VILNIUS UNIVERSITY

ŽIVILĖ SIMONAITYTĖ

CONTROL RISK AS AUDIT RISK ELEMENT ASSESSMENT MODEL

Summary of Doctoral Dissertation

Social sciences, management (03 S)

Vilnius, 2015

The dissertation was prepared during the period 2011–2015 at Vilnius University

Scientific supervisor – prof. dr. habil. Vaclovas Lakis (Vilnius University, social sciences, management – 03 S)

The dissertation will be defended at the Vilnius University Scientific Council in the field of management.

Chairman – prof. dr. Rasa Kanapickienė (Vilnius University, social sciences, management – 03 S)

Members:

Prof. dr. Jonas Martinavičius (Vilnius University, social sciences, economics – 04 S)

Prof. dr. Marija Kučinskienė (Vilnius University, social sciences, management – 03 S)

Prof. dr. Lionius Gaižauskas (Vilnius University, social sciences, management – 03 S)

Prof. dr. Lehte Alver (Tallinn University of Technology, management – 03 S)

The dissertation will be defended at the public meeting of the scientific council in the field of management on 9th of September, 2015 at 10 am in auditorium 403 at the Faculty of Economics, Vilnius University.

Address: Saulėtekio 9, bldg. II, LT-10222, Vilnius, Lithuania.

The summary of the dissertation was distributed on 7th of August, 2015.

The dissertation is available at the library of Vilnius University and at the website: *www.vu.lt/lt/naujienos/ivykiu-kalendorius*.

VILNIAUS UNIVERSITETAS

ŽIVILĖ SIMONAITYTĖ

KONTROLĖS RIZIKOS KAIP AUDITO RIZIKOS ELEMENTO VERTINIMO MODELIS

Daktaro disertacijos santrauka

Vadyba (03 S)

Vilnius, 2015

Disertacija rengta 2011–2015 metais Vilniaus universitete.

Mokslinis vadovas – prof. habil. dr. Vaclovas Lakis (Vilniaus universitetas, socialiniai mokslai, vadyba – 03 S)

Disertacija ginama Vilniaus universiteto Vadybos mokslo krypties taryboje:

Pirmininkė – prof. dr. Rasa Kanapickienė (Vilniaus universitetas, socialiniai mokslai, vadyba – 03 S)

Nariai:

Prof. dr. Jonas Martinavičius (Vilniaus universitetas, socialiniai mokslai, ekonomika – 04 S)

Prof. dr. Marija Kučinskienė (Vilniaus universitetas, socialiniai mokslai, vadyba – 03 S)

Prof. dr. Lionius Gaižauskas (Vilniaus universitetas, socialiniai mokslai, vadyba – 03 S)

Prof. dr. Lehte Alver (Talino technikos universitetas, socialiniai mokslai, vadyba – 03 S)

Disertacija bus ginama viešame Vadybos mokslo krypties tarybos posėdyje 2015 m. rugsėjo 9 d. 10 val. Vilniaus universiteto Ekonomikos fakulteto 403 auditorijoje.

Adresas: Saulėtekio al. 9, II rūmai, LT-10222, Vilnius, Lietuva.

Disertacijos santrauka išsiuntinėta 2015 m. rugpjūčio 7 d.

Disertaciją galima peržiūrėti Vilniaus universiteto bibliotekoje ir Vilniaus universiteto interneto svetainėje adresu: *www.vu.lt/lt/naujienos/ivykiu-kalendorius*.

GENERAL CHARACTERISTICS OF THE DISSERTATION

Relevance of the topic. In 2001, the world was shaken by the Enron scandal, following which the USA, the European Union and other countries decided to adjust their legal accounting and auditing systems. The Sarbanes–Oxley was adopted in the USA, and the basic directives were updated in the European Union. After these reforms were introduced, the audit world did not experience great changes, but the collapse of the bank "Lehman Brothers" gave start to a new financial crisis which severely affected the auditing profession, not due to the loss of customers and revenue, but due to the bankruptcies of the companies and an unqualified opinion which had been provided for their financial statements. Among these companies were such famous companies as the Irish bank "Anglo", the Indian computer services company "Satyam", the Japanese camera manufacturer "Olympus", the American "Autonomy Corporation". The audits of these companies were carried out by the largest auditing firms in the world: "Ernst & Young", "Pricewaterhouse Coopers", "KPMG", "Deloitte & Touche". When the bank "Lehman Brothers" collapsed in 2008, the consequences of the collapse also affected Lithuania, where the banks "Snoras" and "Ūkio Bankas" went bankrupt one after the other. Following these scandals worldwide and in Lithuania, everyone began to talk about the need for audit and usefulness of results, the audit expectation gap was discussed in literature, and the interested parties provided a variety of comments and suggestions.

The auditor, commenting on the company's financial statements, has to assess the issues relating to the business continuity of the company; thus, the crisis which started in 2008, forced everyone to readdress the problem of the audit quality. A review of the findings on the audits of the companies that have recently gone bankrupt presented by the institutions that are responsible for supervision of audit has revealed that the auditors responsible for those audits did not adopt the approach of scepticism and failed to collect sufficient and appropriate audit evidence to reduce the risks identified during the audit to an acceptably low level. This leads to the fact that the biggest impediment

preventing the auditor from expressing the opinion reflecting the real situation is audit risk. A systematic approach to audit risk was first introduced in 1983, when the American Institute of Certified Public Accountants issued a universally acceptable audit risk assessment formula. Later, various foreign and Lithuanian scientists (*Dodge, 1992; Robertson, 1993; Beatie, Fearnley, Brandt, 2005; Turner, Mock, Srivastava, 2003; Jodelienė, 2010*) proposed their own interpretations, but their existence failed to ensure that the auditors carrying out the audits of the bankrupted companies would express an adequate auditor's opinion. The research (*Chapter 2.1*) suggests that auditors still apply a classic audit risk assessment model in practice.

The classic audit risk assessment consists of three components: inherent risk, control risk, and detection risk. The assessment of a significant number of the companies that have recently gone bankrupt and their financial statements, which have been audited and resulted in a unified opinion, business activities that have become more complex and the development of technological processes has revealed that the auditor has no capacity to assess inherent risk; therefore, such assessment should be abandoned altogether. Neither the detection risk can be improved because, in order to reduce this risk, it is necessary to significantly increase the scope of the auditor's activities, which leads to an increase in the resources needed to perform the audit, and it is not acceptable. Therefore, in order to respond to the recent events in the world and to the control audit risk, the element of control risk assessment should be improved. Improvement of control risk as an element of audit risk may lead to a qualitative improvement in audit risk assessment.

Scientific problem and the scale of its research. The assessment of control risk is inseparable from the assessment of the company's internal control. The level of such risk directly depends on the internal control system implemented in the company and the way the risks associated with the system are controlled. The analysis of the scientific publications by Lithuanian (*Bičiulaitis, 2001; Daujotaitė, 2006; Dzingulevičienė, Kustienė, 2010; Eimanavičiūtė, Kustienė, 2014; Gegužis, 2003; Giriūnas, 2012;*

Jodelienė, 2010; Kabašinskas, Toliatienė, 1997; Kanapickienė, 2001; Kanapickienė, 2008; Kanapickienė, 2009; Lakis, 2007; Leonavičiūtė, Vaškelaitis, 2001; Mackevičius, 2001; Mackevičius, 2005; Mackevičius, 2009; Mackevičius, Bartaška, 2003) and foreign (*Adams, 1995; Akresh, 2010; Arens, Elder, Beasley, 2012; Arens, Loebbecke, 1996; Ashbaugh-Skaife, Collins, Kinney, 2007; Ashbaugh-Skaife, Collins, Kinney, LaFond, 2008; Barnabas, 2011; Beneish, Billings, Hodder, 2008; Blokdijk, 2004; Boyson, 2014; Casterella, Jensen, Knechel, 2011; Cohen, Krishnamoorthy, Wright, 2014; Cooper, Gendron, 2001; Cosserat, Rodda, 2009; Davies, 2001; DiNapoli, 2007; Dodge, 1992; Doyle, Ge, McVay, 2007; Dunn, 1996; Fardon, 2010; Fisher, 2005; Fogarty, Graham, Schubert, 2006, 2007; Ghosh, 2005; Graham, Bedard, 2003; Grambling, Rittenberg, Johnstone, 2010; Guenin–Paracini, Malsch, Paille, 2014; Guy, Alderman, 1985; Gupta, 2005; Harrer, 2008; Helbeck, 2008; King, 2011; Knechel, 2001; Knechel, Salterio, Ballou, 2007; Louwers, Ramsay, Sinason, Strawser, Thibodeau, 2013; Millichamp, 2002; Millichamp, Taylor, 2012; Moeller, 2010; Power, 2004; Robertson, 1993; Robinson, 2010; Shim, 2011; Spira, Page, 2003; Trenerry, 2005; Sonin, 2007*) authors, international (*Tarptautiniai audito standartai, 2009*) auditing standards and the standards of the countries which do not apply international auditing standards (*AICPA, 2007; ASA, 2014; AUS 402, 1996; Council of the Institute of Chartered Accountants of India, 2002; SAS 78, 1998; SAS 300, 1995; UK Corporate Governance Code, 2012*) has revealed that a mutual agreement on how control risk should be assessed does not exist. More than one model for the assessment of internal control has been developed (*ABREMA, 1996; Bayer, 1999; Cedergren, 2006; Chapman, 2006; CoCo, 1995; Colbert, Bowen, 1996; COSO, 1992; COSO ERM, 2004; Curtis, Wu, Craig, 2000; Enterprise Risk Management, 2004; IT Governance Institute, 2011; McConnell, Sweiger, 2007; Moeller, 2007; The Committee of Sponsoring Organizations, 2012*). A number of studies (*Alali, Yeh, 2012; Arena, Arnaboldi, Azzone, 2010; Arnold, Benford, Canada, Sutton, 2011; Azizkhani, Monroe, Shailer, 2012; Beatie, Fearnley, Brandt, 2005; Beck,*

Fuller, Muriel, Reid, 2013; Bergstrand, 2009; Bhattacharjee, Moreno, 2002; Catanach, Irving, Williams, Walker, 2011; Chen, 2009; Chen, Huang, Shih, 2006; Cooper, Deo, 2006; Cushing, Loebbecke, 1983; Curtis, Turley, 2007; Dirsmith, Haskins, 1991; Ferreira, Merchant, 1992; Kannan, Skantz, Higgs, 2014; Kumar, Sharma, 2005; Lemon, Tatum, Turley, 2000; Low, 2004; Myllymäki, 2013) have been conducted suggesting that auditing companies apply different methods for this integration, which means that a unified approach to control risk assessment is not applied in practice.

The studies conducted broaden the concept of control risk and the assessment process, but they do not include a detailed analysis of control risk assessment and do not present a systematic approach to audit risk assessment. The recent scandals regarding the collapse of audited companies show that the auditors' community still cannot ensure the provision of reliable data. On this basis, a lack of a conceptual and methodologically sound control risk assessment model is a relevant scientific problem.

Object of the research: control risk assessment.

Purpose of the research: to investigate the state of control risk assessment methods and, based on the existing theory and practice, develop a model for control risk assessment.

In order to achieve the purpose of the research, the following **tasks** were raised:

● to base the need for improving control risk assessment under the current market conditions;

● to establish control risk assessment methods and their appropriateness;

● to analyse the problems arising in the auditing practice during the control risk assessment process and to identify the prerequisites for the development of a control risk assessment model;

● to develop a control risk assessment model revealing a systematic approach to control risk assessment;

● to test the functioning of the model following the example of specific audits.

Methods of the research. The theoretical research regarding the analysis of control risk and the aspects of its assessment was based on the analysis, systematisation, synthesis, abstraction, generalisation and comparison of scientific literature and examination of scholarly literature in the fields of economics, management, accounting, auditing, and others.

In order to identify the practical problems of control risk assessment, empirical research has been carried out. The research includes the use of elements for the organisation of social research and applies the method of a questionnaire survey. The empirical research results have been processed applying the methods of qualitative and quantitative data analysis. The methods of descriptive statistics based on a statistical frequency, for example, the calculation of percentage, graphic presentation of data, have been applied in the quantitative data analysis. Statistical data have been summarised adopting the theory of statistical inference, and the findings on a sample have been used for a generalised description.

In order to understand the object of the dissertation and to achieve the aim, the components of the research object, their interconnection and correlation have been examined. The developed control risk assessment model is broken down into sub-elements, and each of them is divided into assessment questions. In order to test the application of the developed model in practice, the documentation of the audits carried out has been analysed, the persons who carried out audits have been contacted, a logical analysis have been applied, theoretical propositions and results of an empirical research have been summarised and compared, conclusions have been drawn, and proposals have been made.

Research resources. The theoretical research carried out in the dissertation in terms of control risk assessment is based on the published studies conducted by foreign and Lithuanian scientists. In order to develop a control risk assessment model, the results of the survey on certified Lithuanian auditors, and the analysis of the scientific publications by Lithuanian and foreign scientists have been taken into account. For the purpose of testing the

functionality of the developed model, practical application studies have been carried out in auditing companies that operate in Lithuania, in accordance with financial audits they carry out.

Defended propositions:

1. Control risk evaluation is the aspect of audit elaboration which can ensure qualitative audit risk evaluation improvement and reduce the number of inadequate audit opinions.

2. In order to create control risk evaluation model, check its performance in practice and add to overall audit assurance, audit practices and scientific research are taken into account.

3. Control risk evaluation model has to reduce probability of faulty conduct of audit, ensure systematic assessment of control risk, substantiation of the identified risk level, and the connection with the scope and nature of the procedures carried out by the auditor.

Theoretical significance and scientific novelty of the research

The scientific novelty and theoretical significance of the research are described by its theoretical results:

● the analysis of control risk and assessment of interpretations of its concept has allowed to apply a wider approach for summarising control risk assessment and to establish a theory-based principled scheme of the concept of audit risk, to distinguish the essential components of control risk, to classify conditions and factors determining control risk and its components;

● a systematic approach to risk control and its assessment has been proposed suggesting that control risk assessment should be linked to the assessment of the company's internal control but only to the extent that the company's internal control relates to the overall audit risk, relations between the components of control risk have been identified, control risk assessment has been associated with the entire audit process and the use of the results for subsequent actions of the auditor;

● a control risk assessment model has been developed, which clearly shows how control risk assessment should be integrated into the audit process, the consistency of control risk assessment, components of control risk to be assessed, questions that need to be answered when assessing specific components of control risk, the [possibility to transform the questions depending on the experience of the auditor who carries out the assessment, interconnection among the components, relation between control risk and the level of audit risk, guidelines on achieving an acceptably low level of audit risk.

Therefore, a systematic approach to control risk assessment is presented in the developed control risk assessment model which ensures the improvement in the quality of audits carried out.

Practical significance of the research. A new quantitative assessment methodology of the components of control risk has been proposed, which allows to identify all the factors associated with control risk, while assessing their individual level of performance in the audited company and the impact on the overall level of audit risk, to assess the factors according to their individual specifics as well as the specifics and financial indicators of the company's activities, to determine the level of control risk on the basis of the overall level of audit risk, and to ensure that further activities will maintain that level.
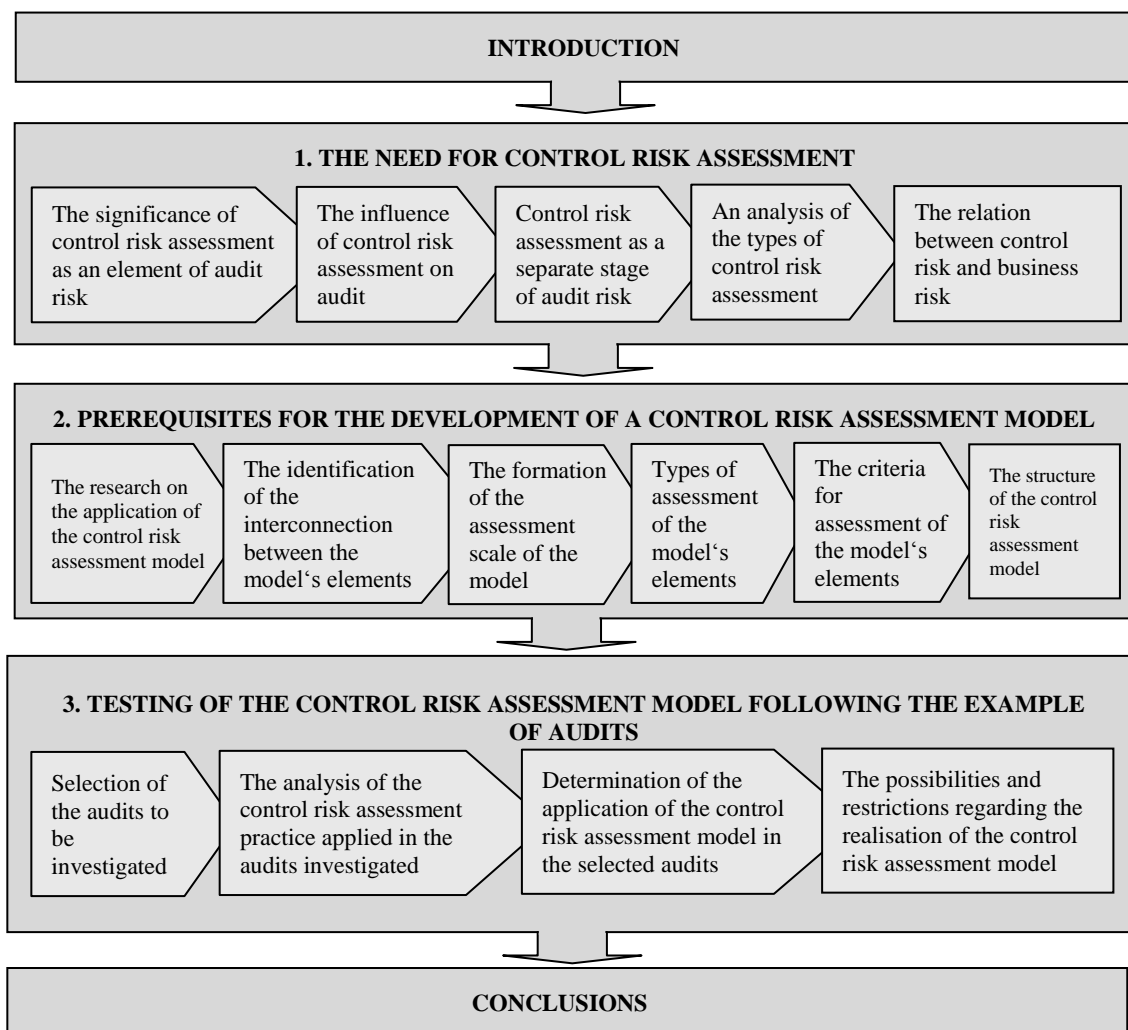
The developed control risk assessment model and the methodology for the assessment of components can be applied in practice by the auditors who perform the audit of financial statements, regardless of the size of the audited company, the nature of its activities and its financial situation. On the basis of the proposed control risk assessment model, the auditors are able to ensure a systematic audit risk assessment process, enhance the quality of audits, improve the reliability of results, save resources, and reduce audit costs by collecting only the necessary audit evidence.

A control risk assessment model is an appropriate scientific measure for academicians who may share the knowledge on audit with the public and conduct further studies on control risk assessment. The committees issuing

auditing standards may apply the model as guidelines on the preparation of clearer, more detailed and more understandable standards of control risk assessment.

The model is designed to improve the assessment carried out by auditors, but other users of financial statements, such as directors, shareholders, finance specialists on the basis of the model may examine the risks occurring in the business environment and the preparation of the company's internal systems in assessing and controlling these risks. In that regard, the findings of the dissertation will facilitate the decisions taken by auditors and other market participants under current business conditions.

The structure and scope of the study. The logical structure of the dissertation is presented below:

INTRODUCTION

1. THE NEED FOR CONTROL RISK ASSESSMENT

| The significance of control risk assessment as an element of audit risk | The influence of control risk assessment on audit | Control risk assessment as a separate stage of audit risk | An analysis of the types of control risk assessment | The relation between control risk and business risk |

2. PREREQUISITES FOR THE DEVELOPMENT OF A CONTROL RISK ASSESSMENT MODEL

| The research on the application of the control risk assessment model | The identification of the interconnection between the model's elements | The formation of the assessment scale of the model | Types of assessment of the model's elements | The criteria for assessment of the model's elements | The structure of the control risk assessment model |

3. TESTING OF THE CONTROL RISK ASSESSMENT MODEL FOLLOWING THE EXAMPLE OF AUDITS

| Selection of the audits to be investigated | The analysis of the control risk assessment practice applied in the audits investigated | Determination of the application of the control risk assessment model in the selected audits | The possibilities and restrictions regarding the realisation of the control risk assessment model |

CONCLUSIONS

The dissertation consists of an introduction, three main chapters, conclusions and proposals regarding the thesis, a list of references, and appendices. 27 tables and 22 figures are included in the thesis. The thesis consists of 179 pages, without appendices, and is based on 196 literature sources.

SUMMARY

The need for control risk assessment

Audit is regarded as an activity in which risk is inevitable. Audit risk refers to the risk that the auditor's opinion regarding significant misstatements in financial statements will be incorrect. The need to assess audit risk in the audit theory is well known, and at the end of the twentieth century audit began to evolve into risk-based audit, which focuses on the economic system in which the audited company operates and the audit evidence regarding its determined risk (*Jodelienė, 2010*).

For the first time a systematic approach to audit risk was formed in 1983, when the American Institute of Certified Public Accountants (AICPA) issued a universally acceptable classic audit risk formula. Later scientists proposed their interpretations of the formula, but they were not established, and the classic audit risk formula is still used. The classic audit risk formula and some of its interpretations are presented in Table 1.

Table 1. **Interpretations of the audit risk formula**

Formula	Author	Explanation of abbreviations
AR=IR×CR×DR	AICPA	AR − audit risk, IR − inherent risk, CR − control risk, DR − detection risk, ER − existing risk, IR − identification risk, sR − sampling risk, AP − risk in analytical procedures, ST − risk in substantive tests.
AR=IR×CR×AP×ST	R. Dodge	
AR=ER×CR×IR×sR	J. Kabašinskas and I. Toliatienė	

Source: composed by the author with reference to AICPA, 1983, Dodge, 1992, Kabašinskas, Toliatienė, 1997.

The classic audit risk formula and its modifications have their limitations; therefore, other methods may be selected for the assessment of audit risk. The main methods are ABREMA (*1996*), risk-based audit (*Bayer, 1999*), and the methods for audit risk assessment proposed by Beatie, Fearnley, and Brandt (*2005*). ABREMA refers to audit risk assessment when risk is assessed on the basis of activities. Audit risk is comprised of two main elements: the risk that there is an error in financial statements and that the auditor will not detect this

error. The first element divides the risk into the likelihood that the error exists and the likelihood that the company has not detected this error. Having analysed the elements of ABREMA, it has been found that the likelihood that the error exists refers to inherent risk, the likelihood that the company will not detect the error refers to control risk, and the risk that the auditor will not detect the error is regarded as detection risk. Therefore, ABREMA is another variation of the classic formula of audit risk. With respect to risk-based audit assessment (*Bayer, 1999*), it has been determined that the classic audit risk assessment is inadequate, since it does not include business risk assessment, which may lead to the fact that the audits are carried out properly, but later the company goes bankrupt, anyway (*Cedergren, 2006*). With reference to audit risk assessment, Beatie, Fearnley, and Brandt (*2005*) distinguish the elements of the auditor's independence and competence as the classic elements of audit risk.

The analysis of the main audit risk assessments has revealed that none of these assessments, including the auditing standards (*2009*), identify the specific values of audit risk assessment; thus, the audit firms are responsible for the preparation of their methodologies, which leads to the fact that none of the audits, especially carried out by different audit firms, cannot be compared, and it is impossible to ascertain and confirm whether the audit was carried out in a proper and reliable manner. For these reasons, audit risk assessment should be improved, ensuring the reliability of audit and preventing individual and subjective interpretations of each auditor regarding what the level of reliability of internal control should be, how an acceptably low level of audit risk can be achieved, etc.

The analysis of the modification of the audit risk formula has shown that in order to assess audit risk, certain elements may not be included and assessed (for example, inherent risk); however, other elements, on the contrary, should be expanded and separated (for example, sampling risk). In fact, only two elements of the audit risk formula remain unchanged, namely control risk and detection risk. The analysis has also revealed that it is impossible to exclude

independent reliability (detection risk), but like both sampling risks it may can be modified depending on the desired level of audit risk. Despite the existing possibility of modification, changes in the level of sampling and detection risks are not particularly desirable because they lead to a significant increase in the auditor's scope of work; therefore, a qualitative improvement in audit risk assessment may be achieved by modifying the assessment of control risk. Hence it follows that the overall audit assessment and its influence on the overall audit results depends on the proper assessment of control risk.

The assessment of internal control and control risk is an integral element of the audit process, which is carried out due to four main reasons: the consistency of the audit process, the need to inform the management about the state of internal control, and short-term as well long-term saving of the audit resources. After the main causes of control risk assessment have been identified, it is important to look for adequate internal control assessment methods that will reduce the subjectivity and complexity of audit, will not leave room for interpretations and unreasonable decisions by the auditor, but will still ensure that the assessment does not change the consistency of the audit, gives an opportunity to inform the company's management about the identified shortcomings and helps to save resources in the short and long terms.

An audit is an exhaustive process, which has a beginning, an end and the steps that are taken while achieving the ultimate aim. It should be noted that specific stages of audit are well established in practice, but there is no evidence that such consistency of audit helps to achieve the objectives. The assessment of the company's internal control or control risk is identified as one of the possible stages of audit, but its exact place has not been defined.

All examined classifications of the consistency of audit have flaws, and none of them clearly indicates why a particular stage has been chosen and what the relation among the stages is. A different presentation of the audit stages, which not only clearly specifies all the stages, but also highlights their interrelation, has been proposed (see Figure 2).
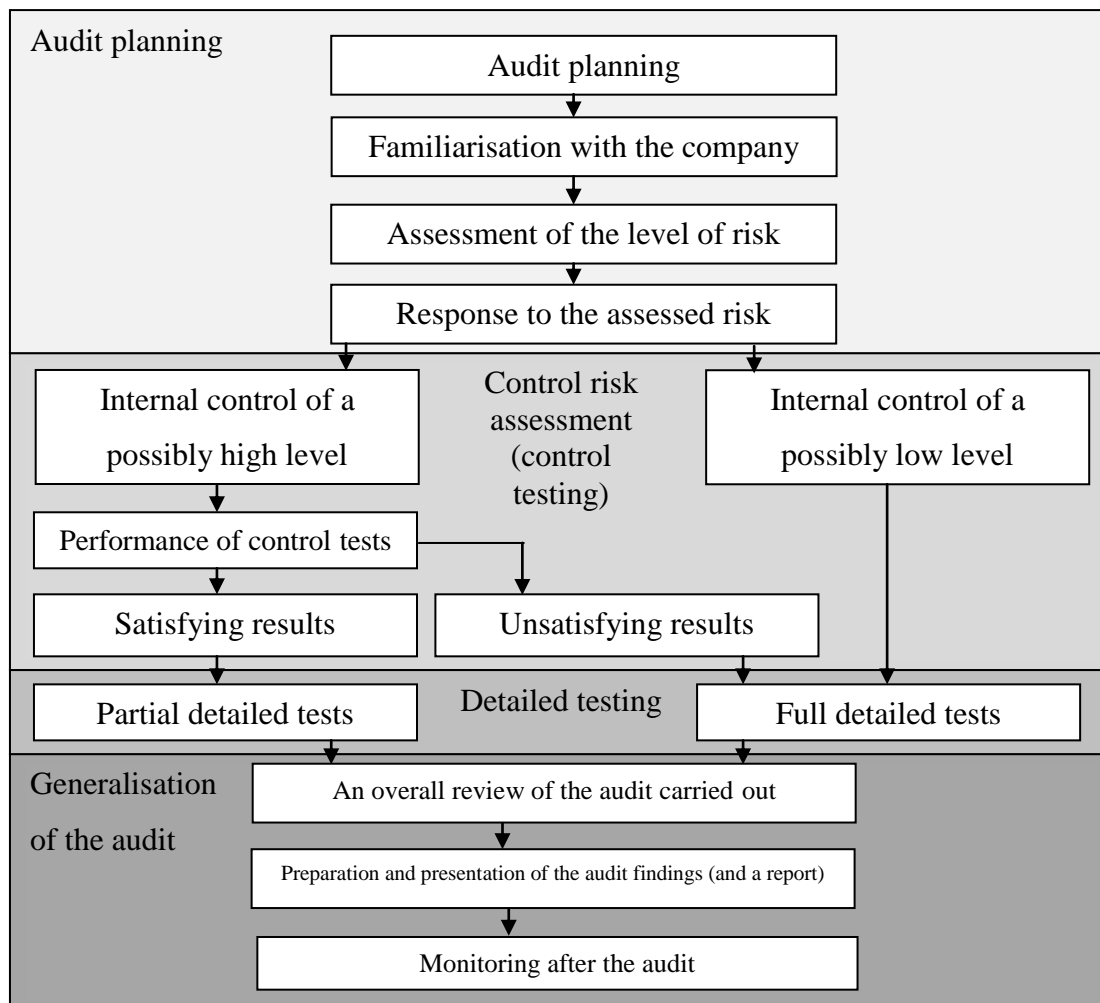
```
┌─────────────────────────────────────────────────────────────────────┐
│ Audit planning                                                      │
│                     ┌─────────────────────────────┐                 │
│                     │       Audit planning        │                 │
│                     └──────────────┬──────────────┘                 │
│                     ┌──────────────▼──────────────┐                 │
│                     │ Familiarisation with the company │            │
│                     └──────────────┬──────────────┘                 │
│                     ┌──────────────▼──────────────┐                 │
│                     │ Assessment of the level of risk │             │
│                     └──────────────┬──────────────┘                 │
│                     ┌──────────────▼──────────────┐                 │
│                     │ Response to the assessed risk │               │
│                     └──────────────┬──────────────┘                 │
├─────────────────────────┬─────────┴─────────────────────────────────┤
│ ┌─────────────────────┐ │ Control risk  ┌─────────────────────────┐ │
│ │ Internal control of a │ │ assessment    │ Internal control of a   │ │
│ │ possibly high level   │ │ (control      │ possibly low level      │ │
│ └──────────┬──────────┘ │ testing)      └────────────┬────────────┘ │
│ ┌──────────▼──────────┐ │                            │              │
│ │ Performance of control tests │──────┐              │              │
│ └──────────┬──────────┘        │       │             │              │
│ ┌──────────▼──────────┐ ┌──────▼──────────────┐      │              │
│ │ Satisfying results  │ │ Unsatisfying results │      │              │
│ └──────────┬──────────┘ └──────────┬──────────┘      │              │
├────────────┼────────────────────────┼───────────────┼──────────────┤
│ ┌──────────▼──────────┐ Detailed testing ┌──────────▼────────────┐ │
│ │ Partial detailed tests │               │ Full detailed tests   │ │
│ └──────────┬──────────┘               └──────────┬────────────────┘ │
├────────────┼──────────────────────────────────────┼────────────────┤
│ Generalisation ┌────────────────────────────────────┐              │
│ of the audit   │ An overall review of the audit carried out │      │
│                └──────────────────┬─────────────────┘              │
│                ┌──────────────────▼─────────────────┐              │
│                │ Preparation and presentation of the audit findings (and a report) │ │
│                └──────────────────┬─────────────────┘              │
│                ┌──────────────────▼─────────────────┐              │
│                │ Monitoring after the audit         │              │
│                └────────────────────────────────────┘              │
└─────────────────────────────────────────────────────────────────────┘
```

Figure 2. The consistency of the audit performance.

Source: composed by the author.

The proposed presentation of the audit consistency provides a graphic depiction of the consistency of the audit stages and shows the place of control risk assessment in the audit process.

Control risk assessment is carried out on the basis on internal control assessment of the audited company. Internal control assessment is not a new element in the audit process; thus, more than one model for internal control assessment has been developed. The general information regarding the most commonly used tools for internal control assessment are presented in Table 2.

Table 2. **The main tools for internal control assessment**

Name	Origin	Date of implementation	Mainly used	Objectives
COSO	American accounting and auditing organisations	1992	In the private sector of Europe and the USA	Reliability of financial accountability
Cadbury	United Kingdom, Adrian Cadbury	1992	In Great Britain	Reliability of financial accountability
CoCo	Canada, Canadian Institute of Chartered Accountants (CICA)	1995	In Canada	Reliability of internal and external accountability
ISO 31000	International organisation of standardisation	2009	In various countries	Risk management

Source: composed by the author on the basis of The Committee, 2012, UK Corporate, 2012, Chartered Accountants, 2012, The International, 2012.

The analysis of the main internal control risk assessment models has revealed that no methods demonstrating how to undertake quantifiable assessment of control risk have been developed. In International Standards on Auditing and the standards proposed by other states, it is suggested that the elements of the COSO model should be used for assessment. International Auditing Standards additionally provide guidance on what should be addressed during the assessment of each item; however, it remains unclear how the assessment results should be summarized. In most cases, three attributes, namely "high", "medium" and "low", are used for control risk assessment, but it is not clear how any of these attributes are selected. It is necessary to have a system that will ensure clearer assessment directly linked to the evidence gathered by the auditor. In order to create an internal control assessment system, the thesis has defined assumptions for control risk assessment. These

assumptions are the basis for risk assessment and, independently of the subsequent assessments, they may not vary:

1. If the auditor wants to reduce control risk, he is required to substantiate it by the assessment carried out. If no activity has been carried out in terms of control risk assessment, it must be assessed by a 100 percent. This assumption requires that any assessment would be based on the work done.

2. Even the most effective internal control system cannot be completely reliable, i.e. control risk can never be regarded as non-existent. The case when control risk is assessed by a 0 percent cannot exist in practice, i.e. no matter how good an internal control system is, it has inherent limitations, and the auditor should take this fact into account and increase control risk.

3. Control risk cannot be lower than the overall audit risk. It has been found that audit risk consists of control risk, detection risk and sampling risk. The latter two are the auditor's risks, which he can reduce by the work he performs, while control risk can only be assessed, but not changed by the auditor. If the auditor assesses that control risk is lower than audit risk, he will not have to carry out any substantive procedures, since the company's internal control system will provide reasonable assurance on the proper preparation of financial statements. The benefits of audit have been proven in the scientific literature and in practice (*Power, 1999*); thus, the model has been developed on the basis of the assumption that the control risk cannot be lower than the audit risk.

All three assumptions relate to the percentage estimates of control risk. The assumptions define that the minimum estimate of control risk must be greater than the overall assessment of audit risk, and the maximum estimate may be equal to 100 percent. These two percentage estimates are the only ones that can be objectively substantiated. Substantiation of the selection of other estimates is subjective, since the following questions remain unanswered: how much work the auditor has to perform so that control risk assessment would be

reduced by at least one percentage point, what the minimum control risk that may be applied for the calculation of audit risk is, what the levels of control risk assessment are, how to choose one or another percentage of assessment.

Assumptions for the development of the control risk assessment model

In order to assess the relevance of control risk assessment problems in practice and to explore the applicability of the developed model, the research on the control risk assessment model has been carried out, during which certified Lithuanian auditors were interviewed.

More than 2/3 (68.49 percent) of the auditors who participated in the research have indicated that control risk assessment is important during audit, 23.29 percent of the respondents pointed out that it is important sometimes, while 65.75 percent of the auditors have indicated that they assess control risk every time they perform a financial audit. Despite the fact that most of the auditors understand the need for control risk assessment and assess it during audits, all respondents have indicated that they encounter difficulties in assessing this risk: 86.30 percent of the respondents have indicated that they experience difficulties in assessing control risk always, and the rest – sometimes. The findings of the research confirm the results of other similar studies (*Jodelienė, 2010, Eimanavičiūtė, Kustienė, 2014*) showing that Lithuanian auditors face numerous challenges when assessing audit risk. This suggests that despite the auditors' experience and the number of audits, control risk assessment is still complex, and it remains unclear how to carry out it properly. The conducted research has revealed that the main factors determining the complexity of control risk assessment are unclear requirements of the standards and difficulties in assessing control risk as a phenomenon (see Fig. 3).
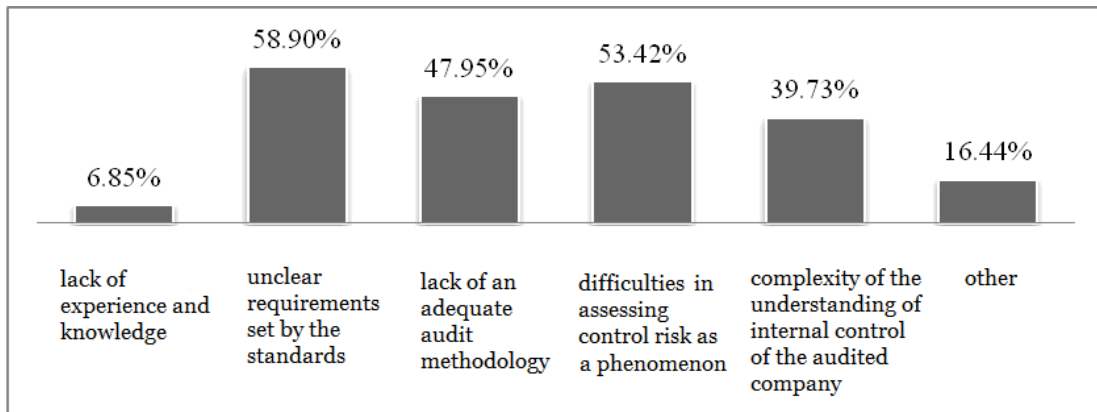
Source: *composed by the author*.

Figure 3. The causes of the difficulties in assessing control risk

In order to generate assumptions for the development of the risk assessment model, the main problems faced by auditors performing control risk assessment have been analyzed. Figure 4 presents the factors determining the assessment of the risk that auditors have identified as the most difficult to be assessed.
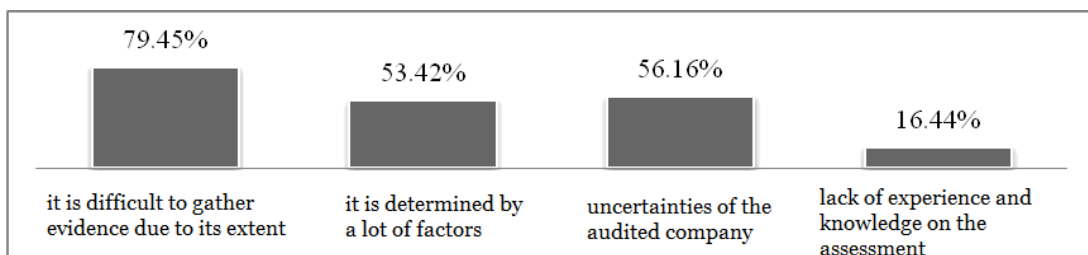
Source: *composed by the author*.

Figure 4. The difficulties in assessing the selected audit risk component

In order to explore the possibilities regarding the use of the model, the auditors were asked whether they used a model linking the assessment of the internal control of a company to the level of control risk. 83.56 percent of the respondents indicated that they would use such a model, 49.32 percent pointed out that they would use such a model always, while 34.25 percent pointed out that they would use the model sometimes. The results suggest that the need for a control risk assessment model exists and that it would be applied in practice. In order for the model to be applied in practice, it should have the

characteristics important for the user. Figure 5 reflects the expectations of the respondents regarding the characteristics of the model.
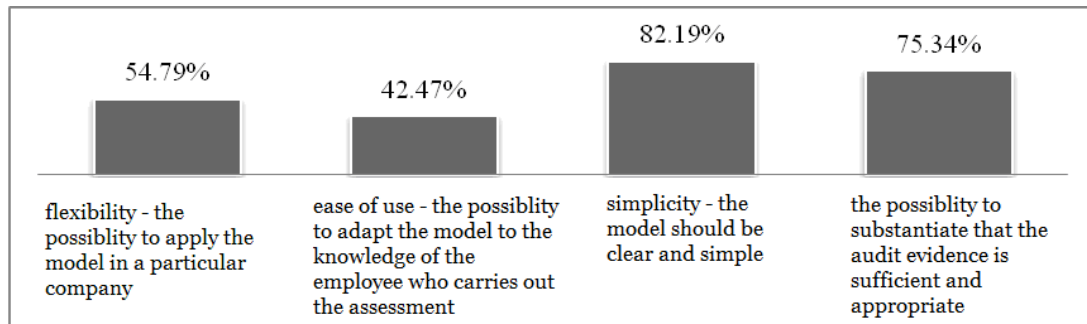
Source: *composed by the author*.

Figure 5. The characteristics of the control risk assessment model important for auditors

The empirical research has confirmed the importance of control risk assessment for audit and has shown that auditors encounter problems in control risk assessment. This indicates that the control risk assessment model reflecting a systematic approach to control risk should be developed. It is important that the model would be applicable in practice; thus, in order to define its main properties and elements, the main findings of the research carried out have to be taken into account.

The elements of the model have been defined, assessment of each element has been examined in detail, the links between the elements were established, and the assessment scale for the model has been developed. It has been determined that the level of control risk has to be set on the basis of the evaluation of the part of the company's internal control which is associated with the preparation of financial statements. The assessment of the elements of the control risk assessment model has determined that when assessing control risk it is advisable to use the model of the internal control system, consisting of five elements: control environment, risk assessment, control procedures, information and communication, and monitoring of control measures. Such use of the elements assures a sufficient flexibility of the model and adaptability to change, is in line with the provisions of the most commonly used auditing

standards, thus, saves resources and enables auditors to envisage the whole internal control system that operates and affects the company.

In order to create a control risk assessment scale, it has been analyzed that neither in theory nor in practice the levels of control risk and their calculation have been determined; therefore, control risk assessment is based on the subjective determination of the level of control risk, which leads to the fact that a significant distortion of information is not detected. For the purpose of establishing the structure of control risk assessment, it has been found that the control risk cannot be lower than the audit risk, and the maximum level of control risk can be 100 percent. There are six intermediate values between the minimum and maximum possible control risk. Each of these intermediate values can be mathematically calculated and is based on the audit procedures. To reduce the control risk, internal control assessment procedures have to be carried out, which must be directly linked to the adequate level of control risk reduction.

In order to link the elements of internal control assessment and the level of control risk reduction, it has been established that each element of internal control is equally important, and the proper functioning of all elements can reduce the risk by a fifth, i.e. (100 percent - Audit risk)/5. It is most convenient to assess each element of internal control by breaking the questions down. It is advisable to carry out an assessment using evaluative and determinable questions. The number and type of the questions depends on the person who performs the audit, the assessor's competence, and the type of questions he chooses to use. Evaluative questions can be divided into determinable questions. The ability to transform the types of questions provides flexibility for assessment and facilitates the application of the model. The flexibility of the questions and the ability to transform them is an exclusive feature of the model, which is not characteristic of any other model that has been designed so far and applied in practice.

A detailed analysis of all the elements of internal control assessment has revealed that the assessment of three elements (risk assessment, control

actions, and the monitoring of control measures) depends on the value of the accounting items (long-term and short-term assets, equity, liabilities, income, and expenses) of the audited company. Taking into account the nature and the most relevant method of assessment of each element, a control risk assessment model (see Fig. 6) has been developed, on which the testing of the risk assessment model, following the example of the selected audits, has been performed.
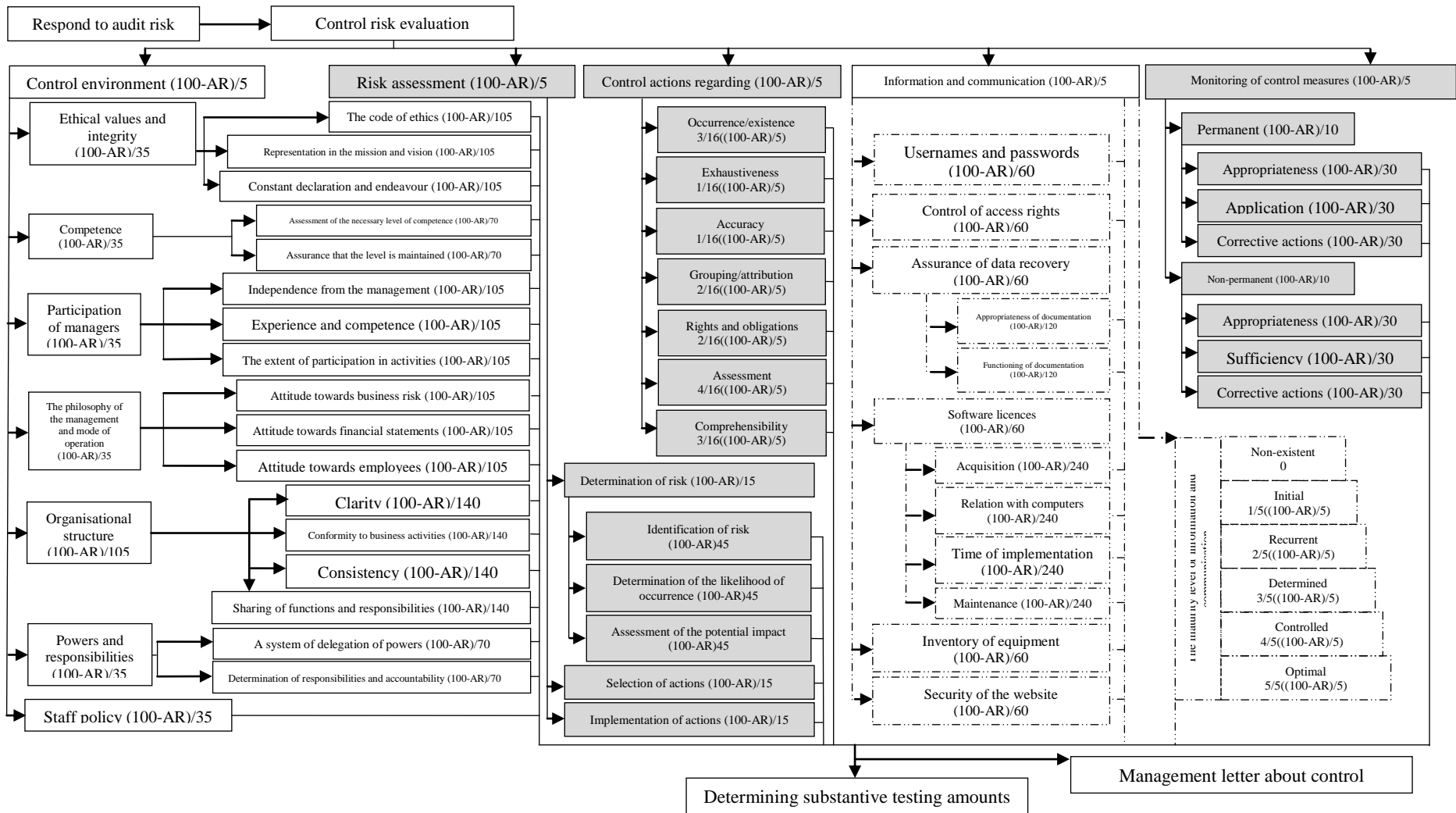
Source: *composed by the author*. **Figure 6. Control risk assessment model.**

While developing the framework for control risk assessment, it has been proven that the best approach to assess control risk is the determination of the reliability of internal control and the elaboration of the existing internal control elements. Each element of internal control may be broken down into smaller evaluative and determinable questions to be assessed during the audit. Each element of control risk and the question it includes is expressed as a percentage, which directly depends on the acceptable audit risk selected by the auditor. The auditor performing the audit and applying this control risk assessment model is able to clearly associate each assessment carried out with the chosen control risk assessment.

Testing of the control risk assessment model following the example of audits

The aim of the research is to explore the possibilities to apply the developed control risk assessment model in practice. In Lithuania, mainly small companies employing one auditor (87) or companies where the auditor does not work full-time (27) operate, and the biggest number of audits are carried out in private companies, for which audit is compulsory. Thus, particular attention should be given to 114 audit firms which employ one auditor and which account for 66 percent of all audit firms. Respectively, 56 percent of the audits are those of private companies, where audit is mandatory; thus, the emphasis has been laid on these audits. Due to the fact that the year 2013 marks the last financial year and the audits accounting for 2013 had been completed during the research, these audits have been chosen as a whole. The analysis of the population has also revealed that 382 audits fall on 114 audit firms, i.e. an average of 3.3 audits for every company; therefore, it is most appropriate to investigate three audits for each company. In order to choose specific audit firms and audits, the field of the audits those firms perform has been assessed. In accordance with the data on the number of active entities based on the type of economic activity (EVRK Rev. 2, section level) provided by the Lithuanian Department of Statistics (*2015*), it is most appropriate to

examine the wholesale and retail trade sector which at the beginning of the year 2015 amounted to 26, i.e. 18 percent of the total number of enterprises, since improperly performed audits may have an impact on the largest number of companies. Taking these factors into account, in order to examine the applicability of the developed model, 9 financial audits performed in trade companies for the financial year that ended in 2013 have been selected for assessment. Three different audit firms, three auditors, five assistant auditors and twenty other employees conducted these audits.

In order to verify the appropriateness of the control risk assessment model for the selected audits, the parameters of the overall audit risk have been defined. Each estimate of these elements is directly dependent on the level of the overall audit risk; therefore, before assessing each element in detail, the target level of audit risk has been determined. It has been analyzed that the percentage of audit risk that should be used during audits has not been clearly defined in the literature. In order to ensure the comparability of the results of all the audits, it has been decided that the target level of the overall audit will be 5 percent, which, on the basis of the survey data, is most commonly applied in practice. The chosen level of risk can be easily modified in the model; therefore, the choice does not limit the possibilities to apply the model.

The assessment included a review of documents of audit firms, which are designed for internal control assessment of the audited companies, and the audit findings presented in those documents have been analyzed on the basis of the developed control risk assessment model. In cases when an audit firm did not assess some of the elements of control, the reduction of its possible control risk was assessed by 0 percent. In cases when some of the elements had been assessed, the assessment results were analyzed and the percentage of control risk reduction was chosen according to the assessment results. During the analysis, redundant control assessment issues the assessment of which during the audit is not associated with the reduction of control risk have been identified in the practice of audit firms; therefore, such assessment should not be carried out during the audit.

Comparison of the control environment of audit as well as of information and communication, i.e. a comparison of the estimates not relating to the value of accounting items, is presented in Figure 7.
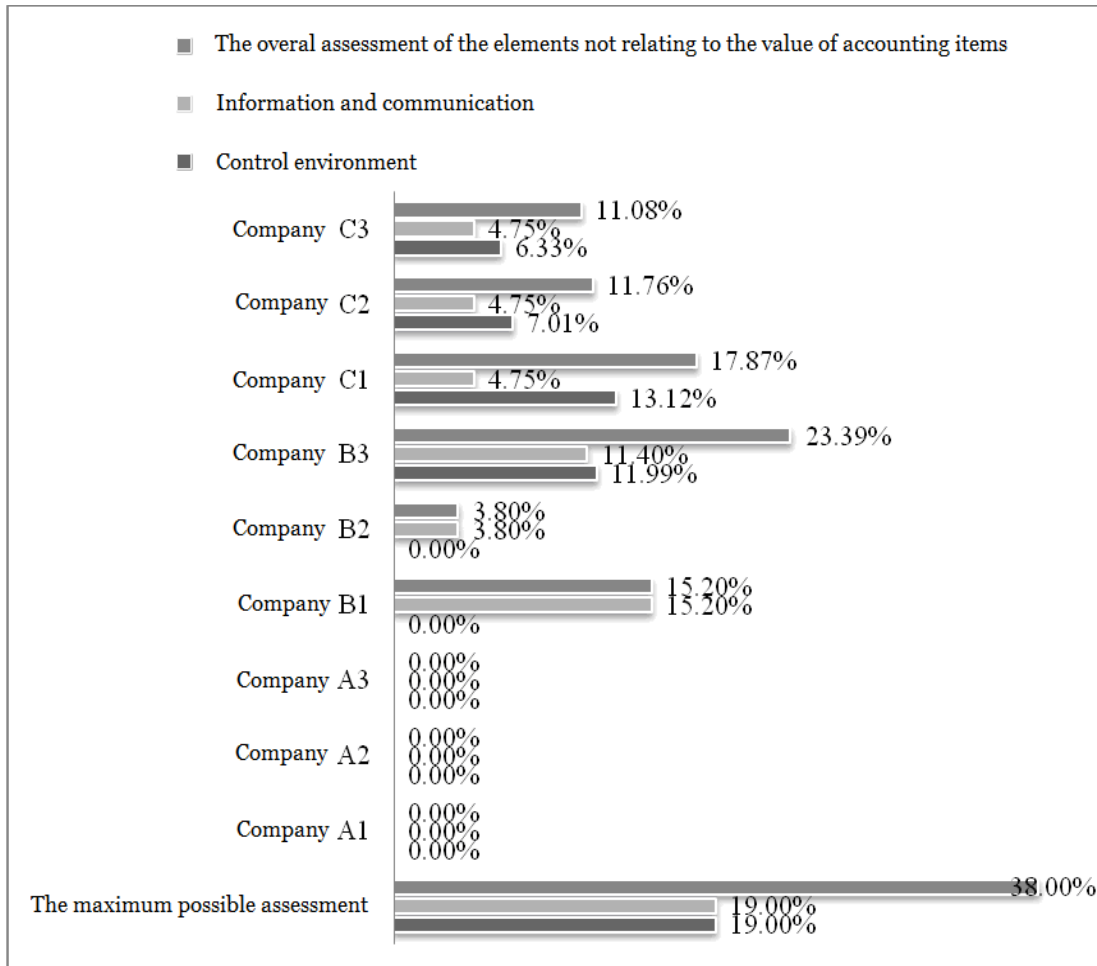
Source: *composed by the author*.

Figure 7. Assessment of the elements not relating to the value of accounting items in the audits examined

On the basis of the value of each element of the control risk assessment model and the values of accounting items of each company, the analysis of risk assessment, control actions and monitoring of control measures of each company, i.e. the analysis of the elements relating to the value of accounting items, has been carried out. The generalized functioning of each element is presented in Figure 8.
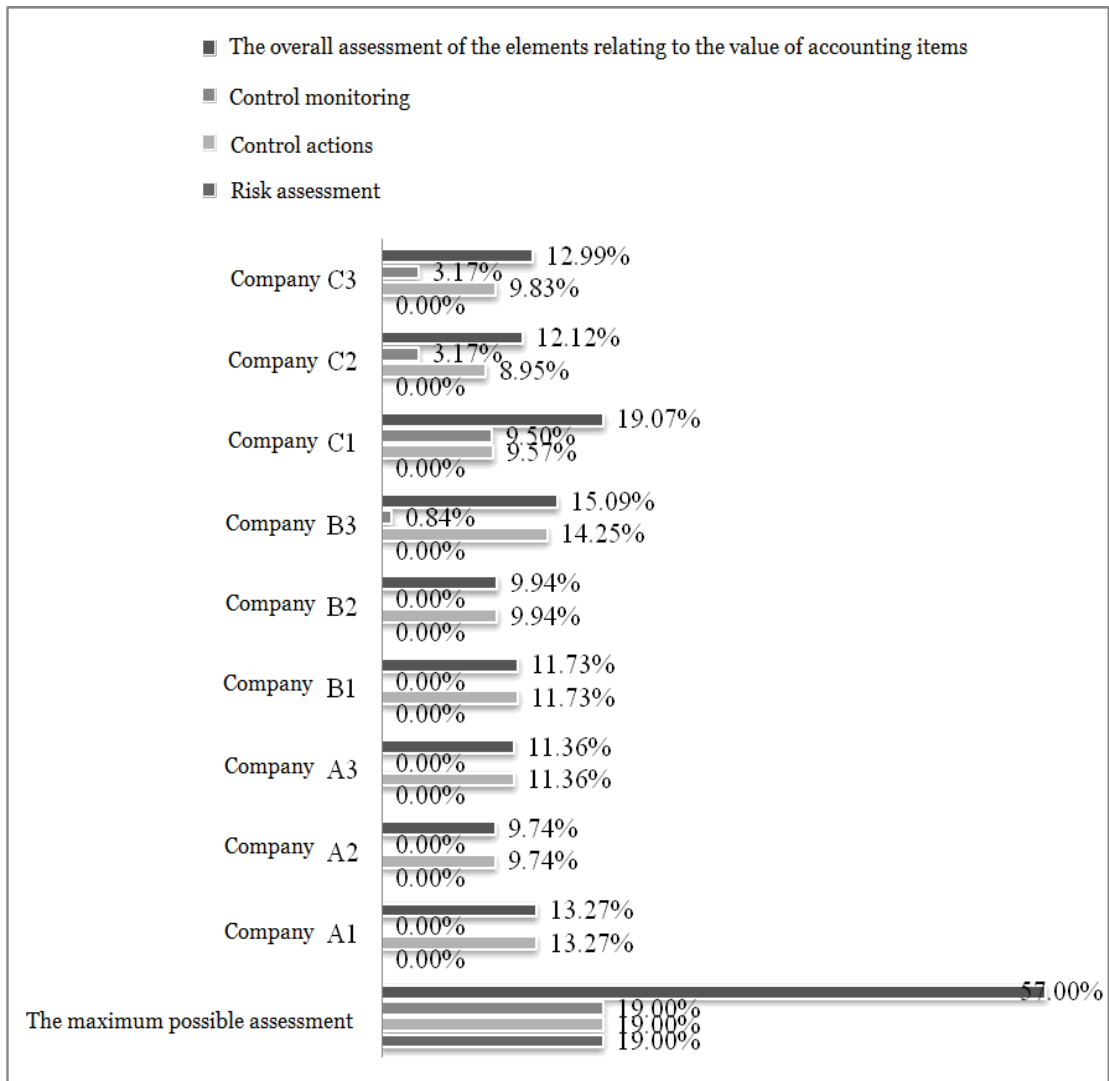
Source: *composed by the author*.

Figure 8. Assessment of the elements relating to the value of accounting items in the audits examined

It has been found that, using the developed control risk assessment model, control risk can be reduced in relation to all the audits examined; however, due to the incomplete assessment of the control risk elements, the reduction is not as great as it could be. Auditors who perform financial audits assess not all the elements of control, assess them only partially, and insufficiently document the work performed, so it is not possible to compare the quality of audits, to substantiate the assessments performed during the audits, and to use the obtained results in order to define the subsequent actions of the auditor. The developed control risk assessment model eliminates these

inefficiencies, ensures the appropriate and sufficient audit documentation, selects an accurate level of control risk, and takes into account the specifics of each company. Control risk assessment directly influences detection risk and allows reducing the amount of substantive procedures; therefore, the control assessment results have to be applied specifically for this purpose.

The generalization of the applicability of the model and the areas of its improvement has revealed that, in order to effectively apply the model, each audit firm should take into account its specificity, i.e. the model should be adapted to the audit practice used by the audit firm, the questions in the questionnaires regarding internal control assessment should be associated with specific estimates of the control risk assessment model, thus ensuring that the company's practice is effectively used. When conducting subsequent researches, different practices of companies should be compared, the most effective practices should be distinguished, the experience of audit firms, the nature of the audited companies, the efficiency of auditors, their assistants and other members of the staff should be taken into account.

Conclusions and propositions

Having examined the theoretical and practical aspects of control risk assessment, the following conclusions have been formulated:

In order to assess audit risk in the current market conditions, the element of inherent risk has to be excluded and not assessed; therefore, only two elements remain in the audit risk formula, namely, the control risk and the detection risk. It is impossible to exclude independent reliability (detection risk) assessment, but the only way to increase independent reliability and to reduce detection risk is to increase the scope of the auditor's activities, which leads to longer and/or more expensive audits. For these reasons, control risk is the only type of risk whose modified assessment can help to achieve a qualitative improvement in audit risk assessment, without significantly affecting audit costs. The overall audit

risk assessment and the overall audit results depend on the appropriate control risk assessment.

2. Control risk assessment is an integral element of the audit process, and its performance is conditioned by four main reasons: the consistency of the audit performance, the need to inform the management about the state of internal control, and the short-term and long-term saving of resources. For these reasons, the control risk should be assessed.

3. A unified approach to the control of risk assessment while conducting the audit of financial statements does not exist in practice. The recent scandals regarding the collapse of the audited companies show that the auditors' community still cannot ensure the provision of reliable data. This is partly due to different approaches to the assessment of certain elements of audit. It has been established that following the Enron bankruptcy in 2001, the audit communities around the world decided to review, improve, and adapt the auditing standards, and after the crisis of 2008 such actions have not been discussed; therefore, for the purpose of ensuring a more homogeneous audit reporting, the assessment of the internal control system and the determination of the level of control risk should be standardized.

4. No methods demonstrating how to undertake a quantifiable assessment of control risk have been developed. In the International Standards on Auditing and standards of other states, the elements of the COSO model are suggested for assessment. The International Standards on Auditing additionally provide guidance on what should be addressed during the assessment of each element; however, it remains unclear how the assessment results should be summarized. In most cases, three attributes, namely "high", "medium", and "low", are used for control risk assessment, but it is not clear how any of these attributes is selected. It is necessary to have a system that will ensure a clearer assessment directly linked to the evidence gathered by the auditor.

5. In order to create such internal control assessment system, the assumptions for control risk assessment have been proposed, which are the basis for risk assessment:

● If the auditor wants to reduce the control risk, he is required to substantiate it by the assessment carried out. If no activity has been carried out in terms of control risk assessment, it must be assessed by 100 percent.

● Even the most effective internal control system cannot be completely reliable, i.e. control risk can never be regarded as non-existent. The case when control risk is assessed by 0 percent cannot exist in practice, i.e. no matter how good an internal control system is, it has inherent limitations, and the auditor should take this fact into account and increase control risk.

● Control risk cannot be lower than the overall audit risk. If the auditor assesses that control risk is lower than audit risk, he will not have to carry out any substantive procedures, since the company's internal control system will provide reasonable assurance on the proper preparation of financial statements. The benefits of audit have been proven in the scientific literature and in practice; thus, the control risk cannot be lower than the audit risk.

6. Companies create an internal control system in order to control the business risk, i.e. an internal control system is created not only to ensure the proper preparation of financial statements, but also for other purposes, which leads to the fact that only a part of the internal control system and business risks are relevant to the auditor carrying out the assessment of audit risk. Control risk is the only risk that is regarded as the risk of both audit and business; therefore, only the part of the company's internal control system which ensures that preventive, corrective, and detection procedures developed and applied by the company provide the reasonable assurance that financial statements are free of significant material misstatements is relevant to the execution of audit.

7. Empirical research suggests that auditors encounter problems in control risk assessment. This indicates that a control risk assessment model reflecting a systematic approach to control risk should be developed. For the model to be applicable in practice, its main properties and elements have to be defined taking into account the findings of the conducted research.

8. The levels of control risk and their calculation have been determined neither in theory nor in practice; therefore, control risk assessment is based on a subjective determination of the level of control risk, which leads to the fact that a significant distortion of information is not detected. For the purpose of structurizing the control risk assessment, the levels of control risk assessment have been defined:

● the control risk cannot be lower than the audit risk;

● the maximum level of control risk is 100 percent;

● there are five intermediate levels between the minimum and maximum values of the control risk.

Each intermediate level may be based on the gathered audit evidence. In order to achieve each of these levels, a certain amount of assessment procedures in terms of internal control of the audited company should be carried out.

9. The main aim of the auditor conducting the internal control assessment is to determine the level of control risk; therefore, the questions of the developed model are grouped according to the elements of the internal control system. Each element of the internal control system may be considered as an objective, and all the objectives allow achieving the aim, which is to assess the company's internal control associated with the preparation of financial statements and to determine the level of control risk. The objectives are broken down into specific evaluative and determinable questions. In order to achieve each objective (to assess the element of the internal control system), one or more questions can be raised. The number and type of questions depends on the person who

performs the audit, the assessor's competence, and the type of questions he chooses to raise. Evaluative questions can be divided into determinable questions. The ability to transform the types of questions provides flexibility for assessment and facilitates the application of the model. The flexibility of the questions and the ability to transform them is an exclusive feature of the model, which is not characteristic of any other model that has been designed so far and applied in practice.

10. To assess the control risk, the model of the internal control system has been used, which consists of five elements, namely control environment, risk assessment, control procedures, information and communication, and monitoring of control measures. On the basis of the assessment scale and the distinguished types of the questions, a detailed assessment of each element is defined as follows:

● the element of the control environment is assessed by analyzing ethical values and integrity, competence, participation of directors, the philosophy of the management and the mode of operation, organizational structure, powers and responsibilities, and the staff policy of the audited company;

● determination of risk (identification of risk, determination of the probability of its occurrence, assessment of the possible impact), selection of actions and implementation of actions are relevant to the risk assessment process;

● depending on the competence of the individuals who perform the audit, the elements of information and communication may be assessed by determining the maturity level of information systems (non-existent, initial, recurrent but intuitive, determinate, controlled, and evaluated and optimal) or by assessing the company's policies on protection of data and mobility;

● the element of control actions is associated with assertions of the management relating to generally accepted accounting principles, i.e. the more generally accepted accounting principles a particular assertion

includes, the more significant reduction in the overall control risk can be achieved, due to control actions that relate to that assertion;

● the element of the monitoring of control measures is assessed by analyzing the permanent and non-permanent monitoring of the audited company. In each case, the applied procedures and their sufficiency and appropriateness as well as the implementation of necessary corrective actions are assessed.

11. The analysis of the developed control risk assessment model, following the example of the selected audits, has confirmed that the model helps to structurize the assessment of internal control and substantiates the determined level of control risk. The model can also be used to select the volume of the subsequent substantive procedures; therefore, the control risk assessment model improves the quality of control risk assessment as well as of audit.

12. The examination of the possibilities to apply the model has revealed that in order to effectively apply the model, each audit firm should take into account its specificity, i.e. the model should be adapted to the practice of the audit firm, and the questions presented in the questionnaires regarding internal control assessment should be associated with the specific estimates of the control risk assessment model.

13. Conducting subsequent researches on the control risk assessment model, different practices of companies should be compared, the most effective practices should be distinguished, the experience of audit firms, the nature of the audited companies, the efficiency of auditors, their assistants and other members of the staff should be taken into account, the application of sampling should be assessed, and the selection of the type and performance of the subsequent substantive procedures should be analyzed in conjunction with the results obtained applying the developed control risk assessment model.

Approbation of the scientific research results and their determination

The main statements and results of the research have been published in seven academic publications:

1. Kundušas, K., Simonaitytė, Ž. (2009). *Tarptautiniai finansinės atskaitomybės ir JAV apskaitos standartai: pagrindiniai skirtumai, jų priežastys ir konvergencija*. Buhalterinės apskaitos teorija ir praktika, Nr. 4, p. 24–35, ISSN 1822-8682.

2. Lakis, V., Simonaitytė, Ž. (2011). *The European Union structural assistance audit planning*. Economics, Nr. 2(14), p. 114–122, ISSN 2080-5977.

3. Lakis, V., Simonaitytė, Ž. (2011). *Assessment of the European Union structural assistance audit model*. Ekonomika, Nr. 90(3), p. 93–103, ISSN 1392-1258.

4. Simonaitytė, Ž. (2012). *Audito atlikimas orientuojantis į audito patikimumą*. Įžvalgos, Nr. 1(7), p. 41–49, ISSN 2029-1639.

5. Simonaitytė, Ž. (2012). *ISSAI Lietuvos valstybiniame audite: reikalavimai ir jų įtaka*. Apskaita, auditas, analizė: mokslas inovacijų ir globalizacijos kontekste, p. 646–654, ISBN 978-609-459-028-3.

6. Simonaitytė, Ž. (2014). *Vidaus kontrolės vertinimo modelių analizė*. Buhalterinės apskaitos teorija ir praktika, Nr. 15A, p. 82–95, ISSN 1822-8682.

7. Simonaitytė, Ž. (2015). *Kontrolės rizikos nustatymo tobulinimas*. Ekonomikos vystymasis: procesai ir tendencijos, p. 254–272, ISBN 978-609-436-019-0.

The results of the research have been presented at the scientific conferences:

1. International conference "Accounting, audit, analysis: science in the context of innovation and globalization", 2012, Vilnius, Lithuania.

2. International conference "Accounting, Audit, Analysis: New Challenges and Problems", 2012, Utena, Lithuania.

3. International conference "Science and Business Harmony", 2014, Vilnius, Lithuania.

4. International conference "Economic Development: Processes and Tendencies", 2015, Vilnius, Lithuania.

About the author

Born on 17th of January, 1986 in Vilnius, Lithuania.

Education

2004–2008 Bachelor of Management and Business Administration, Vilnius University.

2008–2010 Master of Accounting and Audit, Vilnius University.

2011–2015 Doctoral studies at the Vilnius University, Social Sciences: Management and Administration.

Professional experience

2006–2007 Vilnius University Students' Representation, Accountant general

2007–2008 MGAB Precizika, Accountant

2012–2013 Kazimieras Simonavicius University, lecturer

2008 – now National Audit Office of the Republic of Lithuania, auditor, senior auditor, chief auditor

2014 – now Vilnius University, assistant.

SANTRAUKA

Temos aktualumas. 2001 m. pasaulį sukrėtė „Enron" skandalas. Po jotiek JAV, tiek Europos Sąjungos, tiek kitos valstybės ėmėsi koreguoti savo teisines apskaitos ir audito sistemas. JAV priimtas Sarbanes–Oxley aktas, o Europos Sąjungoje atnaujintos pagrindinės direktyvos. Po šių reformų audito pasaulyje didelių permainų nebuvo, tačiau banko „Lehman Brothers" žlugimas buvo impulsas naujai finansų krizei, kuri skaudžiai paveikė ir audito profesiją – ne tiek dėl prarastų klientų ir pajamų, kiek dėl kompanijų, apie kurių finansinių ataskaitų rinkinius buvo pareikšta besąlyginė nuomonė, bankrotų. Tarp šių įmonių pateko tokios garsios kompanijos, kaip antai Airijos bankas „Anglo", Indijos kompiuterinių paslaugų įmonė „Satyam", Japonijos fotoaparatų gamintoja „Olympus", Jungtinių Amerikos Valstijų korporacija „Autonomy Corporation", o šių įmonių auditai buvo atliekami pasaulio didžiausių audito įmonių: „Ernst & Young", „Pricewaterhouse Coopers", „KPMG", „Deloitte & Touche". 2008 m. įvykęs banko „Lehman Brothers" žlugimas ir jo padariniai pasiekė ir Lietuvą, kurioje vienas po kito įvyko bankų „Snoras" ir „Ūkio bankas" bankrotai. Po šių skandalų tiek pasaulyje, tiek Lietuvoje vėl imta kalbėti apie audito poreikį ir jo rezultatų naudingumą, literatūroje daugiau diskutuojama apie audito lūkesčių spragą, suinteresuotos šalys teikia įvairių komentarų ir pasiūlymų.

Auditorius, pareikšdamas nuomonę apie įmonės finansinių ataskaitų rinkinį, turi įvertinti ir jos veiklos tęstinumo problemas, todėl 2008 m. prasidėjusi krizė privertė grįžti prie audito kokybės problemų. Peržiūrėjus auditą prižiūrinčių įstaigų išvadas apie pastaruoju metu bankrutavusių įmonių auditus, nustatyta, kad auditoriai, buvę atsakingi už minėtus auditus, nesilaikė skepticizmo požiūrio ir nesurinko pakankamų bei tinkamų audito įrodymų, kad sumažintų audito metu nustatytą riziką iki priimtinai žemo lygio. Tai lemia, kad didžiausias trukdis auditoriui pareikšti realią situaciją atspindinčią nuomonę, yra audito rizika. Pirmą kartą sisteminis požiūris į audito riziką pateiktas 1983 metais – Amerikos sertifikuotų viešųjų buhalterių institutas paskelbė visuotinai priimtiną audito rizikos vertinimo formulę. Vėliau įvairūs

užsienio ir Lietuvos mokslininkai (*Dodge, 1992, Robertson, 1993, Beatie, Fearnley, Brandt, 2005, Turner, Mock, Srivastava, 2003, Jodelienė, 2010*) siūlė savo interpretacijas, tačiau jos neužtikrino, kad auditoriai, kurie atliko bankrutavusių įmonių auditus, pareikštų tinkamą auditoriaus nuomonę. Atliktas tyrimas (*2.1 skyrius*) rodo, kad auditoriai vis dar naudoja klasikinį audito rizikos vertinimą. Dėl šių priežasčių siūloma tikslinti klasikinį audito rizikos vertinimą ir tobulinti jo elementus.

Klasikinį audito rizikos vertinimą sudaro trys elementai: įgimta rizika, kontrolės rizika ir neaptikimo rizika. Įvertinus pastaraisiais metais itin pagausėjusį įmonių, kurių finansinių ataskaitų rinkiniai audituoti ir apie kuriuos buvo pareikšta besąlyginė nuomonė, bankrotų skaičių, įmonių veiklos sudėtingėjimą, technologinių procesų plėtrą, auditorius nebeturi galimybių įvertinti įgimtos rizikos, o neaptikimo rizikos mažinimas lemia auditui skiriamų išteklių augimą, todėl, norint reaguoti į pastarųjų metų įvykius verslo pasaulyje ir valdyti audito riziką, reikia tobulinti kontrolės rizikos elemento vertinimą. Kontrolės rizika –tas audito rizikos elementas, kurio vertinimą patobulinus galima pasiekti kokybinio audito rizikos vertinimo pagerinimo.

Mokslinė problema ir jos ištyrimo lygis. Kontrolės rizikos vertinimas yra neatsiejamas nuo įmonės vidaus kontrolės vertinimo. Šios rizikos dydis tiesiogiai priklauso nuo to, kokia vidaus kontrolės sistema veikia įmonėje ir kaip valdomos visos su ja susijusios rizikos. Analizuotoje mokslinėje Lietuvos (*Bičiulaitis, 2001, Daujotaitė, 2006, Dzingulevičienė, Kustienė, 2010, Eimanavičiūtė, Kustienė, 2014, Gegužis, 2003, Giriūnas, 2012, Jodelienė, 2010, Kabašinskas, Toliatienė, 1997, Kanapickienė, 2001, Kanapickienė, 2008, Kanapickienė, 2009, Lakis, 2007, Leonavičiūtė, Vaškelaitis, 2001, Mackevičius, 2001, Mackevičius, 2005, Mackevičius, 2009, Mackevičius, Bartaška, 2003*) ir užsienio (*Adams, 1995, Akresh, 2010, Arens, Elder, Beasley, 2012, Arens, Loebbecke, 1996, Ashbaugh-Skaife, Collins, Kinney, 2007, Ashbaugh-Skaife, Collins, Kinney, LaFond, 2008, Barnabas, 2011, Beneish, Billings, Hodder, 2008, Blokdijk, 2004, Boyson, 2014, Casterella, Jensen, Knechel, 2011, Cohen, Krishnamoorthy, Wright, 2014,*

Cooper, Gendron, 2001, Cosserat, Rodda, 2009, Davies, 2001, DiNapoli, 2007, Dodge, 1992, Doyle, Ge, McVay, 2007, Dunn, 1996, Fardon, 2010, Fisher, 2005, Fogarty, Graham, Schubert, 2006, 2007, Ghosh, 2005, Graham, Bedard, 2003, Grambling, Rittenberg, Johnstone, 2010, Guenin–Paracini, Malsch, Paille, 2014, Guy, Alderman, 1985, Gupta, 2005, Harrer, 2008, Helbeck, 2008, King, 2011, Knechel, 2001, Knechel, Salterio, Ballou, 2007, Louwers, Ramsay, Sinason, Strawser, Thibodeau, 2013, Millichamp, 2002, Millichamp, Taylor, 2012, Moeller, 2010, Power, 2004, Robertson, 1993, Robinson, 2010, Shim, 2011, Spira, Page, 2003, Trenerry, 2005, Sonin, 2007) autorių literatūroje, tarptautiniuose (*Tarptautiniai audito standartai, 2009*) ir valstybių, kurios netaiko tarptautinių audito standartų, audito standartuose (*AICPA, 2007, ASA, 2014, AUS 402, 1996, Council of the Institute of Chartered Accountants of India, 2002, SAS 78, 1998, SAS 300, 1995, UK Corporate Governance Code, 2012*) iki šiol nėra bendro sutarimo, kaip reikėtų vertinti kontrolės riziką. Sukurtas ne vienas   vidaus kontrolės sistemos vertinimo modelis (*ABREMA, 1996, Bayer, 1999, Cedergren, 2006, Chapman, 2006, CoCo, 1995, Colbert, Bowen, 1996, COSO, 1992, COSO ERM, 2004, Curtis, Wu, Craig, 2000, Enterprise Risk Management, 2004, IT Goverance Institute, 2011, McConnell, Sweiger, 2007, Moeller, 2007, The Committee of Sponsoring Organizations, 2012*). Atlikti tyrimai (*Alali, Yeh, 2012, Arena, Arnaboldi, Azzone, 2010, Arnold, Benford, Canada, Sutton, 2011, Azizkhani, Monroe, Shailer, 2012, Beatie, Fearnley, Brandt, 2005, Beck, Fuller, Muriel, Reid, 2013, Bergstrand, 2009, Bhattacharjee, Moreno, 2002, Catanach, Irving, Williams, Walker, 2011, Chen, 2009, Chen, Huang, Shih, 2006, Cooper, Deo, 2006, Cushing, Loebbecke, 1983, Curtis, Turley, 2007, Dirsmith, Haskins, 1991, Ferreira, Merchant, 1992, Kannan, Skantz, Higgs, 2014, Kumar, Sharma, 2005, Lemon, Tatum, Turley, 2000, Low, 2004, Myllymäki, 2013*), tai rodo, kad audito įmonės naudoja skirtingus metodus šiai integracijai, taigi praktiškai bendro požiūrio į kontrolės rizikos vertinimą nėra.

Atlikti moksliniai tyrimai pateikia kontrolės rizikos sampratą ir apibrėžia vertinimo procesą, tačiau juose nepateikiama išsamios kontrolės

rizikos vertinimo analizės, neatskleidžiama sisteminio požiūrio į audito rizikos vertinimą. Pastaruoju metu kilę audituotų įmonių žlugimo skandalai rodo, kad auditorių bendruomenė vis dar negali užtikrinti patikimų duomenų pateikimo. Atsižvelgiant į tai, aktuali spręstina mokslinė problema ta, kad nėra konceptualaus ir metodologiškai pagrįsto kontrolės rizikos vertinimo modelio .

Tyrimo objektas – kontrolės rizikos vertinimas.

Tyrimo tikslas – ištirti kontrolės rizikos vertinimo metodų būklę ir remiantis esama teorija ir praktika sudaryti kontrolės rizikos vertinimo modelį.

Šiam tikslui pasiekti keliami tokie **uždaviniai**:

- pagrįsti kontrolės rizikos vertinimo tobulinimo būtinumą šiuolaikinėmis rinkos sąlygomis;

- nustatyti kontrolės rizikos vertinimo būdus ir jų tinkamumą;

- ištirti problemas, su kuriomis susiduriama audito praktikoje vertinant kontrolės riziką, ir išskirti būtinas kontrolės rizikos vertinimo modelio kūrimo sąlygas;

- sukurti kontrolės rizikos vertinimo modelį, kuris atskleistų sisteminį požiūrį į kontrolės rizikos vertinimą;

- patikrinti sudaryto modelio veikimą konkrečių auditų pavyzdžiu.

Tyrimo metodai. Atliktiems teoriniams tyrimams, analizuojant kontrolės riziką ir jos vertinimo aspektus, naudota mokslinės literatūros analizė, sisteminimas, sintezė, abstrahavimas, apibendrinimas ir lyginimas, nagrinėta ekonomikos, vadybos, apskaitos, audito ir kitų sričių mokslinė literatūra.

Siekiant išsiaiškinti praktines kontrolės rizikos vertinimo problemas, atliktas empirinis tyrimas. Jo metu naudoti socialinių tyrimų organizavimo elementai, taikytas anketinės apklausos metodas. Gauti empirinio tyrimo rezultatai apdoroti pasitelkus kokybinės ir kiekybinės duomenų analizės metodus. Kiekybinei duomenų analizei naudoti aprašomosios statistikos metodai, kurie pagrįsti statistiniu dažnumu, pavyzdžiui, procentų apskaičiavimu, grafiniu duomenų vaizdavimu. Statistiniai duomenys

apibendrinti pasitelkus statistinių išvadų teoriją, apie imtį gautos išvados panaudotos apibūdinant visumą.

Disertacijos objektui pažinti ir iškeltam tikslui pasiekti išnagrinėtos tyrimo objekto sudedamosios dalys, jų ryšiai ir sąsajos. Sudarytas kontrolės rizikos vertinimo modelis skaidomas į sudedamuosius elementus, o kiekvienas elementas – į vertinimo klausimus. Tikrinant, kaip sukurtą modelį pritaikyti praktiškai, buvo analizuojami atliktų auditų darbo dokumentai, bendraujama su auditą atlikusiais asmenimis, naudojamasi logine analize, apibendrinami ir lyginami teoriniai teiginiai ir empirinio tyrimo rezultatai, daromos išvados ir teikiama pasiūlymų.

Tyrimo šaltiniai. Teoriniai disertacijos tyrimai, susiję su kontrolės rizikos vertinimu, remiasi skelbiamais užsienio ir Lietuvos mokslininkų atliktais moksliniais tyrimais. Kontrolės rizikos vertinimo modeliui sudaryti remtasi atestuotų Lietuvos auditorių apklausos rezultatais ir Lietuvos bei užsienio autorių mokslinės literatūros analize. Sudaryto modelio funkcionalumui tikrinti praktinio pritaikymo tyrimai atlikti Lietuvoje veikiančiose audito įmonėse remiantis jų atliekamais finansiniais auditais.

Pagrindiniai ginamieji teiginiai:

1. Kontrolės rizikos vertinimo gerinimas yra tas audito vystymo aspektas, kuris gali užtikrinti kokybinį audito rizikos vertinimo pagerinimą ir sumažinti pareiškiamų neteisingų audito nuomonių skaičių.

2. Siekiant sukurti kontrolės rizikos vertinimo modelį, patikrinti jo praktinio taikymo galimybes ir prisidėti prie bendro audito patikimumo didinimo, remiamasi auditorių praktika ir mokslinių tyrimų audito srityje rezultatais.

3. Kontrolės rizikos vertinimo modelis turi panaikinti spragas, kurios lemia nekokybišką audito atlikimą, užtikrinti sistemingą kontrolės rizikos vertinimą, kontrolės rizikos lygio pagrindimą surinktais audito įrodymais, sąsajos su atliekamų procedūrų apimtimi ir pobūdžiu pateikimą.

Darbo mokslinis naujumas ir teorinė jo vertė. Mokslinį tyrimų naujumą ir teorinę darbo reikšmę nusako teoriniai tyrimų rezultatai:

- atlikta kontrolės rizikos ir jos vertinimo sampratos interpretacijų analizė leido pritaikyti platesnį požiūrį apibendrinant kontrolės rizikos vertinimą ir nustatyti teoriškai pagrįstą audito rizikos sampratos principinę schemą, išskirti esminius kontrolės rizikos komponentus, suklasifikuoti kontrolės riziką ir jos komponentus lemiančias sąlygas ir veiksnius;

- pasiūlytas sisteminis požiūris į kontrolės riziką ir jos vertinimą, kuris atskleidžia, kad kontrolės rizikos vertinimas turi būti siejamas su įmonės vidaus kontrolės vertinimu, tačiau tik tiek, kiek įmonės vidaus kontrolė susijusi su bendra audito rizika, identifikuoti kontrolės rizikos komponentų ryšiai, kontrolės rizikos vertinimas susietas su visu audito procesu ir rezultatų panaudojimu tolesniems auditoriaus veiksmams;

- sudarytas kontrolės rizikos vertinimo modelis, kuris aiškiai parodo, kaip kontrolės rizikos vertinimas turi būti integruojamas į audito procesą, kontrolės rizikos vertinimo nuoseklumą, vertintinus kontrolės rizikos komponentus, klausimus, kuriuos reikia atsakyti vertinant konkrečius kontrolės rizikos komponentus, galimybę klausimus keisti atsižvelgiant į vertinimą atliekančio auditoriaus patirtį, komponentų ryšius, kontrolės rizikos sąsajas su audito rizikos lygiu, nurodymus, kaip pasiekti priimtinai žemą audito riziką.

Taigi sukurtame kontrolės rizikos vertinimo modelyje pateikiamas sisteminis požiūris į kontrolės rizikos vertinimą ir taip užtikrinamas atliekamų auditų kokybės gerinimas.

Praktinė darbo reikšmė. Pasiūlyta nauja kontrolės rizikos komponentų kiekybinio vertinimo metodika, kuri leidžia identifikuoti visus su kontrolės rizika susijusius veiksnius, įvertinant kiekvieno iš jų veikimo lygį audituojamoje įmonėje ir įtaką bendram audito rizikos lygiui, vertinti veiksnius atsižvelgiant į kiekvieno iš jų specifiką ir įmonės veiklos specifiką bei

finansinius rodiklius, nustatyti kontrolės rizikos lygį remiantis bendru audito rizikos lygiu ir užtikrinti, kad tolesni veiksmai leis tą lygį išlaikyti.

Sukurtu kontrolės rizikos vertinimo modeliu ir komponentų vertinimo metodika gali naudotis auditoriai, atlikdami finansinių ataskaitų auditą, neatsižvelgiant į audituojamos įmonės dydį, veiklos pobūdį, finansinę situaciją. Auditoriai, remdamiesi pasiūlytu kontrolės rizikos vertinimo modeliu, gali užtikrinti sisteminį audito rizikos vertinimo procesą, pagerinti atliekamų auditų kokybę, rezultatų patikimumą ir, rinkdami tik reikiamus audito įrodymus, taupyti išteklius ir taip mažinti audito atlikimo sąnaudas.

Kontrolės rizikos vertinimo modelis yra tinkama mokslinė priemonė akademinės profesijos atstovams skleisti visuomenei žinias apie auditą ir atlikti tolesnius kontrolės rizikos vertinimo tyrimus. Audito standartų leidėjai modelį gali panaudoti kaip gaires, kuriomis remiantis būtų parengti aiškesni, išsamesni ir suprantamesni kontrolės rizikos vertinimo standartai.

Modelis yra skirtas auditorių atliekamam vertinimui tobulinti, tačiau juo gali remtis ir kiti finansinių ataskaitų duomenų naudotojai, t. y. įmonių vadovai, akcininkai, finansų specialistai, šiuo modeliu jie gali tirti verslo aplinkoje pasireiškiančias rizikas ir įmonių kontrolės sistemų pasirengimą šias rizikas įvertinti ir valdyti. Atsižvelgiant į tai, šio darbo rezultatai palengvins auditorių ir kitų rinkos dalyvių priimamus sprendimus šiuolaikinėmis verslo aplinkos sąlygomis.

Disertacijos struktūra ir apimtis. Disertaciją sudaro įvadas, trys pagrindiniai skyriai, darbą apibendrinančios išvados ir pasiūlymai, literatūros sąrašas ir priedai. Tekste pateiktos 27 lentelės ir 22 paveikslai, bendroji darbo apimtis be priedų yra 179 puslapių, darbe panaudoti 196 literatūros šaltiniai.

Kontrolės rizikos vertinimo modelio naudojimo galimybės ir apribojimai. Pagrindinis sukurto modelio pranašumas yra tas, kad jis leidžia nustatyti tikslų tikrinamos įmonės kontrolės rizikos lygį, kurį vėliau galima integruoti į bendrą rizikos lygio nustatymą ir taip užtikrinti, kad auditas yra atliekamas su pakankamu ir auditoriaus siekiamu patikimumu. Analizuojant modelio pritaikymo galimybes buvo ištirtas modeliu nustatyto kontrolės rizikos

lygio ir reikiamo savarankiško patikimumo (neaptikimo rizikos) ryšys. Prieš pradedant tyrimą buvo nustatyta, kad audito rizika – tai kontrolės rizikos ir savarankiškos rizikos sandauga, taigi, jei auditoriui priimtina audito rizika yra 5 proc., o nustatytas kontrolės rizikos lygis yra 60 proc., tai siekiamas savarankiškas patikimumas yra 55 procentai. Toks skaičiavimas apibūdina bendrą dydžių vertę, tačiau nenurodo, iš kokių sričių ir kokios apimties reikiamas patikimumas turi būti gautas. Kadangi auditas yra atliekamas remiantis apskaitos straipsnių verte, tinkamiausias savarankiško patikimumo paskirstymas bus tas, kuris tiesiogiai priklauso nuo šių straipsnių vertės, t. y. kuo didesnė tam tikro apskaitos straipsnio vertė įmonėje, tuo didesnis reikiamas savarankiškų procedūrų kiekis toje srityje. Pavyzdžiui, jei įmonės didžiausią dalį sudaro ilgalaikis turtas, tai su juo turi būti atliekama daugiausiai savarankiškų procedūrų. Remiantis šiomis nuostatomis, kiekvieno iš tirtų įmonių auditų apskaičiuotas savarankiško patikimumo lygis. Apskaitos straipsnių vertės aspektu kiekvienoje įmonėje reikiamų procedūrų kiekis priklauso nuo toje įmonėje užfiksuotos atitinkamos straipsnio vertės, pavyzdžiui, įmonėje, kurioje didžiausią dalį sudaro pajamos, reikia atlikti daugiau savarankiškų procedūrų, susijusių su jomis, nei įmonėje, kurioje didžiausia yra nuosavo kapitalo vertė. Įverčių nustatymas užtikrina, kad auditoriaus darbas yra paskirstomas proporcingai tiriamoms įmonėms sritims ir auditas gali būti atliktas atitinkamu audito rizikos ir patikimumo lygiu.

Tiriant sukurto modelio naudojimo apribojimus įvertinta tai, kad svarbu nustatyti reikalingą savarankiškų procedūrų kiekį, tačiau neapibrėžiamas jų pobūdis. Skirtingos audito procedūros numato auditoriui skirtingą audito įrodymų patikimumo lygį (*Cooper, Deo, 2006*), todėl tolesnių tyrimų metu turi būti analizuojama kiekio sąsaja su reikalingų savarankiškų procedūrų pobūdžiu. Analizuojant sukurto modelio naudojimo galimybes taip pat įvertinta tai, kad modelis yra grindžiamas įmonės vidaus kontrolės vertinimu, todėl jei audituojamos įmonės vidaus kontrolė yra silpna, auditorius negali pasinaudoti jos teikiamu patikimumu ir sumažinti savarankiškų procedūrų kiekio. Šį apribojimą lemia pati audito rizikos, kuriai vertinti naudojami

kontrolės rizikos vertinimo modelio rezultatai, prigimtis. Vienintelė rizika, kurią auditorius gali valdyti, –neaptikimo rizika (atlikdamas daugiau procedūrų), tačiau ją mažinti yra pats imliausias darbas. Tam, kad audito metu ištekliai nebūtų skiriami ir neefektyviai vidaus kontrolei, kurios rezultatais vėliau negalima sumažinti bendros audito rizikos, vertinti ir dideliam savarankiškų procedūrų kiekiui, tolesnių tyrimų metu turi būti analizuojami būdai, kaip atlikti pirminę audituojamos įmonės vidaus kontrolės sistemos apžvalgą, ir prieš pradedant išsamų vertinimą įsitikinti, kad kontrolės riziką bus galima atitinkamai sumažinti.

Atliekant auditų atlikimo analizę ir sukurto kontrolės rizikos vertinimo modelio taikymo tyrimą nustatyta, kad ne visų auditų metu tiriami visi vidaus kontrolės elementai, todėl modelis buvo pritaikytas tokiems atvejams, t. y. auditorius, naudodamas sukurtą kontrolės rizikos vertinimo modelį, gali pasirinkti, kuriuos iš penkių kontrolės rizikos elementų jis tirs ir kiek dėl to galės sumažinti kontrolės riziką. Sukurtame modelyje tam tikras vidaus kontrolės elementas vertinamas neigiamai, jeigu su juo susijusios įmonės kontrolės neveikė, tačiau vertinant tolesnes sukurto modelio plėtojimo galimybes turėtų būti įvertintas atrankos rizikos elemento integravimas ir tikrinimų metu nustatytų klaidų vertinimas. Tai leistų tam tikrų elementų dalinį veikimą panaudoti kontrolės rizikai sumažinti ir taip dar labiau sumažinti reikiamų savarankiškų procedūrų kiekį bei didinti remiantis modeliu atliekamų auditų efektyvumą.

Apibendrinant modelio naudojimo galimybes ir tobulinimo sritis, reikėtų pažymėti, kad, siekdama efektyviai taikyti modelį, kiekviena audito įmonė turėtų atsižvelgti į savo specifiką, t. y. modelis turėtų būti pritaikomas prie audito įmonės naudojamos praktikos, klausimai vidaus kontrolės vertinimo klausimynuose susieti su konkrečiais kontrolės rizikos vertinimo modelio įverčiais ir taip užtikrinama, kad įmonės praktika yra panaudojama efektyviai. Tolesnių tyrimų metu turėtų būti lyginamos skirtingos įmonių praktikos, išskiriamos efektyviausios, atsižvelgiama į audito įmonių patirtį,

audituojamų įmonių pobūdį, auditorių, jų padėjėjų ir kitų darbuotojų darbo efektyvumą.

Išvados ir pasiūlymai

Ištyrus teorinius ir praktinius kontrolės rizikos vertinimo aspektus, suformuluotos šios išvados:

1. Šiuolaikinėmis rinkos sąlygomis siekiant įvertinti audito riziką įgimtos rizikos elemento reikia atsisakyti ir nevertinti, todėl audito rizikos formulėje lieka tik du elementai –kontrolės ir neaptikimo rizika. Savarankiško patikimumo (neaptikimo rizikos) vertinimo atsisakyti neįmanoma, tačiau vienintelis būdas didinti savarankišką patikimumą ir mažinti neaptikimo riziką yra didinti auditoriaus darbo apimtį, o tai lemia ilgesnį ar / ir brangesnį audito atlikimą. Šios priežastys lemia, kad kontrolės rizika yra vienintelė, kurios vertinimo modifikavimas padeda pasiekti kokybinio audito rizikos vertinimo pagerinimo labiau nedarant įtakos audito atlikimo sąnaudoms. Nuo tikslaus kontrolės rizikos įvertinimo priklauso, kaip bus įvertinta visa audito rizika, kokie bus bendri audito rezultatai.

2. Kontrolės rizikos vertinimas yra neatsiejamas audito elementas, kurio atlikimą ir vertinimo poreikį lemia keturios pagrindinės priežastys: audito atlikimo nuoseklumas, poreikis informuoti vadovybę apie vidaus kontrolės būklę bei trumpalaikis ir ilgalaikis audito išteklių taupymas.

3. Bendro požiūrio į kontrolės rizikos vertinimą atliekant finansinių ataskaitų auditą nėra. Pastaruoju metu kilę audituotų įmonių žlugimo skandalai rodo, kad auditorių bendruomenė vis dar negali užtikrinti patikimų duomenų pateikimo. Po 2001 m. „Enron" bankroto audito bendruomenės visame pasaulyje ėmėsi peržiūrėti audito standartus, juos tobulinti ir pritaikyti prie besikeičiančių sąlygų. Po 2008 m. krizės struktūrizuotai standartai nėra tobulinami, o siekiant užtikrinti homogeniškesnį audito rezultatų pateikimą kontrolės rizikos vertinimas turėtų būti standartizuotas.

4. Bendrų metodų, kaip kiekybiškai turėtų būti vertinama kontrolės rizika, nėra. Tarptautiniuose audito standartuose, kitų valstybių standartuose vidaus kontrolei vertinti siūloma naudoti COSO modelio elementus. Tarptautiniuose audito standartuose papildomai pateikiama nuorodų, į ką reikėtų atkreipti dėmesį atliekant kiekvieno elemento vertinimą, tačiau juose nenurodoma, kaip reikia apibendrinti atlikto vertinimo rezultatus ir nustatyti kontrolės rizikos lygį.. Reikalinga sistema, kuri užtikrins aiškų, t. y. tiesiogiai su auditoriaus surinktais įrodymais susijusį vertinimą.

5. Siekiant sukurti kontrolės vertinimo sistemą išskirtos kontrolės rizikos vertinimo prielaidos, kurios yra kontrolės rizikos vertinimo pagrindas:

- auditorius, norėdamas sumažinti kontrolės riziką, privalo tai pagrįsti atliktu vertinimu; jei dėl kontrolės rizikos įvertinimo nebuvo atlikta jokio darbo, ji negali būti vertinama kitaip nei 100 procentų;

- net ir efektyviausia vidaus kontrolės sistema negali būti visiškai patikima, t. y. kontrolės rizika niekada negali būti vertinama kaip neegzistuojanti; praktikoje negalimas toks atvejis, kai kontrolės rizika yra vertinama 0 proc., t. y. kad ir kokia gera būtų vidaus kontrolės sistema, ji turi įgimtų apribojimų, o auditorius turi tai įvertinti ir padidinti kontrolės riziką;

- kontrolės rizika negali būti mažesnė už bendrą audito riziką; jei auditorius nustatys, kad kontrolės rizika yra mažesnė už audito riziką, jam pačiam nereikės atlikti jokių savarankiškų procedūrų, nes įmonės vidaus kontrolės sistema suteiks pakankamą finansinių ataskaitų tinkamo parengimo garantiją ; įrodyta audito nauda, todėl kontrolės rizika negali būti mažesnė už audito riziką.

6. Vidaus kontrolės sistemą įmonės kuria verslo rizikai valdyti, t. y. vidaus kontrolės sistema kuriama ne tik siekiant užtikrinti tinkamą finansinių ataskaitų parengimą, bet ir kitiems tikslams, tai lemia, kad ne

visa vidaus kontrolės sistema ir ne visa verslo rizika yra aktuali auditoriui vertinant audito riziką. Vienintelė rizika, kuri yra ir audito, ir verslo, – tai kontrolės rizika, todėl auditui atlikti aktuali ta įmonės vidaus kontrolės sistemos dalis, kuri užtikrina, kad įmonės sukurtos ir taikomos prevencinės, korekcinės ir aptikimo procedūros leistų patikimai užtikrinti, kad finansinėje atskaitomybėje nėra reikšmingų iškraipymų.

7. Atliktas empirinis tyrimas patvirtino, kad auditoriai susiduria su kontrolės rizikos vertinimo problemomis. Tai rodo, kad kontrolės rizikos vertinimo modelis, kuris atspindėtų sisteminį požiūrį į kontrolės riziką, turi būti sukurtas. Siekiant, kad modelis būtų tinkamas naudoti, nustatant pagrindines jo savybes ir elementus buvo įvertinami pagrindiniai atlikto tyrimo rezultatai ir galimybė modelį taikyti praktiškai.

8. Nei audito teorijoje, nei praktikoje nėra apibrėžti kontrolės rizikos lygiai ir jų skaičiavimas, todėl atliekamas kontrolės rizikos vertinimas yra grindžiamas subjektyviu kontrolės rizikos lygio nustatymu, todėl gali būti neaptikta reikšmingų informacijos iškraipymų. Siekiant struktūrizuoti kontrolės rizikos vertinimą buvo apibrėžti kontrolės rizikos vertinimo lygiai:

- kontrolės rizika negali būti mažesnė nei audito rizika;
- didžiausias galimas kontrolės rizikos lygis yra 100 proc.;
- tarpiniai lygiai tarp mažiausios ir didžiausios kontrolės rizikos reikšmės yra penki.

Siekiant pateikti patikimus audito rezultatus sukurtame modelyje kiekvienas tarpinis lygis turi būti pagrįstas surinktais audito įrodymais, t. y. kiekvienam iš šių lygių pasiekti turi būti atliekamas tam tikras kiekis audituojamos įmonės vidaus kontrolės vertinimo procedūrų.

9. Pagrindinis auditoriaus tikslas vertinant vidaus kontrolę yra nustatyti kontrolės rizikos lygį, todėl sukurto modelio klausimai sugrupuoti pagal vidaus kontrolės sistemos elementus. Kiekvienas vidaus kontrolės

sistemos elementas yra uždavinys, jų visuma padeda pasiekti tikslą – įvertinti įmonės vidaus kontrolę, susijusią su finansinės atskaitomybės rengimu, ir nustatyti kontrolės rizikos lygį. Uždaviniai skaidomi į konkrečius vertinamuosius ir nustatomuosius klausimus. Kiekvienam uždaviniui pasiekti (vidaus kontrolės sistemos elementui įvertinti) gali būti užduota nuo vieno iki daugybės klausimų. Klausimų kiekis ir jų tipas priklauso nuo to, kas atlieka auditą, nuo vertintojo kompetencijos ir kokio tipo klausimus jam priimtiniau naudoti. Vertinamuosius klausimus galima skaidyti į nustatomuosius klausimus. Galimybė keisti klausimų tipus suteikia vertinimui lankstumo ir palengvina modelio taikymą. Klausimų lankstumas ir galimybė juos keisti yra išskirtinis vertinimo modelio požymis.

10. Vertinant kontrolės riziką naudojamas penkių elementų vidaus kontrolės sistemos vertinimo modelis, kurio elementai yra kontrolės aplinka, rizikos vertinimas, kontrolės procedūros, informacija ir komunikacija, kontrolės priemonių stebėjimas. Remiantis vertinimo skale ir išskirtais klausimų tipais detalus kiekvieno elemento vertinimas apibrėžiamas taip:

- kontrolės aplinkos elementas turi būti vertinamas analizuojant audituojamos įmonės etines vertybes ir sąžiningumą, kompetenciją, vadovų dalyvavimą, vadovybės filosofiją ir veiklos stilių, organizacinę struktūrą, įgaliojimus ir atsakomybę, personalo politiką;

- rizikos vertinimo proceso vertinimo metu audituojamas įmonės rizikos nustatymas (rizikos identifikavimas, pasireiškimo tikimybės nustatymas, galimo poveikio įvertinimas), veiksmų parinkimas ir jų įgyvendinimas;

- atsižvelgiant į auditą atliekančių asmenų kompetenciją, informacijos ir komunikacijos elementas gali būti vertinimas vienu iš dviejų būdų: 1) nustatant informacinių sistemų brandos lygį (neegzistuojantis, pirminis, pasikartojantis, bet intuityvus,

51

apibrėžtas, valdomas ir vertinamas, optimalus) arba 2) vertinant įmonės duomenų apsaugos ir judrumo politiką;

- kontrolės veiksmų elementas susietas su vadovybės tvirtinimais, o šie – su bendraisiais apskaitos principais, t. y. kuo daugiau bendrųjų apskaitos principų apima tam tikras tvirtinimas, tuo labiau su juo susiję kontrolės veiksmai gali sumažinti bendrą kontrolės riziką;

- kontrolės priemonių stebėjimo elementas vertinamas analizuojant audituojamos įmonės nuolatinę ir nenuolatinę stebėseną; kiekvienos iš stebėsenos atveju vertinamos taikomos procedūros, jų pakankamumas ir tinkamumas bei reikiamų korekcinių veiksmų įgyvendinimas.

11. Atlikus sukurto kontrolės rizikos vertinimo modelio taikymo tyrimą pasirinktų auditų pavyzdžiu, įsitikinta, kad modelis užtikrina struktūrizuotą įmonės vidaus kontrolės vertinimą ir remiantis audito metu surinktais įrodymais pagrindžia nustatytą kontrolės rizikos lygį. Modelio tikslas – nustatyti kontrolės rizikos lygį, tačiau papildomai modeliu galima parinkti tolesnių savarankiškų procedūrų apimtį, todėl kontrolės rizikos vertinimo modelis audito kokybę ne tik gerinant kontrolės rizikos vertinimą, bet ir nustatant tolesnių procedūrų apimtį.

12. Nagrinėjant modelio naudojimo galimybes nustatyta, kad, siekiant efektyviai taikyti modelį, kiekviena audito įmonė turi atsižvelgti į savo veiklos ir atliekamų auditų specifiką, t. y. modelis turi būti pritaikomas prie audito įmonės naudojamos praktikos, klausimai vidaus kontrolės vertinimo klausimynuose susieti su konkrečiais kontrolės rizikos vertinimo modelio įverčiais, atsižvelgiama į audito įmonės darbuotojų patirtį, kompetenciją ir galimybes įvertinti tam tikrus kontrolės rizikos elementus.

13. Tolesnių mokslinių kontrolės rizikos vertinimo modelio tyrimų metu turi būti toliau lyginama skirtinga įmonių praktika, išskiriama naudingiausia ir tinkamiausia šiuolaikinėmis rinkos sąlygomis,

įvertinama audito įmonių patirtis, audituojamų įmonių pobūdis, auditorių, jų padėjėjų ir kitų darbuotojų darbo efektyvumas, įtraukiamas audito atrankos taikymas, analizuojamas tolesnių savarankiškų procedūrų pobūdžio parinkimas ir atlikimas siejant su rezultatais, gautais taikant sukurtą kontrolės rizikos vertinimo modelį.