CHAPTER 9

CONSIDERING MATERIALITY AND AUDIT RISK

LEARNING OBJECTIVES

After studying this chapter, you should be able to

9-1 Apply the concept of materiality to the audit.

9-2 Make a preliminary judgment about what amounts to consider material.

9-3 Determine performance materiality during planning.

9-4 Use materiality to evaluate audit findings.

9-5 Define risk in auditing.

9-6 Describe the audit risk model and its components.

9-7 Consider the impact of engagement risk on acceptable audit risk.

9-8 Consider the impact of several factors on the assessment of inherent risk.

9-9 Discuss the relationship of risks to audit evidence.

9-10 Discuss how materiality and risk are related and integrated into the audit process.

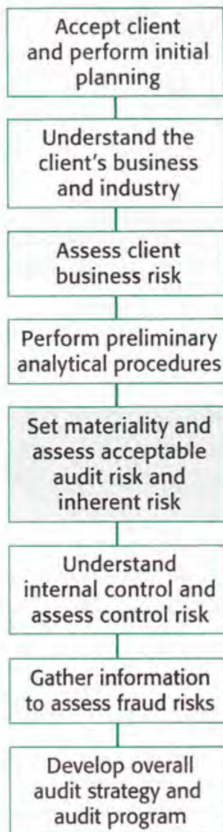
A Moving Target

Ian Romanova, a new staff auditor, arrives onsite during the middle of a whirlwind audit of Whirly-gigs Co., an entrepreneurial startup company with a new hot product that is flying off the shelves just in time for the Christmas season. Whirly-gigs also make other products, but they don't sell nearly as well as the primary product. This creates an inherent risk for the financials of this company, since all of the eggs are in one figurative basket.

Ian will be joining another senior auditor and staff auditor who have been on this audit for months. Since Ian is arriving mid-audit, many of the audit planning procedures have already been started. Initially, Ian's firm planned to complete the audit with just these two auditors in the field, but the plan has changed—more people are needed. Once Ian gets there and dives into the numbers, he can see why.

For the audit of the inventory section to which Ian has been assigned, there are thousands, if not tens of thousands of transactions for the year. Ian scans the papers documenting the original materiality assessment and plans substantive tests for the inventory area. He finds that the firm initially assigned a medium risk to this area and therefore was not planning to do extensive testing; instead, they planned to sample only a small part of the population. However, once testing actually started, numerous exceptions were found within other audit areas. As a result, the team decided to revise the risk assessment and the materiality assessment, expand testing and bring on more staff auditors to assist with the extra testing.

From his review of the unaudited financial statements, Ian sees that the company has just obtained an additional $10 million in private equity financing, by far the second largest amount on the balance sheet next to inventory. "Wow", Ian whispers to himself. When Ian arrives onsite, he finds that all of the samples for review have been selected and set aside prior to his arrival. Once he is sitting in front of the enormous stack of paperwork, thinking of how much easier the sampling would have been, Ian jokes to the partner on the audit, "How many vendor invoices can one staff auditor review?" to which the partner responds, "Let's put it this way: if it were your $10 million, how many invoices would you look at?"



The auditor's responsibility section in an audit report includes two important phrases (italicized below) that are directly related to materiality and risk.

- We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to *obtain reasonable assurance* about whether the financial statements are *free of material misstatement.*

The phrase *obtain reasonable assurance* is intended to inform users that auditors do not guarantee or ensure the fair presentation of the financial statements. Some risk that the financial statements are not fairly stated exists, even when the opinion is unqualified.

The phrase *free of material misstatement* is intended to inform users that the auditor's responsibility is limited to material financial information. Materiality is important because it is impractical for auditors to provide assurances on immaterial amounts.

Materiality and risk are fundamental to planning the audit and designing an audit approach. In this chapter, we will show how these concepts fit into the planning phase of the audit. Note that the topic of this chapter is closely related to earlier discussions of auditor's responsibilities, transaction cycles, and audit objectives (Chapter 6) and planning the audit (Chapter 8).

In this chapter, we apply both materiality and risk to the concepts studied in Chapter 6. We introduce the fifth step in planning the audit, which builds on the first four steps that were covered in Chapter 8. When auditors decide materiality and assess risks, they use a considerable amount of the information acquired and documented during the first four parts of audit planning.

MATERIALITY

OBJECTIVE 9-1

Apply the concept of materiality to the audit.

Materiality is a major consideration in determining the appropriate audit report to issue. The concepts of materiality discussed in this chapter are directly related to those we introduced in Chapter 3.

FASB Concept Statement 2 defines **materiality** as:

- The magnitude of an omission or misstatement of accounting information that, in the light of surrounding circumstances, makes it *probable* that the judgment of a reasonable person relying on the information would have been changed or influenced by the omission or misstatement. [italics added]

Because auditors are responsible for determining whether financial statements are materially misstated, they must, upon discovering a material misstatement, bring it to the client's attention so that a correction can be made. If the client refuses to correct the statements, the auditor must issue a qualified or an adverse opinion, depending on the materiality of the misstatement. To make such determinations, auditors depend on a thorough knowledge of the application of materiality.

A careful reading of the FASB definition reveals the difficulty that auditors have in applying materiality in practice. While the definition emphasizes reasonable users who rely on the statements to make decisions, auditors must have knowledge of the likely users of the client's statements and the decisions that are being made. For example, if an auditor knows that financial statements will be relied on in a buy-sell agreement for the entire business, the amount that the auditor considers material may be smaller than that for an otherwise similar audit. In practice, of course, auditors may not know who all the users are or what decisions they may make based on the financial statements.

Determining materiality requires professional judgment. Auditors follow five closely related steps in applying materiality, as shown in Figure 9-1. The auditor first

determines materiality for the financial statements as a whole. Second, the auditor determines **performance materiality**, which is materiality for segments of the audit (classes of transactions, account balances or disclosures) as shown in the first bracket of the figure. These two steps, which are part of planning, are our primary focus for the discussion of materiality in this chapter. Step 3 occurs throughout the engagement, when auditors estimate the amount of misstatements in each segment as they evaluate audit evidence. Near the end of the audit, during the engagement completion phase, auditors proceed through the final two steps. These latter three steps, as shown in the second bracket in Figure 9-1, are part of evaluating the results of audit tests.

MATERIALITY FOR FINANCIAL STATEMENTS AS A WHOLE

OBJECTIVE 9-2

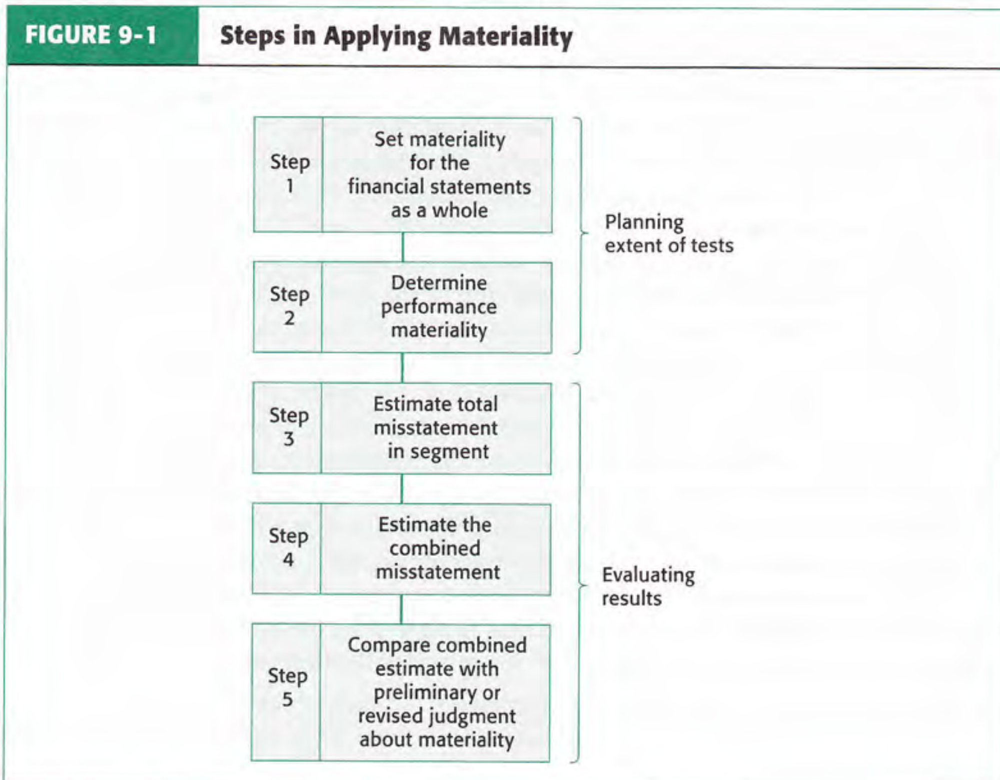
Make a preliminary judgment about what amounts to consider material.

Auditing standards require auditors to decide on the combined amount of misstatements in the financial statements that they would consider material early in the audit as they are developing the overall strategy for the audit. We refer to this as the **preliminary judgment about materiality.** It is called a preliminary judgment about materiality because, although a professional opinion, it may change during the engagement. This judgment must be documented in the audit files.

The preliminary judgment about materiality for the financial statements as a whole (step 1 in Figure 9-1) is the maximum amount by which the auditor believes the statements could be misstated and still *not* affect the decisions of reasonable users. (Conceptually, this is an amount that is $1 less than materiality as defined by the FASB. We define preliminary materiality in this manner for convenience.) This judgment is one of the most important decisions the auditor makes, and it requires considerable professional wisdom.

Auditors set a preliminary judgment about materiality to help plan the appropriate evidence to accumulate. The lower the dollar amount of the preliminary judgment, the more evidence required. Examine the financial statements of Hillsburg Hardware Co., in the glossy insert to the textbook. What combined amount of misstatements will affect

FIGURE 9-1 **Steps in Applying Materiality**



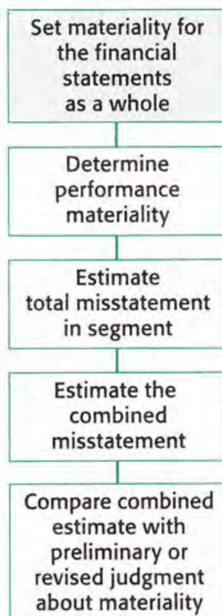
decisions of reasonable users? Do you believe that a $100 misstatement will affect users' decisions? If so, the amount of evidence required for the audit is likely to be beyond that for which the management of Hillsburg Hardware is willing to pay. Do you believe that a $10 million misstatement will be material? Most experienced auditors believe that amount is far too large as a combined materiality amount in these circumstances.

During the audit, auditors often change the preliminary judgment about materiality. We refer to this as the **revised judgment about materiality**. Auditors are likely to make the revision because of changes in one of the factors used to determine the preliminary judgment; that is because the auditor decides that the preliminary judgment was too large or too small. For example, a preliminary judgment about materiality is often determined before year-end and is based on prior years' financial statements or annualized interim financial statement information. The judgment may be reevaluated after current financial statements are available. Or, client circumstances may have changed due to qualitative events, such as the issuance of debt that created a new class of financial statement users.

Factors Affecting Preliminary Materiality Judgment

Several factors affect the auditor's preliminary judgment about materiality for a given set of financial statements. The most important of these are:

Materiality Is a Relative Rather Than an Absolute Concept A misstatement of a given magnitude might be material for a small company, whereas the same dollar misstatement could be immaterial for a large one. This makes it impossible to establish dollar-value guidelines for a preliminary judgment about materiality that are applicable to all audit clients. For example, a total misstatement of $10 million would be extremely material for Hillsburg Hardware Co. because, as shown in their financial statements, total assets are about $61 million and net income before taxes is less than $6 million. A misstatement of the same amount is almost certainly immaterial for a company such as IBM, which has total assets and net income of several billion dollars.



Benchmarks Are Needed for Evaluating Materiality Because materiality is relative, it is necessary to have benchmarks for establishing whether misstatements are material. *Net income before taxes* is often the primary benchmark for deciding what is material for profit-oriented businesses because it is regarded as a critical item of information for users. Some firms use a different primary benchmark, because net income often fluctuates considerably from year to year and therefore does not provide a stable benchmark, or when the entity is a not-for-profit organization. Other primary benchmarks include net sales, gross profit, and total or net assets. After establishing a primary benchmark, auditors should also decide whether the misstatements could materially affect the reasonableness of other benchmarks such as current assets, total assets, current liabilities, and owners' equity. Auditing standards require the auditor to document in the audit files the preliminary judgment about materiality and the basis used to determine it.

Assume that for a given company, an auditor decided that a misstatement of income before taxes of $100,000 or more would be material, but a misstatement would need to be $250,000 or more to be material for current assets. It is not appropriate for the auditor to use a preliminary judgment about materiality of $250,000 for both income before taxes and current assets. Instead, the auditor must plan to find all misstatements affecting income before taxes that exceed the preliminary judgment about materiality of $100,000. Because almost all misstatements affect both the income statement and balance sheet, the auditor uses a primary preliminary materiality level of $100,000 for most tests. The only other misstatements that will affect current assets are misclassifications within balance sheet accounts, such as misclassifying a long-term asset as a current one. So, in addition to the primary preliminary judgment of materiality of $100,000, the auditor will also need to plan the audit with the $250,000 preliminary judgment about materiality for misclassifications of current assets.

Qualitative Factors Also Affect Materiality Certain types of misstatements are likely to be more important to users than others, even if the dollar amounts are the same. For example:

- Amounts involving fraud are usually considered more important than unintentional errors of equal dollar amounts because fraud reflects on the honesty and reliability of the management or other personnel involved. For example, most users consider an intentional misstatement of inventory more important than clerical errors in inventory of the same dollar amount.
- Misstatements that are otherwise minor may be material if there are possible consequences arising from contractual obligations. Say that net working capital included in the financial statements is only a few hundred dollars more than the required minimum in a loan agreement. If the correct net working capital were less than the required minimum, putting the loan in default, the current and noncurrent liability classifications would be materially affected.
- Misstatements that are otherwise immaterial may be material if they affect a trend in earnings. For example, if reported income has increased 3 percent annually for the past 5 years but income for the current year has declined 1 percent, that change may be material. Similarly, a misstatement that would cause a loss to be reported as a profit may be of concern.

Illustrative Guidelines

Accounting and auditing standards do not provide specific materiality guidelines to practitioners. The concern is that such guidelines might be applied without considering all the complexities that should affect the auditor's final decision. However, in this chapter, we do provide guidelines to illustrate the application of materiality. These are intended only to help you better understand the concept of applying materiality in practice. The guidelines are stated in Figure 9-2 in the form of policy guidelines of a

FIGURE 9-2 Illustrative Materiality Guidelines

BERGER AND ANTHONY, CPAs
Gary, Indiana 46405

POLICY STATEMENT
No. 32IC
Title: Materiality Guidelines

Charles G. Berger
Joe Anthony

Professional judgment is to be used at all times in setting and applying materiality guidelines. As a general guideline, the following policies are to be applied:

1. The combined total of misstatements in the financial statements exceeding 6 percent is normally considered material. A combined total of less than 3 percent is presumed to be immaterial in the absence of qualitative factors. Combined misstatements between 3 percent and 6 percent require the greatest amount of professional judgment to determine their materiality.
2. The 3 percent to 6 percent must be measured in relation to the appropriate benchmark. Many times there is more than one benchmark to which misstatements should be compared. The following guides are recommended in selecting the appropriate benchmark:
   a. *Income statement.* Combined misstatements in the income statement should ordinarily be measured at 3 percent to 6 percent of operating income before taxes. A guideline of 3 percent to 6 percent may be inappropriate in a year in which income is unusually large or small. When operating income in a given year is not considered representative, it is desirable to substitute as a benchmark a more representative income measure. For example, average operating income for a 3-year period may be used as the benchmark.
   b. *Balance sheet.* Combined misstatements in the balance sheet should originally be evaluated for current assets, current liabilities, and total assets. For current assets and current liabilities, the guidelines should be between 3 percent and 6 percent, applied in the same way as for the income statement. For total assets, the guidelines should be between 1 percent and 3 percent, applied in the same way as for the income statement.
3. Qualitative factors should be carefully evaluated on all audits. In many instances, they are more important than the guidelines applied to the income statement and balance sheet. The intended uses of the financial statements and the nature of the information in the statements, including footnotes, must be carefully evaluated.

CPA firm. Notice that the guidelines are formulas using one or more benchmarks and a range of percentages. The application of guidelines, such as the ones we present here, requires considerable professional judgment.

Application to Hillsburg Hardware

Using the illustrative guidelines in Figure 9-2 (p. 271), let's examine a preliminary judgment about materiality for Hillsburg Hardware Co. The guidelines are as follows:

Preliminary Judgment About Materiality (Rounded, in Thousands)

	Minimum		Maximum	
	Percentage	Dollar Amount	Percentage	Dollar Amount
Earnings from operations	3	$ 221	6	$ 442
Current assets	3	1,531	6	3,062
Total assets	1	614	3	1,841
Current liabilities	3	396	6	793

If the auditor for Hillsburg Hardware decides that the general guidelines are reasonable, the first step is to evaluate whether any qualitative factors significantly affect the materiality judgment. Assuming no qualitative factors exist, if the auditor concludes at the end of the audit that combined misstatements of operating income before taxes are less than $221,000, the statements will be considered fairly stated. If the combined misstatements exceed $442,000, the statements will not be considered fairly stated. If the misstatements are between $221,000 and $442,000, a more careful consideration of all facts will be required. The auditor then applies the same process to the other three bases.

DETERMINE PERFORMANCE MATERIALITY

OBJECTIVE 9-3

Determine performance materiality during planning.

Performance materiality is defined as the amount(s) set by the auditor at less than materiality for the financial statements as a whole to reduce to an appropriately low level the probability that the aggregate of uncorrected and undetected misstatements exceeds materiality for the financial statements as a whole. Determining performance materiality (step 2 in Figure 9-1 on page 269) is necessary because auditors accumulate evidence by segments rather than for the financial statements as a whole, and the level of performance materiality helps them decide the appropriate audit evidence to accumulate. Performance materiality is inversely related to the amount of evidence an auditor will accumulate. For an accounts receivable balance of $1,000,000, for example, the auditor should accumulate more evidence if a misstatement of $50,000 is considered material than if $300,000 were considered material. However, if auditors assigned the same level of materiality to each segment of the audit that was assigned for the overall financial statements, there would likely be unidentified misstatements that exceed materiality for the financial statements as a whole.

Performance materiality can vary for different classes of transactions, account balances, or disclosures especially if there is a focus on a particular area. For example, users of financial statements might expect disclosures of related-party transactions involving the CEO or the purchase price of a newly-acquired subsidiary to be more precise, and therefore auditors might set a lower materiality level in these audit areas. In addition, overall audit assurance and the cost of audit evidence are considered when determining performance materiality, as discussed further below.

We refer to the process of determining performance materiality as the **allocation of the preliminary judgment about materiality** to segments in our discussion that follows. Most practitioners allocate materiality to balance sheet rather than income statement accounts, because most income statement misstatements have an equal effect on the balance sheet due to the nature of double-entry accounting. For example, a $20,000 overstatement of accounts receivable is also a $20,000 overstatement of sales. It is inappropriate to allocate the preliminary judgment to both income statement and balance sheet accounts because doing so will result in double counting. This enables

auditors to allocate materiality to either income statement or balance sheet accounts. Because most audit procedures focus on balance sheet accounts, materiality should be allocated only to balance sheet accounts.

The determination of performance materiality is based on professional judgment and reflects the amount of misstatement an auditor is willing to accept in a particular segment. For example, if an auditor decides to allocate $100,000 of a total preliminary judgment about materiality of $200,000 to accounts receivable, this means the auditor is willing to consider accounts receivable fairly stated if it is misstated by $100,000 or less. PCAOB auditing standards refer to this amount as **tolerable misstatement**, whereas AICPA standards define tolerable misstatement as the application of performance materiality to a particular sampling procedure. We use the term performance materiality rather than tolerable misstatement throughout this chapter to be consistent with AICPA and IAASB standards.

Auditors face three major difficulties in allocating materiality to balance sheet accounts:

1. Auditors expect certain accounts to have more misstatements than others.
2. Both overstatements and understatements must be considered.
3. Relative audit costs affect the allocation.

All three of these difficulties are considered in the allocation in Figure 9-3. It is worth keeping in mind that at the end of the audit, the auditor must combine all actual and estimated misstatements and compare them to the preliminary judgment about materiality. In determining performance materiality levels, the auditor is attempting to do the audit as efficiently as possible.

FIGURE 9-3 Performance Materiality Levels for Hillsburg Hardware Co.

	Balance 12-31-13 (in Thousands)	Performance Materiality (in Thousands)	
Cash	$ 828	$ 6 (a)	
Trade accounts receivable (net)	18,957	265 (b)	
Inventories	29,865	265 (b)	
Other current assets	1,377	60 (c)	
Property, plant, and equipment	10,340	48 (d)	
Total assets	$61,367		
Trade accounts payable	$ 4,720	90 (e)	
Notes payable—total	28,300	6 (a)	
Accrued payroll and payroll tax	1,470	60 (c)	
Accrued interest and dividends payable	2,050	6 (a)	
Other liabilities	2,364	72 (c)	
Capital stock and capital in excess of par	8,500	6 (a)	
Retained earnings	13,963	NA (f)	
Total liabilities and equity	$61,367	$884	(2 × $442)

NA = Not applicable.

(a) Small performance materiality because account can be completely audited at low cost and no misstatements are expected.

(b) Large performance materiality because account is large and requires extensive sampling to audit the account.

(c) Large performance materiality as a percent of account because account can be verified at extremely low cost, probably with analytical procedures.

(d) Small performance materiality as a percent of account balance because most of the balance is in land and buildings, which is unchanged from the prior year and need not be audited further this year.

(e) Moderately large performance materiality because a relatively large number of misstatements are expected.

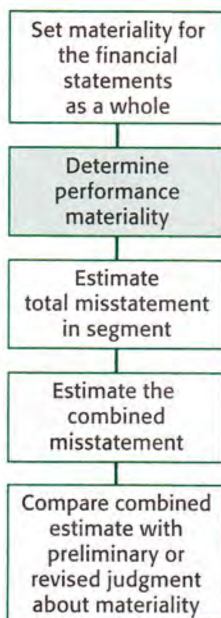
(f) Not applicable—retained earnings is a residual account that is affected by the net amount of the misstatements in the other accounts.

Allocation Illustrated

Figure 9-3 illustrates the allocation approach used to establish different performance materiality levels across segments of the financial statements for the audit of Hillsburg Hardware Co. It summarizes the balance sheet, combining certain accounts, and shows the allocation of total materiality of $442,000 (6 percent of earnings from operations). Moore's allocation approach uses judgment in the allocation, subject to the following two arbitrary requirements established by Berger and Anthony, CPAs:

- Performance materiality for any account cannot exceed 60 percent of the preliminary judgment (60 percent of $442,000 = $265,000, rounded).
- The sum of all performance materiality levels cannot exceed twice the preliminary judgment about materiality (2 × $442,000 = $884,000).

The first requirement keeps the auditor from allocating all of preliminary materiality to one account. If, for example, all of the preliminary judgment of $442,000 is allocated to trade accounts receivable, a $442,000 misstatement in that account will be acceptable. However, it may not be acceptable to have such a large misstatement in one account, and even if it is acceptable, it does not allow for any misstatements in other accounts.



There are two reasons for the second requirement, permitting the sum of performance materiality to exceed overall materiality:

- It is unlikely that all accounts will be misstated by the full amount of performance materiality. If, for example, other current assets have a performance materiality of $100,000 but no misstatements are found in auditing those accounts, it means that the auditor, after the fact, could have allocated zero or a small performance materiality to other current assets. It is common for auditors to find fewer misstatements than performance materiality.
- Some accounts are likely to be overstated, whereas others are likely to be understated, resulting in a net amount that is likely to be less than the preliminary judgment.

Notice in the allocation that the auditor is concerned about the combined effect on operating income of the misstatement of each balance sheet account. An overstatement of an asset account will therefore have the same effect on the income statement as an understatement of a liability account. In contrast, a misclassification in the balance sheet, such as a classification of a note payable as an account payable, will have no effect on operating income. Therefore, the materiality of items not affecting the income statement must be considered separately.

Figure 9-3 (p. 273) also includes the rationale that Moore followed in deciding performance materiality for each account. For example, she concluded that it was acceptable to assign a small amount of performance materiality to notes payable, even though it is as large as inventories. If she had assigned $132,500 to each of those two accounts, more evidence would have been required in inventories, but the confirmation of the balance in notes payable would still have been necessary. It was therefore more efficient to allocate $265,000 to inventories and a small amount to notes payable. Similarly, she allocated $60,000 to other current assets and accrued payroll and payroll tax, both of which are large compared with the recorded account balance. Moore did so because she believes that these accounts can be verified within $60,000 by using only analytical procedures, which are low cost. If performance materiality were set lower, she would have to use more costly audit procedures such as inspection and confirmation.

In practice, it is often difficult to predict in advance which accounts are most likely to be misstated and whether misstatements are likely to be overstatements or understatements. Similarly, the relative costs of auditing different account balances often cannot be determined. It is therefore a difficult professional judgment to allocate the preliminary judgment about materiality to accounts. Accordingly, many accounting firms have developed rigorous guidelines and sophisticated methods for doing so. These guidelines also help ensure the auditor appropriately documents the overall materiality level and performance materiality levels and the factors considered in determining those amounts in the audit files.

To summarize, the purpose of allocating the preliminary judgment about materiality to balance sheet accounts is to help the auditor decide the appropriate evidence to accumulate for each account on both the balance sheet and income statement. An aim of the allocation is to minimize audit costs without sacrificing audit quality. Regardless of how the allocation is done, when the audit is completed, the auditor must be confident that the combined misstatements in all accounts are less than or equal to the preliminary (or revised) judgment about materiality.

ESTIMATE MISSTATEMENT AND COMPARE WITH PRELIMINARY JUDGMENT

OBJECTIVE 9-4

Use materiality to evaluate audit findings.

The first two steps in applying materiality involve planning (see Figure 9-1 on page 269) and are our primary concern in this chapter. The last three steps result from performing audit tests. These steps are introduced here and discussed in more detail in subsequent chapters.

When auditors perform audit procedures for each segment of the audit, they document all misstatements found. Misstatements in an account can be of two types: known misstatements and likely misstatements. **Known misstatements** are those where the auditor can determine the amount of the misstatement in the account. For example, when auditing property, plant, and equipment, the auditor may identify capitalized leased equipment that should be expensed because it is an operating lease. There are two types of **likely misstatements.** The first are misstatements that arise from differences between management's and the auditor's judgment about estimates of account balances. Examples are differences in the estimate for the allowance for uncollectible accounts or for warranty liabilities. The second are projections of misstatements based on the auditor's tests of a sample from a population. For example, assume the auditor finds six client misstatements in a sample of 200 in testing inventory costs. The auditor uses these misstatements to estimate the *total* likely misstatements in inventory (step 3). The total is called an estimate or a "projection" or "extrapolation" because only a sample, rather than the entire population, was audited. The projected misstatement amounts for each account are combined on the worksheet (step 4), and then the combined likely misstatement is compared with materiality (step 5).

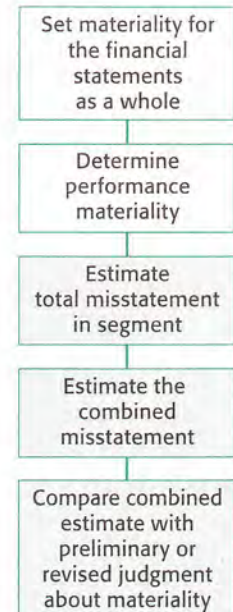


Table 9-1 (p. 276) illustrates the last three steps in applying materiality. For simplicity, only three accounts are included. The misstatement in cash of $2,000 is a known misstatement related to unrecorded bank service charges detected by the auditor. Unlike for cash, the misstatements for accounts receivable and inventory are based on samples. The auditor calculates likely misstatements for accounts receivable and inventory using known misstatements detected in those samples. To illustrate the calculation, assume that in auditing inventory the auditor found $3,500 of net overstatement amounts in a sample of $50,000 of the total population of $450,000. The $3,500 identified misstatement is a known misstatement. To calculate the estimate of the likely misstatements for the total population of $450,000, the auditor makes a direct projection of the known misstatement from the sample to the population and adds an estimate for sampling error. The calculation of the direct projection estimate of misstatement is:

$$\frac{\text{Net misstatements in the sample (\$3,500)}}{\text{Total sampled (\$50,000)}} \times \begin{matrix}\text{Total recorded}\\ \text{population value}\\ \text{(\$450,000)}\end{matrix} = \begin{matrix}\text{Direct projection}\\ \text{estimate of}\\ \text{misstatement}\\ \text{(\$31,500)}\end{matrix}$$

(Note that the direct projection of likely misstatement for accounts receivable of $12,000 is not illustrated.)

The estimate for **sampling error** results because the auditor has sampled only a portion of the population and there is a risk that the sample does not accurately

TABLE 9-1 Illustration of Comparison of Estimated Total Misstatement to Preliminary Judgment about Materiality

Account	Performance Materiality	Known Misstatement and Direct Projection	Sampling Error	Total
Cash	$ 4,000	$ 2,000	$ NA	$ 2,000
Accounts receivable	20,000	12,000	6,000	18,000
Inventory	36,000	31,500	15,750	47,250
Total estimated misstatement amount		$45,500	$16,800	$62,300
Preliminary judgment about materiality	$50,000			

NA = Not applicable.
Cash audited 100 percent.

represent the population. (We'll discuss this in more detail in chapters 15 and 17). In this simplified example, we'll assume the estimate for sampling error is 50 percent of the direct projection of the misstatement amounts for the accounts where sampling was used (accounts receivable and inventory). There is no sampling error for cash because the total amount of misstatement is known, not estimated.

In combining the misstatements in Table 9-1, we can observe that the known misstatements and direct projection of likely misstatements for the three accounts adds to $45,500. However, the total sampling error is less than the sum of the individual sampling errors. This is because sampling error represents the maximum misstatement in account details not audited. It is unlikely that this maximum misstatement amount exists in all accounts subjected to sampling.

Table 9-1 shows that total estimated likely misstatement of $62,300 exceeds the preliminary judgment about materiality of $50,000. The major area of difficulty is inventory, where estimated misstatement of $47,250 is significantly greater than performance materiality of $36,000. Because the estimated combined misstatement exceeds the preliminary judgment, the financial statements are not acceptable. The auditor can either determine whether the estimated likely misstatement actually exceeds $50,000 by performing additional audit procedures or require the client to make an adjustment for estimated misstatements. If the auditor decides to perform additional audit procedures, they will be concentrated in the inventory area.

If the estimated net overstatement amount for inventory had been $28,000 ($18,000 plus $10,000 sampling error), the auditor probably would not have needed to expand audit tests because it would have met both the tests of performance materiality ($36,000) and the preliminary judgment about materiality ($2,000 + $18,000 + $28,000 = $48,000 < $50,000). In fact, the auditor would have had some leeway with that amount because the results of cash and accounts receivable procedures indicate that those accounts are within their performance materiality limits. If the auditor approaches the audit of the accounts in a sequential manner, the findings of the audit of accounts audited earlier can be used to revise the performance materiality established for accounts audited later. In the illustration, if the auditor had audited cash and accounts receivable before inventories, performance materiality for inventories could have been increased.

AUDIT RISK

OBJECTIVE 9-5

Define risk in auditing.

Auditing standards require the auditor to obtain an understanding of the entity and its environment, including its internal control, to assess the risk of material misstatements in the client's financial statements. Chapter 8 described how the auditor

gains an understanding of the client's business and industry to assess client business risk and the risk of material misstatements.

As we saw in Chapter 8, auditors accept some level of **risk** or uncertainty in performing the audit function. The auditor recognizes, for example, the inherent uncertainty about the appropriateness of evidence, uncertainty about the effectiveness of a client's internal controls, and uncertainty about whether the financial statements are fairly stated when the audit is completed. An effective auditor recognizes that risks exist and deals with those risks in an appropriate manner. Most risks auditors encounter are difficult to measure and require careful consideration before the auditor can respond appropriately. Responding to these risks properly is critical to achieving a high-quality audit.

Audit Risk Model for Planning

Auditing standards require the auditor to assess the risk of material misstatements at the overall financial statement level as well as the relevant assertion level for classes of transactions, account balances, and disclosures. Recall from Chapter 6 that the auditor develops audit objectives for each assertion. Thus, our references to audit objectives encompass the assertions for classes of transactions, balances, and presentation and disclosure. Auditors consider these risks in planning procedures to obtain audit evidence primarily by applying the **audit risk model**. The model is introduced here and discussed in greater detail later in the chapter. You will need a thorough understanding of the model to conduct effective audit planning and to master the content presented in the remaining chapters of this book.

The audit risk model helps auditors decide how much and what types of evidence to accumulate for each relevant audit objective. It is usually stated as follows:

$$PDR = \frac{AAR}{IR \times CR}$$

where:

PDR = planned detection risk

AAR = acceptable audit risk

IR = inherent risk

CR = control risk

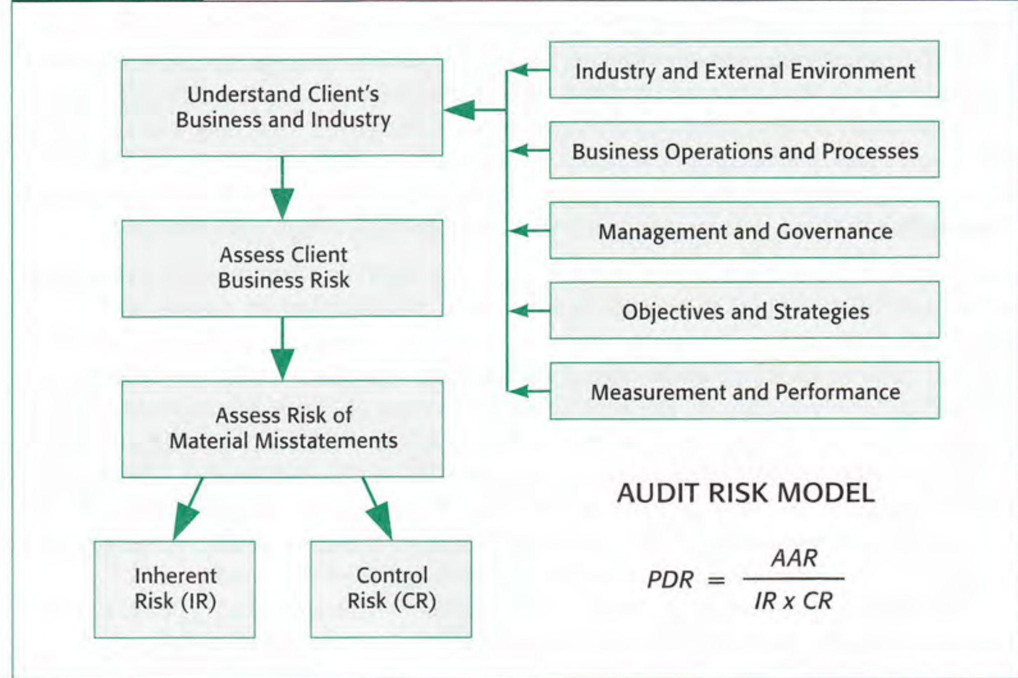
Figure 9-4 (p. 278) shows the relationship between the audit risk model and the understanding of the client's business and industry discussed in Chapter 8. Auditors use the audit risk model to further identify the potential for misstatements in the overall financial statements and at the audit objective level for specific account balances, classes of transactions, and disclosures where misstatements are most likely to occur.

Illustration Concerning Risks and Evidence

Before we discuss the audit risk model components, review the illustration for a hypothetical company in Table 9-2 (p. 279). The auditor assesses risks at the overall financial statement level and at the audit objective level. Table 9-2 illustrates how the auditor might begin by considering risks at the transaction (cycle) level. The auditor will also consider differences in risk levels across various audit objectives within an individual class of transactions. For example, risks related to the existence of sales may be greater than risks related to accuracy of sales. Let's walk through the illustration point by point:

- The first row in the table shows the differences among cycles in the frequency and size of expected misstatements (A). Almost no misstatements are expected in payroll and personnel, but many are expected in inventory and warehousing. It is possible that the payroll transactions are routine, while considerable complexities exist in recording and valuing inventory.
- Similarly, internal control is believed to differ in effectiveness among the five cycles (B). For example, internal controls in payroll and personnel are considered highly effective, whereas those in inventory and warehousing are considered ineffective.
- Finally, the auditor has decided on a low willingness that material misstatements exist after the audit is complete for all five cycles (C). It is common for auditors

FIGURE 9-4 Audit Risk Model and Understanding the Client's Business and Industry



to want an equally low likelihood of misstatements for each cycle after the audit is finished to permit the issuance of an unqualified opinion.

- These considerations (A, B, C) affect the auditor's decision about the appropriate nature, timing, and extent of evidence to accumulate (D). For example, because the auditor expects few misstatements in payroll and personnel (A) and internal controls are effective (B), the auditor plans for less evidence (D) than for inventory and warehousing.

Following is a numerical example for discussion. The numbers used are for the inventory and warehousing cycle in Table 9-2.

$$IR = 100\%$$
$$CR = 100\%$$
$$AAR = 5\%$$
$$PDR = \frac{.05}{1.0 \times 1.0} = .05 \text{ or } 5\%$$

Note that the assessments in Table 9-2 are not in numerical form. Although risk model assessments may be quantitative or nonquantitative, most firms prefer nonquantitative assessments of risk (such as low, moderate, and high) due to the difficulty in precisely quantifying measures of risk.

AUDIT RISK MODEL COMPONENTS

OBJECTIVE 9-6

Describe the audit risk model and its components.

Each of the four risks in the audit risk model is sufficiently important to merit detailed discussion. This section briefly discusses all four to provide an overview of the risks. Acceptable audit risk and inherent risk are discussed in greater detail later in this chapter. Control risk is examined in Chapter 10.

TABLE 9-2	Illustration of Differing Evidence Among Cycles					
		Sales and Collection Cycle	**Acquisition and Payment Cycle**	**Payroll and Personnel Cycle**	**Inventory and Warehousing Cycle**	**Capital Acquisition and Repayment Cycle**
A	Auditor's assessment of expectation of material misstatement before considering internal control (inherent risk)	Expect some misstatements (medium)	Expect many misstatements (high)	Expect few misstatements (low)	Expect many misstatements (high)	Expect few misstatements (low)
B	Auditor's assessment of effectiveness of internal controls to prevent or detect material misstatements (control risk)	Medium effectiveness (medium)	High effectiveness (low)	High effectiveness (low)	Low effectiveness (high)	Medium effectiveness (medium)
C	Auditor's willingness to permit material misstatements to exist after completing the audit (acceptable audit risk)	Low willingness (low)	Low willingness (low)	Low willingness (low)	Low willingness (low)	Low willingness (low)
D	Extent of evidence the auditor plans to accumulate (planned detection risk)	Medium level (medium)	Medium level (medium)	Low level (high)	High level (low)	Medium level (medium)

Planned Detection Risk

Planned detection risk is the risk that audit evidence for an audit objective will fail to detect misstatements exceeding performance materiality. There are two key points to know about planned detection risk.

Planned detection risk is dependent on the other three factors in the model. It will change only if the auditor changes one of the other risk model factors.

Planned detection risk determines the amount of substantive evidence that the auditor plans to accumulate, inversely with the size of planned detection risk. If planned detection risk is reduced, the auditor needs to accumulate more evidence to achieve the reduced planned risk. For example, in Table 9-2, planned detection risk (D) is low for inventory and warehousing, which causes planned evidence to be high. The opposite is true for payroll and personnel.

In the preceding numerical example, the planned detection risk (PDR) of .05 means the auditor plans to accumulate evidence until the risk of misstatements exceeding performance materiality is reduced to 5 percent. If control risk (CR) were .50 instead of 1.0, planned detection risk (PDR) would be .10, and planned evidence could therefore be reduced.

Inherent Risk

Inherent risk measures the auditor's assessment of the susceptibility of an assertion to material misstatement, before considering the effectiveness of related internal controls. If the auditor concludes that a high likelihood of misstatement exists, the auditor will conclude that inherent risk is high. Internal controls are ignored in setting inherent risk because they are considered separately in the audit risk model as control risk. In Table 9-2, inherent risk (A) was assessed high for acquisitions and payments and inventory and warehousing and lower for payroll and personnel and capital acquisition and repayment. Such assessments are typically based on discussions with management, knowledge of the company, and results in audits of previous years.

Inherent risk is inversely related to planned detection risk and directly related to evidence. Inherent risk for inventory and warehousing in Table 9-2 is high, which results in a lower planned detection risk and more planned evidence than if inherent risk were lower. We'll examine this in greater detail later in the chapter.

In addition to increasing audit evidence for a higher inherent risk in a given audit area, auditors commonly assign more experienced staff to that area and review the completed audit tests more thoroughly. For example, if inherent risk for inventory obsolescence is extremely high, it makes sense for the CPA firm to assign an experienced staff person to perform more extensive tests for inventory obsolescence and to more carefully review the audit results.

Control Risk

Control risk measures the auditor's assessment of the risk that a material misstatement could occur in an assertion and not be prevented or detected on a timely basis by the client's internal controls. Assume that the auditor concludes that internal controls are completely ineffective to prevent or detect misstatements. That is the likely conclusion for inventory and warehousing (B) in Table 9-2 (p. 279). The auditor will therefore assign a high, perhaps 100 percent, risk factor to control risk. The more effective the internal controls, the lower the risk factor that can be assigned to control risk.

The audit risk model shows the close relationship between inherent and control risks. For example, an inherent risk of 40 percent and a control risk of 60 percent affect planned detection risk and planned evidence the same as an inherent risk of 60 percent and a control risk of 40 percent. In both cases, multiplying *IR* by *CR* results in a denominator in the audit risk model of 24 percent. The combination of inherent risk and control risk is referred to in auditing standards as the **risk of material misstatements**. The auditor may make a combined assessment of the risk of material misstatements or the auditor can separately assess inherent risk and control risk. (Remember, inherent risk is the expectation of misstatements *before* considering the effect of internal control.)

As with inherent risk, the relationship between control risk and planned detection risk is inverse, whereas the relationship between control risk and substantive evidence is direct. If the auditor concludes that internal controls are effective, planned detection risk can be increased and evidence therefore decreased. The auditor can increase planned detection risk when controls are effective because effective internal controls reduce the likelihood of misstatements in the financial statements.

Before auditors can set control risk less than 100 percent, they must obtain an understanding of internal control, evaluate how well it should function based on the understanding, and test the internal controls for effectiveness. Obtaining an understanding of internal control is required for all audits. The latter two are assessment of control risk steps that are required only when the auditor assesses control risk below maximum.

Auditors of larger public companies choose to rely extensively on controls because they must test the effectiveness of internal control over financial reporting to satisfy Sarbanes–Oxley Act requirements. Auditors of other companies and other types of entities are also likely to rely on controls that are effective, especially when day-to-day transaction processing involves highly automated procedures. When controls are likely to be ineffective and inherent risk is high, the use of the audit risk model causes the auditor to decrease planned detection risk and thereby increase planned evidence. We devote the entire next chapter to understanding internal control, assessing control risk, and evaluating their impact on evidence requirements.

Acceptable Audit Risk

Acceptable audit risk is a measure of how willing the auditor is to accept that the financial statements may be materially misstated after the audit is completed and an unqualified opinion has been issued. When auditors decide on a lower acceptable audit risk, they want to be more certain that the financial statements are *not* materially misstated. Zero risk is certainty, and a 100 percent risk is complete uncertainty. Complete assurance (zero risk) of the accuracy of the financial statements is not economically practical. Moreover, as we discussed in Chapter 6, the auditor cannot guarantee the complete absence of material misstatements.

Often, auditors refer to the term **audit assurance** (also called *overall assurance* or *level of assurance*) instead of acceptable audit risk. Audit assurance or any of the equivalent terms is the complement of acceptable audit risk, that is, one minus

acceptable audit risk. In other words, acceptable audit risk of 2 percent is the same as audit assurance of 98 percent.

The concept of acceptable audit risk can be more easily understood by thinking in terms of a large number of audits, say, 10,000. What portion of these audits can include material misstatements without having an adverse effect on society? Certainly, the portion is below 10 percent. It is probably much closer to 1 percent or less. If an auditor believes that the appropriate percentage is 1 percent, then acceptable audit risk should be set at 1 percent, or perhaps lower, based on the specific circumstances.

When employing the audit risk model, there is a direct relationship between acceptable audit risk and planned detection risk, and an inverse relationship between acceptable audit risk and planned evidence. If the auditor decides to reduce acceptable audit risk, planned detection risk is thereby reduced, and planned evidence must be increased. For a client with lower acceptable audit risk, auditors also often assign more experienced staff or review the audit files more extensively.

Distinction Among Risks in the Audit Risk Model

There are important distinctions in how the auditor assesses the four risk factors in the audit risk model. For acceptable audit risk, the auditor decides the risk the CPA firm is willing to take that the financial statements are misstated after the audit is completed, based on certain client related factors. An example of a client where the auditor will accept very little risk (low acceptable audit risk) is for an initial public offering. We will discuss factors affecting acceptable audit risk shortly. Inherent risk and control risk are based on auditors' expectations or predictions of client conditions. An example of a high inherent risk is inventory that has not been sold for two years. An example of a low control risk is adequate separation of duties between asset custody and accounting. The auditor cannot change these client conditions, but can only make a likelihood assessment. Inherent risk factors are discussed later in the chapter and control risk is covered in Chapter 10. Detection risk is dependent completely on the other three risks. It can be determined only after the auditor assesses the other three risks.

ASSESSING ACCEPTABLE AUDIT RISK

Auditors must decide the appropriate acceptable audit risk for an audit, preferably during audit planning. First, auditors decide engagement risk and then use engagement risk to modify acceptable audit risk.

Impact of Engagement Risk on Acceptable Audit Risk

OBJECTIVE 9-7

Consider the impact of engagement risk on acceptable audit risk.

Engagement risk is the risk that the auditor or audit firm will suffer harm after the audit is finished, even though the audit report was correct. Engagement risk is closely related to client business risk, which was discussed in Chapter 8. For example, if a client declares bankruptcy after an audit is completed, the likelihood of a lawsuit against the CPA firm is reasonably high, even if the quality of the audit was high.

It is worth noting that auditors disagree about whether engagement risk should be considered in planning the audit. Opponents of modifying evidence for engagement risk contend that auditors do not provide audit opinions for different levels of assurance and therefore should not provide more or less assurance because of engagement risk. Proponents contend that it is appropriate for auditors to accumulate additional evidence, assign more experienced personnel, and review the audit more thoroughly on audits where legal exposure is high or other potential adverse actions affecting the auditor exist, as long as the assurance level is not decreased below a reasonably high level when low engagement risk exists.

Factors Affecting Acceptable Audit Risk

When auditors modify evidence for engagement risk, it is done by control of acceptable audit risk. We believe that a reasonably low acceptable audit risk is always desirable, but in some circumstances an even lower risk is needed because of engagement risk factors. Research points to several factors affecting engagement risk and, therefore, acceptable audit risk. Only three of those are discussed here: the degree to which

external users rely on the statements, the likelihood that a client will have financial difficulties after the audit report is issued, and the integrity of management.

The Degree to Which External Users Rely on the Statements When external users place heavy reliance on the financial statements, it is appropriate to decrease acceptable audit risk. When the statements are heavily relied on, a great social harm can result if a significant misstatement remains undetected in the financial statements. Auditors can more easily justify the cost of additional evidence when the loss to users from material misstatements is substantial. Several factors are good indicators of the degree to which statements are relied on by external users:

- *Client's size.* Generally speaking, the larger a client's operations, the more widely the statements are used. The client's size, measured by total assets or total revenues, will have an effect on acceptable audit risk.
- *Distribution of ownership.* The statements of publicly held corporations are normally relied on by many more users than those of closely held corporations. For these companies, the interested parties include the SEC, financial analysts, and the general public.
- *Nature and amount of liabilities.* When statements include a large amount of liabilities, they are more likely to be used extensively by actual and potential creditors than when there are few liabilities.

The Likelihood That a Client Will Have Financial Difficulties After the Audit Report Is Issued If a client is forced to file for bankruptcy or suffers a significant loss after completion of the audit, auditors face a greater chance of being required to defend the quality of the audit than if the client were under no financial strain. The natural tendency for those who lose money in a bankruptcy, or because of a stock price reversal, is to file suit against the auditor. This can result both from the honest belief that the auditor failed to conduct an adequate audit and from the users' desire to recover part of their loss regardless of the adequacy of the audit work.

In situations in which the auditor believes the chance of financial failure or loss is high and a corresponding increase in engagement risk occurs, acceptable audit risk should be reduced. If a subsequent challenge occurs, the auditor will be in a better position to defend the audit results successfully. Total audit evidence and costs will increase, but this is justifiable because of the additional risk of lawsuits that the auditor faces.

It is difficult for an auditor to predict financial failure before it occurs, but certain factors are good indicators of its increased probability:

- *Liquidity position.* If a client is constantly short of cash and working capital, it indicates a future problem in paying bills. The auditor must assess the likelihood and significance of a steadily declining liquidity position.
- *Profits (losses) in previous years.* When a company has rapidly declining profits or increasing losses for several years, the auditor should recognize the future solvency problems that the client is likely to encounter. It is also important to consider the changing profits relative to the balance remaining in retained earnings.
- *Method of financing growth.* The more a client relies on debt as a means of financing, the greater the risk of financial difficulty if the client's operating success declines. Auditors should evaluate whether fixed assets are being financed with short- or long-term loans, as large amounts of required cash outflows during a short time can force a company into bankruptcy.
- *Nature of the client's operations.* Certain types of businesses are inherently riskier than others. For example, other things being equal, a start-up technology company dependent on one product is much more likely to go bankrupt than a diversified food manufacturer.

GROUPON: A LIGHTNING-ROD CLIENT

Groupon, Inc., started in 2008, is an Internet-based local marketplace that connects merchants to consumers by offering goods and services at a discount. The company has grown rapidly since its formation in October 2008. However, when the company was going public in 2011, it would have been classified as an audit client with high inherent risk: an internet-based business model, an upcoming initial public offering (IPO), top management turnover, low working capital, and aggressive accounting practices, just to mention a few of the indicators.

Groupon offers deep-discount deals online for local and national retailers. When a customer purchases a deal, Groupon keeps a portion of the proceeds and forwards the remainder on to the retailer. Prior to going public, Groupon recorded revenue for the entire amount of proceeds received despite owing a portion to the retailer, an aggressive practice that was deemed acceptable by their auditors, but ultimately found not acceptable by the SEC. The SEC forced Groupon to amend its registration statement prior to their IPO and reduce sales revenue by approximately 50 percent. In fact, Groupon had to amend its registration statement eight times before it eventually went public in November 2011. The SEC also disagreed with the Company's inclusion of a non-GAAP income measure in their registration statement. Groupon touted "adjusted consolidated segment operating income," which was essentially income before selling, general and administrative expenses, which the SEC understandably argued was misleading to potential investors.

Their financial reporting troubles did not end with the IPO. The company had to revise its fourth quarter 2011 earnings release prior to issuing audited results for the year because they failed to sufficiently reserve for customer refunds on higher-priced items. Company management also reported a material weakness in internal control in their 2011 financial statements. All of this led to an investor lawsuit against Groupon, and a drop in stock price, in April 2012. The news headline that followed was appropriate: "GRPN is Now Half Price Without a Groupon."

Sources: 1. Francine McKenna, "Groupon: Ernst & Young's Accounting Challenged Client," *Forbes* (April 23, 2012); 2. Joan Lappin, "GRPN is Now Half Price Without a Groupon," *Forbes.com* (April 23, 2012)

- *Competence of management.* Competent management is constantly alert for potential financial difficulties and modifies its operating methods to minimize the effects of short-run problems. Auditors must assess the ability of management as a part of the evaluation of the likelihood of bankruptcy.

The Auditor's Evaluation of Management's Integrity As we discussed in Chapter 8 as a part of new client investigation and continuing client evaluation, if a client has questionable integrity, the auditor is likely to assess a lower acceptable audit risk. Companies with low integrity often conduct their business affairs in a manner that results in conflicts with their stockholders, regulators, and customers. In turn, these conflicts often reflect on the users' perceived quality of the audit and can result in lawsuits and other disagreements. A prior criminal conviction of key management personnel is an obvious example of questionable management integrity. Other examples of questionable integrity might include frequent disagreements with previous auditors, the Internal Revenue Service, and the SEC. Frequent turnover of key financial and internal audit personnel and ongoing conflicts with labor unions and employees may also indicate integrity problems.

Making the Acceptable Audit Risk Decision

To assess acceptable audit risk, the auditor must first assess each of the factors affecting acceptable audit risk. Table 9-3 (p. 284) illustrates the methods used by auditors to assess each of the three factors already discussed. After examining Table 9-3, it is easy to observe that the assessment of each of the factors is highly subjective, meaning overall assessment of acceptable audit risk is also highly subjective. A typical evaluation of acceptable audit risk is high, medium, or low, where a low acceptable audit risk assessment means a "risky" client requiring more extensive evidence, assignment of more experienced personnel, and/or a more extensive review of audit documentation. As the engagement progresses, auditors obtain additional information about the client, and acceptable audit risk may be modified.

TABLE 9-3 Methods Practitioners Use to Assess Acceptable Audit Risk

Factors	Methods Used to Assess Acceptable Audit Risk
External users' reliance on financial statements	• Examine the financial statements, including footnotes, such as the Form 10K for a publicly held company. • Read minutes of board of directors meetings to determine future plans. • Read financial analysts' reports for a publicly held company. • Discuss financing plans with management.
Likelihood of financial difficulties	• Analyze the financial statements for financial difficulties using ratios and other analytical procedures. • Examine historical and projected cash flow statements for the nature of cash inflows and outflows.
Management integrity	Follow the procedures discussed in Chapter 8 for client acceptance and continuance.

ASSESSING INHERENT RISK

OBJECTIVE 9-8

Consider the impact of several factors on the assessment of inherent risk.

The inclusion of inherent risk in the audit risk model is one of the most important concepts in auditing. It implies that auditors should attempt to predict where misstatements are most and least likely in the financial statement segments. This information affects the amount of evidence that the auditor needs to accumulate, the assignment of staff and the review of audit documentation.

Factors Affecting Inherent Risk

The auditor must assess the factors that make up the risk and modify audit evidence to take them into consideration. The auditor should consider several major factors when assessing inherent risk:

- Nature of the client's business
- Results of previous audits
- Initial versus repeat engagement
- Related parties
- Complex or nonroutine transactions
- Judgment required to correctly record account balances and transactions
- Makeup of the population
- Factors related to fraudulent financial reporting
- Factors related to misappropriation of assets

Nature of the Client's Business Inherent risk for certain audit objectives is affected by the nature of the client's business. For example, an electronics manufacturer faces a greater likelihood of obsolete inventory than a steel fabricator does. Inherent risk is most likely to vary from business to business for accounts such as inventory, accounts and loans receivable, investments, and property, plant, and equipment. The nature of the client's business should have little or no effect on inherent risk for accounts such as cash, notes, and mortgages payable. Information gained while obtaining knowledge about the client's business and industry and assessing client business risk, as discussed in Chapter 8, is useful for assessing this factor.

Results of Previous Audits Misstatements found in the previous year's audit have a high likelihood of occurring again in the current year's audit, because many types of misstatements are systemic in nature, and organizations are often slow in making changes to eliminate them. Therefore, an auditor is negligent if the results of the preceding year's audit are ignored during the development of the current year's

audit program. For example, if the auditor found significant inventory valuation misstatements in last year's audit, the auditor will likely assess inherent risk as high in the current year's audit, and extensive testing will have to be done as a means of determining whether the deficiency in the client's system has been corrected. If, however, the auditor found no misstatements for the past several years in conducting tests of an audit area, the auditor is justified in reducing inherent risk, provided that changes in relevant circumstances have not occurred.

Initial Versus Repeat Engagement Auditors gain experience and knowledge about the likelihood of misstatements after auditing a client for several years. The lack of previous years' audit results causes most auditors to assess a higher inherent risk for initial audits than for repeat engagements in which no material misstatements were previously found. Most auditors set a high inherent risk in the first year of an audit and reduce it in subsequent years as they gain more knowledge about the client.

Related Parties Transactions between parent and subsidiary companies, and those between management and the corporate entity, are examples of related-party transactions as defined by accounting standards. Because these transactions do not occur between two independent parties dealing at "arm's length," a greater likelihood exists that they might be misstated or inadequately disclosed, causing an increase in inherent risk. We discussed related parties transactions in Chapter 8.

Complex or Nonroutine Transactions Transactions that are unusual for a client, or involve lengthy or complex contracts, are more likely to be incorrectly recorded than routine transactions because the client often lacks experience recording them. Examples include fire losses, major property acquisitions, purchase of complex investments, and restructuring charges resulting from discontinued operations. By knowing the client's business and reviewing minutes of meetings, the auditor can assess the consequences of complex or nonroutine transactions.

Judgment Required to Correctly Record Account Balances and Transactions Many account balances such as certain investments recorded at fair value, allowances for uncollectible accounts receivable, obsolete inventory, asset impairments, liability for warranty payments, major repairs versus partial replacement of assets, and bank loan loss reserves require estimates and a great deal of management judgment related to valuation. Because they require considerable judgment, the likelihood of misstatements increases, and as a result the auditor should increase inherent risk.

Makeup of the Population Often, individual items making up the total population also affect the auditor's expectation of material misstatement. Most auditors use a higher inherent risk for valuation of accounts receivable where most accounts are significantly overdue than where most accounts are current. Examples of items requiring a higher inherent risk include transactions with affiliated companies (see vignette below), amounts due from officers, cash disbursements made payable to cash, and accounts receivable outstanding for several months. These situations require greater investigation because of a greater likelihood of misstatement than occurs with more typical transactions.

Factors Related to Fraudulent Financial Reporting and Misappropriation of Assets In Chapter 6, we discussed the auditor's responsibilities to assess the risk of fraudulent financial reporting and misappropriation of assets. It is difficult in concept and practice to separate fraud risk factors into acceptable audit risk, inherent risk, or control risk. For example, management that lacks integrity and is motivated to misstate financial statements is one of the factors in acceptable audit risk, but it may also affect control risk. Similarly, several of the other risk factors influencing management characteristics are a part of the control environment, as we'll discuss in Chapter 10. These include the attitude, actions, and policies that reflect the overall attitudes of top management about integrity, ethical values, and commitment to competence.

GLOBAL ADVERTISING FIRM CHARGED IN ACCOUNTING FRAUD INVOLVING INTERCOMPANY RECEIVABLES

The Securities and Exchange Commission filed enforcement actions in 2008 against global advertising network McCann-Erickson Worldwide and two former executives for their roles in an accounting fraud involving intercompany transactions. The SEC complaint alleges that McCann, which owns hundreds of regional and local advertising agencies throughout the world, fraudulently misstated its financial results by improperly failing to expense intercompany charges that were instead recorded as receivables. Its holding company, Interpublic Group of Companies, Inc., (IPG) negligently failed to address the accounting problems at McCann, its largest subsidiary, resulting in material misstatements in its own financial reporting.

McCann's management failed to reconcile intercompany accounts for at least six years covering the period 1997–2002. At times, McCann's management intentionally delayed reconciling intercompany accounts because they knew it would result in write-offs that would interfere with the company's efforts to hit profit targets. In fact, every year from 1997 to 2002 the firm's auditor listed pressure to produce results in line with budgets as part of its risk assessment, and described the failure to reconcile the intercompany accounts as a fundamental breakdown in internal controls. IPG and McCann agreed to settle the SEC's charges, and McCann agreed to pay a $12 million penalty.

Source: United States District Court Southern District of New York, *Securities and Exchange Commission v. Interpublic Group of Companies, Inc. and McCann-Erickson Worldwide, Inc.*, April 30, 2008.

To satisfy the requirements of auditing standards, it is more important for the auditor to assess the risks and to respond to them than it is to categorize them into a risk type. For this reason, many audit firms perform additional procedures to assess fraud risk beyond assessing the risk of material misstatements in relevant audit objectives.

The risk of fraud should be assessed for the entire audit as well as by cycle, account, and objective. For example, a strong incentive for management to meet unduly aggressive earnings expectations may affect the entire audit, while the susceptibility of inventory to theft may affect only the inventory account. For both the risk of fraudulent financial reporting and the risk of misappropriation of assets, auditors focus on specific areas of increased fraud risk and designing audit procedures or changing the overall conduct of the audit to respond to those risks. The specific response to an identified risk of fraud can include revising assessments of acceptable audit risk, inherent risk, and control risk. Assessing fraud risk will be the focus of Chapter 11.

Making the Inherent Risk Decision

The auditor must evaluate the information affecting inherent risk to assess the risk of material misstatements at the audit objective level for cycles, balances, and disclosures. Some factors, such as an initial versus repeat engagement, will affect many or perhaps all cycles, whereas others, such as nonroutine transactions, will affect only specific accounts or audit objectives. Although the profession has not established standards or guidelines for setting inherent risk, we believe that auditors are generally conservative in making such assessments. Assume that in the audit of inventory the auditor notes that (1) a large number of misstatements were found in the previous year and (2) inventory turnover has slowed in the current year. Auditors will likely set inherent risk at a relatively high level (some will use 100 percent) for each audit objective for inventory in this situation.

Obtain Information to Assess Inherent Risk

Auditors begin their assessments of inherent risk during the planning phase and update the assessments throughout the audit. Chapter 8 discussed how auditors gather information relevant to inherent risk assessment during the planning phase. For example, to obtain knowledge of the client's business and industry, auditors may tour the client's plant and offices and identify related parties. This and other information about the entity and its environment discussed in Chapter 8 pertain directly to assessing inherent risk. Also, several of the items discussed earlier under factors affecting inherent risk, such as the results of previous audits and nonroutine transactions, are evaluated separately to help assess inherent risk. As audit tests are performed during an audit, the auditor may obtain additional information that affects the original assessment.

RELATIONSHIP OF RISKS TO EVIDENCE AND FACTORS INFLUENCING RISKS

OBJECTIVE 9-9

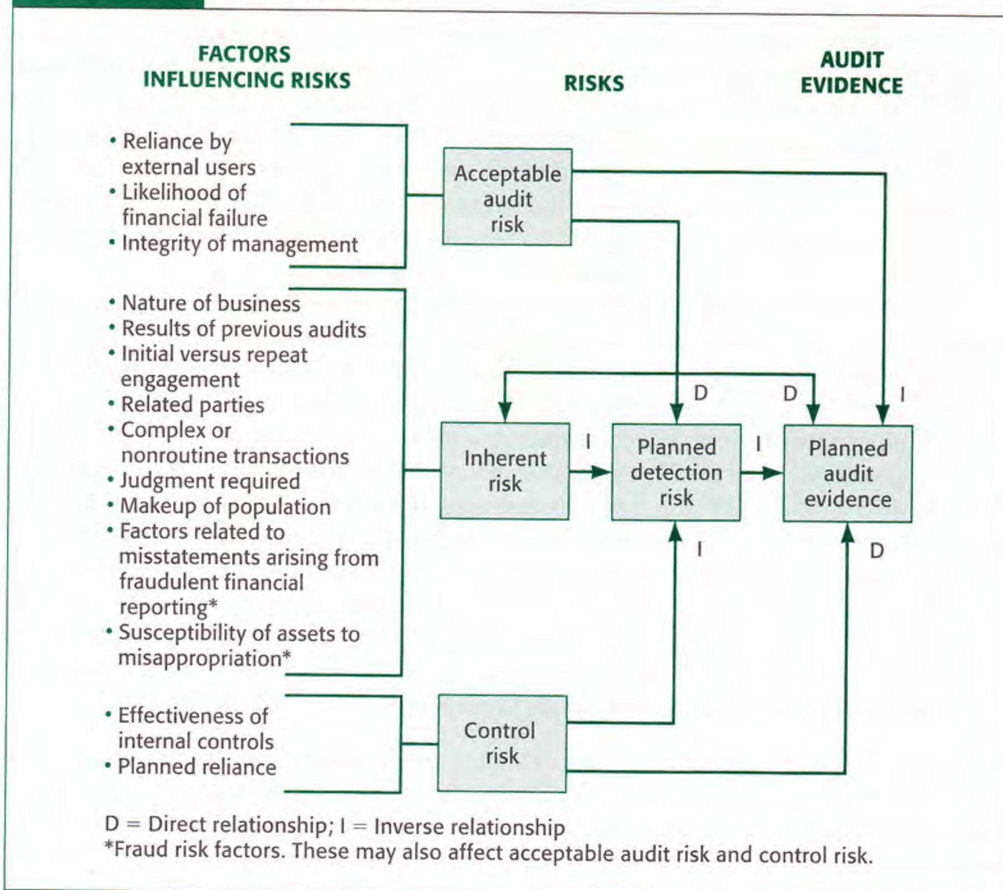
Discuss the relationship of risks to audit evidence.

Figure 9-5 summarizes factors that determine each of the risks, the effect of the three component risks on the determination of planned detection risk, and the relationship of all four risks to planned audit evidence. "D" in the figure indicates a direct relationship between a component risk and planned detection risk or planned evidence. "I" indicates an inverse relationship. For example, an increase in acceptable audit risk results in an increase in planned detection risk (D) and a decrease in planned audit evidence (I). Compare Figure 9-5 to Table 9-2 (p. 279) and observe that these two illustrations include the same concepts.

Auditors respond to risk primarily by changing the extent of testing and types of audit procedures, including incorporating unpredictability in the audit procedures used. In addition to modifying audit evidence, there are two other ways that auditors can change the audit to respond to risks:

1. *The engagement may require more experienced staff.* CPA firms should staff all engagements with qualified staff. For low acceptable audit risk clients, special care is appropriate in staffing, and the importance of professional skepticism should be emphasized. Similarly, if an audit area such as inventory has a high inherent risk, it is important to assign that area to someone with experience in auditing inventory.

FIGURE 9-5 Relationship of Factors Influencing Risks to Risks and Risks to Planned Evidence



D = Direct relationship; I = Inverse relationship
*Fraud risk factors. These may also affect acceptable audit risk and control risk.

2. *The engagement will be reviewed more carefully than usual.* CPA firms need to ensure adequate review of the audit files that document the auditor's planning, evidence accumulation and conclusions, and other matters in the audit. When acceptable audit risk is low, more extensive review is often warranted, including a review by personnel who were not assigned to the engagement. If the risk of material misstatements (the combination of inherent risk and control risk) is high for certain audit objectives for an account, the reviewer will likely spend more time making sure the evidence was appropriate and correctly evaluated.

Audit Risk for Segments

The risk of material misstatements, control risk, and inherent risk are assessed for each audit objective in each segment of the audit. The assessments are likely to vary on the same audit from cycle to cycle, account to account, and objective to objective. For example, internal controls may be more effective for the existence of cash than for those related to fixed asset accuracy or net realizable value audit objectives. Control risk will therefore be lower for the existence of cash than for fixed asset valuation. Factors affecting inherent risk, such as susceptibility to misappropriation of assets and routineness of the transactions, are also likely to differ from account to account or among audit objectives for a single account. For that reason, it is normal to have inherent risk vary for different accounts in the same audit.

Acceptable audit risk is ordinarily assessed by the auditor during planning and held constant for each major cycle and account. Auditors normally use the same acceptable audit risk for each segment because the factors affecting acceptable audit risk are related to the entire audit, not individual accounts. For example, the extent to which external users' decisions rely upon financial statements is usually related to the overall financial statements, not just one or two accounts.

In some cases, however, a *lower* acceptable audit risk may be more appropriate for one account than for others. If an auditor decided to use a medium acceptable audit risk for the audit as a whole, the auditor might decide to reduce acceptable audit risk to low for inventory if inventory is used as collateral for a short-term loan.

Some auditors use the same acceptable audit risk for all segments based on their belief that at the end of the audit, financial statement users should have the same level of assurance for every segment of the financial statements. Other auditors use a different level of assurance for different segments based on their belief that financial statement users may be more concerned about certain account balances relative to other accounts in a given audit. For illustrations in this and subsequent chapters, we use the same acceptable audit risk for all segments in the audit. Note, however, that changing the risk for different segments is also acceptable.

Like control risk and inherent risk, planned detection risk and required audit evidence will vary from cycle to cycle, account to account, or audit objective to audit objective. This conclusion should not be surprising. As the circumstances of each engagement differ, the extent and nature of evidence needed will depend on the unique circumstances. For example, inventory might require extensive testing on an engagement because of deficient internal controls and the auditor's concerns about obsolescence resulting from technological changes in the industry. On the same engagement, accounts receivable may require little testing because of effective internal controls, fast collection of receivables, excellent relationships between the client and customers, and good audit results in previous years. Similarly, for a given audit of inventory, an auditor may assess a higher inherent risk of a realizable value misstatement because of the higher potential for obsolescence but a low inherent risk of a classification misstatement because there is only purchased inventory.

Relating Performance Materiality and Risks to Balance-Related Audit Objectives

Although it is common in practice to assess inherent and control risks for each balance-related audit objective, it is not common to allocate materiality to those objectives. Auditors are able to effectively associate most risks with different objectives, and it is reasonably easy to determine the relationship between a risk and one or two objectives. For example, obsolescence in inventory is unlikely to affect

any objective other than realizable value. It is more difficult to decide how much of the materiality allocated to a given account should in turn be allocated to one or two objectives. Therefore, most auditors do not attempt to do so.

Measurement Limitations

One major limitation in the application of the audit risk model is the difficulty of measuring the components of the model. Despite the auditor's best efforts in planning, the assessments of acceptable audit risk, inherent risk, and control risk, and therefore planned detection risk, are highly subjective and are only approximations of reality. Imagine, for example, attempting to precisely assess inherent risk by determining the impact of factors such as the misstatements discovered in prior years' audits and technology changes in the client's industry.

To offset this measurement problem, many auditors use broad and subjective measurement terms, such as *low*, *medium*, and *high*. As Table 9-4 shows, auditors can use this information to decide on the appropriate amount and types of evidence to accumulate. For example, in situation 1, the auditor has decided on a high acceptable audit risk for an account or objective. The auditor has concluded a low risk of misstatement in the financial statements exists and that internal controls are effective. Therefore, a high planned detection risk is appropriate. As a result, a low level of evidence is needed. Situation 3 is at the opposite extreme. If both inherent and control risks are high and the auditor wants a low acceptable audit risk, considerable evidence is required. The other three situations fall between these two extremes.

It is equally difficult to measure the amount of evidence implied by a given planned detection risk. A typical audit program intended to reduce detection risk to the planned level is a combination of several audit procedures, each using a different type of evidence which is applied to different audit objectives. Auditors' measurement methods are too imprecise to permit an accurate quantitative measure of the combined evidence. Instead, auditors subjectively evaluate whether sufficient appropriate evidence has been planned to satisfy a planned detection risk of low, medium, or high. Presumably, measurement methods are sufficient to permit an auditor to determine whether more or different types of evidence are needed to satisfy a low planned detection risk than for medium or high. Considerable professional judgment is needed to decide how much more.

In applying the audit risk model, auditors are concerned about both over-auditing and under-auditing. Most auditors are more concerned about the latter, as under-auditing exposes the CPA firm to legal liability and loss of professional reputation. Because of the concern to avoid under-auditing, auditors typically assess risks conservatively. For example, an auditor might not assess either control risk or inherent risk below .5 even when the likelihood of misstatement is low. In these audits, a low risk might be .5, medium .8, and high 1.0, if the risks are quantified.

Tests of Details of Balances Evidence-Planning Worksheet

Auditors develop various types of decision aids to help link judgments affecting audit evidence with the appropriate evidence to accumulate. One such worksheet is included in Figure 9-6 (p. 290) for the audit of accounts receivable for Hillsburg

TABLE 9-4 Relationships of Risk to Evidence

Situation	Acceptable Audit Risk	Inherent Risk	Control Risk	Planned Detection Risk	Amount of Evidence Required
1	High	Low	Low	High	Low
2	Low	Low	Low	Medium	Medium
3	Low	High	High	Low	High
4	Medium	Medium	Medium	Medium	Medium
5	High	Low	Medium	Medium	Medium

Hardware Co. The eight balance-related audit objectives introduced in Chapter 6 are included in the columns at the top of the worksheet to help ensure the auditor considers risks related to all the relevant balance-related assertions. Rows one and two are acceptable audit risk and inherent risk. Performance materiality for accounts receivable is included at the bottom of the worksheet. The engagement in-charge, Fran Moore, made the following decisions in the audit of Hillsburg Hardware Co.:

- *Performance materiality.* The preliminary judgment about materiality for the financial statements as a whole was set at $442,000 (approximately 6 percent of earnings from operations of $7,370,000). She allocated $265,000 to the audit of accounts receivable (see Figure 9-3 on page 273).
- *Acceptable audit risk.* Fran assessed acceptable audit risk as medium because the company is publicly traded, but is in good financial condition, and has high management integrity. Although Hillsburg is a publicly traded company, its stock is not widely held or extensively followed by financial analysts.

FIGURE 9-6 Evidence-Planning Worksheet to Decide Tests of Details of Balances for Hillsburg Hardware Co. – Accounts Receivable

	Detail tie-in	Existence	Completeness	Accuracy	Classification	Cutoff	Realizable value	Rights
Acceptable audit risk	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium
Inherent risk	Low	Medium	Low	Low	Low	Medium	Medium	Low
Control risk—Sales								
Control risk—Cash receipts								
Control risk—Additional controls								
Substantive tests of transactions—Sales								
Substantive tests of transactions—Cash receipts								
Analytical procedures								
Planned detection risk for tests of details of balances								
Planned audit evidence for tests of details of balances								

Performance materiality $265,000

- *Inherent risk.* Fran assessed inherent risk as medium for existence and cutoff because of concerns over revenue recognition. Fran also assessed inherent risk as medium for realizable value. In past years, audit adjustments to the allowance for uncollectible accounts were made because it was found to be understated. Inherent risk was assessed as low for all other objectives.

Planned detection risk would be approximately the same for each balance-related audit objective in the audit of accounts receivable for Hillsburg Hardware Co. if the only three factors the auditor needed to consider were acceptable audit risk, inherent risk, and performance materiality. The evidence-planning worksheet shows that other factors must also be considered before making the final evidence decisions. (These are studied in subsequent chapters and will be integrated into the evidence-planning worksheet at that time.)

Relationship of Risk and Materiality to Audit Evidence

OBJECTIVE 9-10

Discuss how materiality and risk are related and integrated into the audit process.

The concepts of materiality and risk in auditing are closely related and inseparable. Risk is a measure of uncertainty, whereas materiality is a measure of magnitude or size. Taken together, they measure the uncertainty of amounts of a given magnitude. For example, the statement that the auditor plans to accumulate evidence such that there is only a 5 percent risk (acceptable audit risk) of failing to uncover misstatements exceeding performance materiality of $265,000 is a precise and meaningful statement. If the statement eliminates either the risk or materiality portion, it is meaningless. A 5 percent risk without a specific materiality measure could imply that a $100 or $1 million misstatement is acceptable. A $265,000 overstatement without a specific risk could imply that a 1 percent or 80 percent risk is acceptable.

The relationships among performance materiality and the four risks to planned audit evidence are shown in Figure 9-7 (p. 292). This figure expands Figure 9-5 (p. 287) by including performance materiality. Observe that performance materiality does not affect any of the four risks, and the risks have no effect on performance materiality, but together they determine planned evidence. Stated differently, performance materiality is not a part of the audit risk model, but the combination of performance materiality and the audit risk model factors determine planned audit evidence.

Revising Risks and Evidence

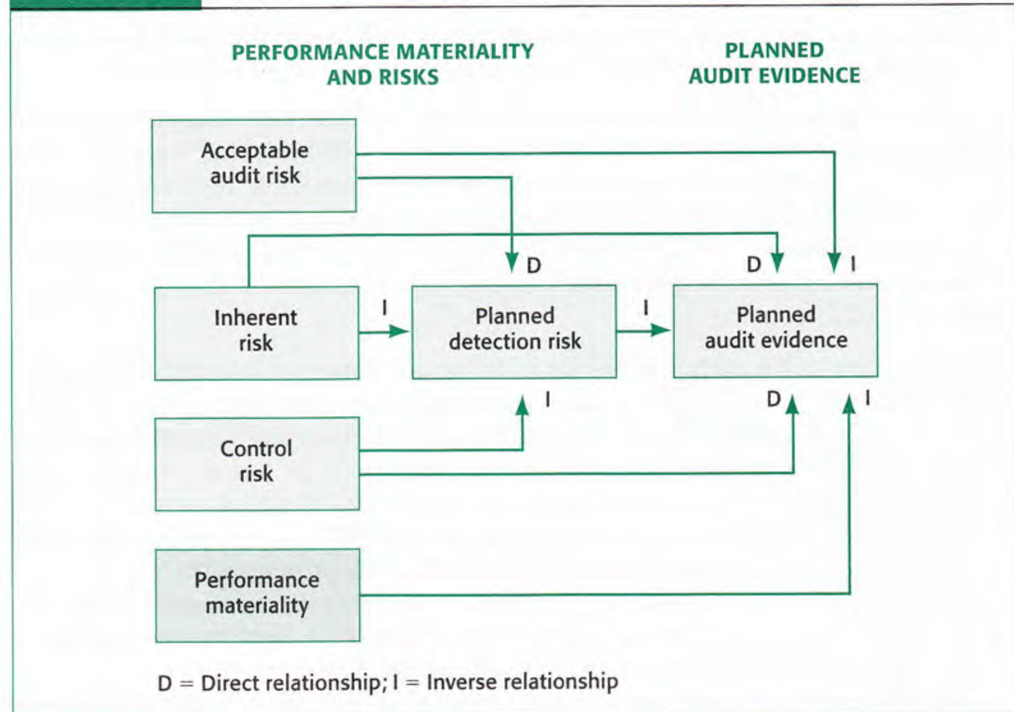
The audit risk model is primarily a planning model and is, therefore, of limited use in evaluating results. No difficulties occur when the auditor accumulates planned evidence and concludes that the assessment of each of the risks was reasonable or better than originally thought. The auditor will conclude that sufficient appropriate evidence has been collected for the audit objectives related to that account or cycle.

However, special care must be exercised when the auditor decides, on the basis of accumulated evidence, that the original assessment of control risk or inherent risk was understated or acceptable audit risk was overstated. In such a circumstance, the auditor should follow a two-step approach.

1. The auditor must revise the original assessment of the appropriate risk. It violates due care to leave the original assessment unchanged if the auditor knows it is inappropriate.
2. The auditor should consider the effect of the revision on evidence requirements, *without use of the audit risk model.* If a revised risk is used in the audit risk model to determine a revised planned detection risk, there is a danger of not increasing the evidence sufficiently. Instead, the auditor should carefully evaluate the implications of the revision of the risk and modify evidence appropriately, outside of the audit risk model.

For example, assume that the auditor confirms accounts receivable and, based on the misstatements found, concludes that the original control risk assessment as low was inappropriate. The auditor should revise the estimate of control risk upward and carefully consider the effect of the revision on the additional evidence needed in the audit of receivables and the sales and collection cycle. Based on the results of the

FIGURE 9-7 **Relationship of Performance Materiality and Risks to Planned Evidence**



additional tests performed, the auditor should carefully evaluate whether sufficient appropriate evidence has been gathered in the circumstances to reduce audit risk to an acceptable level.

SUMMARY

Materiality and risk are fundamental concepts important to audit planning. Both concepts require significant auditor judgment and they directly impact the auditor's planned audit evidence. Materiality is important because the auditor provides assurance to financial statement users that the financial statements are free of material misstatements. Thus, the auditor must develop a preliminary judgment about materiality to be able to design an audit strategy that will provide a basis for that assurance. Furthermore, because auditors accept some level of uncertainty in performing the audit function, the consideration of risk as defined by the audit risk model is necessary for the auditor to effectively address those risks in the most appropriate manner. The auditor's understanding of the entity and its environment, including its internal control, provide a basis for the auditor's assessment of the risk of material misstatements. Using the audit risk model and performance materiality for each audit objective, the auditor determines the audit evidence needed to achieve an acceptable level of audit risk for the financial statements as a whole.

ESSENTIAL TERMS

Acceptable audit risk—a measure of how willing the auditor is to accept that the financial statements may be materially misstated after the audit is completed and an unqualified audit opinion has been issued; see also *audit assurance*

Allocation of the preliminary judgment about materiality—the process of assigning to each balance sheet account the misstatement amount considered to be material for that account based on the auditor's preliminary judgment

Audit assurance—a complement to acceptable audit risk; an acceptable audit risk of 2 percent is the same as audit assurance of 98 percent; also called *overall assurance* and *level of assurance*

Audit risk model—a formal model reflecting the relationships between acceptable audit risk (AAR), inherent risk (IR), control risk (CR), and planned detection risk (PDR); $PDR = AAR/(IR \times CR)$

Control risk—a measure of the auditor's assessment of the risk that a material misstatement could occur in an assertion and not be prevented or detected on a timely basis by the client's internal controls

Engagement risk—the risk that the auditor or audit firm will suffer harm because of a client relationship, even though the audit report rendered for the client was correct

Inherent risk—a measure of the auditor's assessment of the susceptibility of an assertion to material misstatement before considering the effectiveness of internal control

Known misstatements—specific misstatements in a class of transactions or account balance identified during the audit

Likely misstatements—misstatements that arise from either differences between management's and the auditor's judgment about estimates of account balances or from projections of misstatements based on the auditor's test of a sample from a population

Materiality—the magnitude of an omission or misstatement of accounting information that, in the light of surrounding circumstances, makes it *probable* that the judgment of a reasonable person relying on the information would have been changed or influenced by the omission or misstatement

Performance materiality—the materiality amount(s) for segments of the audit, set by the auditor at less than materiality for the financial statements as a whole

Planned detection risk—a measure of the risk that audit evidence for a segment will fail to detect misstatements that could be material, should such misstatements exist; $PDR = AAR/ (IR \times CR)$

Preliminary judgment about materiality—the maximum amount by which the auditor believes that the statements could be misstated and still *not* affect the decisions of reasonable users; used in audit planning

Revised judgment about materiality—a change in the auditor's preliminary judgment made when the auditor determines that the preliminary judgment was too large or too small

Risk—the acceptance by auditors that there is some level of uncertainty in performing the audit function

Risk of material misstatements—the risk that the financial statements are materially misstated prior to the audit ($IR \times CR$)

Sampling error—results because the auditor has sampled only a portion of the population

Tolerable misstatement—the application of performance materiality to a sampling procedure (AICPA standards) or the materiality allocated to any given account balance (PCAOB standards)

REVIEW QUESTIONS

9-1 (Objective 9-1) Chapter 8 introduced the eight parts of the planning phase of an audit. Which part is the evaluation of materiality and risk?

9-2 (Objective 9-1) Define the meaning of the term *materiality* as it is used in accounting and auditing. What is the relationship between materiality and the phrase *obtain reasonable assurance* used in the auditor's report?

9-3 (Objectives 9-1, 9-2) Explain why materiality is important but difficult to apply in practice.

9-4 (Objective 9-2) What is meant by setting a preliminary judgment about materiality? Identify the most important factors affecting the preliminary judgment.

9-5 (Objective 9-2) What is meant by using benchmarks for setting a preliminary judgment about materiality? How will those benchmarks differ for the audit of a manufacturing company and a government unit such as a school district?

9-6 (Objective 9-2) Assume that Rosanne Madden, CPA, is using 5% of net income before taxes, current assets, or current liabilities as her major guidelines for evaluating materiality. What qualitative factors should she also consider in deciding whether misstatements may be material?

9-7 (Objectives 9-2, 9-3) Distinguish between the terms *performance materiality* and *preliminary judgment about materiality*. How are they related to each other?

9-8 (Objective 9-3) Assume a company with the following balance sheet accounts:

Account	Amount	Account	Amount
Cash	$10,000	Long-term loans	$30,000
Fixed assets	60,000	M. Johnson, proprietor	40,000
	$70,000		$70,000

You are concerned only about overstatements of owner's equity. Set performance materiality for the three relevant accounts such that the preliminary judgment about materiality does not exceed $5,000. Justify your answer.

9-9 (Objective 9-3) Provide two examples of when an auditor might set a lower level of performance materiality for a particular class of transactions, account balance, or disclosure.

9-10 (Objective 9-2) How will the conduct of an audit of a medium-sized company be affected by the company's being a small part of a large conglomerate as compared with it being a separate entity?

9-11 (Objective 9-4) Assume materiality for the financial statements as a whole is $100,000 and performance materiality for accounts receivable is set at $40,000. If the auditor finds one receivable that is overstated by $55,000, what should the auditor do?

9-12 (Objective 9-6) Define the audit risk model and explain each term in the model. Also describe which two factors of the model when combined reflect the risk of material misstatements.

9-13 (Objective 9-6) Explain the causes of an increased or decreased planned detection risk.

9-14 (Objectives 9-6, 9-8) Define what is meant by inherent risk. Identify four factors that make for high inherent risk in audits.

9-15 (Objective 9-8) Explain why inherent risk is set for audit objectives for segments (classes of transactions, balances, and presentation and disclosure) rather than for the overall audit. What is the effect on the amount of evidence the auditor must accumulate when inherent risk is increased from medium to high for an audit objective?

9-16 (Objective 9-8) Explain the effect of extensive misstatements found in the prior year's audit on inherent risk, planned detection risk, and planned audit evidence.

9-17 (Objectives 9-6, 9-7) Explain what is meant by the term *acceptable audit risk*. What is its relevance to evidence accumulation?

9-18 (Objective 9-7) Explain the relationship between acceptable audit risk and the legal liability of auditors.

9-19 (Objective 9-6) Explain why there is an inverse relationship between planned detection risk and the amount of evidence an auditor collects for a specific audit objective.

9-20 (Objective 9-9) Auditors have not been successful in measuring the components of the audit risk model. How is it possible to use the model in a meaningful way without a precise way of measuring the risk?

9-21 (Objective 9-10) Explain the circumstances when the auditor should revise the components of the audit risk model and the effect of the revisions on planned detection risk and planned evidence.

9-22 (Objective 9-10) Explain how audit risk and materiality are related and why they need to be considered together in planning an audit.

MULTIPLE CHOICE QUESTIONS FROM CPA EXAMINATIONS

9-23 (Objectives 9-1, 9-2) The following questions deal with materiality. Choose the best response.

a. Which one of the following statements is correct concerning the concept of materiality?
   (1) Materiality is determined by reference to guidelines established by the AICPA.
   (2) Materiality depends only on the dollar amount of an item relative to other items in the financial statements.
   (3) Materiality depends on the nature of an item rather than the dollar amount.
   (4) Materiality is a matter of professional judgment.

b. In considering materiality for planning purposes, an auditor believes that misstatements aggregating $10,000 will have a material effect on an entity's income statement, but that misstatements will have to aggregate $20,000 to materially affect the balance sheet. Ordinarily, it is appropriate to design audit procedures that are expected to detect misstatements that aggregate
   (1) $10,000
   (2) $15,000
   (3) $20,000
   (4) $30,000

c. A client decides not to record an auditor's proposed adjustments that collectively are not material and wants the auditor to issue the report based on the unadjusted numbers. Which of the following statements is correct regarding the financial statement presentation?
   (1) The financial statements are free from material misstatement, and no disclosure is required in the notes to the financial statements.
   (2) The financial statements do not conform with generally accepted accounting principles (GAAP).
   (3) The financial statements contain unadjusted misstatements that should result in a qualified opinion.
   (4) The financial statements are free from material misstatement, but disclosure of the proposed adjustment is required in the notes to the financial statements.

9-24 (Objectives 9-6, 9-8) The following questions concern audit risk. Choose the best response.

a. Some account balances, such as those for pensions and leases, are the result of complex calculations. The susceptibility to material misstatements in these types of accounts is defined as
   (1) audit risk.
   (2) detection risk.
   (3) inherent risk.
   (4) sampling risk.

b. As the acceptable level of detection risk decreases, the auditor may do one or more of the following except change the
   (1) nature of audit procedures to more effective procedures.
   (2) timing of audit procedures, by perhaps performing them at year-end rather than an interim date.
   (3) extent of audit procedures, by perhaps using larger sample sizes.
   (4) assurances provided by audit procedures to a lower level.

c. Inherent risk and control risk differ from planned detection risk in that they
   (1) arise from the misapplication of auditing procedures.
   (2) may be assessed in either quantitative or nonquantitative terms.
   (3) exist independently of the financial statement audit.
   (4) can be changed at the auditor's discretion.

9-25 (Objective 9-9) The following questions deal with audit risk and evidence. Choose the best response.

a. Which of the following does not increase the need for sufficient appropriate audit evidence?
   (1) A lower acceptable level of detection risk
   (2) An increase in the assessed control risk
   (3) A lower acceptable audit risk
   (4) A decrease in the assessed inherent risk

b. As lower acceptable levels of both audit risk and materiality are established, the auditor should plan more work on individual accounts to
   (1) find smaller misstatements.
   (2) find larger misstatements.
   (3) increase the performance materiality in the accounts.
   (4) increase inherent risk in the accounts.

c. Based on evidence gathered and evaluated, an auditor decides to increase the assessed level of control risk from that originally planned. To achieve an overall audit risk level that is substantially the same as the planned audit risk level, the auditor could
   (1) decrease detection risk.
   (2) increase materiality levels.
   (3) decrease substantive testing.
   (4) increase inherent risk.

DISCUSSION QUESTIONS AND PROBLEMS

9-26 (Objectives 9-2, 9-3, 9-4) You are evaluating audit results for assets in the audit of Roberts Manufacturing. You set the preliminary judgment about materiality at $50,000. The account balances, performance materiality, and estimated overstatements in the accounts are shown next.

Account	Account Balance	Performance Materiality	Estimate of Total Overstatements
Cash	$ 50,000	$ 5,000	$ 1,000
Accounts receivable	1,200,000	30,000	20,000
Inventory	2,500,000	50,000	?
Other assets	250,000	15,000	12,000
Total	$4,000,000	$100,000	?

Required

a. Assume you tested inventory amounts totaling $1,000,000 and found $10,000 in overstatements. Ignoring sampling risk, what is your estimate of the total misstatement in inventory?

b. Based on the audit of the assets accounts and ignoring other accounts, are the overall financial statements acceptable? Explain.

c. What do you believe the auditor should do in the circumstances?

9-27 (Objective 9-3) Ling, an audit manager, is planning the audit of Modern Technologies, Inc., (MT, Inc.) a manufacturer of electronic components. This is the first year that Ling's audit firm has performed the audit for MT, Inc. Ling set the preliminary judgment about materiality for the financial statements as a whole at $66,000 and is now in the process of setting performance materiality for asset accounts. Asset balances for the current year (unaudited) and prior year (audited) are listed on the next page, as well as Ling's initial determination of performance materiality for each account. Based on preliminary discussions with management, a tour of the production facility, and background reading about the electronic components industry, Ling determines that MT, Inc., has strong credit policies, and most customers pay their full balance on time. Competition in the electronic components industry is high and inventory can become obsolete quickly due to rapid technology changes (inventory turnover is a measure that analysts focus on when assessing performance for electronic component manufacturers). Production equipment is relatively specialized and additional investment is required when new electronic components are introduced.

	Current Year (unaudited)	Performance Materiality	Prior Year (audited)
Cash	$ 397,565	$10,000	$ 356,122
Accounts receivable, net of allowance	2,583,991	25,000	2,166,787
Inventory	1,953,845	15,000	1,555,782
Total current assets	4,935,401		4,078,691
Property, plant, and equipment, net	1,556,342	20,000	1,458,963
Other assets	153,000	20,000	149,828
Total assets	$6,644,743		$5,687,482

Required

a. What factors should Ling consider in setting performance materiality for the asset accounts?

b. Explain why Ling set performance materiality for cash at the lowest amount.

c. Explain why Ling set performance materiality for inventory at a lower amount as compared to accounts receivable, PP&E, and other assets.

d. Explain why Ling set performance materiality for accounts receivable at the highest amount.

e. Does setting materiality at a lower level result in collecting more or less audit evidence (as compared to setting materiality at a higher level)?

9-28 (Objectives 9-2, 9-3, 9-4) Below and on page 298 are statements of earnings and financial position for Wexler Industries.

Consolidated Statements of Earnings
Wexler Industries (in Thousands)

	For the 53 Weeks Ended	For the 52 Weeks Ended	
	March 30, 2013	March 31, 2012	April 1, 2011
Revenue			
Net sales	$8,351,149	$6,601,255	$5,959,587
Other income	59,675	43,186	52,418
	8,410,824	**6,644,441**	**6,012,005**
Costs and expenses			
Cost of sales	5,197,375	4,005,548	3,675,369
Marketing, general, and administrative expenses	2,590,080	2,119,590	1,828,169
Provision for loss on restructured operations	64,100	–	–
Interest expense	141,662	46,737	38,546
	7,993,217	**6,171,875**	**5,542,084**
Earnings from continuing operations before income taxes	**417,607**	**472,566**	**469,921**
Income taxes	**(196,700)**	**(217,200)**	**(214,100)**
Earnings from continuing operations	**220,907**	**255,366**	**255,821**
Provision for loss on discontinued operations, net of income taxes	**(20,700)**	**–**	**–**
Net earnings	**$ 200,207**	**$ 255,366**	**$ 255,821**

Consolidated Statements of Financial Position
Wexler Industries (in Thousands)

Assets	March 30, 2013	March 31, 2012
Current assets		
Cash	$ 39,683	$ 37,566
Temporary investments, including time deposits of $65,361 in 2013 and $181,589 in 2012 (at cost, which approximates market)	123,421	271,639

Assets	March 30, 2013	March 31, 2012
Receivables, less allowances of $16,808 in 2013 and $17,616 in 2012	899,752	759,001
Inventories		
Finished product	680,974	550,407
Raw materials and supplies	443,175	353,795
	1,124,149	904,202
Deferred income tax benefits	9,633	10,468
Prepaid expenses	57,468	35,911
Current assets	**2,254,106**	**2,018,787**
Land, buildings, and equipment, at cost, less accumulated depreciation	**1,393,902**	**1,004,455**
Investments in affiliated companies and sundry assets	**112,938**	**83,455**
Goodwill and other intangible assets	**99,791**	**23,145**
Total	**$3,860,737**	**$3,129,842**

Liabilities and Stockholders' Equity	March 30, 2013	March 31, 2012
Current liabilities		
Notes payable	$ 280,238	113,411
Current portion of long-term debt	64,594	12,336
Accounts and drafts payable	359,511	380,395
Accrued salaries, wages, and vacations	112,200	63,557
Accrued income taxes	76,479	89,151
Other accrued liabilities	321,871	269,672
Current liabilities	**1,214,893**	**928,522**
Long-term debt	**730,987**	**390,687**
Other noncurrent liabilities	**146,687**	**80,586**
Deferred income taxes	**142,344**	**119,715**
Stockholders' equity		
Common stock issued, 51,017,755 shares in 2013 and 50,992,410 in 2012	51,018	50,992
Additional paid-in capital	149,177	148,584
Cumulative foreign currency translation adjustment	(76,572)	–
Retained earnings	1,554,170	1,462,723
Common stock held in treasury, at cost, 1,566,598 shares	(51,967)	(51,967)
Stockholders' equity	**1,625,826**	**1,610,332**
Total	**$3,860,737**	**$3,129,842**

Required

a. Use professional judgment in deciding on the preliminary judgment about materiality for earnings, current assets, current liabilities, and total assets. Your conclusions should be stated in terms of percents and dollars.

b. Assume that you define materiality for the financial statements as a whole as a combined misstatement of earnings from continuing operations before income taxes of 5%. Also assume that you believe there is an equal likelihood of a misstatement of every account in the financial statements, and each misstatement is likely to result in an overstatement of earnings. Allocate materiality to these financial statements as you consider appropriate.

c. As discussed in part b., net earnings from continuing operations *before* income taxes was used as a base for calculating materiality for the Wexler Industries audit. Discuss why most auditors use *before*-tax net earnings instead of *after*-tax net earnings when calculating materiality based on the income statement.

d. Now, assume that you have decided to allocate 75% of your preliminary judgment to accounts receivable, inventories, and accounts payable because you believe all other accounts have a low inherent and control risk. How does this affect evidence accumulation on the audit?

e. Assume that you complete the audit and conclude that your preliminary judgment about materiality for current assets, current liabilities, and total assets has been met.

The actual estimate of misstatements in earnings exceeds your preliminary judgment. What should you do?

9-29 (Objectives 9-2, 9-3, 9-4, 9-6, 9-7, 9-8, 9-10) The following are concepts discussed in this chapter:

1. Preliminary judgment about materiality
2. Control risk
3. Risk of fraud
4. Inherent risk
5. Risk of material misstatements
6. Known misstatement
7. Estimated total misstatement in a segment
8. Planned detection risk
9. Estimate of the combined misstatement
10. Acceptable audit risk
11. Performance materiality

Required

a. Identify which items are *audit planning decisions* requiring professional judgment.

b. Identify which items are *audit conclusions* resulting from application of audit procedures and requiring professional judgment.

c. Under what circumstances is it acceptable to change those items in part a. after the audit is started? Which items can be changed after the audit is 95% completed?

9-30 (Objectives 9-6, 9-7) Describe what is meant by acceptable audit risk. Explain why each of the following statements is true:

a. A CPA firm should attempt to achieve the same audit risk for all audit clients when circumstances are similar.

b. A CPA firm should decrease acceptable audit risk for audit clients when external users rely heavily on the statements.

c. A CPA firm should decrease acceptable audit risk for audit clients when engagement risk is high.

d. Different CPA firms should attempt to achieve reasonably similar audit risks for clients with similar circumstances.

9-31 (Objective 9-7) Bohrer, CPA, is considering the following factors in assessing audit risk at the financial statement level in planning the audit of Waste Remediation Services (WRS), Inc.'s financial statements for the year ended December 31, 2013. WRS is a privately held company that contracts with municipal governments to close landfills. Audit risk at the financial statement level is influenced by the risk of material misstatements, which may be indicated by factors related to the entity, management, and the industry environment.

1. This was the first year WRS operated at a profit since 2008 because the municipalities received increased federal and state funding for environmental purposes.
2. WRS's Board of Directors is controlled by Tucker, the majority shareholder, who also acts as the chief executive officer.
3. The internal auditor reports to the controller and the controller reports to Tucker.
4. The accounting department has experienced a high rate of turnover of key personnel.
5. WRS's bank has a loan officer who meets regularly with WRS's CEO and controller to monitor WRS's financial performance.
6. WRS's employees are paid bi-weekly.
7. Bohrer has audited WRS for five years.
8. During 2013, WRS changed its method of preparing its financial statements from the cash basis to generally accepted accounting principles.
9. During 2013, WRS sold one half of its controlling interest in Sanitation Equipment Leasing Co. (SEL) WRS retained a significant interest in SEL.
10. During 2013, litigation filed against WRS in 2003 alleging that WRS discharged pollutants into state waterways was dropped by the state. Loss contingency disclosures that WRS included in prior years' financial statements are being removed for the 2013 financial statements.
11. During December 2013, WRS signed a contract to lease disposal equipment from an entity owned by Tucker's parents. This related party transaction is not disclosed in WRS's notes to its 2013 financial statements.

12. During December 2013, WRS increased its casualty insurance coverage on several pieces of sophisticated machinery from historical cost to replacement cost.
13. WRS recorded a substantial increase in revenue in the fourth quarter of 2013. Inquiries indicated that WRS initiated a new policy and guaranteed several municipalities that it would refund state and federal funding paid to WRS on behalf of the municipality if it failed a federal or state site inspection in 2014.
14. An initial public offering of WRS stock is planned in 2014.

Required For each of the 14 factors listed above, indicate whether the item would likely increase audit risk, decrease audit risk, or have no effect on audit risk.*

9-32 (Objectives 9-6, 9-9) Following are six situations that involve the audit risk model as it is used for planning audit evidence requirements in the audit of inventory.

	Situation					
Risk	**1**	**2**	**3**	**4**	**5**	**6**
Acceptable audit risk	High	High	Low	Low	High	Medium
Inherent risk	Low	High	High	Low	Medium	Medium
Control risk	Low	Low	High	High	Medium	Medium
Planned detection risk	–	–	–	–	–	–
Planned evidence	–	–	–	–	–	–

Required

a. Explain what *low*, *medium*, and *high* mean for each of the four risks and planned evidence.
b. Fill in the blanks for planned detection risk and planned evidence using the terms low, medium, or high.
c. Using your knowledge of the relationships among the foregoing factors, state the effect on planned evidence (increase or decrease) of changing each of the following five factors, while the other three remain constant:
   (1) A decrease in acceptable audit risk
   (2) A decrease in control risk
   (3) A decrease in planned detection risk
   (4) A decrease in inherent risk
   (5) A decrease in inherent risk and an increase in control risk of the same amount

9-33 (Objectives 9-6, 9-8, 9-9) Mark Hopper is planning the audit of the investments account for audit client Garden Supply Co. (GSC). GSC invests excess cash at the end of the summer sales season through an investment manager who invests in equity and debt securities for GSC's account. Mark has assessed the following risks as low, medium, or high for the relevant balance-related audit objectives in the investment account.

		Risk of Material Misstatements		
Balance-Related Audit Objectives	**Audit Risk**	**Inherent Risk**	**Control Risk**	**Planned Detection Risk**
Existence	Medium	Medium	Medium	
Completeness	Medium	Low	Medium	
Accuracy	Low	High	Medium	
Classification	Medium	Low	Low	
Cutoff	Medium	Medium	Low	
Detail tie-in	Low	Medium	Low	
Realizable value	Low	High	Medium	
Rights and obligations	Medium	Medium	Low	

Required

a. Describe each of the four identified risks in the columns of the table above.
b. Fill in the blank for planned detection risk for each balance-related audit objective using the terms low, medium, or high.

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c. Which audit objectives require the greatest amount of evidence and which require the least?

d. Through audit testing, Mark finds the investment manager's controls over recording purchases and sales of securities are not as effective as originally assessed. What should Mark do?

9-34 (Objectives 9-6) Below are ten independent risk factors:

1. The client lacks sufficient working capital to continue operations.
2. The client fails to detect employee theft of inventory from the warehouse because there are no restrictions on warehouse access and the client does not reconcile inventory on hand to recorded amounts on a timely basis.
3. The company is publicly traded.
4. The auditor has identified numerous material misstatements during prior year audit engagements.
5. The assigned staff on the audit engagement lack the necessary skills to identify actual errors in an account balance when examining audit evidence accumulated.
6. The client is one of the industry's largest based on its size and market share.
7. The client engages in several material transactions with entities owned by family members of several of the client's senior executives.
8. The allowance for doubtful accounts is based on significant assumptions made by management.
9. The audit program omits several necessary audit procedures.
10. The client fails to reconcile bank accounts to recorded cash balances.

Required

Identify which of the following audit risk model components relates most directly to each of the ten risk factors:

- Acceptable audit risk
- Inherent risk
- Control risk
- Planned detection risk

9-35 (Objectives 9-6, 9-10) Using the audit risk model, state the effect on control risk, inherent risk, acceptable audit risk, and planned evidence for each of the following independent events. In each of the events a. through j., circle one letter for each of the three independent variables and planned evidence: I = increase, D = decrease, N = no effect, and C = cannot determine from the information provided.

a. The client's management materially decreased long-term contractual debt:

Control risk	I D N C	Acceptable audit risk	I D N C
Inherent risk	I D N C	Planned evidence	I D N C

b. The company changed from a privately held company to a publicly held company:

Control risk	I D N C	Acceptable audit risk	I D N C
Inherent risk	I D N C	Planned evidence	I D N C

c. The auditor decided to set assessed control risk at the maximum (it was previously assessed below the maximum):

Control risk	I D N C	Acceptable audit risk	I D N C
Inherent risk	I D N C	Planned evidence	I D N C

d. The client acquired a new subsidiary located in Italy:

Control risk	I D N C	Acceptable audit risk	I D N C
Inherent risk	I D N C	Planned evidence	I D N C

e. The account balance increased materially from the preceding year without apparent reason:

Control risk	I D N C	Acceptable audit risk	I D N C
Inherent risk	I D N C	Planned evidence	I D N C

f. You determined through the planning phase that working capital, debt-to-equity ratio, and other indicators of financial condition improved during the past year:

Control risk	I D N C	Acceptable audit risk	I D N C
Inherent risk	I D N C	Planned evidence	I D N C

g. This is the second year of the engagement, and there were few misstatements found in the previous year's audit. The auditor also decided to increase reliance on internal control:

Control risk	I D N C	Acceptable audit risk	I D N C
Inherent risk	I D N C	Planned evidence	I D N C

h. The client began selling products online to customers through its Web page during the year under audit. The online customer ordering process is not integrated with the company's accounting system. Client sales staff print out customer order information and enter that data into the sales accounting system:

Control risk	I D N C	Acceptable audit risk	I D N C
Inherent risk	I D N C	Planned evidence	I D N C

i. There has been a change in several key management personnel. You believe that management is somewhat lacking in personal integrity compared with the previous management. You believe it is still appropriate to do the audit:

Control risk	I D N C	Acceptable audit risk	I D N C
Inherent risk	I D N C	Planned evidence	I D N C

j. In discussions with management, you conclude that management is planning to sell the business in the next few months. Because of the planned changes, several key accounting personnel quit several months ago for alternative employment. You also observe that the gross margin percent has significantly increased compared with that of the preceding year:

Control risk	I D N C	Acceptable audit risk	I D N C
Inherent risk	I D N C	Planned evidence	I D N C

CASES

9-36 (Objectives 9-6, 9-7, 9-8) Whitehead, CPA, is planning the audit of a newly obtained client, Henderson Energy Corporation, for the year ended December 31, 2013. Henderson Energy is regulated by the state utility commission and because it is a publicly traded company the audited financial statements must be filed with the Securities and Exchange Commission (SEC).

Henderson Energy is considerably more profitable than many of its competitors, largely due to its extensive investment in information technologies used in its energy distribution and other key business processes. Recent growth into rural markets, however, has placed some strain on 2013 operations. Additionally, Henderson Energy expanded its investments into speculative markets and is also making greater use of derivative and hedging transactions to mitigate some of its investment risks. Because of the complexities of the underlying accounting associated with these activities, Henderson Energy added several highly experienced accountants within its financial reporting team. Internal audit, which has direct reporting responsibility to the audit committee, is also actively involved in reviewing key accounting assumptions and estimates on a quarterly basis.

Whitehead's discussions with the predecessor auditor revealed that the client has experienced some difficulty in correctly tracking existing property, plant, and equipment items. This largely involves equipment located at its multiple energy production facilities. During the recent year, Henderson acquired a regional electric company, which expanded the number of energy production facilities.

Whitehead plans to staff the audit engagement with several members of the firm who have experience in auditing energy and public companies. The extent of partner review of key accounts will be extensive.

Required Based on the above information, identify factors that affect the risk of material misstatements in the December 31, 2013, financial statements of Henderson Energy. Indicate whether the factor increases or decreases the risk of material misstatements. Also, identify which audit risk model component is affected by the factor. Use the format below:

Factor	Effect on the Risk of Material Misstatement	Audit Risk Model Component
Henderson is a new client	Increases	Inherent risk

FIGURE 9-8 Stanton Enterprises Summary Financial Statements

Balance Sheet

	Preliminary 12-31-13	Audited 12-31-12
Cash	$ 243,689	$ 133,981
Trade accounts receivable	3,544,009	2,224,921
Allowance for uncollectible accounts	(120,000)	(215,000)
Inventories	4,520,902	3,888,400
Prepaid expenses	29,500	24,700
Total current assets	8,218,100	6,057,002
Property, plant, and equipment:		
At cost	12,945,255	9,922,534
Less accumulated depreciation	(4,382,990)	(3,775,911)
Total prop., plant, and equipment	8,562,265	6,146,623
Goodwill	1,200,000	345,000
Total assets	$17,980,365	$12,548,625
Accounts payable	$ 2,141,552	$ 2,526,789
Bank loan payable	150,000	–
Accrued liabilities	723,600	598,020
Federal income taxes payable	1,200,000	1,759,000
Current portion of long-term debt	240,000	240,000
Total current liabilities	4,455,152	5,123,809
Long-term debt	960,000	1,200,000
Stockholders' equity:		
Common stock	1,250,000	1,000,000
Additional paid-in capital	2,469,921	1,333,801
Retained earnings	8,845,292	3,891,015
Total stockholders' equity	12,565,213	6,224,816
Total liabilities and stockholders' equity	$17,980,365	$12,548,625

Combined Statement of Income and Retained Earnings

	Preliminary 12-31-13	Audited 12-31-12
Sales	$43,994,931	$32,258,015
Cost of goods sold	24,197,212	19,032,229
Gross profit	19,797,719	13,225,786
Selling, general, and administrative expenses	10,592,221	8,900,432
Pension cost	1,117,845	865,030
Interest expense	83,376	104,220
Total operating expenses	11,793,442	9,869,682
Income before taxes	8,004,277	3,356,104
Income tax expense	1,800,000	1,141,000
Net income	6,204,277	2,215,104
Beginning retained earnings	3,891,015	2,675,911
	10,095,292	4,891,015
Dividends declared	(1,250,000)	(1,000,000)
Ending retained earnings	$ 8,845,292	$ 3,891,015

9-37 (Objectives 9-2, 9-3, 9-6, 9-7, 9-8) It is 2013 and you are planning the audit of Stanton Enterprises Ltd (SS LTD) for the financial year end year ended 31 December 2013. SS LTD has its head office in New Delhi and manufacturing plants in Mumbai and Bangalore. It sells to a wide range of mostly Indian and overseas mining companies for both Indian and overseas operations. The company was listed on the Indian stock exchange when your audit firm was appointed auditors. While actual financial statements' real data has fluctuated over the subsequent years, the company has built an

enviable reputation of quality and service. In addition, judging from previous auditors' information, the auditors have not observed any serious errors and problems with the reliability of interim financial statements.

To meet the requirements, use the Financial Statement information Figure 9-8 with the following information in the Statement of Financial Position, Statement of Combined Statement of Income, and Retained Earnings and Additional Information to complete the following requirements.

Required

a. Identify and support six significant audit risks and identify their major or medium risk. Only include identified minor risks if there are insufficient significant risks.

b. Identify and support two audit strengths. These must be discussed as strengths and not as audit risks assessed as low risk.

c. With reference to your answers to a. and b., discuss if the overall audit planning risk level is extreme, high, medium, or low.

d. With reference to your answer to c., identify a quantitative dollar amount for planning materiality if any, and support this with a discussion of more than one of the commonly used bases.

FIGURE 9-9 **Stanton Enterprises Evidence-Planning Worksheet to Decide Tests of Details of Balances for Accounts Receivable**

	Detail tie-in	Existence	Completeness	Accuracy	Classification	Cutoff	Realizable value	Rights
Acceptable audit risk								
Inherent risk								
Control risk—Sales								
Control risk—Cash receipts								
Control risk—Additional controls								
Substantive tests of transactions—Sales								
Substantive tests of transactions—Cash receipts								
Analytical procedures								
Planned detection risk for tests of details of balances								
Planned audit evidence for tests of details of balances								

Performance materiality ______

e. The evidence planning worksheet to decide tests of details of balances for SS LTD accounts receivable is shown in Figure 9-9. Use the information and your assumptions to complete the following rows of the planning worksheet: Acceptable audit risk, Inherent risk, and Analytical procedure. Also fill in performance of materiality for account receivables at the bottom of the worksheet. Make any assumptions you believe are reasonable and appropriate and document them.

INTEGRATED CASE APPLICATION — PINNACLE MANUFACTURING: PART II

9-38 (Objectives 9-7, 9-8)

In Part I of the case, you performed preliminary analytical procedures for Pinnacle (pp. 263–265). The purpose of Part II is to identify factors influencing risks and the relationship of risks to audit evidence.

During the planning phase of the audit, you met with Pinnacle's management team and performed other planning activities. You encounter the following situations that you believe may be relevant to the audit:

1. Your firm has an employee who reads and saves articles about issues that may affect key clients. You read an article in the file titled, "EPA Regulations Encouraging Solar-Powered Engines Postponed?" After reading the article, you realize that the regulations management is relying upon to increase sales of the Solar-Electro division might not go into effect for at least ten years. A second article is titled, "Stick to Diesel Pinnacle!" The article claims that although Pinnacle has proven itself within the diesel engine industry, they lack the knowledge and people necessary to perform well in the solar-powered engine industry.
2. You ask management for a tour of the Solar-Electro facilities. While touring the warehouse, you notice a section of solar-powered engines that do not look like the ones advertised on Pinnacle's Web site. You ask the warehouse manager when those items were first manufactured. He responds by telling you, "I'm not sure. I've been here a year and they were here when I first arrived."
3. You also observe that new computerized manufacturing equipment has been installed at Solar-Electro. The machines have been stamped with the words, "Product of Welburn Manufacturing, Detroit, Michigan."
4. During discussions with the Pinnacle controller, you learn that Pinnacle employees did a significant amount of the construction work for a building addition because of employee idle time and to save costs. The controller stated that the work was carefully coordinated with the construction company responsible for the addition.
5. While reading the footnotes of the previous year's financial statements, you note that one customer, Auto-Electro, accounts for nearly 15% of the company's accounts receivable balance. You investigate this receivable and learn the customer has not made any payments for several months.
6. During a meeting with the facilities director, you learn that the board of directors has decided to raise a significant amount of debt to finance the construction of a new manufacturing plant for the Solar-Electro division. The company also plans to make a considerable investment in modifications to the property on which the plant will be built.
7. While standing in line at a vending machine, you see a Pinnacle vice president wearing a golf shirt with the words "Todd-Machinery." You are familiar with the company and noticed some of its repairmen working in the plant earlier. You tell the man you like the shirt and he responds by saying, "Thank you. My wife and I own the company, but we hire people to manage it."
8. After inquiry of the internal audit team, you realize there is significant turnover in the internal audit department. You conclude the turnover is only present at the higher-level positions.

9. While reviewing Pinnacle's long-term debt agreements, you identify several restrictive covenants. Two requirements are to keep the current ratio above 2.0 and debt-to-equity below 1.0 at all times.
10. The engagement partner from your CPA firm called today notifying you that Brian Sioux, an industry specialist and senior tax manager from the firm's Ontario office, will be coming on-site to Pinnacle's facilities to investigate an ongoing dispute between the Internal Revenue Service and Pinnacle.
11. A member of your CPA firm, who is currently on-site in Detroit at the Welburn division, calls you to see how everything is going while you are visiting Solar-Electro in Texas. During your conversation, he asks if you know anything about the recent intercompany loan from Welburn to Solar-Electro.

Required

a. Review Part I of the case and the situations in Part II and identify information that affects your assessment of acceptable audit risk. Note that only some of the situations in Part II will relate to acceptable audit risk. Classify the information based on the three factors that affect acceptable audit risk.

External users' reliance on financial statements
Likelihood of financial difficulties
Management integrity

b. Assess acceptable audit risk as high, medium, or low considering the items you identified in requirement a. (A risky client will be assessed as a low acceptable audit risk.) Justify your response.

c. Identify inherent risks for the audit of Pinnacle using the information from Parts I and II. For each inherent risk, identify the account or accounts and the relevant audit objectives that may be affected.

Inherent Risk	Account or Accounts Affected	Relevant Audit Objectives

RESEARCH PROBLEM 9-1: MATERIALITY AND PERFORMANCE MATERIALITY

Establishing materiality and allocation of materiality to individual accounts requires considerable judgment. Access Dell's 10-K report with financial statements for the year ended February 3, 2012, from the company's Web site at www.dell.com (follow links for "company information," "investors," and "financial reporting").

Required

a. Assume that your firm's materiality guidelines indicate that materiality should be between three and six percent of net income before taxes. What percentage and dollar amount of materiality would you use for the audit of Dell? Explain.

b. What asset accounts on Dell's balance sheet should be allocated the largest amount of performance materiality? Explain.