

USING MATERIALITY IN AUDIT PLANNING

A practical way to relate the auditor's materiality estimate to the design of audit procedures.

by George R. Zuber, Robert K. Elliott, William R. Kinney, Jr., and James J. Leisenring

John Smith, CPA, is the auditor of Ajax, Inc. Recently, Smith had listened to another CPA describe how a careful consideration of materiality during the planning phase improved the coordination and efficiency of an audit. In planning his current examination of Ajax, Inc.'s, financial statements (see exhibit 1, page 44), Smith decided to apply some of those materiality concepts in the design of audit procedures.

Auditors like Smith, who are engaged to examine financial statements, seek to determine whether the financial statements taken as a whole are materially misstated. Materiality has been defined over the years by, among others, accounting standard-setting bodies, courts, regulatory agencies and auditors. Generally, these definitions indicate that an omission or misstatement is material if knowledge of the omission or misstatement would influ-

ence the judgment of a reasonable person. Although the determination of what is material to financial statements is necessarily an accounting concept, materiality also is a basic consideration in the audit process. An objective of an audit is to search for errors that, either individually or in the aggregate, would be material to the financial statements. Because Smith will have to decide if he is satisfied that the financial statements aren't materially misstated, it is essential that he plan his audit to obtain sufficient evidential matter to make that evaluation.

This article will describe how Smith, and other auditors, can use a preliminary estimate of materiality in planning an effective—and efficient—audit.

What Is a Preliminary Estimate of Materiality?

According to Statement on Auditing Standards no. 22, *Planning and Supervision*,¹ the auditor considers, among other things, preliminary estimates of materiality levels when he plans an audit of financial statements. SAS no. 22 doesn't explicitly require an auditor to quantify, either as a specific or an approximate amount, his preliminary estimate of materiality. However, quantification is the most practical way to consider such an estimate in audit planning. Because financial statements are used to assess an entity's current position and performance and to predict an entity's future flow of cash, changes in the amount, timing or uncertainty of the entity's cash flow are matters that would be expected to affect the judgment of a reasonable person. Because

¹Statement on Auditing Standards no. 22, *Planning and Supervision* (New York: AICPA, 1978). See also *AICPA Professional Standards*, vol. 1 (Chicago: Commerce Clearing House), AU section 311.

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Authors' note: The American Institute of CPAs auditing standards board has exposed a proposed statement on auditing standards entitled *Materiality and Audit Risk in Conducting an Audit* (New York: AICPA, December 6, 1982). This article isn't an interpretation or digest of the exposure draft, although the methods discussed in this article would be, in the authors' view, one method of complying with certain provisions of the exposure draft.

these assessments and predictions are expressed in quantitative terms, the definition of materiality must relate to these quantities. In addition, some quantification of "allowable error" is essential to communicating with staff assistants about the design and performance of audit procedures.

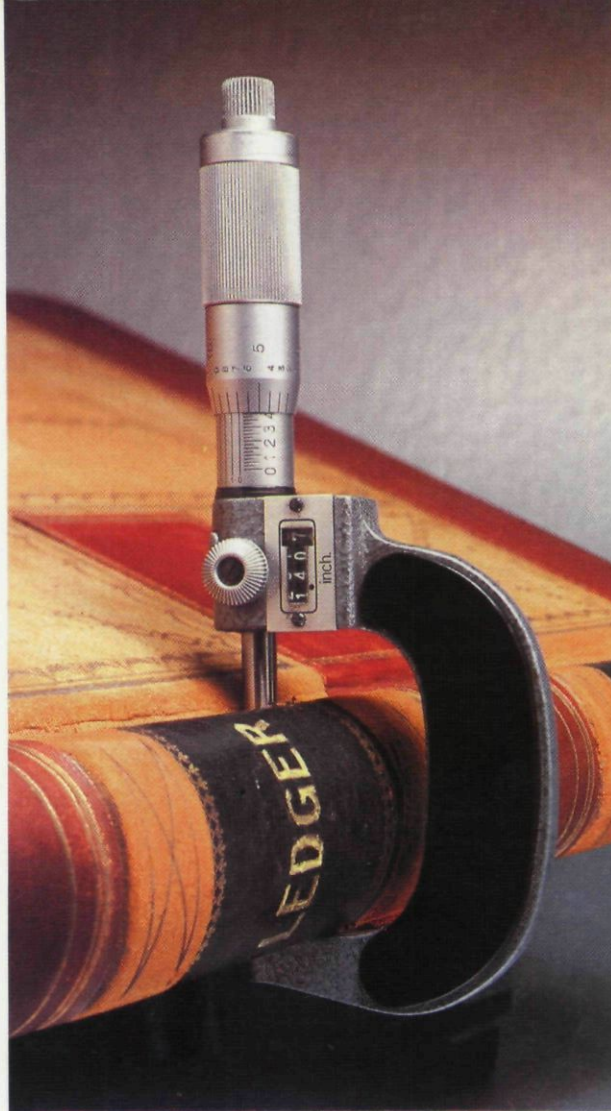
SAS no. 22 suggests that there may, in fact, be more than one level of materiality for the financial statements taken as a whole to be considered by an auditor. For example, Smith believes that \$125,000 may be material if the error affects Ajax, Inc.'s, net income,² while an error of up to \$200,000 may be immaterial if the error affects only classification. The various levels of materiality result from the varying significance of different errors to the user's assessments and predictions of future cash flow.

Although there may be more than one level of materiality, it is practical to design audit procedures using only one preliminary estimate of materiality for the financial statements taken as a whole. The selection of one preliminary estimate results from the inability of an auditor to simultaneously plan the nature, timing and extent of an audit procedure with different sensitivities to error. For example, it isn't practical for Smith to try to design one inventory test which would find pricing errors that aggregate to \$10,000 and extension errors that aggregate to \$20,000. Because income is frequently considered the most sensitive predictor of future cash flow for a business entity, auditors often establish as preliminary estimates of materiality the aggregate level of errors affecting income that they would consider to be material.³ Accordingly, Smith decided that \$125,000 is a reasonable preliminary estimate of financial statement materiality to use in planning the audit of Ajax, Inc.

Numerous factors would likely influence an auditor's evaluation of the results of his audit

²Virtually all errors in Ajax, Inc.'s, financial statements that affect income are mitigated by a tax effect. If the marginal tax rate (federal and state) is 50 percent, the aftertax effect of \$125,000 of error would be about 6 percent of net income.

³The fact that income is often considered the most sensitive predictor of future cash flows doesn't mean that an auditor can't develop a preliminary estimate of materiality until the net income for the period is known. Because materiality generally relates to a notion of longer-run expected income or average income, some auditors use total assets or average sales in conjunction with average income rates to estimate materiality.



procedures when he decides whether the financial statements include material error. In making a preliminary estimate of materiality, an auditor can anticipate many of those factors. For example, by obtaining an understanding of the client's business, an auditor has a reasonable understanding of the size of the entity (for example, total assets, equity, sales and average earnings) and the nature of the client's operations and related transactions. Those factors would ordinarily be considered in developing a preliminary estimate of materiality. As a result, those factors wouldn't be likely to cause the preliminary estimate of materiality to differ from the materiality standard used in evaluating the financial statement presentation after the audit is complete. Certain factors, however, may cause the auditor's preliminary estimate of materiality to differ from the materiality standard used for evaluation. Those factors include significant changes in the circumstances considered in making the preliminary estimate (such as a merger or a disposal of a segment of the business) and information disclosed by the application of audit procedures that couldn't

Exhibit 1

Financial statements for Ajax, Inc.

Balance sheet

(as of December 31, 19XX)

| | |
|-------------------------------|---------------------|
| Cash | \$ 1,830,000 |
| Accounts receivable | 2,627,000 |
| Inventory | 5,155,000 |
| Property, plant and equipment | 4,573,000 |
| Other assets | 205,000 |
| | <u>\$14,390,000</u> |

| | |
|--|---------------------|
| Current installments of long-term debt | \$ 257,000 |
| Accounts payable | 1,419,000 |
| Accrued liabilities | 1,996,000 |
| Long-term debt | 3,115,000 |
| Deferred income taxes | 755,000 |
| Common stock | 1,679,000 |
| Retained earnings | 5,169,000 |
| | <u>\$14,390,000</u> |

Statement of earnings

(for the year ended December 31, 19XX)

| | |
|------------------------------------|-------------------|
| Sales | \$22,425,000 |
| Cost of goods sold | 18,407,000 |
| Selling and administrative expense | 2,096,000 |
| Interest expense | 254,000 |
| Provision for taxes | 672,000 |
| Net income | <u>\$ 996,000</u> |

be anticipated in the design of audit procedures.

The latter group includes errors that are smaller, either individually or in the aggregate, than the auditor's preliminary estimate of materiality but that could be expected, because of their nature, to affect the judgment of a reasonable person relying on the financial statements. Matters that may be material because of qualitative factors include fraudulent transactions, improper payments for the purpose of obtaining favorable trade concessions and errors that may influence compliance with a working capital requirement under a debt covenant. Since qualitative factors may relate to transactions or accounts that involve relatively small amounts, it would be prohibitively expensive to plan audit procedures sufficient to search for them. For example, Ajax,

Inc., sells a significant portion of its products to a foreign country that prohibits any form of payment to governmental officials in exchange for favorable trade arrangements. If an Ajax, Inc., agent would pay \$1,000 to an official of that country, the future cash flow of Ajax, Inc., might be materially affected by the loss of trade. Although such a payment could lead to a material effect on Ajax, Inc.'s, financial statements, it would be impractical for Smith to plan for, and Ajax, Inc., to pay for, an audit that could be expected to reveal any improper payments as small as \$1,000. As a result, while such factors—if discovered during the audit—are ordinarily considered in evaluating the financial statement presentation after the application of audit procedures, they can't effectively be considered when the auditor makes a preliminary estimate of materiality.

We believe materiality is essentially a quantitative consideration of what is important to the presentation of a company's financial statements. Both quantitative and qualitative matters, while not necessarily all precise amounts, can be considered either in terms of historical dollar values or in terms of the present value of their future effects on the company's financial statements. Any matters that would have no quantitative effect on current or future financial statements, including the notes and statement of accounting policies, are outside the scope of an auditor's responsibilities.

Relating Materiality to Audit Procedures for Financial Statement Components

The auditor's preliminary estimate of materiality for the financial statements taken as a whole influences the appropriate nature, timing and extent of audit procedures for particular account balances and classes of transactions. As stated earlier, the auditor should use his preliminary estimate of materiality to plan the audit in a manner that will provide him with sufficient evidential matter to make a reasonable evaluation of the extent of errors, if any, in the financial statements. Holding other planning considerations equal, as the total amount of error that would be considered material decreases, the scope of appropriate audit procedures to be applied to financial statement components increases and vice versa.

Two examples of extreme situations illustrate this point. If Smith considered \$1 to be material to Ajax, Inc.'s, financial statements, the scope of audit procedures sufficient to de-

test material errors would require Smith to examine and evaluate virtually every transaction and balance composing the financial statements. On the other hand, if Smith estimated materiality to be \$20 million for the financial statements of Ajax, Inc., he could conclude, virtually without performing any audit procedures, that it was unlikely that the financial statements include material error. Because the threshold of what constitutes a material error is never at either extreme, it is necessary to devise some means of translating an auditor's preliminary estimate of materiality into the selection of appropriate procedures, the determination of the extent of those procedures and the selection of suitable times for applying the procedures.

Without some method of using his preliminary estimate of materiality to design audit procedures, an auditor incurs the risk of inadvertently underauditing. In such circumstances, an auditor is precluded from expressing an opinion on the financial statements, or, if he does express an opinion, he violates professional auditing standards because the opinion isn't based on sufficient evidential matter.

One way in which an auditor might plan procedures that will be sufficient to detect material errors is to overaudit. This approach would cause an auditor to use procedures that could be expected to detect errors that are significantly smaller than any amounts that could be expected to aggregate to a material amount. This approach isn't practical as a general policy because more resources would be used in reaching an opinion on the presentation of the financial statements than necessary. If Smith used this approach, Ajax, Inc., would pay unnecessarily large audit fees. Because Smith wouldn't be competitive in the marketplace, it would be reasonable to expect Ajax, Inc., to eventually engage a different auditor. Inefficient use of resources isn't a professionally desirable method of achieving an auditor's objective of detecting material error. An auditor needs a better way to incorporate his preliminary estimate of materiality into planning audit procedures.

A Practical Approach to Relating Materiality to Financial Statement Components

One practical approach is to break down, or allocate, the preliminary estimate of materiality to components of the financial statements. In essence, the auditor would establish a preliminary estimate of allowable error for indi-

vidual components of the financial statements based on his preliminary estimate of materiality for the financial statements taken as a whole. Examples of such components would be account balances, classes of transactions, locations and divisions. SAS no. 39, *Audit Sampling*,⁴ refers to such a measure of allowable error for planning substantive tests of detail as *tolerable error*. According to SAS no. 39, tolerable error is the maximum "monetary error in the related account balance or class of transactions [that] may exist without causing the financial statements to be materially misstated." Furthermore, tolerable error "is related to the auditor's preliminary estimates of materiality levels in such a way that tolerable error, combined for the entire audit plan, does not exceed those estimates."⁵ While SAS no. 39 discusses tolerable error only in the context of audit sampling, that concept of allowable error in a financial statement component is applicable to all audit procedures.

Tolerable error, as discussed in SAS no. 39, can be thought of as including two elements: (1) the auditor's expectation of likely error that will remain uncorrected in the financial statements after the audit is complete and (2) an allowance for the risk of possible further error that might not be detected or indicated by the audit procedures.

Assessing Expected Error

Several factors influence an auditor's expectation of error in the financial statements. When planning the audit, an auditor can generally estimate the amount of error that is likely to exist in the financial statements based on his understanding of the entity's business and his experience in auditing the client in prior years. For example, Smith knows from prior years' experience that there are generally a moderate number of adjustments necessary to Ajax, Inc.'s, financial statements because of a number of weaknesses in related internal accounting controls. Smith's preliminary estimate is that the Ajax, Inc., financial statements will include approximately \$30,000 of errors that overstate net income.

⁴SAS no. 39, *Audit Sampling* (New York: AICPA, 1981). See also *AICPA Professional Standards*, AU sec. 350.

⁵*Ibid.*, par. 18. See also *AICPA Professional Standards*, AU sec. 350.18.

An auditor also might be aware that an error exists in the financial statements because that error was first identified during the audit of a prior period's financial statements. The error wasn't corrected in prior periods because it was considered immaterial to the financial statements for those periods. It may be material, however, to the current financial statements if, when added to other errors that are identified in the current period, the sum is

"The auditor's expectation of error that will remain uncorrected is influenced by the likelihood that the client will adjust the financial statements for the auditor's best estimate of error."

material. Even though the auditor first obtained information about the error before the audit of the current financial statements began, he would still consider that information in planning audit procedures. For example, during the prior year's audit, Smith identified a machine recorded in Ajax, Inc.'s, financial statements that had been scrapped. Ajax, Inc.'s, management didn't adjust the prior year's financial statements because the machine had only a two-year remaining life. Smith had agreed that the error was immaterial. The related overstatement of machinery in the current year's financial statements, net of depreciation, is \$2,000, resulting in a total expected error in the financial statements of \$32,000.

The auditor's expectation of error that will remain uncorrected is influenced by the likelihood that the client will adjust the financial statements for the auditor's best estimate of error. An auditor is generally able to anticipate the likelihood that the client will be willing to adjust the financial statements for some, or all, of the auditor's best estimate of error. For example, Smith knows from experience that some of his clients don't believe it is cost justified to adjust financial statements for the immaterial errors he brings to their attention. The more an entity is willing to adjust the financial statements for the auditor's estimate of error, the less the auditor needs to consider expected uncorrected error

in relation to the preliminary estimate of materiality. If a client agrees to adjust the financial statement for all errors identified or projected by the auditor, no portion of the preliminary estimate of materiality will need to be reserved for expected uncorrected error. Because Ajax, Inc.'s, management generally adjusts for a substantial portion of the errors identified by the audit procedures, Smith believes it is likely that only about \$4,000 of the \$32,000 in errors he expects in the financial statements won't be adjusted.

Because it may be difficult for an auditor to identify the specific accounts in which expected error is likely to occur and remain uncorrected, it is often practical for an auditor to simply reduce his preliminary estimate of materiality by expected uncorrected error in the financial statements taken as a whole rather than to estimate the expected uncorrected error for each component of the financial statements. As a result, Smith will have \$121,000 of the \$125,000 preliminary estimate of materiality available to be allocated to the tolerable errors for components of the financial statements. In a sense, this \$121,000 is a "cushion" or an allowance for the imprecision inherent in the application of audit procedures.

Determining Tolerable Errors

The need to allow for possible further error that may not be detected or indicated by planned audit procedures arises from the imprecision inherent in audit procedures. An auditor performs audit procedures related to specific assertions about a component of the financial statements to estimate the amount of error in that component. When an auditor designs audit procedures, he recognizes that his best estimate of error in a component of the financial statements will in fact likely be greater or less than the true, but unknown, actual amount of error in the component. Because an auditor is primarily concerned with the possibility that his best estimate of error for all components of the financial statements may underestimate the actual error in the financial statements, the auditor allows for some cushion in the design of audit procedures.

To be conservative, an auditor might always plan to evaluate the results of his audit procedures by adding an estimate, given the audit procedures he performed, of the maximum error that he believes might reasonably exist for each of the components of the financial statements. That approach, however,

would be overly conservative because any mistake in the auditor's best estimate of error is equally likely to be an underestimate or an overestimate. Although some of the best estimates might underestimate the actual error in the component, it is extremely unlikely that all best estimates are underestimates. A good analogy would be to consider the results one might expect from flipping 10 coins. Although it is possible to flip 10 coins and get 10 heads, it is very unlikely. In a similar manner, it is unlikely that an auditor would underestimate the error in all components of the financial statements. As a result, an auditor would ordinarily plan audit procedures so that the sum of the individual allowances, or tolerable errors, for each component of the financial statements would be larger than the desired allowance for possible further error for the financial statements taken as a whole. How much larger will be illustrated below.

Several factors influence the auditor's determination of tolerable error for a component of the financial statements. One factor is the magnitude of the component relative to the financial statements taken as a whole. An auditor generally allocates a greater portion of his preliminary estimate of materiality for the financial statements to larger components of those financial statements. For example, it is generally reasonable to allow for the possibility of more error in an accounts receivable balance of \$30 million than in a marketable securities balance of \$2 million. The unit cost to audit an individual element making up a component of the financial statements also influences the determination of tolerable error for that component. For example, greater tolerable error might be allocated to components, such as inventory, that are expected to be relatively difficult and costly to audit precisely when compared with components such as cash and long-term debt. An auditor also may consider the variability of the values in a

component of the financial statements when he determines an appropriate tolerable error for the component. As the variability of the items within a component increases, it is more difficult to estimate the amount of error in the component. As a result, some auditors would allocate a relatively larger tolerable error to components with high variability. Further, the auditor would consider user needs for precision in financial statement components and not select a tolerable error for a component (for example, receivables or current assets) that would result in an insufficiently precise determination of the amount of the component.

Smith used as a decision aid for determining tolerable errors for components of the financial statements a simplified mathematical formula. One such formula is illustrated in exhibit 2, this page. Smith used the formula to obtain "first pass" estimates of tolerable errors for all the account balances that make up Ajax, Inc.'s, financial statements. These estimates are shown in exhibit 3, page 52. Smith calculated his first pass estimates for all accounts to be audited. He didn't calculate tolerable error for net income or retained earnings because net income is the residual of the other accounts and retained earnings is the sum of prior net income (less dividends, which can be audited with precision).

The formula in exhibit 2 includes only a consideration of the relative magnitude of the components of the financial statements. A more comprehensive model also would include the other factors that influence the appropriate allocation of the preliminary estimate of materiality for the financial statements to the individual components. Although a more comprehensive model might result in a more efficient allocation, the cost to develop such a complex model might outweigh the savings.

A less formal method of determining toler-

Exhibit 2

Illustrative formula for allocating tolerable error

$$\begin{array}{l} \text{Tolerable error} \\ \text{for a} \\ \text{component} \end{array} = \begin{array}{l} \text{Preliminary estimate of} \\ \text{materiality less expected} \\ \text{uncorrected error} \\ \text{in the financial statements} \end{array} \times \sqrt{\frac{\text{Amount of component}}{\text{Total amount of all components that} \\ \text{make up the financial statements to} \\ \text{which materiality is being allocated}}}$$

Exhibit 3

Ajax, Inc., tolerable error worksheet (December 31, 19XX)

| | Financial statement amounts | Accounts to be audited | Tolerable error | | Notes |
|--|--------------------------------|---------------------------|------------------------------|--------------------------|-------|
| | | | "First pass" (by formula) | Judgmental allocation | |
| Cash | \$ 1,830,000 | \$ 1,830,000 | \$ 20,000 | \$ 10,000 | 1 |
| Accounts receivable | 2,627,000 | 2,627,000 | 24,000 | 30,000 | |
| Inventory | 5,155,000 | 5,155,000 | 33,000 | 65,000 | 2 |
| Property, plant and equipment | 4,573,000 | 4,573,000 | 32,000 | 10,000 | 3 |
| Other assets | 205,000 | 205,000 | 7,000 | 10,000 | |
| | <u>\$14,390,000</u> | | | | |
| Current installments of long-term debt | \$ 257,000 | 257,000 | 7,000 | 0 | 4 |
| Accounts payable | 1,419,000 | 1,419,000 | 18,000 | 30,000 | |
| Accrued liabilities | 1,996,000 | 1,996,000 | 21,000 | 25,000 | |
| Long-term debt | 3,115,000 | 3,115,000 | 26,000 | 0 | 4 |
| Deferred income taxes | 755,000 | 755,000 | 13,000 | 0 | 4 |
| Common stock | 1,679,000 | 1,679,000 | 19,000 | 0 | 4 |
| Retained earnings | 5,169,000 | N/A* | N/A* | N/A* | |
| | <u>\$14,390,000</u> | | | | |
| Sales | \$22,425,000 | 22,425,000 | 70,000 | 60,000 | 5 |
| Cost of goods sold | 18,407,000 | 18,407,000 | 63,000 | 60,000 | 6 |
| Selling and administrative expense | 2,096,000 | 2,096,000 | 21,000 | 20,000 | |
| Interest expense | 254,000 | 254,000 | 7,000 | 0 | 4 |
| Provision for taxes | 672,000 | 672,000 | 12,000 | 0 | 4 |
| Net income | <u>\$ 996,000</u> | <u>N/A*</u> | <u>N/A*</u> | <u>N/A*</u> | |
| Total | | <u>\$67,465,000</u> | <u>\$393,000</u> | <u>\$320,000</u> | |
| Nonadditive combined tolerable error | | | <u>\$121,083</u> | <u>\$120,623</u> | |

*N/A = not applicable.

Notes:

- 1 Cash can be audited to a tight tolerance at reasonable cost.
- 2 Individual inventory items are relatively expensive to audit because of the need to establish the quantity, the price and the net realizable value. Also, users wouldn't need precision as tight as \$33,000.
- 3 Fixed assets can be audited to a tight tolerance because a major component is land and buildings that were audited in prior years and are still in place.
- 4 Account to be audited 100 percent; no allocation of tolerable error is necessary.
- 5 Sales have either been realized in cash or are included in accounts receivable, which has its own allocation of tolerable error. This allocation is principally for accuracy errors and understatement due to unbilled items.
- 6 This allocation is for errors other than errors in inventory relief since inventory has its own allocation of tolerable error.

able errors would be for the auditor to use his judgment to assess a tolerable error for each component of the financial statements and then consider whether those tolerable errors, in the aggregate, are reasonable in relation to the preliminary estimate of materiality for the financial statements taken as a whole. Because of the nonadditive nature of tolerable error discussed earlier, the sum of tolerable errors would ordinarily be larger than the auditor's preliminary estimate of materiality for the financial statements taken as a whole.⁶

Smith decided to use a judgmental allocation of tolerable error to the financial statement components. He started with the first pass estimates of the formula but adjusted them for other factors he considered relevant. As an example, he allocated less tolerable error to cash than the formula did because he knew that the audit costs to achieve a tight precision in cash are very reasonable. Some of his other reasons are indicated in exhibit 3. Smith allocated no tolerable error to those accounts he planned to audit 100 percent.

After Smith allocated tolerable error to the financial statement components by using his judgment, he considered whether the combined tolerable error was within his adjusted preliminary estimate of materiality. His final allocations and the combined amount are shown in exhibit 3.

The objectives described in this article can be achieved without an explicit allocation of the auditor's preliminary estimate of materiality. The most common approach is an extensive use of dollar-unit sampling. The auditor who uses dollar-unit sampling essentially thinks of the financial statements as one large population to be sampled. Therefore, rather than determine tolerable errors for the components of the financial statements, that auditor uses his preliminary estimate of materiality for financial statements directly in the calculation of appropriate sample sizes for the components. Auditors who use dollar-unit sampling would, of course, still need to (1) deduct an allowance for expected unadjusted error from their preliminary estimates of materiality, (2) consider errors arising in prior years

that affect the current financial statements and (3) establish tolerable errors for components of the financial statements that are tested by audit procedures other than dollar-unit sampling.

How Tolerable Error Is Used

After Smith used his judgment to determine the tolerable error for various components of Ajax, Inc.'s, financial statements, he designed audit tests that he expected to achieve those levels of precision. Other things being equal, the smaller the tolerable error Smith assigned to a component, the stronger the required procedures to achieve that precision. Stronger tests would, in general, be (1) tests that, by their nature, are more likely to detect error (a test of detail, for example, versus an analytical review procedure), (2) tests using larger sample sizes or (3) tests performed closer to the balance sheet date.

For certain tests, Smith could use his estimate of tolerable error explicitly in designing the tests. For example, he planned to use statistical sampling for accounts receivable and inventory; thus tolerable error for those accounts would be used in the statistical formula to determine sample size. Also, Smith planned to use a multiple regression analytical review procedure for cost of goods sold, and he could use the tolerable error explicitly in that test. Even in the areas that Smith planned to use nonstatistical sampling, he could use tolerable error to design his tests using the methods described in a recent article on audit sampling⁷ and in the American Institute of CPAs guide entitled *Audit Sampling*.⁸

However, Smith's consideration of the concept of tolerable error isn't meant to suggest that the scope of all audit procedures can be determined using mathematical formulas. In fact, Smith will still be unable to directly compute the scope of his other audit procedures by using a formula. However, even without the ability to directly translate tolerable error into the scope of most audit proce-

⁶The combined tolerable error could be estimated by the use of a statistical formula that takes into account the nonadditive nature of tolerable error. The aggregate tolerable error would be the square root of the sum of the squared tolerable errors for the components. Using this formula, the combined tolerable errors for the "first pass" column in exhibit 3, page 52, would be \$121,083, which is approximately equal to Smith's adjusted preliminary estimate of materiality.

⁷Carl S. Warren, Stephen V. N. Yates and George R. Zuber, "Audit Sampling: A Practical Approach," *JofA*, Jan. 82, pp. 62-72.

⁸Statistical Sampling Subcommittee, *Audit Sampling* (New York: AICPA, 1983).

dures by formula, the consideration of tolerable error still assists Smith in making decisions about the nature, timing and extent of procedures appropriate for testing components of the financial statements. For example, if Smith is deciding whether to visit a warehouse location with \$100,000 of inventory, an assignment of \$80,000 of tolerable error to that location may assist him in deciding that he doesn't need to visit the warehouse. Instead, he may perform limited tests of the warehouse records or analytical review procedures. Conversely, if an account balance is assigned a very small tolerable error relative to the total balance, Smith would generally

need to perform procedures sufficient to detect even small amounts of error.

Summary

When an auditor examines financial statements, he looks for errors that could be material to those statements. Unless an auditor makes a preliminary estimate of what is material to the financial statements under examination and uses that estimate in designing appropriate audit procedures, he isn't likely to find material errors if they exist. This article has described some of the factors that influence an auditor's consideration of a preliminary estimate of materiality for financial statements and a practical way to relate that estimate to the design of appropriate audit procedures. ■

Advice to directors: avoid the rubber stamp

When Penn Central collapsed more than a decade ago, many of its directors were surprised and dismayed to find themselves sued by stockholders who alleged that the directors had failed to meet their responsibilities. Subsequently, under prodding from the Securities and Exchange Commission, the New York Stock Exchange and litigious stockholders . . . corporate boards began adding more outside directors, forming director audit committees to monitor corporate affairs and enlarging director involvement in corporate policies.

But memories are short, and . . . directors of many corporations have again slid back into the clubby atmosphere that tempts them to rubber-stamp management decisions with few questions. At the least, directors should keep in mind that if serious company troubles break into the open, shareholders and the public will want to know, and have a right to know, what the board of directors was doing, or not doing, to serve the best interests of the corporation and its owners.

From an editorial in
Business Week, August 23, 1982

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