training, motivation of staff, automation of business processes and the development or acquisition of software (software), purchase of equipment and software, which allows to minimize risks, interaction with regulatory authorities (to minimize the risks associated with the implementation of national projects), interacting with competitors (signing contracts interaction), interaction with external parties (tenders for the supply of equipment and provision of services), accountability for the implementation of various functions, changes in the company's management structure and its individual functional blocks in the direction of increasing the share of functions (patterns) in the field of risk management (Moskvin, 2008).

In order to improve RMS is necessary to pay special attention on the part of the company's internal audit control over the implementation of regulations of works on risk management in the company with the application "Distribution functions of risk management systems", program risk governance in the company and subsequent years, provisions on the regulation of risk management committee, provisions on the risk managers of the company (Moskvin, 2008).

6 CONCLUSION

Financial risks have a significant impact on the various aspects of the financial activities of the company, which is caused by the instability of the external environment, the economic situation in the country, the emergence of new innovative financial instruments, expansion of financial relations, the variability of the financial market conditions and other factors. Therefore, the identification, evaluation and monitoring of the level of financial risks is one of the most pressing problems in the practice of financial management. The most significant impact is divided in two ways. Firstly, the level of exposure has a decisive influence on the formation level of profitability of the enterprise financial operations - these two indicators are closely interrelated and constitute a single system "profitability-risk." Secondly, the financial risks are the main form of generating a direct threat of bankruptcy, as the financial losses associated with these risks, which are the most noticeable. Therefore, virtually all financial solutions are aimed at the formation of the company's profit, increasing its market value and ensuring the financial security required by financial managers owning generation technology, the adoption and implementation of risk solutions. The modern market environment is unthinkable without risk. Risk is always and everywhere, it is difficult to avoid, but it can be expected to determine the degree of risk and the level of damage it can cause to the enterprise. The presence of risk as part of the economic process due to the limited material, labor, financial, information and other resources. Therefore, the ability to detect and provide a reasonable assessment of risk depends on the efficiency of operations and, consequently, the competitiveness of enterprises (Granaturov 17–23).

Financial Risk Management of the enterprise is a relatively new independent area of financial management and is one of the most important management processes in its system. Financial risk covers a wide range of issues - from the risk assessment and methods of neutralization of some of its financial operations to the financial operations in general. The essence of risk management as a category is manifested in the relationship of its key elements, such as the possibility of deviation from the intended purpose for which it was carried out

the selected alternative, the likelihood of achieving the desired result, lack of confidence in achieving this goal, the possibility of material, moral and other losses related to the implementation of the selected alternative in the conditions of uncertainty (Granaturov 17–23).

Entrepreneurial activity is carried out under conditions of uncertainty and depends on many factors, a change which cannot be predicted with reasonable accuracy. Thus, the main risk factors are the spontaneity of natural processes and phenomena, natural disasters, accident, instability of political power, a collision of conflicting interests, probabilistic nature of the TR (technological revolution), incompleteness, lack of information about the object, process, phenomenon, limitations, lack of material, financial, labour and other resources in making and implementing decisions, imbalance of the main components of the economic mechanism (planning, pricing, logistics, financial and credit relations). There is a large number of economic and business risks, but there is no strict, unambiguous classification, therefore it is possible to distinguish the main types of risks like commercial, technical, industrial, financial, foreign exchange, investment, interest rate risk. Depending on the expected value of losses for the risk assessment of the acceptability of distinguished areas of risk (risk-free zone, a zone of acceptable risk, a critical area of risk, catastrophic risk zone) (Granaturov 17–23).

In the market economy, the basic principle of management is the successful elimination of the effect of risk situations that in the future provides the greatest financial stability. Managers of enterprises have the ability to use various risk management techniques that contribute to reduce the total amount of enterprise business risk. Risk management as a management system that involves the number of processes and activities, that implement meaningful impact on risk, which includes the definition of risk capital investment purposes, the collection and processing of risk aspects of the data, the determination of the probability of occurrence of risk events, identification the extent and amount of risk, choice of risk management techniques and ways to reduce it (Granaturov 17–23).

The calculations for a comprehensive assessment of the risks of financial and economic activities of the Company X allow making the following conclusions. The main types of risks in the Legal Recruiting Company are introduced below.

Inflation risk. Changing consumer prices index has certain influence on the Company's financial condition. Inflation risk is taken into account at the Company X is drawing up financial plans. Existing and projected levels of inflation are far from critical values for the Company X and the industry as a whole, on the basis of this, the influence of inflationary factors on the financial stability. This is particularly important if there are expectations in the future to fall for any reason the net profit.

The strategy of the organization (wrong choice of its own commercial enterprise objectives, erroneous forecast of development of the external environment, incorrect assessment of the potential commercial enterprise) Thus, the overall risk of the company is formed from the risk of a significant loss of income from sales and a sharp decline in risk-free profit. In cases of forecasting lower revenues from the sale is important to ensure a minimum of fixed costs in its composition and minimum fixed payments from net profit.

The main role belongs to the internal and external mechanisms for managing risks (avoid the risk, limiting risk concentration, diversification, hedging, distribution, self-insurance, insurance, and other methods). As a result of this international enterprise risk management practice was the development and implementation of various types of alternative risk transfer.

In addition, no matter how well the problem of risk was studied, it is clear that all the techniques, methods and techniques of risk aversion, as demonstrated by international practice, can not completely eliminate the problem of any one country, but the need for continuous development and improvement of well-known methods to reduce the risks, is obviously the development of new, more effective ways to manage risk, as well as the prediction of their possible level.

REFERENCES

- An Act to protect investors by improving the accuracy and reliability of corporate disclosures made pursuant to the securities laws, and for other purposes. Public Law 107–204. 2002 116 Art. 745, 107th Congress. Accessed 14 March 2016
<http://www.sec.gov/about/laws/soa2002.pdf>
- Averkamp H. 2004. Accounting Coach. What is Owner's Equity Ratio. Accessed 10 March 2016
<http://www.accountingcoach.com/blog/what-is-owners-equity>
- Baturina N.A. 2009. Directory economist №7, Riski kak element antikrizisnogo upravleniya: obosnovanie protsessov issledovaniya (Risks as an element of crisis management: rationale of the research process), 22–28.
- Balance Sheet and Income Statement of the Company X. 2011.
- Balance Sheet and Income Statement of the Company X. 2012.
- Balance Sheet and Income Statement of the Company X. 2013.
- Blank IA. 2006. Upravlenie finansovimi riskami (Financial Risk Management), 556-600.
- Chernyak VZ. 2007. Financial analysis, 414.
- Claire Boyte-White. 2016. What is a good gearing ratio? Accessed 17 March 2016
<http://www.investopedia.com/ask/answers/121814/what-good-gearing-ratio.asp>.
- Company web-site
- Dubinin, E. 2007. Analiz riskov investitsionnogo proekta (Risk analysis of the investment project). Accessed 8 February 2016
http://www.cfin.ru/finanalysis/invrisk/inv_risk.shtml
- Gonzalez, Vicente, Antunes, Ricardo, A Production Model for Construction: A Theoretical Framework. 209–228.

- Granaturov V.M. 2011. Economic risk. Essence, measurement methods, ways to reduce, 17–23, 26–59.
- Grenyov N.N. 2009. *Finansovii Menedgment (Financial Management)*, 496.
- Greuning, H. and Brajovic Bratanovic, S. (2000). *Analyzing banking risk*. Washington, D.C.: World Bank, 23–56
- Hampton J. 2011. *The AMA handbook of financial risk management*. New York: American Management Assassination, 14.
- Horcher, Karen A., Wiley J. 2005, *Essentials of financial risk management*. 1–3.
- Hillier D., S. Ross, R. Westerfield, J. Jaffe, and B. Jordan. McGraw-Hill, 1st Edition. 2010. *Corporate Finance: European Edition*. Accessed 16 March 2016
<https://www.litesoul.com/library/corporate-finance-first-european-edition-jaffe-ross.docx-Oa2Z.docx>
- Hussain S. I., S. R. Diacon and J. S. Toms. 2001. *Equity Returns, Bankruptcy Risk and Asset Pricing Models*. University of Nottingham. Accessed 16 March 2016
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=312980
- Katy Loughney 2014. *Metrics That Matter – Security Risk Analytics*. Accessed 20 March 2016
http://www.isaca.org/chapters7/OrangeCounty/NewsandAnnouncements/Documents/Brinqa_ISACA_OC_01142014.pdf.
- Lusnikov, A. 2007. *How to reduce the financial risks*, 32-35
- Markowitz, H.M. 1952. *The Journal of Finance*, Portfolio Selection, 77–91.
- Moskvin, VA 2008. *Mechanisms neutralize financial risks*. Accessed 20 March 2016
Access: http://www.cfin.ru/finanalysis/risk/inside_neutraliztn.shtml

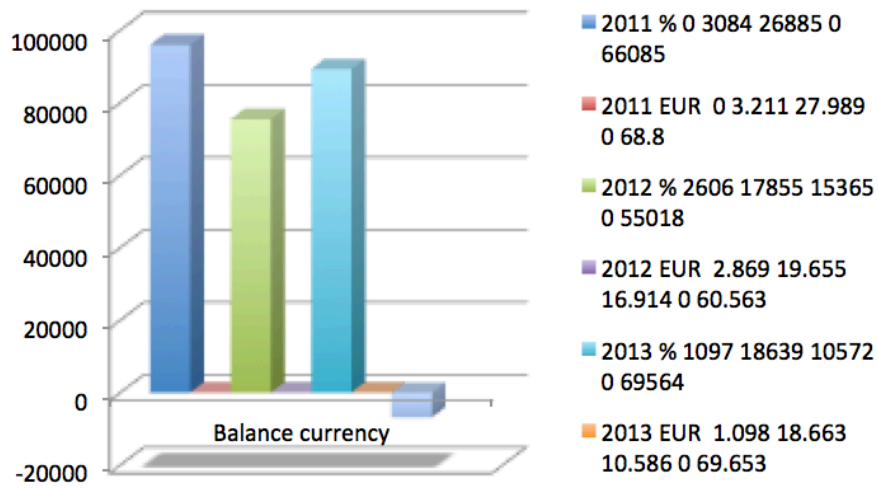
- McNeil, Alexander J., Frey, Rüdiger, Embrechts, Paul. 2005. Princeton University Press, Quantitative risk management: concepts, techniques and tools, 2–3.
- Plugina G.I. 2007. Accounting and risk evaluation of financial and economic activity of the enterprise at decision, 54-58.
- Shapkin AS. 2008. The theory of risk modeling and risk situations, 880.
- Unknown Author. 2016. What is Equity Ratio? Accessed 20 March 2016
<http://www.investopedia.com/terms/d/debtequityratio.asp>
- Voronova I. 2012. Financial risks: Cases of non-financial enterprises. 435–461
- Yakovleva. 2008. Evaluation of financial risk on the basis of financial statements, Financial Director of "Promtechenergo 2000"; Journal "Handbook economist». Accessed 20 March 2016
<http://www.cfin.ru/finanalysis/risk/accounting.shtml>.

APPENDICES

Appendix 1. - Analysis of structure and location of the business entity's assets

Appendix 2. - Risk assessment of financial stability

Appendix 1. - Analysis of structure and location of the business entity's assets
(based on Yakovleva 2008)



Appendix 2. Risk assessment of financial stability (based on Yakovleva 2008)

