# DETERMINATION OF MATERIALITY THRESHOLD PATTERN IN AUDIT MISSIONS

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*Given the vagueness character of the guideline offered both by the International Standards on Auditing and the Minimal Norms on Auditing, considering the importance of the materiality threshold in designing the plan and the audit program, we tried to justify the need to establish a certain level of this materiality threshold considering not only the comparison basis offered by the practical norms issued by the Financial Auditors Chamber of Romania, but also considering the audit risks and the audit costs.*
*About the materiality threshold we can say that it represent the quantity dimension of false presentations assumed by the auditor through the valuation of the audit risk.*
*In quantification of materiality threshold we started from the assessment of the audit risks and determination of the grantable errors, on segments, in accordance with cumulated impact of all these over the economical and financial indicators and later by cumulating all grantable errors in establishing the materiality level.*

*Keywords: materiality level, grantable error, audit risk*

*JEL codes: M42*

Considering that the materiality threshold plays a major role in determination of the audit report type, the Commission of Financial Accounting Standards defined the materiality threshold as follows: “The importance of an omission or a false presentation of the accounting information, which, through the overall circumstances, gives way to a probability that the professional judgment of a reasonable person relying on that information should have been changed or influenced by the respective omission or false presentation”.
When an auditor discovers a significant error of false presentation of information, that auditor will notice the client at once in order for the client to make the proper corrections and if the client refuses, in this case, the auditor will issue a qualified opinion.
From this definition we can make an opinion about the difficulties met by the auditors in determination of the materiality threshold. This definition refers to the reasonable users that rely on financial statements in taking decisions. In this case the auditors must have knowledge about who are the probable beneficiaries of the financial statements of the client and what decisions are to be taken on the basis of these situations.
The materiality threshold may differ in magnitude from one organization to another, and it can be influenced both by the client dimensions, profitableness rates and the risks of the company, which the auditors assess by quantize the immanent risks and control risk.
The auditors, since the early stage of planning the audit, makes an valuation of the risk to which they are subjected to in the case in which they express an opinion that is not in concordance with the reality, being capable in this way to determine the acceptable audit risk which will be inversely proportional to the risk to which the auditor is subjected to.
There is a close connection between the audit risk and the materiality threshold meaning that the materiality threshold is the arbitrary measure for the relative estimation of the risk audit.
As follows we will present, for example purpose, in order to asses the significance, a company that has as main activity - road construction activity.
The main factors with influence over the audit risk are closely related to the general economical environment and to the nature of client activity, management, client attitude towards the audit and also to the accounting personnel.

Factors characteristic for the economical environment are as follows:
- Competition is growing and it is influenced by political factors;
- The main clients of the company are represented by the local city halls;
- The economy is in recess and most of the city hall reduced their budget for investments;
- Difficult access to lending;
- The shareholders are spread but there are two shareholders with majority rights that are also involved in the company management;
- The majority of shareholders intend to sell their shares if an opportunity appears;
- The company is financing its growth mainly through credits but also through profit capitalization:
- The company technical equipments are territorially dispersed at working places:
- The company is currently participating to public tenders where there are certain qualifying conditions related to the financial indicators.

All these factors determine the auditor to rate the risk related to the economical environment which affects the audit's client as being high. This risk exposes the auditor to some risks that he wishes to diminish. This fact is achieved by accepting a lower audit risk.

As regarding the factors that have an influence over the management risk our attention was drawn only by the fact that the management control is weak in the way that exist no control normative and this will have an influence over the control risk so that is the reason why we evaluate the management related risk at a reduced level.

The accounting personnel related risk is evaluated at a moderate rate because, although it exists competent personnel with adequate means, there are certain pressures related to timelines for presenting certain works and the company is currently having a personnel shortage.

The client attitude related risk towards the audit is considered to be reduced because is the second year when this company is audited and the errors occurred in prior year were corrected without any conflicts.

As a conclusion we can say that the risks to which the company is subjected to are high especially because of the economical environment and the auditor will diminish the acceptable audit risk, most probably by diminishing the materiality threshold in order to be as less as possible exposed against potential users.

The auditor takes into consideration the materiality threshold at the global level of financial statements and also in relation with the balance of individual accounts with its transaction classes and presentation of information.

The materiality threshold can be influenced by:
- Legal requirements and settlements;
- Reasons related to the individual account balances of financial statements;
- The existing relations between those mentioned above.

This process can have as result different levels of the materiality threshold depending on the aspect of financial statements taken into consideration.

The materiality threshold can be defined as the error level which taken individually or cumulated with other errors could determine the information user to change his decision.

Therefore, we shall present a simplified balance sheet of the company and we shall simulate different levels of errors and their implications in possible decisions of the users.

The sensitivity analysis guides the auditors towards determining the materiality threshold in the conditions of existence of some errors presented in financial standings.

Thus we have tried to determine the level of the presentations considered insignificant in the circumstance of qualitative factors' nonexistence.

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| Financial statements | Anul N | Anul N+1 |
|---|---|---|
| Fixed Assets | 13.380.821 | 23.589.627 |
| Stocks | 3.852.984 | 4.993.492 |
| Debtors | 5.886.797 | 17.116.365 |
| Cash And Bank | 7.286.794 | 177.959 |
| Total Current Assets | 17.026.575 | 22.287.816 |
| Prepayments | 113.468 | 160.522 |
| **Total Assets** | **30.520.864** | **46.037.965** |
| Short-Term Debts | 12.472.913 | 16.929.072 |
| Short-Term Debts from operation | 10.302.554 | 11.625.615 |
| Financial Short-Term Debts | 2.170.359 | 5.303.457 |
| Debts Payabale After More Than One Year | 5.099.634 | 9.002.169 |
| Share Premium Account | 2.200.000 | 2.200.000 |
| Revaluation Reserves | | 8.152.400 |
| Reserves | 2.515.505 | 4.526.865 |
| The Outcome Brought Forward | 731.632 | 2.868.354 |
| The Outcome Of Financial Year | 6.602.582 | 2.359.105 |
| Total Own Assets | 11.587.211 | 19.519.646 |
| Provisions | 462.508 | |
| **Total Liabilities And Equity** | **30.520.864** | **46.037.965** |
| | | |
| **Net Turnover** | 47.668.150 | 60.735.211 |
| **Operating - Profit** | 8.623.320 | 4.899.114 |

In our sensitivity analysis we have started from the financial statements of a business corporation. We have analyzed the financial standing of the business corporation by applying analytical procedures determining the following essential indicators for a company's viability:
-the economic return calculated as a ratio between the operating profit and the total assets;
-the financial return calculated as a ratio between the result of the exercise and the equity capital.
-the commercial return calculated as a ratio between the operating profit and the turnover.
-the general liquidity calculated as a ratio between the circulating assets and short-term debts.
-the current liquidity calculated as a ratio between the difference among the circulating assets and stocks and short-term debts.
-the general solvency calculated as a ratio between the total assets and total debts.
-the patrimonial solvency calculated as a ratio between the equity capital and the total liability.
The overvaluation of the receivables implies simultaneously the management discharge too, practically involving an undervaluation of the receivables, a growth of the debts with value added tax and of the profit tax, as well as an overvaluation of the profits.
Subsequently we have simulated overvaluation / undervaluation of receivables with impact on the stocks undervaluation / overvaluation, debts overvaluation / undervaluation, and profit overvaluation / undervaluation of profit but also on the financial-economic indicators.
The simulation was carried out with the help of a random numbers generating programme which:

- has simulated a maximum overvaluation of the receivables with 24% and a maximum undervaluation of the receivables with 23%;
- has simulated a discharge from the management of the stocks by the overvaluation of the commercial margin with 39% and an undervaluation of the commercial margin with 9 percent considering that the commercial margin of a company is of 10%.

We have determined the acceptance and rejection hypotheses by the establishment of the limits of the indicators hence the users' decisions will be changed.

| Indicator | Calculated level | Maximum admitted level | Minimum admitted level |
|---|---|---|---|
| General liquidity | **132%** | 140% | 120% |
| Current liquidity | **102%** | 110% | 90% |
| | | | |
| General solvency | **178%** | 190% | 160% |
| Patrimonial solvency | **42%** | 39% | 45% |
| | | | |
| Economic return | **10,6%** | 11,30% | 9,9% |
| Financial return | **12,1%** | 13% | 11% |
| Comercial return | **8,1%** | 8,60% | 7,70% |

***Hypothesis 1***

It shall be admitted overvaluations / undervaluation in the patrimonial elements which will generate a general liquidity with values between 120% and 132%

It shall be admitted overvaluations/ undervaluation in the patrimonial elements which will generate a current liquidity with values between 90% and 110%

It shall be admitted overvaluations / undervaluation in the patrimonial elements which will generate a general solvency with values between 160% and 190%

It shall be admitted overvaluations / undervaluation in the patrimonial elements which will generate a patrimonial solvency with values between 39% and 45%

It shall be admitted overvaluations / undervaluation in the patrimonial elements which will generate an economic return with values between 9.7% and 11.5%

It shall be admitted overvaluations / undervaluation in the patrimonial elements which will generate a financial return with values between 11% and 13%

It shall be admitted overvaluations / undervaluation in the patrimonial elements which will generate an economic return with values between 7.7% and 8.6%

In the case where the indicators' level is situated out of the ranges established in the above diagram, the undervaluation / overvaluations of the patrimonial elements will be rejected.

Subsequently we shall compare the level of the indicators resulted from simulation with the acceptance or rejection hypotheses and we hereby shall determine the maximum level of the erroneous presentations accepted in the overvaluation / undervaluation of the profits, overvaluation / undervaluation of the receivables, overvaluation / undervaluation of the debts, overvaluation / undervaluation of the stocks.

a) We shall compare the simulation number 21 of Annex 1 which gives us the minimum limits of the validation hypotheses offering to us the following values:

The economic return 10,1%

The financial return is of 10,9%

The commercial return is of 8,4%

The current liquidity is of 90%

The other indicators do not have variations comparing to the initial status.

Consequently if the company's profit would be overvalued with the ammount of lei 256.707 the real indicators of the company would have the above shown values. Thus the maximum limit of profit overvaluation accepted by us is of lei 256.707.
b) We shall compare the simulation number 29 of Annex 1 which gives us the maximum limits of the validation hypotheses offering to us the following values:
The economic return 11%
The financial return is of 13%
The commercial return is of 8,2%
The current liquidity is of 112%
The other indicators do not have variations comparing to the initial status.
Consequently if the company's profit would be ondervalued with the ammount of lei 256.707 the real indicators of the company would have the above shown values. Thus the maximum limit of profit undervaluation accepted by us is of lei 212.440.
Hence the materiality treshold applied to the balance accounts which have implications in the profit and loss account shall be established to 256.707 for overvaluations and 212.404 for undervaluations.
For the overvaluations or undervaluations of the operations which do not have implications over the results it can be established other level of the materiality treshold.
Consequently an error of 5% from total assets for asset accounts and of 5% from total passive for passive accounts could be considered insignificant in the absence of qualitative factors which affects the materiality threshold, this error of 5% represent an absolute error of lei 2.301.898 and it could be considered insignificant if the error belong to the balance sheet accounts.
These being the maximum admitted amounts we will try to determine the materiality threshold for every category taking into consideration:
- the account weight in total assets
- the accepted audit risk;
- the level of inherent risks for every account therefore at the expected level error in every account
- the impact of the error in profit
- the carry out of the audit process
- the cost of getting the audit samples
- the population characteristics

***Tabel - materiality threshold allocation of accounts***

| Balance sheet elements | Anul N+1 | Weight in total balance sheet | Maximum admitted level | The impact of the error in profit | Maximum admitted level |
|---|---|---|---|---|---|
| Materiality threshold for balace sheet accounts | 2.301.898 | | | | |
| Materiality threshold for profit accounts | 256.707 | | | | |
| Fixed Assets | 23.589.627 | 51,2% | 1.179.481 | 10,0% | 25.671 |
| Stocks | 4.993.492 | 10,8% | 249.674 | 40,0% | 102.682 |
| Debtors | 17.116.365 | 37,2% | 855.818 | 45,0% | 115.510 |
| Cash And Bank | 177.959 | 0,4% | 8.895 | 5,0% | 13.280 |
| Total Assets | 46.037.965 | | | | |
| Short-Term Debts | 16.929.072 | 37% | 846.450 | 70% | 179.695 |

| | | | | | |
|---|---|---|---|---|---|
| Long Term Debts | 9.002.169 | 20% | 450.108 | 22% | 56.475 |
| Share Premium Account | 2.200.000 | 5% | 110.000 | 2% | 5.134 |
| Revaluation Reserves | 8.152.400 | 18% | 407.620 | 2% | 5.134 |
| Reserves | 4.526.865 | 9% | 226.340 | 2% | 5.134 |

***Annex 1 simulation of financial indicators***

| Poz | Economic return | Financial return | Comercial return | General liquidity | Current liquidity | General solvency | Patrimonial solvency | over/ under evaluations |
|---|---|---|---|---|---|---|---|---|
| 1 | 10,8% | 12,4% | 8,1% | 132% | 106% | 177% | 42% | -72311,2343 |
| 2 | 11,1% | 13,0% | 8,4% | 132% | 107% | 178% | 42% | -211755,193 |
| 3 | 9,9% | 10,4% | 7,6% | 130% | 89% | 178% | 42% | 377297,829 |
| 4 | 11,0% | 13,1% | 8,2% | 132% | 116% | 177% | 42% | -228694,505 |
| 5 | 10,6% | 11,9% | 8,0% | 132% | 101% | 178% | 42% | 44787,7699 |
| 6 | 10,7% | 12,1% | 8,1% | 132% | 100% | 178% | 42% | -13088,9897 |
| 7 | 11,4% | 13,8% | 8,5% | 133% | 113% | 177% | 42% | -380553,88 |
| 8 | 10,6% | 12,1% | 8,1% | 132% | 102% | 178% | 42% | -686,091086 |
| 9 | 10,9% | 12,8% | 8,1% | 132% | 112% | 177% | 42% | -149249,617 |
| 10 | 10,5% | 11,7% | 8,0% | 132% | 97% | 178% | 42% | 78892,942 |
| 11 | 10,0% | 10,6% | 7,6% | 131% | 92% | 178% | 42% | 331469,541 |
| 12 | 10,6% | 12,0% | 8,0% | 132% | 101% | 178% | 42% | 22841,8475 |
| 13 | 10,9% | 12,6% | 8,2% | 132% | 106% | 177% | 42% | -115631,451 |
| 14 | 10,7% | 12,2% | 8,1% | 132% | 104% | 177% | 42% | -34571,4753 |
| 15 | 10,6% | 12,0% | 8,0% | 132% | 101% | 178% | 42% | 25247,5446 |
| 16 | 10,6% | 12,1% | 8,0% | 131% | 105% | 177% | 42% | -7169,2809 |
| 17 | 10,7% | 12,1% | 8,1% | 132% | 102% | 178% | 42% | -8412,56725 |
| 18 | 11,1% | 13,1% | 8,4% | 132% | 109% | 177% | 42% | -237251,506 |
| 19 | 10,6% | 12,0% | 8,1% | 132% | 102% | 178% | 42% | 8792,43691 |
| 20 | 10,6% | 11,9% | 8,1% | 132% | 96% | 178% | 43% | 36429,1272 |
| 21 | 10,1% | 10,9% | 7,8% | 131% | 90% | 178% | 43% | 256707,227 |
| 22 | 11,5% | 14,0% | 8,7% | 133% | 112% | 178% | 42% | -428561,445 |
| 23 | 10,6% | 12,0% | 8,1% | 132% | 101% | 178% | 42% | 8732,22411 |
| 24 | 10,6% | 12,0% | 8,1% | 132% | 99% | 178% | 42% | 12421,6056 |
| 25 | 11,1% | 13,2% | 8,2% | 132% | 115% | 177% | 42% | -249614,204 |
| 26 | 10,8% | 12,4% | 8,1% | 132% | 105% | 177% | 42% | -78204,586 |
| 27 | 10,7% | 12,3% | 8,1% | 132% | 107% | 177% | 42% | -58686,0789 |
| 28 | 10,5% | 11,7% | 8,0% | 132% | 97% | 178% | 42% | 92261,7197 |
| 29 | 11,0% | 13,0% | 8,2% | 132% | 112% | 177% | 42% | -212441,545 |
| 30 | 10,5% | 11,6% | 8,0% | 132% | 94% | 178% | 43% | 105109,631 |
| 31 | 10,6% | 12,0% | 8,0% | 132% | 101% | 178% | 42% | 29711,7463 |
| 32 | 10,6% | 12,0% | 8,1% | 132% | 101% | 178% | 42% | 10366,603 |
| 33 | 10,6% | 11,9% | 8,0% | 132% | 101% | 178% | 42% | 33359,1653 |
| 34 | 10,7% | 12,1% | 8,1% | 132% | 103% | 178% | 42% | -8053,96194 |
| 35 | 10,7% | 12,3% | 8,1% | 132% | 106% | 177% | 42% | -41718,3664 |
| 36 | 10,7% | 12,2% | 8,1% | 132% | 103% | 178% | 42% | -17492,637 |
| 37 | 10,7% | 12,1% | 8,1% | 132% | 103% | 178% | 42% | -13567,6655 |
| 38 | 10,6% | 12,1% | 8,1% | 132% | 102% | 178% | 42% | 669,791138 |
| 39 | 11,0% | 13,0% | 8,3% | 132% | 111% | 177% | 42% | -207932,573 |
| 40 | 10,5% | 11,8% | 8,0% | 131% | 101% | 178% | 42% | 54811,2056 |

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