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## DIFFERENTIATION OF PERFORMANCE MATERIALITY IN AUDIT BASED ON BUSINESS NEEDS

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**Abstract.** Companies are exposed to various risks. Failure to identify and eliminate them may aggravate the development of companies, some of which may be forced to cease operation. Audit can help in revealing the majority of risks. The auditor has an unlimited access to the information, operational strategy, and in some cases even to commercial secrets, of the auditee. Auditor collects a large amount of different information about the company, but it is used only as much as necessary for formulating a conclusion about financial statements. Upon a closer cooperation of the auditor with the persons in charge of the governance of the audited entity, the client needs can be identified and, once the audit plan is slightly revised, the areas that are within the interest of the client can be analysed in more detail. This article aims to investigate the determination of performance materiality in audit to separate classes of transactions based on the principal areas of importance identified by the business undergoing audit. Based on the data collected during the study, a modified model for determining performance materiality in audit was created which can help to identify better the current and potential risks of the distinguished areas. The application of this model enables carrying out an audit in the areas which are of the highest importance to the users of the audit results more effectively and providing them with more detailed information in the management letter. This would help to identify the substantial risks of the auditee in more detail and on time.

**Keywords:** materiality, audit, risks, tolerable error, management letter.

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### 1. Introduction

Companies, especially the newly established ones, encounter various difficulties which can be hard to overcome at times. Based on the information of the United States Bureau of Labor Statistics, only approximately 50% of the newly established enterprises overcome the period of five years in business (Survival of private..., 2017). There are various reasons for such poor results. According to the study carried out in the United Kingdom in 2015, the main problems are as follows: the access to financing, late payments made by clients, rising wage costs, insurance management problems (Challenges ahead for..., 2016), constantly changing tax laws (Payroll Challenges Are..., 2017), cashflow management, budgeting and other risks. There can be various types of risks, anything varying from easily removed to the most complex situations, the solution of which requires a lot of resources. Not all companies, however, have enough experience to identify all the most important risks. Additional financial resources may also be insufficient for hiring external consultants.

The external audit being carried out may be a suitable tool for revealing the majority of risks and helping to avoid them. The procedures carried out by the auditor and the number of them on the large scale depends on the materiality applied by the auditor. This value is determined based on the professional decision of the auditor. Although the auditor should specifically assess the expectations of users of financial statements in terms of materiality, and to audit mainly those areas which are of the highest importance to the auditee and the persons concerned, a few studies have confirmed that the materialities used by the auditors and the expectations of users of the financial statements differ (Holstrum & Messier, 1982; Jennings et al., 1987; Chewning et al., 1998; Iskandar & Iselin, 1999; Cho et al., 2003; Messier et al., 2005; Rooij, 2009; Aljaaidi, 2009; Kristensen, 2015; Eilifsen & Messier, 2015; Lakis & Masiulevičius, 2017). When the auditor cooperates with the persons responsible for the management of the entity under audit more closely, it is possible to identify the client needs better and to rely on them when determining performance materiality. This would help to further analyse the riskiest areas which are of the highest importance to the company management. Carrying out the determination of performance materiality based on the business needs to every area separately would help to provide more detailed comments and insights about the risks of the areas concerned.

There have been a number of studies carried out on determination of materiality on separate areas: Zuber et al. (1983) proposed an algorithmic model for determining materiality; Dutta & Graham (1988) developed an analytical method for determining materiality for accounts based on expenditure. Emby & Pecchiari (2013) researched the influence of qualitative factors on the materiality to accounts. All of these studies, however, did not analyse the expectations of users of financial statements and its effect on the materiality of various accounts. Thus studies for determining the materiality of financial statements for separate accounts, which would analyse the expectations of users of financial statements, have currently been in a particularly high demand in order to have a different prospective of the audit process and the expectations of the new businesses. 15 experts from different companies were interviewed during the study. Based on the data obtained, a model for determining the performance materiality in audit was suggested which would help to audit the riskiest areas that are within the interest of the management of audited entities in more detail.

# 2. Expectations of audited business with regards to information about risks in the company

When it comes to the audit of financial statements, in some cases the audited entity believes that a very detailed inspection and analysis of all the areas are being carried out during the audit, and this should help the auditor to detect fraud (Coenen, 2012) or all the risks, but it does not exactly work that way in real life. The auditor seeks to achieve the main objective of audit, i.e. to enhance the degree of confidence of intended users in the financial statements. This is achieved by the expression of an opinion by the auditor on whether the financial statements are prepared, in all material respects, in accordance with an applicable financial reporting framework. In the case of

### ENTREPRENEURSHIP AND SUSTAINABILITY ISSUES

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most general purpose frameworks, that opinion is on whether the financial statements are presented fairly, in all material respects, or give a true and fair view in accordance with the framework (ISA 200, 2009). International auditing standards name requirements and tasks which the auditor has to carry out and what evidence they have to collect in order to achieve this objective of the audit of financial statements. Therefore, the aim of the audit is not to identify all the risks which would be of interest of the auditee but to carry out the audit within the framework of the materiality determined.

By expressing opinion, the auditor expresses view on whether financial statements meet the financial position, performance or cash flows of the company, and the audit procedures are being planned based on the materiality established (both based on the planning materiality and on performance materiality). International standards on auditing obliges auditor to properly notify the persons in charge of the government about significant flaws in the internal control determined by the auditor during the audit (260 TAS, 2009; ISA 265, 2009; ISA 315, 2009). Significant flaws in the internal control, however, do not include less material risks, i.e. the aim of the auditor is to determine the critical risks, but the audit procedures are not planned in the way that all the risks would be identified in detail. However, some areas in terms of operation may be important to the company management, but on the financial audit point of view and in the framework of established materiality, they are not important to the auditor; thus the audited entity may not get the test results about these areas in detail. Moreover, further to what has already been mentioned in the beginning of the article, the expectations of entrepreneurs of the value of materiality applied by the auditor often do not correspond with the materiality adapted by the auditor; therefore business may receive insufficient information about the misstatements and risks which the businesses would expect.

Audit resources are focused on searching for misstatements or errors in the financial statements based on the materiality determined. In order to increase the contribution of the audit in identifying the risks of business, especially that of a new business, which could significantly contribute to the consolidation of a new business in the market (by eliminating risks on time), the process of establishing materiality should be improved. Audit materiality is one of the most important criteria used by the auditor that determines the number and type of the procedures carried out; thus a more detailed analysis of applying this materiality can help to find ways how to carry out audit more effectively and contribute better to identifying risks that business is exposed to.

## 3. Limitations of determining performance materiality in audit

In order to improve the final benefit of audit results to the business, it is important to understand the few types of audit materiality of financial statements. The first one is the *planning materiality*— misstatements, including omissions, are considered to be material if they, individually or in the aggregate, could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements (ISA 320, 2009). A few main models of determining planning materiality (McKee & Eilifsen, 2000)have been named, the *Model of the Unit Rule* is one of them. When applying this model, materiality is estimated by choosing a specific financial indicator based on various qualitative parameters and applying a certain percentage on it. E.g. a 5% from profit before tax, 0.5 % from assets or income etc. The *Model of Size Rule* is a model based on the *Model of the Unit Rule*, but a specific percentage from a chosen financial indicator is not applied in this case. A range of the percentage, that may be used, is determined to every financial indicator, e.g. 5–10 % from the profit before taxes, 0.5–1 % from all the income etc. The *Average Model* is a model which uses four or five financial indicators (based on the unit rule), and the auditor assigns a weighted average to every of these indicators. E.g. a weighted weight of 20% is attributed to the profit before taxes, 40% – tothe comprehensive income, 20% – to the assets, 20% –to the equity. The final materiality is calculated based on the formula of weighted average. *The Formula Model* is a model where a mathematical formula, which would be deducted based on statistical analyses, is used.

## ENTREPRENEURSHIP AND SUSTAINABILITY ISSUES

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The second concept of materiality is *Performance Materiality* which is the amount or amounts set by the auditor at less than planning materiality to reduce to an appropriately low level the probability that the aggregate of uncorrected and undetected misstatements exceeds planning materiality (ISA 320, 2009). First of all, the planning materiality is determined and based on it, the performance materiality is determined (it is lower than planning materiality) which is used to determine the number and the type of audit procedures. The value of performance materiality is often inversely proportional to the scope of the audit procedures carried out. If the value of performance materiality is too low, it may lead to possibly unnecessary audit procedures being carried out (Barnes, 1973), which costs financial resources (Bagshaw & Selwood, 2014). On the contrary, too high performance materiality means lower numbers of audit procedures. The areas, where a lower value of performance materiality is applied, will be analysed and audited in more detail, and there are likely to be more audit observations. Therefore, the exact and correct calculation of this type of materiality is the principle task which leads to both achieving the principle objective of the audit, and the quality of the audit results provided to the audited business.

Despite the fact that determining performance materiality is one of the most important tasks of the auditor, the practice of detecting this indicator varies and is under discussion. International audit standards do not provide specific instructions how to estimate materiality (Acito et al., 2009), thus when determining both planning materiality and performance materiality, the auditor relies on his/her professional decision (SAS 107, 2006; Joldos et al., 2010; Statement..., 2015; Raziūnienė & Verbickaitė, 2017). Therefore it is impossible to unanonimously define how materiality is determined due to reason that every auditor or audit firm establishes internal procedures and criterias. But having assessed the main models described in the literature and having looked at the models used by a number of large audit firms (from the audit TOP 4),the most frequent principles for determining materiality may be justifiably presumed.

Based on the definition of materiality, the auditor has to assess the expectations of users of financial statements (Application..., 2015), but most frequently the auditor does it only indirectly. It means that auditor can consider the business needs independently and decide what is important to business, but the auditor is not obliged to ask the users specifically or agree with them on the materiality used. It is a big problem because studies have confirmed that the materialities used by the auditors and the expectations of users of financial statements differ. It confirms that upon choosing a materiality, the auditors do not always consider the needs of users properly. Secondly, the majority of scientific or practical work is dedicated to determining planning materiality only, but determining performance materiality to different accounts has not been subject to much research. Some materiality distribution methods described (McKee & Eilifsen, 2000) are as follows: the Method of Professional Decision, when the author carries out the distribution only based on their professional experience. The *Indicator* Method when the distribution is carried out based on the risk assigned – from the lowest to the highest. The Method of Assessing Past Adjustments when the distribution is carried out based on the mistakes found in the past. The Formula Method when the distribution is carried out based on the mathematical formulas. Still, none of the methods assesses business needs directly. In addition, it is not known whether these methods have been widespread and applied in practice. After the renewed standards on auditing entered into force in 2016, PWC, a firm that is a part of the Big Four audit firms, started revealing a materiality level used in the audit report. However, only the value of planning materiality is revealed, whereas performance materiality is not indicated. EY is yet another firm, that is a part of Big Four audit firms, which is also reluctant to publically reveal the methodology for determining materiality, but as it can be seen from publicly available sources, a tolerable error is determined of approximately 50% from panning materiality (A short overview...). Therefore, performance materiality is not determined for separate accounts differently.

Performance materiality of audit determines the number and depth of audit procedures. This materiality, however, has not been researched sufficiently, and frequently the models used by audit firms are unknown, thus researching

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this value and improving its estimation to separate classes of transactions may be one of the ways to increase audit effectiveness by determining the risks in more detail that are of the highest interest to business.

## 4. Determining performance materiality based on the needs of users

When determining materiality, the auditor has the freedom of professional decision to choose the materiality that is satisfactory to them, but as it has been mentioned before, the materiality determined by the auditor often fails to meet the expectations of users of financial statements, thus it may be presumed that at times the auditor fails to assess these expectations in practice. In turn, the final outcomes of audit may provide little added value to audited entity. In addition, the different classes of transactions or balances are of different importance to the company management; therefore determining different performance materiality to different accounts may help to direct audit resources in a more targeted manner. Synchronizing the evaluations of performance materiality of the auditor and that of the audited entity can help to get a positive outcome, i.e. to determine the performance materiality for different accounts seperatly which would allow to audit accounts in more detail that are within the higherst interest for the client; therefore it is suggested to use the model of three stages for determining performance materiality.

In the first stage, it is necessary to collect information about the areas that are within the interest of the company management directly, i.e. of the areas where the company sees problems and which are the most important ones. The survey method during which the management of the audited entity or other business representatives concerned would provide the information indicated in Figure 1:

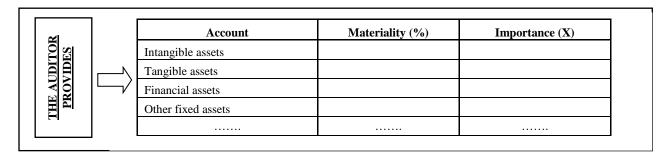


Fig. 1. Survey with regards to materiality and relevance of financial statements

Source: Compiled by the authors

The survey would be provided to the company with different accounts indicated. The managing staff (executives, shareholders and other participants in the business) would in turn provide the information about the sum of mistakes in percentages in a relevant account which they think would be immaterial and would not have an effect on the decisions made (a lower percentage would represent a higher importance and vice versa, a higher percentage would show that the area is of little materiality or completely immaterial). It is important to note that some studies have confirmed that users of financial statements lack knowledge on materiality (Rooij, 2009; Houghton et al., 2011; Considerations..., 2012); thus upon simplifying the method of a survey, it would be requested to indicate the value of planning materiality (which would be likely to be better understood to the business), but the auditor should determine different materiality based on the accounts on the level of performance materiality. This would help to maintain the established common audit practice with regards to determining planning materiality - the materiality level of all financial statements would be maintained, but the audit procedure would be improved by adjusting performance materiality in accordance with separate accounts. The

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company management should also indicate the areas which they think are the most important and where they wished the auditor would carry out a verification in more detail or provide more observations/suggestions. The first stage would help to ensure the exclusion of the most important areas, i.e. the most important areas where more analysis is needed for the business and a more detailed analysis and determination of various risks would be excluded on the basis of a different level of materiality or on the level of a separate feature that the area is of particular importance. This stage is important because of the aspect of a direct assessment of expectations. Currently the auditor has to assess the needs of users of financial statements but there is no clear system how they should do and document it – this additional formal stage would help to decrease the gap between the expectations of the auditor and that of the audited entity.

In the second stage the auditor should determine performance materiality based on the information received in the first stage. As it has been previously mentioned, materiality is suggested to be determined not directly based on the materiality value provided by business, but to apply principle of intervals based on this value by determining performance materiality (i.e. in accordance with the materiality percentage provided by business, to choose the final level of performance materiality based on the interval determined). Based on the study carried out in 2015, where 8 largest audit firms in the United States of America had been surveyed, the lowest mark of performance materiality used was 50%, whereas the highest mark was 90% (Eilifsen & Messier, 2015). It has been suggested to differentiate performance materiality within the range of 50–90%. During the study carried out by the authors, information from 15 experts, representing different companies, was collected. The materialities indicated by the experts most frequently (when summarizing different accounts) were distributed as indicated in Figure 2.

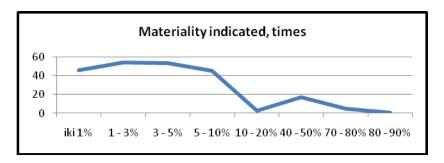


Fig. 2. Materiality percentage indicated by experts for different accounts

Source: Compiled by the authors

The information collected indicates that the distribution of the materiality indicated in the ranges of under1%, 1–3%, 3–5% and 5–10% was similar. A significant drop was determined from the value of 10%. It may be concluded that materiality of over 10% demonstrates that the respective accounts are of very little importance. Therefore, considering the fact that the most frequently applied value of performance materiality is 50–90% and that, in accordance with the information of the study, it has been determined that the materiality identified among the categories of 1%, 1–3%, 3–5% and 5–10% is distributed in a similar manner – it is suggested to distribute performance materiality in equal parts from 50 to 90%. It is suggested to subjectively apply the value of 25% of performance materiality to the areas which are of a high importance to audited business (Figure 3). The number of procedures carried out depends on the value of performance materiality determined (most frequently a higher percentage of performance materiality applied indicates lower numbers of audit procedures); therefore differentiation of performance materiality suggested in Figure 3 to different accounts may better target those areas which are of the highest importance to the audited entity.

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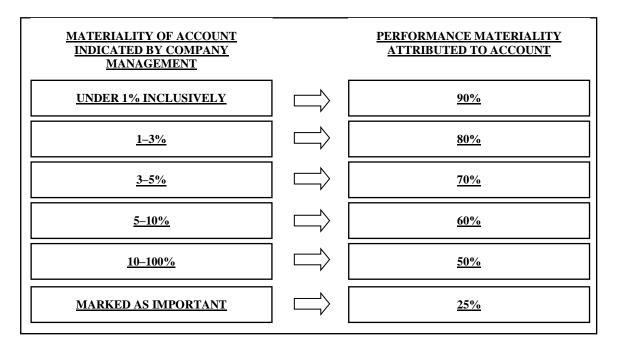


Figure 3. Distribution of performance materiality based on survey of audited entities

Source: Compiled by the authors

It is suggested to expand the letter to the management **in the third stage** by describing the determination of performance materiality applied during the audit. In the cases where more detailed procedures were carried out, to describe these areas, their scope and performed procedures. To describe all the additional discovered observations in detail in the areas which are of the highest importance to the audited business, its managers, shareholders, investors and other users of the information of financial statements.

Extended letter to the management team could be used in various ways. Firstly, the audited entity could distribute the resources it possesses more accurately both in solving known risks and in the risks determined additionally. Provided there is an internal audit unit in the audited entity, the work of this unit could be determined or revised based on the new risks determined by external audits. Internal audit unit could predict the actions used for eliminating risks. Failure to identify new risks during audit would give an additional confirmation to the company, i.e. when it is known that more detailed procedures were carried out during the audit and without identifying the risks, the company would be able to give less attention to these areas without concerne. A more detailed analysis of risky areas would help to identify risks on time, and this in turn would help the company to direct resources for eliminating risks on time. Timely elimination of risks could help a company save financial resources and improve enterprise's activities. Differentiation of performance materiality, based on the materialities named by the auditees and the most important areas where business would like to access more detailed information and would like a more detailed inspection, would allow distributing the resources of the audit work more rationally. In turn, the quality of external audit would also improve because the risks important to the users of financial statements would be determined in more detailed; therefore the main goal of audit would be implemented better, and the overall risk of audit would decrease. By determining performance materiality directly based on the client needs, the expectations of the audited entity would be better met and the final audit results,

## ENTREPRENEURSHIP AND SUSTAINABILITY ISSUES

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which would provide a higher added value to the audited business because the audit materiality applied would match the needs of users of financial statements directly, and the final audit results would be expanded.

### **Conclusions**

The value of performance materiality of financial statements has a direct effect on the number and scope of the procedures carried out; thus the correct determination of this materiality is one of the most important tasks of an auditor in order to carry out the audit and increase the added value of the audit results to the business.

Although the materiality value should be applied based on the needs of users of financial statements, the studies carried out in the past confirm that the expectations of the materiality applied by the auditors and that of the business differ; thus in some cases the goal of financial audit statements may not be fully achieved, and the added value created may not be satisfactory to the managers of the auditee or to other persons concerned. Different areas of financial statements are of different importance to business but the research of the materiality applied by audit firms show that audit firms frequently do not reveal how performance materiality is determined precisely, and current practice shows that performance materiality is not determined for different accounts seperatly.

The proposed model would improve audit processes in various aspects and would increase the benefit of final audit results. Firstly, the determined value of performance materiality should reflect the expectations of users of financial statements; thus the opinion of users should be considered directly when calculating materiality. But there are currently no specific practical or methodological guideline show how auditors should carry it out. This suggested model could help the auditors receive written information from the auditee directly about the most important areas thus the risk that materiality fails to meet the expectations of users would decrease significantly. In addition, performance audit materiality would be determined separatly for different account of financial statements based on the needs of a specific business; thus audit resources could be concentrated into the key areas and they could be audited in more detail. A more detailed analysis could also be carried out of the enterprise's activities and potential risks could be identified more specifically. This in turn would lead to an increase in the ultimate reliability of the audit. Additional risks that are within the interest of business, determined along with other observations, would be revealed in the extended letter to the management, which is likely to increase the added value created by financial statements. Also attention would be provided not only to historical data, but also to timely current or potential risks in the company.

### References

A short overview. Retrieved from: <a href="http://www.unifr.ch/ses/pdf/cours/Audit\_methodology\_FS\_10.pdf">http://www.unifr.ch/ses/pdf/cours/Audit\_methodology\_FS\_10.pdf</a>

Acito, A. A. Burks, J. J.; Johnson, W. B. (2009). Materiality decisions and the correction of accounting errors, *Accounting Review*. Vol. 84, Issue 3, p. 659 - 688.

 $Aljaaidi,\,K.\,S.\,Y.\,(2009).\,Reviewing\,the\,\,audit\,\,expectation\,\,gap\,\,Literature\,\,from\,\,1974\,\,to\,\,2007\,\,//\,\,IPBJ.\,\,Vol.\,\,1,\,Issue\,\,1,\,p.\,\,41\,\,-\,75.$ 

Application of Materiality to Financial Statements. IFRS Practice Statement (2015). Retrieved from: <a href="http://www.ifrs.org/Current-Projects/IASB-Projects/Disclosure-Initiative/Materiality/Exposure-Draft-October 2015/Documents/ED IFRSPracticeStatement OCT2015">http://www.ifrs.org/Current-Projects/IASB-Projects/Disclosure-Initiative/Materiality/Exposure-Draft-October 2015/Documents/ED IFRSPracticeStatement OCT2015</a> WEBSITE.pdf

Ataskaita dėl auditorių ir audito įmonių audito kokybės užtikrinimo 2015 m. [Report on quality assurance audit of auditors and audit firms in 2015]. Retrieved from:

https://www.google.lt/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&cad=rja&uact=8&ved=0ahUKEwi9j4G0kqrUAhXSJSwKHQyZD

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Bagshaw, K.; Selwood, J. 2014. Core Auditing Standards for Practitioners. Cornwall: John Wiley & Sons, Incorporated.

Barnes, J. (1973). More efficient auditing through an understanding of the materiality concept // *Journal of Accountancy*. Vol. 135, Issue 5, p. 78 - 80.

Challenges ahead for upbeat entrepreneurs. 2016. Director. Vol. 69 Issue 8, p. 48-49.

Chewning, E. G.; Eugene, G.; Wheeler, S. W.; Chan, K. C. (1998). Evidence on auditor and investor materiality thresholds resulting from equity-for-debt swaps, *Auditing: A Journal of Practice & Theory*. Vol. 17, No 1, p. 39 - 53.

Cho, S. Y.; Hagerman, R. L.; Nabar, S.; Patterson, E. R. (2003). Measuring Stockholder Materiality, *Accounting Horizons*. Vol. 17, p. 63-76

Coenen, T. (2012). Why didn't the auditors find the fraud? Retrieved from: <a href="http://www.sequenceinc.com/fraudfiles/2012/03/why-didnt-the-auditors-find-the-fraud/">http://www.sequenceinc.com/fraudfiles/2012/03/why-didnt-the-auditors-find-the-fraud/</a>

Considerations of materiality in financial reporting (2012). Retrieved from: https://www.esma.europa.eu/sites/default/files/library/2015/11/2011\_373\_.pdf

Dutta, S. K.; Graham, L. E. (1998). Considering Multiple Materialities for Account Combinations in Audit Planning and Evaluation: A Cost Efficient Approach, *Journal of Accounting, Auditing and Finance* Vol. 13, No. 2, 151 - 171

Eilifsen, W. F.; Messier, W. F. Jr. (2015). Materiality Guidance of the Major Public Accounting Firms, *Auditing: A Journal of Practice & Theory*. Vol. 34, No. 2, p. 3 – 26.

Emby, C.; Pecchiari, N. (2013). An Empirical Investigation of the Influence of Qualitative Risk Factors on Canadian Auditors' Determination of Performance Materiality, *Accounting Perspectives*. Vol. 12 Issue 4, p. 281 - 299.

Holstrum, G. L.; Messier, W. F. Jr. (1982). A Review and Integration of Empirical Research on Materiality, *Auditing: A Journal of Practice & Theory*. Vol. 2, No 1, p. 45 - 63.

Houghton, K. A.; Jubb, C.; Kend, M. (2011). Materiality in the context of audit: the real expectation gap, *Managerial Auditing Journal*. Vol. 26 Issue 6, p. 482 - 500.

ISA 200 Overall Objectives of the independent auditor and the conduct of an audit in accordance with international standards on auditing. Retrieved from: http://www.ifac.org/system/files/downloads/a008-2010-iaasb-handbook-isa-200.pdf

ISA 260 Communication with those charged with governance. Retrieved from: http://www.ifac.org/system/files/downloads/a014-2010-iaasb-handbook-isa-260.pdf

ISA 265 Communicating deficiencies in internal control to those charged with governance and management. Retrieved from: <a href="http://www.ifac.org/system/files/downloads/a015-2010-iaasb-handbook-isa-265.pdf">http://www.ifac.org/system/files/downloads/a015-2010-iaasb-handbook-isa-265.pdf</a>

ISA 315 (Revised) Identifying and Assessing the Risks of Material Misstatement through Understanding the Entity and Its Environment. Retrieved from: <a href="https://www.iaasb.org/system/files/meetings/files/20130415-IAASB-Agenda\_Item\_5-D\_Disclosures%20-%20ISA%20315%20%28Revised%29%20for%20reference%20ONLY.pdf">https://www.iaasb.org/system/files/meetings/files/20130415-IAASB-Agenda\_Item\_5-D\_Disclosures%20-%20ISA%20315%20%28Revised%29%20for%20reference%20ONLY.pdf</a>

ISA 320 Materiality in planning and performing audit. Retrieved from: <a href="http://www.ifac.org/system/files/downloads/a018-2010-iaasb-handbook-isa-320.pdf">http://www.ifac.org/system/files/downloads/a018-2010-iaasb-handbook-isa-320.pdf</a>

Iskandar, T. M.; Iselin, E. R. (1999). A review of materiality research // Accounting Forum. Vol. 23, Issue 3, p. 209 - 239.

Jennings, M.; Kneer, D. C.; Reckers, P. M. J. (1987). A Reexamination of the Concept of Materiality: View of Auditors, Users, and Officers of the Court, *Auditing: A Journal of Practice* & Theory. Vol. 6, No 2, p. 104 - 115.

# ENTREPRENEURSHIP AND SUSTAINABILITY ISSUES

ISSN 2345-0282 (online) <a href="http://jssidoi.org/jesi/2018">http://jssidoi.org/jesi/2018</a> Volume 6 Number 1 (September) <a href="http://doi.org/10.9770/jesi.2018.6.1(9)">http://doi.org/10.9770/jesi.2018.6.1(9)</a>

Joldos, A. M.; Staniciu, I. C.; Grejdan, G. (2010). Pillars of the Audit Activity: Materiality and Audit Risk //Annals of the University of Petrosani Economics. Vol. 10 Issue 2, p. 225 - 238.

Kristensen, R. H. (2015). Judgment in an auditor's materiality assessments // Danish Journal of Management & Business. Nr. 2, p. 53 - 65.

Lakis, V.; Masiulevičius, A. (2017). Possibilities of harmonizing materiality expectations of the users of financial statements and materiality value applied by the auditor (not published yet), *Vadyba/Journal of Management*. Vol. Nr. 2 (31).

Mckee, T. E.; Eilifsen, A. (2000). Current materiality guidance for auditors, CPA Journal. Vol. 70, Issue 7, p. 54 - 58.

Messier, W. F. Jr.; Martinov-Bennie, N.; Eilifsen, A. (2005). A review and integration of empirical research on materiality: two decades later, *Auditing: A Journal of Practice & Theory*. Vol. 24, Issue 2, p. 153 - 187.

Namolo, O. 2017. The top 10 challenges faced by entrepreneurs today: solved. Retrieved from: <a href="https://www.deluxe.com/sbrc/financial/top-10-challenges-faced-entrepreneurs-today-solved">https://www.deluxe.com/sbrc/financial/top-10-challenges-faced-entrepreneurs-today-solved</a>

Payroll challenges are a fact of small-business life. 2017. Inc. Vol. 39 Issue 9, p. 62-62. Retrieved from: https://www.inc.com/surepayroll/payroll-challenges-are-a-fact-of-small-business-life.html

Raziūnienė, D.; Verbickaitė, G. (2017). Reikšmingumo samprata finansinių ataskaitų audite [Significance concept in audit of financial statements], Apskaitos ir finansų mokslas ir studijos: problemos ir perspektyvos. Vol. 11, No 1, p. 41 - 51.

Rooij, D. (2009). Materiality of misstatements from the perspective of the users of the financial statements - Narrowing the expectation gap between users and auditors, *Erasmus University*, p 136-159.

SAS 107 Audit Risk and Materiality in Conducting an Audit. Retrieved from: <a href="http://www.aicpa.org/Research/Standards/AuditAttest/DownloadableDocuments/AU-00312.pdf">http://www.aicpa.org/Research/Standards/AuditAttest/DownloadableDocuments/AU-00312.pdf</a>

Survival of private sector establishments by opening year (2017). Retrieved from: https://www.bls.gov/bdm/us\_age\_naics\_00\_table7.txt

Zuber, G. R.; Elliot, R. K.; Kinney, W. R.; Leisenring, J. J. (1983). Using materiality in audit planning, *Journal of Accountancy*. Vol. 155 Issue 3. 42 - 54.

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