Evaluation of Internal Control System in Mining Industry Enterprises in Lithuania

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Abstract
An enterprise operating in the mining industry sector is constantly influenced by external and internal environmental factors, and changes of these factors may increase the risks to its performance. Trying to decrease the risks to a reasonable minimal level, there appears also a demand to establish some changes in the internal control system – to refuse some irrelevant and inefficient control procedures and functions and to adjust the valid ones or to set the new ones. The demand to improve the internal control system might be fulfilled upon obtaining the required information about the efficiency and the internal control system and knowing the ways of strengthening the control and activities so as to avoid losses and reach the goals of the enterprise. Thus, the need of a special function – to assess the internal control system and its effectiveness – appears in the enterprise. So, the scientific article analyzes the internal control system, the combination of its existentialism and effectiveness with regard to the fact that in present economic situation special attention is given to learning and prevention of fraud in Lithuania. During the last years when it was attempted to achieve long-term and effective management of the enterprises, the internal control became one of the main tools to implement these tasks, especially in the enterprises of such character, where frauds and mistakes are especially frequent. So, the article analyzes the internal control system in the mining industrial enterprises, defines concept of its effectiveness and the meaning, and performs survey of the state of internal control system in the Lithuanian mining industrial enterprises.

Key words: Effectiveness of Internal Control, Mining Industry, Frauds and Mistakes, Internal Control

INTRODUCTION
Each enterprise is unique for its performance, management policy and goals, although especially for mining industry enterprises it is very important to know how purposefully materials and financial resources are being used and whether the enterprise’s capital is not being embezzled or wasted. Maximizing the rational commodity of available recourses and financial profit, the enterprise’s shareholders aim to implement different forms and methods of internal control in the enterprise management system and thus to ensure its effectiveness.

In the nowadays competitive world, technologies are rapidly developing and varying, market needs are changing, business processes are becoming more difficult, and it is getting more and more complicated to control an enterprise and to perform its internal control. Consequently, the heads of enterprises operating in the mining industry sector need a system of control management that might enable to control effectively the enterprise’s performance and to ensure the implementation of its goals and tasks. J. C. Helbeck (2008), R. Kanapickienė (2001) emphasized that only an effective internal control in the enterprise can help to ensure its productive economic performance, guarantee that the laws, subordinate legislations and the enterprise’s internal rules are being obeyed, to implement proper enterprise’s capital safety methods, to avoid mistakes, to reveal indulgences, etc. However, in scientific literature, for example J. Mackevičius, L. Kazlauskienė (2009), D. Beneish, M. Billings, L. Hodder (2008), W. Kwak, S. Eldridge, Y. Shi, G. Kou (2009), P. Campbell, S. Daniels, N. Dennis, M. Faber (2007) there is often expressed another non-traditional attitude stating that an effective internal control reveals the prospects of enterprise development and helps to notice threats to its existence, and so such a control becomes an important means of risk management.

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Therefore the managers of mining industrial enterprises need such a control management system that would allow managing the enterprise’s activity effectively and securing the implementation of their goals and tasks. However, another untraditional attitude is also often encountered in the scientific literature, for example A. M. King (2011), C. O’Leary, E. Iselin, D. Sharma (2006) state that the effective internal control reveals the enterprise’s development perspectives, helps to notice the risk hazardous to enterprise’s existence – in such a way this control becomes an important risk management tool. It is noticed that the mining industry is one of the most important and significant for the national budget of the Republic of Lithuania, thus the internal control research in this area is important and meaningful not only for the enterprises, but also for the state. According to L. Giriūnas, G. Jakštonytė (2010), W. Ge, S. McVay (2005), L. Giriūnas (2009), the resources of earth entrails are one of main driving forces of society’s economic and social progress, and Lithuania is not an exception.

Object of research – internal control in Lithuanian mining industrial enterprises.
The aim of this research – to evaluate the state and effectiveness of internal control in the Lithuanian mining industrial enterprises.
The tasks of research:
• To identify the internal control and its importance for mining industrial enterprises;
• To conduct the research on internal control in the Lithuanian mining industrial enterprises;
• To determine the areas of internal control system, which have to be improved, in the Lithuanian mining industrial enterprises.

Research methods: The analysis of Lithuanian and foreign economical literature is performed. The observation survey in Lithuanian companies is carried out.

LITERATURE REVIEW
Nowadays, the rapid development of technology and economic pressure in the competitive environment make the enterprises change their attitude to internal control. This helps enterprises to achieve their goals through a set of certain rules and procedures. Among the foreign scientists that investigate the state of enterprise internal control system and its assessment, we should mention C. Barnabas (2011), M. Biegelman, J. Bartow (2012), M. Fardon (2010), P. Gupta, (2010), B. Moller (2010), K. H. S. Pickett (2010), J. K. Shim (2011) and others. However, a detailed analysis of these and other sources has shown a lack of attention to the analysis of enterprises’ internal control system, especially in enterprises operating in mining industry.

The changing subjects of political, economic, social and technological aspects changes in the policy of enterprise management. Therefore, internal control in an enterprise of mining industry in the changing conditions may become inappropriate or even ineffective; therefore, its assessment must be regarded as one of the main instruments to improve the policy of accounting, to protect the enterprise’s property, to assure the effectiveness of its performance. D. Otley (1999) mentioned that internal control is the main part of the enterprise management system; however, the modelling of it assessment in the worldwide scientific environment is not being widely discussed or analysed. There is no exact recipe of how an enterprise could ensure the effectiveness of its internal control system, and there is no ready-made model of such assessment, especially in the mining industry sector.

A preliminary analysis has shown that in Lithuanian enterprises that operate in the mining industry sector there are not enough formalized procedures of internal control; the official distribution of responsibility is informal and ineffective, resulting in a weak internal control and consequently in mistakes in financial reports and frauds. These facts reflect the inefficiency of internal control. To identify and fight the reasons for intentional or unintentional mistakes and frauds, which usually emerge because of an insufficient level of internal control, becomes an essential necessity. E. Vassen, R. Meuwissen, C. Schelleman (2009) mentioned that the problem of uncertain practical assessment of internal control effectiveness is also complemented by the very specific accounting system which prevails in mining industry enterprises. The specificity is mainly influenced by the sphere of reserves, because they are not just produced or purchased like in production or sales enterprises; they are extracted by natural mining, and in their evaluation theory there are more than twenty...
different mathematical ways of calculation; by the way, a three-percent bias is allowed, which normally comprises quite a marked sum. It is in reserves accounting that an mining industry enterprise can vary not only the extracted amounts, but also account for certain natural conditions; for example, wet digging obtained during the rainy weather would be heavier than the one extracted in a dry period. Thus, the accounting particularity in this sphere of industry determines the necessity of a model of assessing the effectiveness of internal control to prevent the conditions for the enterprise’s employees or authorities to make intentional mistakes or frauds; besides, such identifications in accounting are practically impossible.

RESEARCH METHODOLOGY
The specialists of internal control of all seventy three companies of mining industry operating in the country were selected as the respondents of the research being done in case of a little different management system – managers of the companies. In order to make a list of respondents, the analysis of Lithuanian companies of mining industry was conducted – there were searched for sectors, where the specialists of internal control could work. The selection of certain experts was determined by their role in the company’s organizational structure, and the priority was given to the specialists of internal control of higher level of organizational structure.

When the research on the system of internal control is conducted in the Lithuanian companies of mining industry, the questionnaires should be structured and purposeful, and the expert should answer the questions provided in the questionnaire. With regard to the purpose of the research, some particular questions and answers are formed, they are assessed quantitatively and they can be used for correlative analysis.

From 73 sent questionnaires, 68 were returned (93 per cent reciprocity). They satisfied all the requirements set for them and were processed properly. The level of answer is calculated as the ratio of the number of respondents having replied and all the respondents, and it is equal to 0,93, while the systematic error is quite small, according to G. Keller (2008), D. A. Dickey, W. A. Fuller (1979).

RESULTS OF THE RESEARCH
According to the conducted research on the assessment of internal control system present in the companies of mining industry, a relatively high number of deliberate and unintentional mistakes and frauds exists. Such results are determined by specific character of activity of the Lithuanian companies of mining industry and specific accounting system of the company. According to the done analysis of questionnaires, the number of mistakes and frauds and potential to their appearance is not small (see Fig. 1).

The done research allows stating that the mistakes are encountered in all the Lithuanian companies of mining industry without any exception, but their assessment is very different and depends on the fact whether they cause any financial losses, because majority of mistakes may be insignificant and they can be quickly found and corrected. However, according to the results received during the research it is possible to state that the Lithuanian companies of mining industry have ineffective internal control system, which affects the existence of mistakes and frauds. The analysis of fraud should be done presuming that the companies will not reveal for sure that they execute and initiate frauds, that 71,23 per cent, i.e. 52 from 73 companies of mining industry acknowledge that the frauds happen. Thus it is possible to state that such results and their size are essentially unexpected. However the frauds in these companies are initiated by the company’s employees and not by the management, and of course their existence may become known just from the special services. Besides, according to the respondents, the most frequent frauds are difficult to prove even on the company’s level, because they are executed not by one employee, but by their entire chain.

The results of the research when it is attempted to determine the conditions favorable to appearance and development of frauds and mistakes allow stating that they may be divided into peculiarity of the accounting of mining companies, improvement of qualification of accounting employees, change of staff, peculiarity and technology of the company’s activity. When the respondents were asked to answer, what
determines such range of deliberate and unintentional mistakes and frauds, they stated that the main reason could be considered the accounting peculiarity of the mining company, as it is possible that the internal control will not find mistakes and frauds on the basis of information provided by the accounting system alone (see Fig. 2).

Insert figure 2 here

All the presented conditions allow stating that the most frequent mistakes are caused by the accounting peculiarity of the company, which is determined by complex accounting policy of resources and quite difficult tax basis that is different from the tax basis of other manufacturing or commercial companies. In such a case the main difference is exactly the sale-purchase accounting because the purchases of resources do not exist in the mining companies, as the sales have to be coordinated with the norms provided in the extractive permits of natural resources. Thus the demand for qualified personnel of accounting sector, who are familiar with the management of accounting of companies of similar character, thus following the research results, the employers are always searching for the personnel of the highest and not high qualification. This first of all induces change of accounting staff, but it also has to be mentioned that frequent change of staff creates favorable conditions for development not only of mistakes, but also of frauds. According to P. Dechow, W. Ge, C. Schrand (2010), the majority of frauds appear not only because of poor effectiveness of internal control, but poorly motivated personnel of the company are the weak link of any organization. The same result is also presented by the performed research, on the basis of which it is possible to state that the especially flexible motivation system of employees should be implanted in the company of mining industry that also affects the changes in frequency of change of personnel.

According to the research results of mining industrial enterprises, they have ineffective internal control system because:

- The deliberate or unintentional mistakes are encountered in all the analyzed enterprises without any exception;
- The majority of analyzed enterprises encounter frauds initiated by the employees;
- The present frauds and mistakes allow making the presumption that at least one or more weaknesses exist, which create conditions for development of frauds and mistakes (see Fig. 3).

Insert figure 3 here

The done research allows stating that the present enterprises of mining industrial sector have insufficiently effective internal control system because even if deliberate or incidental mistakes or frauds are not predominant in the enterprise, it is still not possible to state that it has effective internal control system. The effective internal control system present in the mining industrial enterprise may become unsuitable or even ineffective when the circumstances change, thus the assessment of its effectiveness is one of the tools to improve the accounting policy, to protect the company’s assets, and to secure the correct accounting and effective activity. Although internal control is the main part of the enterprise’s management system, but the modeling of its effectiveness’ assessment is not widely discussed or analyzed in global scientific environment. It is not completely clear, how and using what methods the enterprise could secure effectiveness of internal control system. Besides there is no created assessment model of internal control system, in mining industrial sector, too, which would allow optimizing control and its activity with regard to the particularity of the enterprise’s activity and other factors.

REFERENCES

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Fig1. Assessment of existence of mistakes and frauds in the Lithuanian companies of mining industry with regard to effectiveness of internal control

Fig2. Group of conditions, which result in presence of mistakes and frauds
INEFFECTIVE INTERNAL CONTROL SYSTEM IN ENTERPRISES OF MINING INDUSTRY

Mistakes that exist in all mining industry enterprises
- Sales process (65.75%*)
- Tax accounting (36.16%*)
- Purchasing process (52.05%*)
- Accounting of immaterial property (27.39%*)
- Debt and liability management (24.61%*)
- Asset management (20.95%*)

Frauds existing in mining industry enterprises (71.23%*)
- Sales process (93.15%*)
- Purchasing process (69.86%*)
- Asset conversation (87.67%*)
- Debts and liabilities (27.39%*)

Formation of assessment model of effectiveness of internal control system in mining industry enterprises

Special attention must be paid to:
- Guarantee asset protection
- Eliminate conditions that are beneficial for mistakes and frauds to happen in mining industry enterprise
- Control sale processes (reserve accounting)

* - Results of respondents according to form-filling research.

Fig.3. Identification of the state of internal control system in enterprises operating in mining industry sector