CONSIDERATIONS REGARDING MATERIALITY CALCULATION AND AUDIT RISK IN THE CONTEXT OF THE GUIDELINES FOR AUDIT QUALITY

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Abstract:
The purpose of this article is to present some aspects regarding the determination of materiality and audit risk in financial/statutory audit according to Minimum Standards and Guide for a Quality Audit. The main objectives considered when drafting the article consisted of analyzing definitions of materiality and audit risk, audit risk components presentation and their relationship with audit opinions expressed by the financial auditor. Then we continued with the presentation of a comparative analysis between the determination of materiality and audit risk based on Minimum Standards on Auditing and of the Guidelines for Audit Quality. The scientific approach is based on information from the literature in financial/statutory and practice of documenting within the number of 20 companies in Alba County.

Keywords: *financial / statutory audit, materiality, audit risk, audit opinion*

JEL classification: M42, N40

Introduction

Determining materiality in financial/statutory audit activity takes into account the experience of the auditor its professional judgment and knowledge of the entity's activity audited. Materiality is the "cornerstone" in determining the type of opinion to be issued (unqualified, qualified, disclaimer audit opinion, adverse opinion).

Materiality and audit risk are considered throughout the audit when identifying and assessing risks of material misstatement, determining the nature, timing and scope of additional audit procedures and evaluating the effect of misstatements on the financial statements.

Research methodology

Research methodology that we used to achieve this article was to review the literature and systematize the rules in the field of financial/statutory audit, and factual documentation of an entity, Romanian legal person, in pursuit of the case study presented. Towards the targets, in this article we used as the main research methods, the following: qualitative analysis, in it being found the comparison method, a method aimed at obtaining perceptual differences between determination of materiality and audit risk according to the Minimum Standards on Auditing and Guidelines for Audit Quality; synthesis: found in establishing conclusions aimed at explaining and assessing the situation found documentation that theoretical research method in which we included International Standards on Auditing, accounting and regulations concerning auditing and case study method.

Pillars of financial/ statutory audit mission: materiality and audit risk

According to the conceptual framework for financial reporting issued by the IASB (International Accounting Standards Board) used by companies that prepare financial statements in accordance with International Accounting Standards, materiality

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is defined as: "information is material if its omission or incorrect presentation could influence decisions that users take based on information on a particular financial reporting entity. In other words, materiality is an issue of particular relevance to an entity based on the nature or magnitude, or both, elements referred to information in the context of the financial report of an individual entity. Accordingly, the Board can not specify a quantitative threshold for significance and cannot predetermine what could be material in a given situation“[247].

Materiality is determined by the financial auditor and represents the maximum tolerable extent to which the financial statements may be misstated, but acceptable from the point of view of stakeholders. The assessment of what is material is a matter of judgment. In this context, the state of acceptability is determined by the balance that must be maintained between the demands of users of financial information and the auditor's limited possibilities for action[248].

According to International Standards on Auditing (2009), audit risk is the risk that the auditor gives an inappropriate audit opinion when the financial statements are materially misstated. Audit risk is a function of the risks of material misstatement and detection risk. Detection risk is the risk that the procedures performed by the auditor to reduce audit risk to an acceptably low level will not be able to detect a misstatement that exists and that could be material, either individually or in the aggregate with other distortion. Risk of material misstatement is the risk that the financial statements are materially misstated prior to audit. It consists of two components[249]:

1. Inherent risk is the susceptibility of an assertion about a class of transactions, account balance or presentation to be materially misstated, either individually or in aggregated with other misstatements, before taking into account any related controls.

2. Control risk is the risk that a misstatement that could occur at the level of claims on a class of transactions, account balance or presentation that could be material, either individually or in aggregated with other misstatements may not be prevented or detected and corrected on a timely basis by the entity's internal control.

Inherent risk is inversely proportional to detect planned and proportionate to the amount of information evidence. Besides an inherent risk for a particular area being audited, it will increase the amount of audit evidence, another typical consequence is appointing an audit team of people with more experience for that sphere auditing and a more rigorously verification prepared for their worksheet[250].

Research methodology

To support the theoretical documentation of this article, we try to facilitate the understanding of the process through practical documentation, so we consider appropriate to use in an empirical study SC Alpha SA, a Romanian legal entity. Technique used for grounding empirical study was analyzed through analysis guide accounting records, the financial year N to highlight the differences in the methods for determining the two pillars of an audit (materiality and audit risk) according to Minimum Standards on Auditing and Guidelines for Audit Quality.

According to the Minimum Standards on Auditing

The empirical research was conducted on a sample of 20 companies in Alba Iulia: joint stock companies, limited liability companies and non-bank financial institutions, some of which are listed at the Bucharest Stock Exchange. In these entity

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[247] International Financial Reporting Standards, CECCAR, București, 2009, p.34

[248] Sorin Domnișoru, *Audit statutar și comunicare financiară*, Volume I, Economică Publishing House, București, 2011, p. 209

[249] Manual of International Standards on Auditing and Quality Control: 2009 Financial Audit, Irecson Publishing House, București, 2009, p,29-30

[250] Irimie Popa (coord.), *Standarde generale de audit*, Mirton Publishing House, Timișoara, 2011, p.137

determined materiality and audit risk through a comparative analysis based on minimum standards for Audit and Audit Quality Guidelines. An example of how to determine the threshold of significance; audit and risk is presented in the paper. Also, we mention that for the other companies how to determine materiality and audit risk made by the same rules. In all 20 companies signifies the threshold was determined based on turnover ie 1% of it because it was the most constant indicator.

Table no.1 Determining materiality at SC Alpha SA for the financial exercise N according to the Minimum Standards on Auditing

		Date
Audit client:	**Written by:**	17/01/N+1
SC ALPHA SA	**U.A.M, C.I.C.**	
Audited period:	**Revised by:**	19/01/N+1
01.01.N-31.12.N	**T.N.**	

Financial statements	Current year -required-	The exercise current budgeted	Previous years n-1 -required-	Previous years n-2 -required-
	RON	RON	RON	RON
Total assets (before debt relief)	**35.794.424**	**37.250.000**	**34.315.068**	**31.452.117**
1%	357.944	372.500	343.151	314.521
2%	715.888	745.000	686.301	629.042
Turnover	**53.706.453**	**58.550.000**	**82.633.030**	**80.172.639**
0.5%	268.532	292.750	413.165	400.863
1%	537.065	585.500	826.330	801.726
Profit before tax	**2.516.171**	**3.150.000**	**4.080.729**	**3.854.112**
5%	125.809	157.500	204.036	192.706
10%	251.617	315.000	408.073	385.411
Materiality	**268.532**			
Planning stage	**268.532**			
Opinion expression stage	**268.532**			

Source: Processed after the worksheet regulated by the Minimum Standards on Auditing issued by the Chamber of Financial Auditors of Romania

At the preliminary stage of research we establish materiality analysis based on three benchmarks: total assets, turnover and profit before tax, so that in the next phase, which consists in determining the audit risk, establishing, within of two phases: determination inherent general and specific determination inherent risk, control risk and detection risk. We note that although financial audit under legislation / Regulations in force for the financial year 2010 year included in the analysis, no longer were using minimum standards of Audit to conduct an audit we considered that a proper research by comparison assumes that to process the same information in two ways, according to minimum standards and according to the Guidelines for Audit Quality.

At the beginning of the analysis were calculated for the year N (actual and budgeted), the three indicators to establish the materiality at the planning stage (Table 1).

Although total assets indicator was the most consistent over the three financial years, professional judgment has led us to the choice of turnover as the most relevant indicator for the shareholder. This level should be used to see whether areas of uncertainty or disagreement financial statements are significant enough so as to require a qualified opinion where uncertainty or disagreement cannot be resolved.

Materiality determined in the planning phase is used primarily to determine the sample size; the one in the opinion stage - to determine if adjustments are needed in the end.

Thus, once the materiality is established, we proceed to the next stage, namely the determination of audit risk (specific inherent risk, general inherent risk and control risk) for this process to complete the determination of the sample that will be subject to audit (Table no. 2).

Table no. 2 Determining the sample at SC Alpha SA for the financial exercise N according to the Minimum Standards on Auditing

Audit client: SC Alpha SA			**Written by:**	**UAM, CIC**	**25/01/N+1**
Audited period: 01.01.N-31.12.N			**Revised by:**	**TN**	**25/01/N+1**
	Inherent risk (R1)	RNNE	Control risk (CR)	Calculation of risk band (R1x RNNEx CR)	Size of the sample
Tangible and intangible assets	0,23	0,56	100	12,88%	18
Accounts of the group and investments	0,23	0,31	100	7,13%	8
Inventories and work in progress – quantities	0,23	0,56	100	12,88%	18
Inventories and work in progress – assessment	0,23	0,56	100	12,88%	18
Debtors	0,23	0,56	100	12,88%	18
Short-term investments	0,23	1	100	23,00%	28
Bank accounts and petty cash – payments	0,23	0,31	100	7,13%	8
Bank accounts and petty cash – incomings	0,23	0,31	100	7,13%	8
Bank accounts – confronted with bank statements	0,23	0,31	100	7,13%	8
Creditors	0,23	0,56	100	12,88%	18
Long-term creditors	0,23	1	100	23,00%	28
Sales	0,23	0,31	100	7,13%	8
Purchases	0,23	0,31	100	7,13%	8
Expenses	0,23	0,31	100	7,13%	8
Wages and indemnities	0,23	0,31	100	7,13%	8
Other audit sections	0,23	1	100	23,00%	28
Checking balance and accounting entries	0,23	0,56	100	12,88%	18
Preliminary financial statements and entries after the end of the financial year	0,23	1	100	23,00%	28

Source: Processed after the worksheet regulated by the Minimum Standards on Auditing issued by the Chamber of Financial Auditors of Romania

For each audit risk assessment is required for the auditors to present an inappropriate audit opinion on the financial statements. This risk known as Audit risk can be divided into three components, inherent risk, control risk and detection risk, being necessary to analyze all such:

- Inherent risk (IR): Minimum Standards on Auditing both currently and in the Guide for Audit Quality is made for a minimum checking inherent in documenting risk assessment;

- Control Risk (CR) where the client performs internal controls that the auditor intends to rely, it is first necessary to assess those controls and then test it to make sure they are properly applied. So where Reliance on internal controls, substantive testing sample sizes will be adjusted by applying risk factor control;

- Detection Risk (DR) so finally after having considered all other aspects of the safety audit, sampling techniques will be used to ensure the reliability of audit in all areas exceeds 95 %.

According to the Guidelines for Audit Quality

Within the same society, Alpha SA when planning an audit in accordance to the Guidelines for Audit Quality, we will establish audit risk components as follows:

- General inherent risk: risk determination is based on a so-called "inherent risk checklist" which includes items related to management issues, environmental accounting and audit matters operational environment and is used to classify customers into high-risk entities, medium, low and very low. The number of positive responses indicates the degree of risk attached and an audit officer must use professional judgment on the overall level of risk. Therefore based on professional judgment and the results of the evaluation components inherent generally established that it is very low.

- Specific inherent risk: after general inherent risk assessment is important to consider whether there is any scope of audit to be attached to a specific risk. Specific inherent risk is the chance of a significant misrepresentation in a certain area due to a specific problem in that area; detection method is summarized by answering the 6 questions (error-prone system, the accountant responsible for that poor training, complex operations, nature, risk of loss/embezzlement/fraud and many professional judgment / calculations unusual operations). After responding to these questions, it was concluded that the specific inherent risk is very low.

Then, based on a matrix provided in the Guidelines for Audit Quality is the intersection of the two risks, so the SC Alpha SA resulted in a very low inherent risk set to the value 5.

- Control Risk: is a determined based on response to a series of questions on the following components: sales cycle, cycle stocks, investment cycle, payroll cycle, purchasing cycle, cash cycle. Because the SC Alpha SA has no internal control system, risk control is very high assigning the value 1.

After determining inherent risk at SC Alpha SA, we determine materiality. Materiality level was changed so that it rose from 0.5% of turnover according to the Minimum Standards on Auditing as 1% under the new Guidelines for Audit Quality issued in 2012, the financial year N (Table no. 3).

Table no. 3. Determining materiality at SC Alpha SA for the financial exercise N according to the Guidelines for Audit Quality

Financial statements	**Current year -required-**	**The exercise current budgeted**	**Previous years n-1 -required-**
	RON	**RON**	**RON**
Profit before tax, after adjusting for exceptional items and top managers	**2.516.171**	**3.150.000**	**4.080.729**
10%	251.617	315.000	408.073
5%	125.809	157.500	204.036

Turnover	**53.706.453**	**58.550.000**	**82.633.030**
2%	1.074.129	1.171.000	1.652.660
1%	537.065	585.500	826.330
Total assets	**35.794.424**	**37.250.000**	**34.315.068**
2%	715.888	745.000	686.301
1%	357.944	372.500	343.151
Auditor's materiality set at	**537.065**		
Functional materiality threshold set at	**350.000**		

Source: Processed after the worksheet regulated by the Guidelines for Audit Quality issued by the Chamber of Financial Auditors of Romania

Therefore, we moved to the next stage, namely the determination of audit risk (inherent risk, control risk) using the adjacent matrix that indicates the risk coefficient to be divided by the value set materiality at the planning stage. Thus, the new value of materiality determined in the planning phase will be 315,921 Ron.

RI / **RC**	***Very small***	**Small**	**Medium**	**Big**	**Very big**
Very small	0,7	1	1,2	1,5	1,7
Small	1	1,2	1,5	1,7	2
Medium	1,2	1,5	1,7	2	2,2
Big	1,5	1,7	2	2,2	2,5
Very big	***1,7***	2	2,2	2,5	2,7

Once established materiality level based on audit risk, the next step in the planning stage is the calculation of minimum sample size for each test section contained in the audit mission (Table no. 4). In this paper we present sample size determination only two sections, the other sections applying the same rules.

At the end of the study, using empirical research to guide analysis of documents as a method of qualitative research conducted in SC Alpha SA for financial year N, respectively for Guidelines of Audit Quality in force and the Minimum Standards on Auditing repelled we have drawn the following conclusions:

- Under the new Guidelines for Audit Quality, the annual business rate applied to determine the materiality at the planning stage is higher, the current method of determining the sample matrix using established the materiality level at 315, 920.59 Ron. This value set in the year N is with 47,388 Ron higher than the level of materiality determined in accordance with the minimum standards for Audit repealed, it being 268,532 Ron;

- The minimum sample size determined by comparison with the new regulations repealed is less so if according to the minimum standards established audit period was from 8 to 28 depending on the value of the population within each section of the test phase, currently under the Guidelines for a quality audit can be seen a considerable decrease in the minimum sample size, time limit is set according to the value of between 0.01682 to 8.96494 population within each section of the test phase.

Tabel no. 4. Determining sample at SC Alpha SA for the financial exercise N according to the Guidelines for Audit Quality

Statement of financial position	Value of approx. population	Materiality	Specific risk factors inherent	Risk factor control	Credibility analytical review	Is necessary the sample?	Minimum sample size	Due to the lack of sample
				1 High risk: 5 Low risk	3 total :1 none	Yes/No		
E								
Land	526117,93	315920,5882	5	1	1	Yes	0,33307	
Building	11922742,01	315920,5882	5	1	1	Yes	7,547936	
Technical installations and machinery	10661328,16	315920,5882	5	1	1	Yes	6,749372	
Depreciation	14161038	315920,5882	5	1	1	Yes	8,964935	
H								
Suppliers debtors	18328,05	315920,5882	5	1	1	Yes	0,011603	
Clients	13560760,71	315920,5882	5	1	1	Yes	8,584917	
Uncertain clients	2777692,49	315920,5882	5	1	1	Yes	1,758475	

Source: Processed after the worksheet regulated by the Guidelines for Audit Quality issued by the Chamber of Financial Auditors of Romania

Conclusions

Information collected by the auditor shall be sufficient for defining materiality and risk assessment both at the knowledge of the audited entity and the stage of performing analytical procedures.

The research results have shown the following:

- Determination of a sample following items: total assets (1% and 2%), sales (0.5% and 1% / 1% and 2% of profit before tax (5% and 10%). Way we see that both minimum standards and the Audit guide for Audit Quality, the percentages for total assets and profit before tax remained the same, the only changes in turnover;
- Assessment of inherent risk is generally four or five levels (very low, low, medium, high and very high)
- Assessment of inherent risk makes specific sections (GP) or (DV) answering a set of 6 questions on four or five levels
- In the Minimum Standards on Auditing inherent risk is expressed as a percentage, while in the Guidelines for Audit Quality is expressed in figures
- Detection of the risk assessment is a numerical percentage
- Materiality is influenced by the general inherent risk and general control risk
- Determination of audit risk according to the Minimum Standards on Auditing is based on the formula: AR = IR * CR * RN and according to the Guidelines for Audit Quality, as follows: RA = population size / materiality affected risk / RI / RC / RN

The conclusion drawn from this study a total of 20 entities Alba is that although the new Guide for Audit Quality issued in 2012 supports the intensification of the financial auditor and scope given to establishing materiality levels and determining sample stage planning to ensure audit quality, in this case the empirical study presented (representative case for all 20 companies in the sample) it was observed that although materiality level increased, the sample set in the planning phase decreased. This leads to the need for intensive professional judgment in the audit engagement, factor in ensuring a degree audit with high quality.

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