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Current Materiality Guidance for Auditors

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Introduction

Sound materiality judgments are an important element in maintaining investor confidence in the public reporting system currently used by our capital markets. The degree of imprecision allowed in the public reporting system partially determines the value of such a system as a means for providing information. If the allowable imprecision is too high, then the value of the public reporting system is low.

The FASB Statement of Financial Accounting Concepts No. 2 defined materiality as:

"The omission or misstatement of an item in a financial report is material if, in the light of surrounding circumstances, the magnitude of the item is such that it is probable that the judgment of a reasonable person relying on the report would have been changed or influenced by the inclusion or correction of the items."

Materiality is problematic since it requires professional judgment about the relative importance and effect of financial reporting and disclosure choices on the decisions of the users of financial statements. While accountants materiality judgments primarily are disclosure related, auditor materiality judgments affect both the amount of work done by the auditor and the disclosures made [or not made] in the financial statements.

There is such difficulty and conflict surrounding materiality decisions that, during 1998, the largest accounting firms in the U.S. independently formed a "Big Five Audit Materiality Task Force" to identify and understand practice issues relating to audit materiality. This Task Force subsequently issued some preliminary recommendations and sponsored a research project concerning investor expectations about materiality. Some of these recommendations are contained in a current exposure draft of a new auditing standard.

Materiality and Risk

Audit risk is defined in the International Standards on Auditing (ISAs) Section 400 as the: "...risk that the auditor gives an inappropriate audit opinion when the financial statements are materially misstated." Thus, strictly interpreted, this definition considers Type II error only, i.e., the risk of failure to modify an opinion on financial statements that are materially misstated, but not the risk of incorrectly modifying an opinion on non-misstated financial statements (i.e., Type I error). Auditors, of course, reduce audit risk to an acceptable level by obtaining and evaluating sufficient, competent audit evidential matter. It is important to note that audit risk is defined in terms of a "material misstatement." From both a theoretical and practical perspective this means that it is not possible to discuss audit risk in a meaningful way without also discussing a corresponding level of materiality.

As noted in ISA Section 320, "There is an inverse relationship between materiality and the level of audit risk." This follows directly from the definition of audit risk since the possibility that an

opinion will be classified as inappropriate increases (decreases), thereby increasing (decreasing) audit risk, if materiality decreases (increases). For example, if we decrease our materiality amount from \$1,000,000 to \$100,000, and gather the same audit evidence, our audit risk increases. This occurs because, when auditing without complete evidence, it is harder to be confident about the absence of a lower level of misstatements since they are usually harder to detect. Thus, if we do not change our audit procedures and thereby our audit evidence obtained, our risk of being falsely confident (i.e., making a type II error) would increase. In order to have the same level of audit risk for a \$100,000 materiality level as for a \$1,000,000 materiality level, an auditor would have to obtain additional audit evidence about possible misstatements in the interval from \$100,000 to \$1,000,000. For example, if an auditor were using monetary unit sampling [PPS sampling] and materiality decreased from \$1,000,000 to \$100,000 the corresponding sample size needed to keep audit risk at the same level, increased from 16 to 160, thereby providing additional audit evidence.

The auditors' materiality decision is a multi-factor decision involving both quantitative and qualitative aspects. Calculated materiality amounts derived using quantitative approaches may be increased or decreased based on the auditors' professional judgment about the possible effect of qualitative factors such as the following:

- Risk of earnings manipulation, for example, management motivation to "manage" or "smooth" earnings
- Possible effect on misstatements on trends, such as profitability trend
- Presence of restrictive debt covenants
- Magnifying effect of misstatement on share price for company with high price/earnings multiple
- Closeness of projected earnings to net loss status
- Accuracy and reliability of accounting system
- Imminent acquisition/merger/sale
- The possible effect of a misstatement on segment information
- Threat of litigation or other external review of the auditors' work such as monitoring by government agency or entity
- Relationship to stockholders' equity or retained earnings
- Imminent public stock offering
- The risk that there may be undetected misstatements
- Detection of fraud or fraud indicators in prior period

The previous list clearly includes factors that could also influence the auditor's inherent risk and control risk assessments. This should not be a surprise, since there will be underlying factors that could influence both the effect of the presence of misstatements on users' decisions (i.e., materiality considerations), the risk of material misstatements will occur, assuming no related internal controls (i.e., inherent risk), and the risk that misstatements that occur are not prevented or detected by controls (i.e. control risk). The auditor should, in such cases, consider the effects of the underlying factors on both materiality and risk in planning the audit.

Since most firms strive for a relatively constant level of overall audit risk, there is a very practical lesson in this section. If you use the wrong materiality level you may do either too much or too little audit work. The former affects the efficiency of the audit, the latter may affect the effectiveness of the audit. Thus, in planning an audit, it is very important to make proper judgments about materiality.

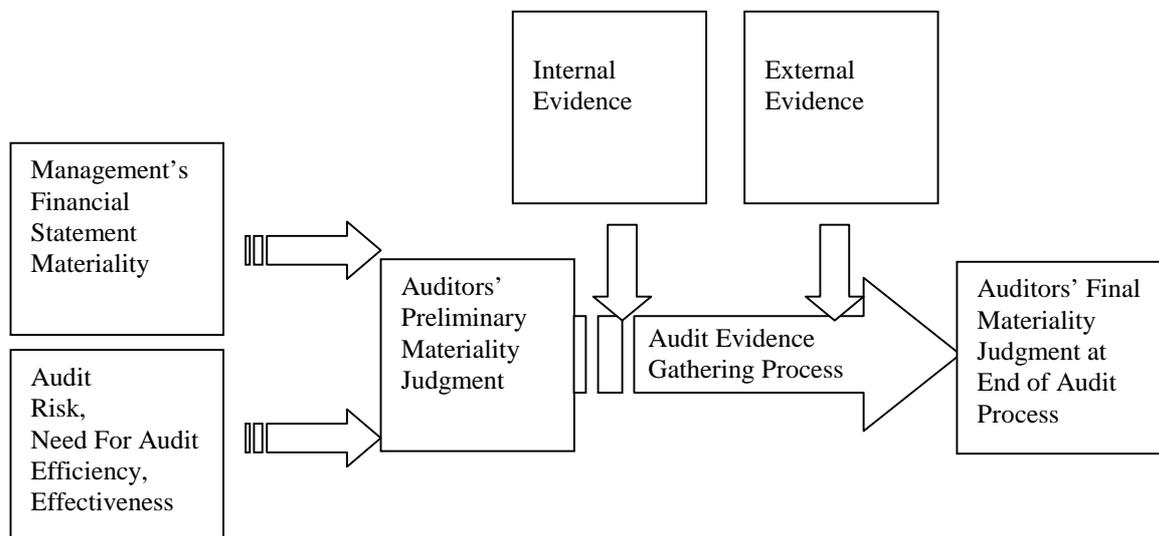
Materiality levels may differ for different categories of audits. As noted by the General Accounting Office field work standards for financial audits, "...in an audit of the financial statements of a government entity or an entity that receives government assistance, auditors may set lower materiality levels than in audits in the private sector because of the public accountability of the auditee, the

various legal and regulatory requirements, and the visibility and sensitivity of government programs, activities, and functions.”

Different Approaches for Determining Auditing Materiality

As shown in the following figure, auditors typically make the following two types of materiality judgments:

- *Preliminary materiality judgment*- the purpose of this materiality is to guide the auditor in determining the nature, timing, and extent of audit procedures. This judgement would consider management’s financial statement materiality amount but may be either higher or lower due to risk and needs of the audit process.
- *Final reporting materiality judgment*- the purpose of this materiality is to assist the auditor in evaluating the effect of misstatements on his/her reporting



These two judgments may result in the same level of materiality although they frequently do not. Frequently the preliminary materiality judgment will change during the course of the audit due to additional information gained during the audit. For example, the auditor may lower the preliminary materiality judgment if fiscal year net income turn out to be significantly lower that what was forecasted at the interim date when the audit was planned.

These judgments may also differ because the auditor may intentionally set the preliminary materiality judgment at a lower level than what the auditor believes the final reporting materiality judgment is likely to be. This may be done to increase the likelihood of detecting misstatements and thereby lower overall audit risk. In effect, the auditor does this to provide an extra margin of safety. The auditor may believe that an extra margin of safety is needed due to some circumstance, such as the possibility of litigation about the audit.

The auditing standards do not explicitly require the auditor to quantify materiality. However, although auditors may consider a number of nonquantitative factors (see the previous section) when

determining the materiality judgment, they typically prefer to quantify the preliminary materiality judgment.

Quantitative approaches by auditors for making the preliminary materiality judgment typically can be classified into one of the following four categories:

- Single Rules
- Variable or Size Rules
- Blend or Averaging Methods
- Formula Methods

Single rules are "rules of thumb" use a single financial variable for computing materiality. Typically, as a matter of policy, an audit firm would provide three or four such rules and allow the auditor in an individual audit to choose the most appropriate rule. Depending on his/her assessment of qualitative factors, an auditor would select the single rule that was judged to be the most appropriate way to compute materiality for a specific client. Examples of possible common single rules are:

- 5% of pre-tax income
- 1/2% of total assets
- 1% of equity
- 1/2% of total revenues

Variable or size rules are similar to single rules but they differ in that they provide a range of possible different materiality levels for companies of different sizes. As with a single rule, an auditor would use an assessment of qualitative factors to help decide what materiality level to select within the appropriate range. An example of a possible variable rule is:

- 2 to 5% of Gross Profit if it is less than \$20,000
- 1 to 2% of Gross Profit if it is between \$20,000 - \$1,000,000
- 1/2 to 1% of Gross Profit if it is between \$1,000,000 - \$100,000,000
- 1/2% of Gross Profit if it is over \$100,000,000

Blend or average methods typically take four or five individual rules of thumb and then either weight each rule according to some proportion or average them (an equal weighting). Presumably, the blending or averaging process provides an indirect way of considering qualitative factors. An example of the averaging method would be to take the previously listed four single rules and average them (give each of them a 25% weight).

Formula methods use a mathematical formula that has been determined from a statistical analysis of the materiality levels for a large sample of companies. Since the individual materiality levels in this sample are typically determined via single rules of thumb, the formula methods are merely another form of the blend or average method. The most widely known formula is one used by KPMG although there are many others in the audit literature. The 1998 version of the KPMG formula is:

$$\text{Materiality} = 1.84 \text{ times } (\text{Greater of Assets or Revenues})^{2/3}$$

Hypothetical Case Illustration

In order to illustrate the previous materiality methods, let us assume the following summary financial statements for ABC Company (000s omitted):

Balance Sheet		Income Statement	
Assets	\$3,000,000 =====	Total Revenues	\$9,000,000
		Cost of Merchandise	<u>5,000,000</u>
		Gross Profit	4,000,000
		Selling & Other Expenses	<u>3,200,000</u>
Liabilities	\$2,000,000	Net Income Before Tax	800,000
Owners' Equity	<u>1,000,000</u>	Income Tax	<u>300,000</u>
	\$3,000,000 =====	Net Income After Tax	\$ 500,000 =====

The single rule method would involve the auditor selecting one of the four following materiality amounts:

<u>Single Rule</u>	<u>Computation</u>	<u>Materiality Amount</u>
5% of pre-tax income	5% x \$800,000	\$40,000
1/2% of total assets	1/2% x \$3,000,000	\$15,000
1% of equity	1% x \$1,000,000	\$10,000
1/2% of total revenues	1/2% x \$9,000,000	\$45,000

The variable or size rule method would involve the following computations with the auditor judgmentally selecting a materiality amount somewhere in the computed materiality range:

<u>Variable or Size Rule</u>	<u>Computation</u>	<u>Materiality Range</u>
1/2% to	1/2% x \$4,000,000	\$20,000 to
1% of Gross Profit	1% x \$4,000,000	\$40,000

The average or blending method using the single rules previously given would involve the following computation:

<u>Average Method</u>	<u>Computation</u>	<u>Materiality Amount</u>
(5% of pre-tax income	(\$40,000	
+ 1/2% of total assets	+ \$15,000	
+ 1% of equity	+\$10,000	
+ 1/2% of total revenues)	+\$45,000)	
/ 4	/ 4	\$27,500

The formula method would involve the following computation if the KPMG formula were used:

<u>KPMG Formula</u>	<u>Computation</u>	<u>Materiality Amount</u>
1.84 x (Greater of Assets or Revenues) ^{2/3}	1.84 x (9,000,000) ^{2/3}	\$79,612

As can be seen from the previous computations, the materiality amounts computed using either the Single Rule method or the Variable Rule method varied from a possible low of \$10,000 to a possible high of \$45,000 depending on the auditor's judgment. Empirical research on materiality has shown

that different auditors may make widely different materiality judgments given the same set of facts and circumstances when using either the Single Rule method or the Variable Rule method. Since the materiality judgment is related to how much audit work is necessary, this means that variability in materiality judgments could result in auditors in the same audit firm doing widely differing amounts of work for essentially similar clients. Accordingly, many firms have adopted the Average or Blending method as way of eliminating the variability caused by the materiality judgment process in the other two methods. As can be seen in the previous example, the Average Method materiality amount of \$27,500 is in the middle of the \$10,000 to \$45,000 range from the Single Rule methods and close to the middle of the \$20,000 to \$40,000 range given by the Variable or Size Method. Finally, in this illustration the KPMG formula resulted in a materiality amount approximately twice amount provided by the alternative methods, presumably due to differences in their audit process.

The various quantitative approaches can be viewed as decision aids that assist auditors in making their materiality judgment. As stated previously, auditors also consider numerous qualitative aspects.

When making materiality decisions at the end of the audit, the auditor may use different materiality judgments for different items, or for classification versus income-affecting items. For example, an auditor may decide to use a relatively low materiality level for either recording or disclosure of an event that has or could provide significant negative adverse publicity to either the client or the audit firm, such as cost of a product recall. The auditor may use a relatively high materiality level for the decision about recording or disclosing an event that has a low probability of occurring, such as the filing of lawsuit.

Materiality at the Account Level

As discussed in ISA Section 320, an auditor must consider materiality "... at both the overall financial statement level and in relation to individual account balances, classes of transactions and disclosures." This means that due to factors such as differences in individual financial statement account balances and legal or regulatory requirements, the auditor may establish different materiality levels for different accounts, classes of transactions, or disclosures.

Although the standards only require the auditor to "consider" materiality at the different levels, many auditors prefer to translate the numerical estimate of preliminary materiality into specific amounts of materiality at account or class of transactions level. When the preliminary materiality is allocated to classes of transactions (transaction cycles) the audit of these classes of transactions also covers the accounts affected by the classes of transactions. This allocation or splitting of the overall materiality amount normally results in lower materiality amount being used at the account or class of transactions level than is used at the overall financial statement level.

The account or class of transactions materiality amount does not necessarily have to be in proportion to the account or class of transactions size. For example, assume that the overall financial statement materiality level is \$100,000 and the auditor is setting the materiality level for the inventory account which is 10% of total assets. The auditor might assign a materiality level of \$50,000 to inventory [50% of materiality] even though it is only 10% of total assets. The auditor might even assign a materiality level of \$50,000 to each major account in the balance sheet even though when added together the individual account materiality amounts might far exceed the materiality amount for the overall financial statements. The principal reason for auditors being willing to use materiality amounts at the account level which add up to more than overall financial statement materiality is the possibility of offsetting errors. For example, assume the inventory account value is overstated by \$200,000 but the receivables valuation is understated by \$225,000. The net error on the overall financial statements is only \$25,000, which is less than materiality.

Auditors use the following variety of approaches for moving from overall financial statement materiality to materiality at the account level:

- *Judgmental Approach*- The auditor sets the account materiality on a purely judgmental basis.
- *Ratio Approach*- The auditor sets the account materiality a range depending on the auditor's assessment of risk. For example, the range may vary from 1/3 to 1/6 of the overall financial statement materiality. If risk is judged to be high then the auditor uses 1/6 of the overall materiality. This results in the account being audited more closely to reduce the high-assessed risk level. In this case the risk factors considered should relate to materiality considerations and not risk factors in general.
- *Adjusting Entry Assessment*- The auditor sets the account materiality at some fraction of overall financial statement materiality depending on how many adjusting entries were on last year's audit. For example, if there were 5 adjusting entries on last year's audit the auditor might set materiality for the account at 1/5 of the overall materiality. The thought here is that the more adjusting entries expected, the poorer the system, and the closer the accounts need to be audited.
- *Formula Approach*- Some auditors use a mathematical formula which assigns some proportion of overall materiality to the individual accounts, based on their relative size and the possibility of offsetting errors. This formula has the effect of allocating a larger percentage of overall materiality to relatively large accounts. For example, using the following formula, an individual account that was 40% of the total of all accounts would have 63% of materiality assigned to it while an account that was only 10% of the total of all accounts would only have 32 % of materiality assigned to it:

$$\text{Materiality For Account} = \text{Overall Materiality} - \text{Expected Uncorrected Error} \times \left(\frac{\text{Account Balance}}{\text{Total of All Account Balances}} \right)^{1/2}$$

These three approaches can be viewed as decision aids that assist the auditors in his/her judgment.

The auditor also considers a variety of non-quantitative or qualitative factors when assigning materiality at the account level. Some of these factors are:

- *Cost*- some accounts are more costly to audit and the auditor may assign more of the overall materiality to those accounts and less to other accounts which are less costly to audit.
- *Analytical Procedures Results*- preliminary analytical procedures may signal that there is a potential problem with an account, therefore, the auditor may use a lower materiality level for this account so it will be audited more closely.
- *Prior Period Adjustments For Account*- an account which had no adjustments after detailed substantive testing in a prior audit might be assigned a lower materiality level if the overall environment were stable.
- *Consequences of Misstatement*- some accounts might be allocated a very small materiality amount if the consequences of a misstatement could be severe. For example, if failure to make adequate royalty payments could result in loss of a key technology, the auditor may use a low level of materiality for that account.
- *Use of Account Data For Other Purposes*- an account might be audited 100% and no materiality allocated to it if data accuracy is important for other purposes. For example, officers' compensation might be audited very closely if it has to be separately reported to a regulatory agency or the tax authorities.

Summary

Auditors have to make materiality judgments on every audit. This is a difficult process as both quantitative and qualitative factors have to be evaluated. Additionally, there is no formal guidance

for how to implement the materiality concepts discussed in the auditing standards. Although they are sometimes difficult to make, good materiality judgments are crucial for the conduct of a successful audit as poor judgments can result in an audit that is ineffective and/or inefficient. This article explained the materiality concept and provided application examples. Auditors will find this article useful for reviewing the materiality concept and comparing their current procedures with the applications discussed, to see if improvements can be made.

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