

AUDIT PLANNING

The Fall Of Enron: Did Anyone Understand Their Business?

The bankruptcy of Enron Corporation, at one time the nation's largest energy wholesaling company, represents one of the biggest corporate collapses in American history. Despite being listed as No. 7 on the Fortune 500 list with a market capitalization of \$75 billion before its collapse, Enron's meltdown was rapid. The fall began in October 2001 when Enron officials reported a shocking \$618 million quarterly loss related to allegedly mysterious and hidden related party partnerships with company insiders. Then, in early November 2001, company officials were forced to admit that they had falsely claimed almost \$600 million in earnings dating back to 1997, requiring the restatement of four years of audited financial statements. By the end of 2001, the company was in bankruptcy.

Enron was created in 1985 out of a merger of two gas pipelines, and was a pioneer in trading natural gas and electricity in the newly deregulated utilities markets. In its earlier years, Enron made its money from hard assets like pipelines. However, by the end of the 1990s, 80% of Enron's earnings came from a more vague business known as "wholesale energy operations and services." Enron had built new markets, such as trading of weather securities. In early 2001, speculation about Enron's business dealings began to surface. One highly regarded investment banker publicly stated that no one could explain how Enron actually made money.

In the wake of the collapse, many wonder how these issues could go undetected for so long. Many point to Enron's incredibly complicated business structure and related vague and confusing financial statements. "What we are looking at here is an example of superbly complex financial reports. They didn't have to lie. All they had to do was to obfuscate it with sheer complexity," noted John Dingell, U.S. Congressman from Michigan. Others even allege that the men running the company never even understood their business concept because it was too complicated.

Apparently, the complexity and uncertainty surrounding Enron's business and financial statements fooled their auditors, too. Enron's auditor faced a flurry of attacks, class action lawsuits, and a criminal indictment that ultimately led to the firm's demise. In December 2001 congressional testimony, the audit firm's CEO admitted that the firm's professional judgment "turned out to be wrong" and that they mistakenly let Enron keep the related entities separate when they should have been consolidated.

The Enron disaster continues to provide many lessons for the auditing profession. One to be underscored for auditors is the paramount importance of understanding the company's business and industry to identify significant business risks that increase the risk of material misstatements in the financial statements. Without that understanding, it will be almost impossible to identify the next Enron.

LEARNING OBJECTIVES

After studying this chapter, you should be able to

- 8-1** Discuss why adequate audit planning is essential.
- 8-2** Make client acceptance decisions and perform initial audit planning.
- 8-3** Gain an understanding of the client's business and industry.
- 8-4** Assess client business risk.
- 8-5** Perform preliminary analytical procedures.
- 8-6** State the purposes of analytical procedures and the timing of each purpose.
- 8-7** Select the most appropriate analytical procedure from among the five major types.
- 8-8** Compute common financial ratios.

Source: Based on Bethany McLean, "Why Enron Went Bust," *Fortune* (December 24, 2001), pp. 58–68.

As the chapter story illustrates, Enron’s complex and confusing business structure helped disguise material misstatements in Enron’s financial statements for several years. Gaining an understanding of the client’s business and industry is one of the most important steps in audit planning. This chapter explains audit planning in detail, including gaining an understanding of the client’s business and industry, assessing client business risk, and performing preliminary analytical procedures.

PLANNING

OBJECTIVE 8-1

Discuss why adequate audit planning is essential.

Principles underlying AICPA auditing standards indicate:

The auditor must plan the work and properly supervise any assistants.

There are three main reasons why the auditor should properly plan engagements: to enable the auditor to obtain sufficient appropriate evidence for the circumstances, to help keep audit costs reasonable, and to avoid misunderstandings with the client. Obtaining sufficient appropriate evidence is essential if the CPA firm is to minimize legal liability and maintain a good reputation in the business community. Keeping costs reasonable helps the firm remain competitive. Avoiding misunderstandings with the client is necessary for good client relations and for facilitating high-quality work at reasonable cost. Suppose that the auditor informs the client that the audit will be completed before June 30 but is unable to finish it until August because of inadequate scheduling of staff. The client is likely to be upset with the CPA firm and may even sue for breach of contract.

FIGURE 8-1 Planning an Audit and Designing an Audit Approach

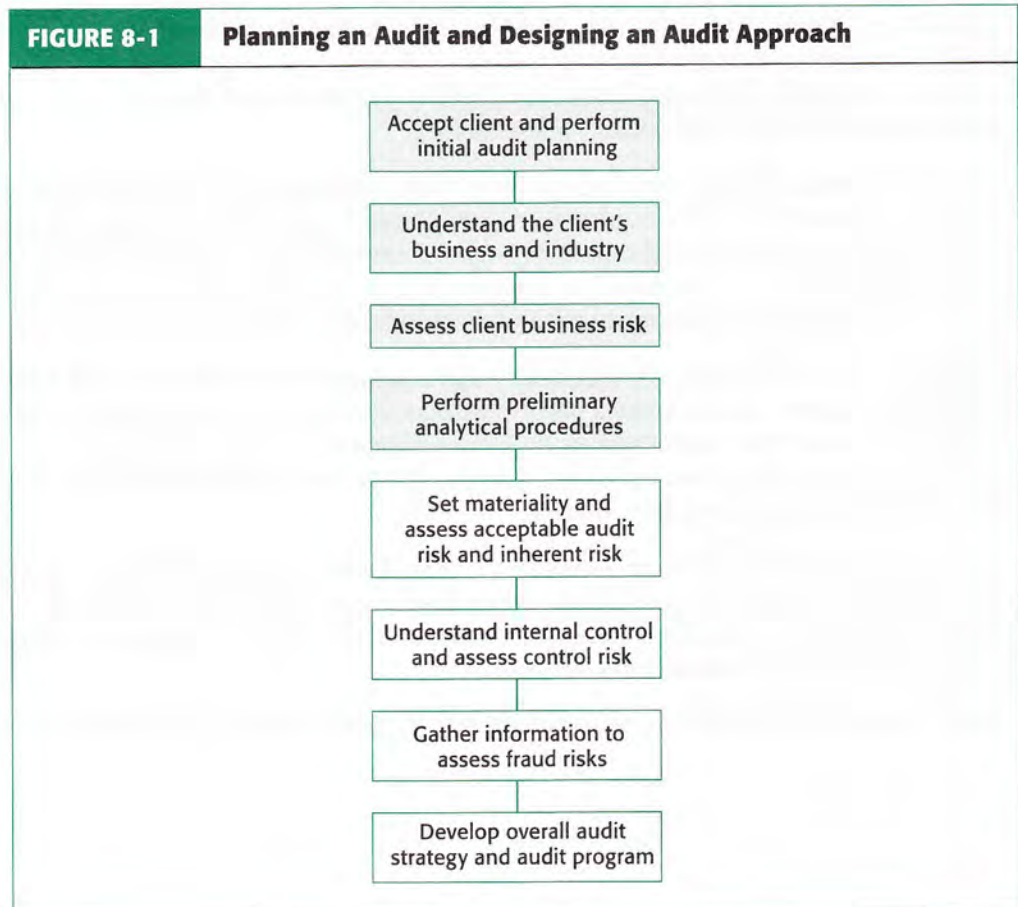


Figure 8-1 presents the eight major parts of audit planning. Each of the first seven parts is intended to help the auditor develop the last part, an effective and efficient overall audit plan and audit program. The first four parts of the planning phase of an audit are studied in this chapter. The last four are studied separately in later chapters.

Before beginning our discussion, we briefly introduce two risk terms: *acceptable audit risk* and *inherent risk*. These two risks significantly influence the conduct and cost of audits. Much of the early planning of audits deals with obtaining information to help auditors assess these risks.

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 the auditor decides on a lower acceptable audit risk, it means that the auditor wants to be more certain that the financial statements are *not* materially misstated. Zero risk is certainty, and a 100 percent risk is complete uncertainty.

Inherent risk is a measure of the auditor's assessment of the likelihood that there are material misstatements in an account balance before considering the effectiveness of internal control. If, for example, the auditor concludes that there is a high likelihood of material misstatement in accounts receivable due to changing economic conditions, the auditor concludes that inherent risk for accounts receivable is high.

Assessing acceptable audit risk and inherent risk is an important part of audit planning because it helps determine the amount of evidence that will need to be accumulated and the experience level of staff assigned to the engagement. For example, if inherent risk for inventory is high because of complex valuation issues, more evidence will be accumulated in the audit of inventory and more experienced staff will be assigned to perform testing in this area.

ACCEPT CLIENT AND PERFORM INITIAL AUDIT PLANNING

Initial audit planning involves four things, all of which should be done early in the audit:

1. The auditor decides whether to accept a new client or continue serving an existing one. This determination is typically made by an experienced auditor who is in a position to make important decisions. The auditor wants to make this decision early, before incurring any significant costs that cannot be recovered.
2. The auditor identifies why the client wants or needs an audit. This information is likely to affect the remaining parts of the planning process.
3. To avoid misunderstandings, the auditor obtains an understanding with the client about the terms of the engagement.
4. The auditor develops an overall strategy for the audit, including engagement staffing and any required audit specialists.

OBJECTIVE 8-2

Make client acceptance decisions and perform initial audit planning.

Even though obtaining and retaining clients is not easy in a competitive profession such as public accounting, a CPA firm must use care in deciding which clients are acceptable. The firm's legal and professional responsibilities are such that clients who lack integrity or argue constantly about the proper conduct of the audit and fees can cause more problems than they are worth. Some CPA firms now refuse any clients in certain high-risk industries, such as software technology companies or health and casualty insurance companies, and may even discontinue auditing existing clients in those industries. Some smaller CPA firms will not do audits of publicly held clients because of the risk of litigation or because of costs associated with registering the audit firm with the PCAOB. An auditor is unlikely to accept a new client or continue serving an existing client if the risk associated with the client is greater than the risk the firm is willing to accept.

Client Acceptance and Continuance

New Client Investigation Before accepting a new client, most CPA firms investigate the company to determine its acceptability. They do this by examining, to the extent possible, the prospective client's standing in the business community, financial stability, and relations with its previous CPA firm. For example, many CPA firms use considerable caution in accepting new clients in newly formed, rapidly growing businesses. Many of these businesses fail financially and expose the CPA firm to significant potential liability. The CPA firm must also determine that it has the competency, such as industry knowledge, to accept the engagement and that the firm can satisfy all independence requirements.

For prospective clients that have previously been audited by another CPA firm, the new (successor) auditor is *required* by auditing standards to *communicate with the predecessor auditor*. The purpose of the requirement is to help the successor auditor evaluate whether to accept the engagement. The communication may, for example, inform the successor auditor that the client lacks integrity or that there have been disputes over accounting principles, audit procedures, or fees.

The burden of initiating the communication rests with the successor auditor, but the predecessor auditor is required to respond to the request for information. However, the confidentiality requirement in the *Code of Professional Conduct* requires that the predecessor auditor obtain permission from the client before the communication can be made. In the event of unusual circumstances such as legal problems or disputes between the client and the predecessor, the predecessor's response can be limited to stating that no information will be provided. If a client will not permit the communication or the predecessor will not provide a comprehensive response, the successor should seriously consider the desirability of accepting a prospective engagement, without considerable other investigation.

Even when a prospective client has been audited by another CPA firm, a successor may make other investigations by gathering information from local attorneys, other CPAs, banks, and other businesses. In some cases, the auditor may even hire a professional investigator to obtain information about the reputation and background of key members of management. Such extensive investigation is appropriate when there has been no previous auditor, when a predecessor auditor will not provide the desired information, or if any indication of problems arises from the communication.

AICPA auditing standards also require that the auditor determine whether the financial reporting framework to be used by management to prepare the financial statements is appropriate. Without an appropriate financial reporting framework, the auditor does not have suitable criteria for auditing the financial statements. In making that determination, the auditor considers the nature of the entity, the purpose and nature of the financial statements, and whether laws or regulations prescribe a particular framework. Common financial reporting frameworks include U.S. generally accepted accounting principles and international financial reporting standards (IFRS).

Continuing Clients Many CPA firms evaluate existing clients annually to determine whether there are reasons for not continuing to do the audit. Previous conflicts over the appropriate scope of the audit, the type of opinion to issue, unpaid fees, or other matters may cause the auditor to discontinue association. The auditor may also drop a client after determining the client lacks integrity.

Even if none of the previously discussed conditions exist, the CPA firm may decide not to continue doing audits for a client because of excessive risk. For example, a CPA firm might decide that considerable risk of a regulatory conflict exists between a governmental agency and a client, which could result in financial failure of the client and ultimately lawsuits against the CPA firm. Even if the engagement is profitable, the long-term risk may exceed the short-term benefits of doing the audit.

Investigating new clients and reevaluating existing ones is an essential part of deciding acceptable audit risk. For example, assume a potential client operates in a



reasonably risky industry, that its management has a reputation of integrity, but is also known to take aggressive financial risks. If the CPA firm decides that acceptable audit risk is extremely low, it may choose not to accept the engagement. If the CPA firm concludes that acceptable audit risk is low but the client is still acceptable, the firm may accept the engagement but increase the fee proposed to the client. Audits with a low acceptable audit risk will normally result in higher audit costs, which should be reflected in higher audit fees.

Two major factors affecting acceptable audit risk are the likely statement users and their intended uses of the statements. The auditor is likely to accumulate more evidence when the statements are to be used extensively, as is often the case for publicly held companies, those with extensive indebtedness, and companies that are to be sold in the near future.

The most likely uses of the statements can be determined from previous experience with the client and discussions with management. Throughout the engagement, the auditor may get additional information about why the client is having an audit and the likely uses of the financial statements. This information may affect the auditor's acceptable audit risk.

A clear understanding of the terms of the engagement should exist between the client and the CPA firm. Auditing standards require that auditors document their understanding with the client, usually in an **engagement letter**, including the engagement's objectives, the responsibilities of the auditor and management, identification of the financial reporting framework used by management, reference to the expected form and content of the audit report, and the engagement's limitations. For public companies, the audit committee is responsible for hiring the auditor as required by the Sarbanes–Oxley Act. The engagement letter is typically signed by management for private companies. An example of an engagement letter for the audit of a private company is provided in Figure 8-2 (p. 232).

The engagement letter may also include an agreement to provide other services such as tax returns or management consulting allowed under the *Code of Professional Conduct* and regulatory requirements. It should also state any restrictions to be imposed on the auditor's work, deadlines for completing the audit, assistance to be provided by the client's personnel in obtaining records and documents, and schedules to be prepared for the auditor. It often includes an agreement on fees. The engagement letter also serves the purpose of informing the client that the auditor cannot guarantee that all acts of fraud will be discovered.

Identify Client's Reasons for Audit

Obtain an Understanding with the Client

ALL THAT GLITTERS ISN'T GOLD

Gold! Just as the discovery of gold at Sutter's Mill started the 1849 gold rush in California, the announcement of a major gold discovery in Indonesia in 1993 sent Bre-X Minerals, Ltd., shares soaring on the Toronto stock exchange. The discovery was billed as the "gold discovery of the century," and fights emerged over who had the rights to mine the gold.

A thorough understanding of core operations at businesses such as Bre-X Minerals is critical when CPAs evaluate whether they can effectively serve as auditor. In situations like Bre-X that involve unique and complex operations, the auditor often must rely on the evaluation of specialists to understand the value of assets such as gold and other extractive minerals. Without this kind of knowledge, the auditor may face enormous risks.

While plenty of intrigue surrounded the Bre-X gold find, it turned out to be a hoax. Fire destroyed all the geologist's records of the find, and the exploration manager mysteriously plunged from a helicopter in an alleged suicide just before the announcement that the gold discovery appeared to be a fraud. Allegedly, the gold samples had been "salted" with gold, and the samples had been destroyed, preventing independent verification. A separate, independent analysis of the discovery by another company indicated insignificant amounts of gold, resulting in a 90 percent decline in the value of Bre-X shares.

Source: Based on William C. Symonds and Michael Shari, "After Bre-X, the Glow is Gone," *BusinessWeek* (April 14, 1997), pp. 38–39.

HILYER AND RIDDLER, CPAs
Macon, Georgia 31212

June 14, 2013

Mr. Chuck Milsaps, President
 Babb Clothing Co.
 4604 Oakley St.
 Macon, Georgia 31212

Dear Mr. Milsaps:

You have requested that we audit the financial statements of Babb Clothing Co., which comprise the balance sheet as of December 31, 2013, and the related statements of income; changes in stockholders' equity and cash flows for the year then ended; and the related notes to the financial statements. We are pleased to confirm our acceptance and our understanding of this audit engagement by means of this letter. Our audit will be conducted with the objective of our expressing an opinion on the financial statements.

We will conduct our audit in accordance with auditing standards generally accepted in the United States of America (GAAS). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement. An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

Because of the inherent limitations of an audit, together with the inherent limitations of internal control, an unavoidable risk that some material misstatements may not be detected exists, even though the audit is properly planned and performed in accordance with GAAS.

In making our risk assessments, we consider internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. However, we will communicate to you in writing concerning any significant deficiencies or material weaknesses in internal control relevant to the audit of the financial statements that we have identified during the audit.

Our audit will be conducted on the basis that management acknowledges and understands that they have responsibility

- a. for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America;
- b. for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free of material misstatement, whether due to fraud or error; and
- c. to provide us with
 - i. access to all information of which management is aware that is relevant to the preparation and fair presentation of the financial statements such as records, documentation, and other matters;
 - ii. additional information that we may request from management for the purpose of the audit; and
 - iii. unrestricted access to persons within the entity from whom we determine it necessary to obtain audit evidence.

As part of our audit process, we will request from management written confirmation concerning representations made to us in connection with the audit.

As part of our engagement for the year ending December 31, 2013, we will also prepare the federal and state income tax returns for Babb Clothing Co.

Our fees will be billed as work progresses and are based on the amount of time required at various levels of responsibility, plus actual out-of-pocket expenses. Invoices are payable upon presentation. We will notify you immediately of any circumstances we encounter that could significantly affect our initial estimate of total fees of \$135,000.

We will issue a written report upon completion of our audit of Babb Clothing Co.'s financial statements. Our report will be addressed to management and the board of directors of Babb Clothing Co. We cannot provide assurance that an unmodified opinion will be expressed. Circumstances may arise in which it is necessary for us to modify our opinion, add an emphasis-of-matter or other-matter paragraph(s), or withdraw from the engagement.

Please sign and return the attached copy of this letter to indicate your acknowledgement of, and agreement with, the arrangements for our audit of the financial statements including our respective responsibilities.

Yours very truly:

Alan Hilyer

Alan Hilyer
Partner

Accepted:

By: *Chuck Milsaps*
Date: 6-21-13

Engagement letter information is important in planning the audit principally because it affects the timing of the tests and the total amount of time the audit and other services will take. For example, if the deadline for submitting the audit report is soon after the balance sheet date, a significant portion of the audit must be done before the end of the year. If unexpected circumstances arise or if client assistance is not available, arrangements must be made to extend the amount of time for the engagement. Client-imposed restrictions on the audit can affect the procedures performed and possibly even the type of audit opinion issued.

After understanding the client's reasons for the audit, the auditor should develop and document a preliminary **audit strategy** that sets the scope, timing, and direction of the audit and that guides the development of the audit plan. This strategy considers the nature of the client's business and industry, including areas where there is greater risk of significant misstatements. The auditor also considers other factors such as the number of client locations and the past effectiveness of client controls in developing a preliminary approach to the audit. The planned strategy helps the auditor determine the resources required for the engagement, including engagement staffing.

Develop Overall Audit Strategy

Select Staff for Engagement The auditor must assign the appropriate staff to the engagement to comply with auditing standards and to promote audit efficiency. One of the underlying principles in auditing standards is that:

Auditors are responsible for having appropriate competence and capabilities to perform the audit.

Staff must therefore be assigned with that requirement in mind, and those assigned to the engagement must be knowledgeable about the client's industry. Larger audit engagements are likely to require one or more partners and staff at several experience levels. Individuals in multiple offices of the firm may be included, including offices outside the United States, if the client has operations in numerous locations around the world. Specialists in such technical areas as statistical sampling, business valuation, and computer risk assessment may also be assigned. On smaller audits, only one or two staff members may be needed.

A major consideration of staffing is the need for continuity from year to year. Continuity helps the CPA firm maintain familiarity with the technical requirements and closer interpersonal relations with client personnel. An inexperienced staff assistant is likely to become the most experienced nonpartner on the engagement within a few years.

Consider a computer manufacturing client with extensive inventory of computers and computer parts where inherent risk for inventory has been assessed as high. It is essential for the staff person doing the inventory portion of the audit to be experienced in auditing inventory. The auditor should also have a good understanding of the computer manufacturing industry. The CPA firm may decide to engage a specialist if no one within the firm is qualified to evaluate whether the inventory is obsolete.

Evaluate Need for Outside Specialists As the story involving the gold claim at Bre-X illustrates, if the audit requires specialized knowledge, it may be necessary to consult a specialist. Auditing standards establish the requirements for selecting specialists and reviewing their work. Examples include using a diamond expert in evaluating the replacement cost of diamonds and an actuary for determining the appropriateness of the recorded value of insurance loss reserves. Another common use of specialists is consulting with attorneys on the legal interpretation of contracts and titles or business valuation experts on fair value accounting treatments.

The auditor must have a sufficient understanding of the client's business to recognize whether a specialist is needed. The auditor needs to evaluate the specialist's

professional qualifications and understand the objectives and scope of the specialist's work. The auditor should also consider the specialist's relationship to the client, including circumstances that might impair the specialist's objectivity. The use of a specialist does not affect the auditor's responsibility for the audit and the audit report should not refer to the specialist unless the specialist's report results in a modification of the audit opinion.

UNDERSTAND THE CLIENT'S BUSINESS AND INDUSTRY

OBJECTIVE 8-3

Gain an understanding of the client's business and industry.

Accept client and perform initial audit planning

Understand the client's business and industry

Assess client business risk

Perform preliminary analytical procedures

Set materiality and assess acceptable audit risk and inherent risk

Understand internal control and assess control risk

Gather information to assess fraud risks

Develop overall audit strategy and audit program

A thorough understanding of the client's business and industry and knowledge about the company's operations are essential for the auditor to conduct an adequate audit. Another of the underlying principles in auditing standards states:

The auditor identifies and assesses risks of material misstatement, whether due to fraud or error, based on an understanding of the entity and its environment, including the entity's internal control.

The nature of the client's business and industry affects client business risk and the risk of material misstatements in the financial statements. (Client business risk is the risk that the client will fail to meet its objectives. It is discussed later in this chapter.) In recent years, several factors have increased the importance of understanding the client's business and industry:

- Recent significant declines in economic conditions around the world are likely to significantly increase a client's business risks. Auditors need to understand the nature of the client's business to understand the impact of major economic downturns on the client's financial statements and ability to continue as a going concern.
- Information technology connects client companies with major customers and suppliers. As a result, auditors need greater knowledge about major customers and suppliers and related risks.
- Clients have expanded operations globally, often through joint ventures or strategic alliances.
- Information technology affects internal client processes, improving the quality and timeliness of accounting information.
- The increased importance of human capital and other intangible assets has increased accounting complexity and the importance of management judgments and estimates.

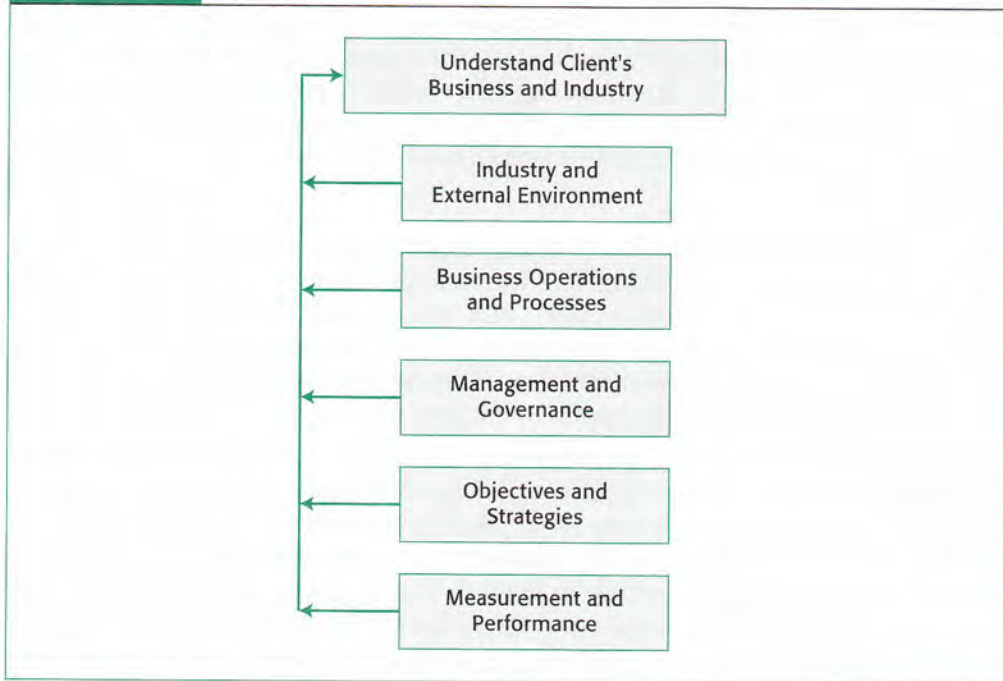
SIGNS OF GLOBAL SLOWDOWN IMPACT CLIENT BUSINESS RISKS

The financial crisis that began to unfold in 2008 continues to wreak havoc on the global economy. While the U.S. stock market has recovered significantly since its lowest point in 2008 when the Dow Jones Industrial Average fell to 6,547, markets remain jittery as events surrounding the global outlook remain disappointing and uncertain. The health of the Euro continues to be threatened by economic and political uncertainties in Greece, Spain, and Portugal. Other recent signs, such as reports at manufacturers around the globe that purchasing is down, are dampening the global economic outlook as well. Signs of economic troubles are turning up in China, India, South Africa, and Brazil, and there are concerns

that signs of slowdown are occurring in sync around the globe.

Unfortunately, slowdowns can become interconnected and self-reinforcing. For example, U.S. businesses that generate sales from European and Brazilian markets are impacted at the same time businesses in Brazil are affected by slowdowns in manufacturing in China and India. Auditor knowledge of a client's business is especially important as they consider the impact of global economic conditions on a client's core business operations and strategies.

Source: Based on Jon Hilsenrath and Joshua Mitchell, "New Signs of Global Slowdown," *The Wall Street Journal* (May 25, 2012), pp. A1 and A6.

FIGURE 8-3**Strategic Systems Understanding of the Client's Business and Industry**

- Many clients may have invested in complex financial instruments, such as collateralized debt obligations or mortgage backed securities, which may have declined in value, require complex accounting treatments, and often involve unknown counterparties who may create unexpected financial risks for the client.

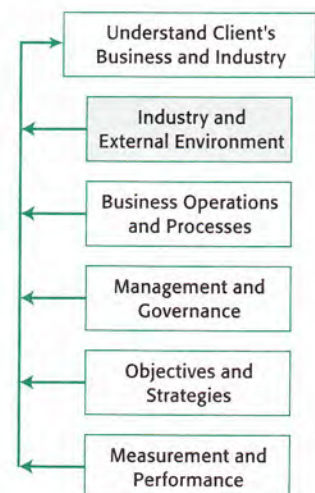
Auditors consider these factors using a strategic systems approach to understanding the client's business. Figure 8-3 provides an overview of the approach to understanding the client's business and industry. Next, we will discuss several aspects of this approach.

The three primary reasons for obtaining a good understanding of the client's industry and external environment are:

1. Risks associated with specific industries may affect the auditor's assessment of client business risk and acceptable audit risk—and may even influence auditors against accepting engagements in riskier industries, such as the financial services and health insurance industries.
2. Many inherent risks are common to all clients in certain industries. Familiarity with those risks aids the auditor in assessing their relevance to the client. Examples include potential inventory obsolescence in the fashion clothing industry, accounts receivable collection inherent risk in the consumer loan industry, and reserve for loss inherent risk in the casualty insurance industry.
3. Many industries have unique accounting requirements that the auditor must understand to evaluate whether the client's financial statements are in accordance with accounting standards. For example, if the auditor is doing an audit of a city government, the auditor must understand governmental accounting and auditing requirements. Unique accounting requirements exist for construction companies, railroads, not-for-profit organizations, financial institutions, and many other organizations.

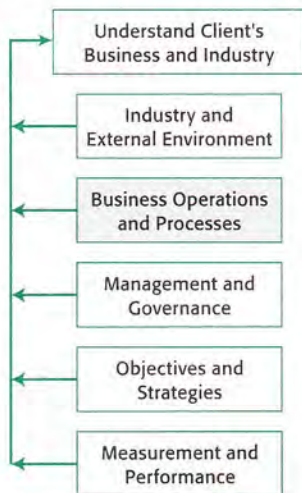
Many auditor litigation cases (like those described in Chapter 4) result from the auditor's failure to fully understand the nature of transactions in the client's industry,

Industry and External Environment



similar to what occurred in the Enron case discussed in the opening vignette to this chapter. The auditor must also understand the client's external environment, including such things as wide volatility in economic conditions, extent of competition, and regulatory requirements. For example, auditors of utility companies need more than an understanding of the industry's unique regulatory accounting requirements. They must also know how recent deregulation in this industry has increased competition and how fluctuations in energy prices impact firm operations. To develop effective audit plans, auditors of all companies must have the expertise to assess external environment risks.

Business Operations and Processes



The auditor should understand factors such as major sources of revenue, key customers and suppliers, sources of financing, and information about related parties that may indicate areas of increased client business risk. For example, many technology firms are dependent on one or a few products that may become obsolete due to new technologies or stronger competitors. Dependence on a few major customers may result in material losses from bad debts or obsolete inventory.

Tour Client Facilities and Operations A tour of the client's facilities is helpful in obtaining a better understanding of the client's business operations because it provides an opportunity to observe operations firsthand and to meet key personnel. By viewing the physical facilities, the auditor can assess physical safeguards over assets and interpret accounting data related to assets such as inventory in process and factory equipment. With such first-hand knowledge, the auditor is better able to identify inherent risks, such as unused equipment or potentially unsalable inventory. Discussions with nonaccounting employees during the tour and throughout the audit also help the auditor learn more about the client's business to aid in assessing inherent risk.

Identify Related Parties Transactions with related parties are important to auditors because accounting standards require that they be *disclosed in the financial statements* if they are material. A **related party** is defined in auditing standards as an affiliated company, a principal owner of the client company, or any other party with which the client deals, where one of the parties can influence the management or operating policies of the other. A **related party transaction** is any transaction between the client and a related party. Common examples include sales or purchase transactions between a parent company and its subsidiary, exchanges of equipment between two companies owned by the same person, and loans to officers. A less common example is the exercise of significant management influence on an audit client by its most important customer.

A transaction with a related party is not an arm's-length transaction. Therefore, there is a risk that they may not be valued at the same amount as a transaction with an independent third party. For example, a company may be able to purchase inventory from a related company at more favorable terms than from an outside vendor. Most auditors assess inherent risk as high for related parties and related party transactions, because of the accounting disclosure requirements, the lack of independence between the parties involved in the transactions, and the opportunities they may provide to engage in fraudulent financial reporting.

Because material related party transactions must be disclosed, all related parties need to be *identified and included in the auditor's permanent files* early in the engagement. (The disclosure requirements include the nature of the related party relationship; a description of transactions, including dollar amounts; and amounts due from and to related parties.) Having all related parties included in the permanent audit files, and making sure all auditors on the team know who the related parties are, helps auditors identify undisclosed related party transactions as they do the audit. Auditing standards require the auditor to ask management to identify the entity's related parties and inquire as to whether the entity has entered into any transactions with these related parties and, if so, the type and purpose of the transaction. Those standards also require the auditor to inquire of management and perform other

procedures to obtain an understanding of controls that management has established to identify, authorize, and approve related party transactions. Auditors may also learn about related parties by reviewing SEC filings and examining stockholders' listings to identify principal stockholders.

Because of the lack of independence between related parties, the Sarbanes–Oxley Act prohibits related party transactions that involve personal loans to any director or executive officer of a public company. Banks and other financial institutions, however, are permitted to make normal loans, such as residential mortgages, to their directors and officers using market rates.

Because management establishes a company's strategies and business processes, an auditor should assess management's philosophy and operating style and its ability to identify and respond to risk, as these significantly influence the risk of material misstatements in the financial statements. Research commissioned by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), *Fraudulent Financial Reporting 1998–2007*, found that in over 340 instances of fraudulent financial reporting investigated by the SEC, the chief executive officer (CEO) or chief financial officer (CFO) was named as being involved in perpetrating the fraud, representing almost 90 percent of the cases.

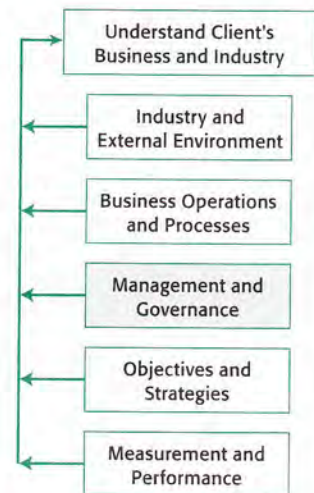
A firm's governance includes its organizational structure, as well as the activities of the board of directors and the audit committee. An effective board of directors helps ensure that the company takes only appropriate risks, while the audit committee, through oversight of financial reporting, can reduce the likelihood of overly aggressive accounting. To gain an understanding of the client's governance system, the auditor should understand how the board and audit committee exercise oversight, including consideration of the company's code of ethics and evaluation of the corporate minutes.

Code of Ethics Companies frequently communicate the entity's values and ethical standards through policy statements and codes of conduct. In response to requirements in the Sarbanes–Oxley Act, the SEC requires each public company to disclose whether it has adopted a code of ethics that applies to senior management, including the CEO, CFO, and principal accounting officer or controller. A company that has not adopted such a code must disclose this fact and explain why it has not done so. The SEC also requires companies to promptly disclose amendments and waivers to the code of ethics for any of those officers. Auditors should gain knowledge of the company's code of ethics and examine any changes and waivers of the code of conduct that have implications about the governance system and related integrity and ethical values of senior management.

Minutes of Meetings The **corporate minutes** are the official record of the meetings of the board of directors and stockholders. They include key authorizations and summaries of the most important topics discussed at these meetings and the decisions made by the directors and stockholders. Common authorizations in the minutes include compensation of officers, new contracts and agreements, acquisitions of property, loans, and dividend payments. Examples of other information relevant to the audit include discussions about litigation, a pending issue of stock, or a potential merger.

The auditor should read the minutes to obtain authorizations and other information that is relevant to performing the audit. This information should be included in the audit files by making an abstract of the minutes or by obtaining a copy and underlining significant portions. Before the audit is completed, the auditor must follow up on this information to be sure that management has complied with actions taken by the stockholders and the board of directors. As an illustration, the authorized compensation of officers should be traced to each individual officer's payroll record as a test of whether the correct total compensation was paid. Similarly, the auditor should compare the authorizations of loans with notes payable to make certain that these liabilities are recorded and key terms disclosed. Litigation, pending stock issues, and merger information may need to be included in footnotes. Auditors

Management and Governance



often supplement their review of minutes with inquiries of the audit committee or full board about their awareness of events that might affect financial reporting.

Strategies are approaches followed by the entity to achieve organizational objectives. Auditors should understand client objectives related to:

1. Reliability of financial reporting
2. Effectiveness and efficiency of operations
3. Compliance with laws and regulations

Despite management's best efforts, business risks arise that threaten management's ability to achieve its objectives. As a result, knowledge of client objectives and strategies helps the auditor to assess client business risk and inherent risk in the financial statements. For example, product quality can have a significant impact on the financial statements through lost sales and through warranty and product liability claims. Toyota, Inc., suffered significant losses arising from business risks when production problems involving gas pedals and brakes in several of its most popular vehicles triggered significant declines in sales and stockholder value.

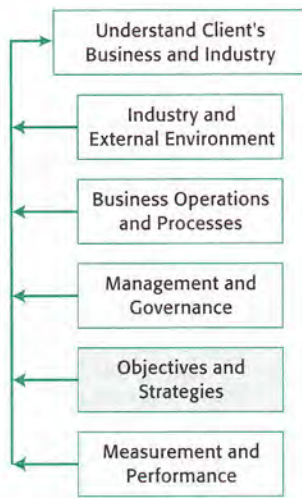
As part of understanding the client's objectives related to compliance with laws and regulations, the auditor should become familiar with the terms of client contracts and other legal obligations. These can include such diverse items as long-term notes and bonds payable, stock options, pension plans, contracts with vendors for future delivery of supplies, government contracts for completion and delivery of manufactured products, royalty agreements, union contracts, and leases. Most contracts are of primary interest in individual parts of the audit and, in practice, receive special attention during the different phases of the detailed tests. For example, the provisions of a pension plan will receive substantial emphasis as a part of the audit of the unfunded liability for pensions. The auditor should review and abstract the documents early in the engagement to gain a better perspective of the organization and to better assess inherent risks. Later, these documents can be examined more carefully as a part of the tests of individual audit areas.

A client's performance measurement system includes key performance indicators that management uses to measure progress toward its objectives. These indicators go beyond financial statement figures, such as sales and net income, to include measures tailored to the client and its objectives. Such key performance indicators may include market share, sales per employee, unit sales growth, unique visitors to a Web site, same-store sales, sales by country, and sales per square foot for a retailer.

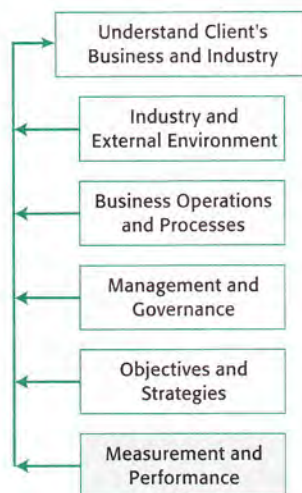
Inherent risk of financial statement misstatements may be increased if the client has set unreasonable objectives or if the performance measurement system encourages aggressive accounting. For example, a company's objective may be to obtain the leading market share of industry sales. If management and salespeople are compensated based on achieving this goal, there is increased incentive to record sales before they have been earned or record sales for nonexistent transactions. In such a situation, the auditor is likely to increase assessed inherent risk and the extent of testing for the occurrence transaction-related audit objective for sales.

Performance measurement includes ratio analysis and benchmarking against key competitors. As part of understanding the client's business, the auditor should perform ratio analysis or review the client's calculations of key performance ratios. Performing preliminary analytical procedures is the fourth step in the planning process and is discussed later in this chapter.

Client Objectives and Strategies



Measurement and Performance



ASSESS CLIENT BUSINESS RISK

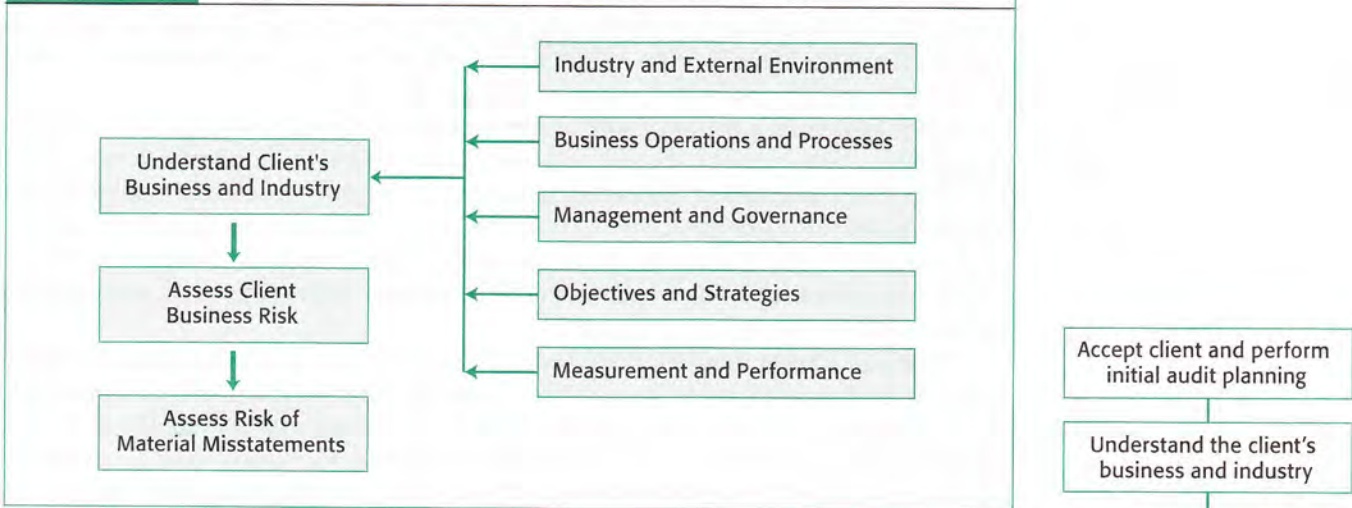
OBJECTIVE 8-4

Assess client business risk.

The auditor uses knowledge gained from the understanding of the client's business and industry to assess **client business risk**, the risk that the client will fail to achieve its objectives. Client business risk can arise from any of the factors affecting the client

FIGURE 8-4

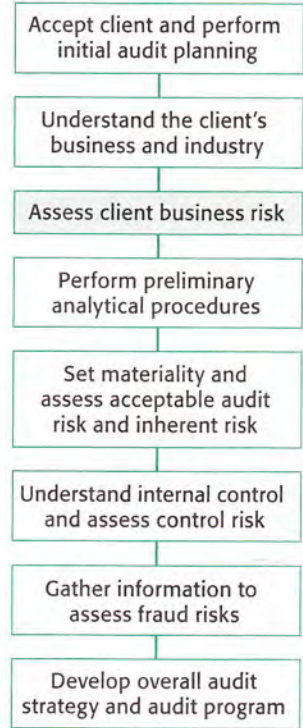
Understanding the Client’s Business and Industry, Client Business Risk, and Risk of Material Misstatements



and its environment, such as significant declines in the economy that threaten the client’s cash flows, new technology eroding a client’s competitive advantage, or a client failing to execute its strategies as well as its competitors.

The auditor’s primary concern is the risk of material misstatements in the financial statements due to client business risk. For example, companies often make strategic acquisitions or mergers that depend on successfully combining the operations of two or more companies. If the planned synergies do not develop, the fixed assets and goodwill recorded in the acquisition may be impaired, affecting the fair presentation in the financial statements.

Figure 8-4 summarizes the relationship among the client’s business and industry, client business risk, and the auditor’s assessment of the risk of material financial statement misstatements. The auditor’s assessment of client business risk considers the client’s industry and other external factors, as well as the client’s business strategies, processes and other internal factors. The auditor also considers management controls



**BROADER
FOCUS ON RISK
OVERSIGHT**

Expectations that boards and audit committees are effectively overseeing an organization’s risk management processes are at all time highs. As the volume and complexity of risks increase due to highly volatile economic conditions, globalization, emerging technologies, and complex business transactions, key stakeholders are putting pressure on boards and senior executives to strengthen their approach to risk management. For example, the New York Stock Exchange Final Governance Rules require the audit committee to discuss management’s guidelines and policies for risk oversight. The SEC requires the board of directors to provide disclosures in proxy statements to stockholders that describe the board’s involvement in risk oversight. Standard & Poor’s has expanded its evaluation of the entity’s ability to manage important strategic and operational risks as an important component of the credit rating process.

Many organizations are adopting enterprise risk management (ERM) as a way to effectively manage the complex portfolio of risks that exist across an organization. Instead of relying on a traditional, “silo-based” strategy, where each area of the organization manages its own risk, ERM adopts a broader top-down view of risks that integrates and coordinates risk oversight across the entire enterprise. An effectively implemented ERM process should provide auditors with important information about the client’s most significant business risk exposures.

Sources: 1. Methodology: Management and Governance Credit Factors for Corporate Entities and Insurers, Standard & Poor’s, New York (November 13, 2012); 2. Proxy Disclosure Enhancements, Securities and Exchange Commission, Washington, DC (December 16, 2009); 3. Final Governance Rules, New York Stock Exchange (November 4, 2003).

that may mitigate business risk, such as effective risk assessment practices and corporate governance. Remaining risk after considering the effectiveness of top management controls is sometimes called residual risk. After evaluating client business risk, the auditor can then assess the risk of material misstatement in the financial statements, and then apply the audit risk model to determine the appropriate extent of audit evidence. Use of the audit risk model is discussed in Chapter 9.

Management is a primary source for identifying client business risks. In public companies, management should conduct thorough evaluations of relevant client business risks that affect financial reporting to be able to certify quarterly and annual financial statements, and to evaluate the effectiveness of disclosure controls and procedures required by the Sarbanes–Oxley Act. Boards of directors and senior executives increasingly implement an enterprise-wide approach to risk management as described in the vignette on page 239.

Sarbanes–Oxley requires management to certify that it has designed disclosure controls and procedures to ensure that material information about business risks are communicated to management and disclosed to external stakeholders, such as investors. These procedures cover a broader range of information than is covered by an issuer’s internal controls for financial reporting. The procedures should capture information that is relevant to assess the need to disclose developments and risks that pertain to the company’s business. For example, if a subsidiary engages in significant hedging activities, controls should exist so that top management is informed of and discloses this information. Inquiries of management about client business risks it has identified, in advance of certifying quarterly and annual financial statements, may provide a significant source of information for auditors about client business risks affecting financial reporting.

The Sarbanes–Oxley Act also requires management to certify that it has informed the auditor and audit committee of any significant deficiencies in internal control, including material weaknesses. Such information enables auditors to better evaluate how internal controls may affect the likelihood of material misstatements in financial statements.

Auditing standards require the engagement team, including the engagement partner, to discuss the susceptibility of the entity’s financial statements to material misstatement. The purpose of this required engagement-team discussion is to provide an opportunity for more experienced team members to share insights based on their knowledge of the entity and for the team to exchange information about client business risks and how the financial statements might be susceptible to material misstatement due to fraud or error. These discussions also help the engagement team members gain a better understanding of the potential for material misstatement in the specific financial statement areas assigned to them.

PERFORM PRELIMINARY ANALYTICAL PROCEDURES

OBJECTIVE 8-5

Perform preliminary analytical procedures.

Auditors perform preliminary analytical procedures to better understand the client’s business and to assess client business risk. One such procedure compares client ratios to industry or competitor benchmarks to provide an indication of the company’s performance. Such preliminary tests can reveal unusual changes in ratios compared to prior years, or to industry averages, and help the auditor identify areas with increased risk of misstatements that require further attention during the audit.

The Hillsburg Hardware Co. example is used to illustrate the use of preliminary analytical procedures as part of audit planning. This is followed by a summary of the audit planning process, and further discussion of the use of analytical procedures throughout the audit.

Table 8-1 presents key financial ratios for Hillsburg Hardware Co., along with comparative industry information that auditors might consider during audit planning.

TABLE 8-1 **Examples of Planning Analytical Procedures**

| Selected Ratios | Hillsburg 12/31/13 | Industry 12/31/13 | Hillsburg 12/31/12 | Industry 12/31/12 |
|--|-----------------------|----------------------|-----------------------|----------------------|
| Short-Term Debt-Paying Ability | | | | |
| Cash ratio | 0.06 | 0.22 | 0.06 | 0.20 |
| Quick ratio | 1.57 | 3.10 | 1.45 | 3.00 |
| Current ratio | 3.86 | 5.20 | 4.04 | 5.10 |
| Liquidity Activity Ratios | | | | |
| Accounts receivable turnover | 7.59 | 12.15 | 7.61 | 12.25 |
| Days to collect accounts receivable | 48.09 | 30.04 | 47.96 | 29.80 |
| Inventory turnover | 3.36 | 5.20 | 3.02 | 4.90 |
| Days to sell inventory | 108.63 | 70.19 | 120.86 | 74.49 |
| Ability to Meet Long-Term Obligations | | | | |
| Debt to equity | 1.73 | 2.51 | 1.98 | 2.53 |
| Times interest earned | 3.06 | 5.50 | 3.29 | 5.60 |
| Profitability Ratios | | | | |
| Gross profit percent | 27.85 | 31.00 | 27.70 | 32.00 |
| Profit margin | 0.05 | 0.07 | 0.05 | 0.08 |
| Return on assets | 0.09 | 0.09 | 0.08 | 0.09 |
| Return on common equity | 0.26 | 0.37 | 0.24 | 0.35 |

These ratios are based on the Hillsburg Hardware Co. financial statements. (See the glossy insert in this textbook.) Hillsburg's Annual Report to Shareholders described the company as a wholesale distributor of hardware equipment to independent, high-quality hardware stores in the midwestern United States. The company is a niche provider in the overall hardware industry, which is dominated by national chains like Home Depot and Lowe's. Hillsburg's auditors identified potential increased competition from national chains as a specific client business risk. Hillsburg's market consists of smaller, independent hardware stores. Increased competition could affect the sales and profitability of these customers, likely affecting Hillsburg's sales and the value of assets such as accounts receivable and inventory. An auditor might use ratio information to identify areas where Hillsburg faces increased risk of material misstatements.

The profitability measures indicate that Hillsburg is performing fairly well, despite the increased competition from larger national chains. Although lower than the industry averages, the liquidity measures indicate that the company is in good financial condition, and the leverage ratios indicate additional borrowing capacity. Because Hillsburg's market consists of smaller, independent hardware stores, the company holds more inventory and takes longer to collect receivables than the industry average.

In identifying areas of specific risk, the auditor is likely to focus on the liquidity activity ratios. Inventory turnover has improved but is still lower than the industry average. Accounts receivable turnover has declined slightly and is lower than the industry average. The collectibility of accounts receivable and inventory obsolescence are likely to be assessed as high inherent risks and will therefore likely warrant additional attention in the current year's audit. These areas likely received additional attention during the prior year's audit as well.

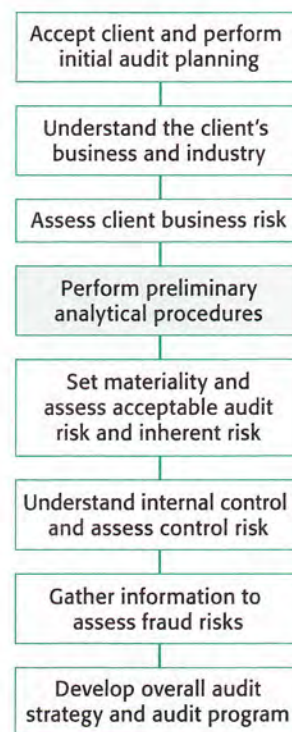
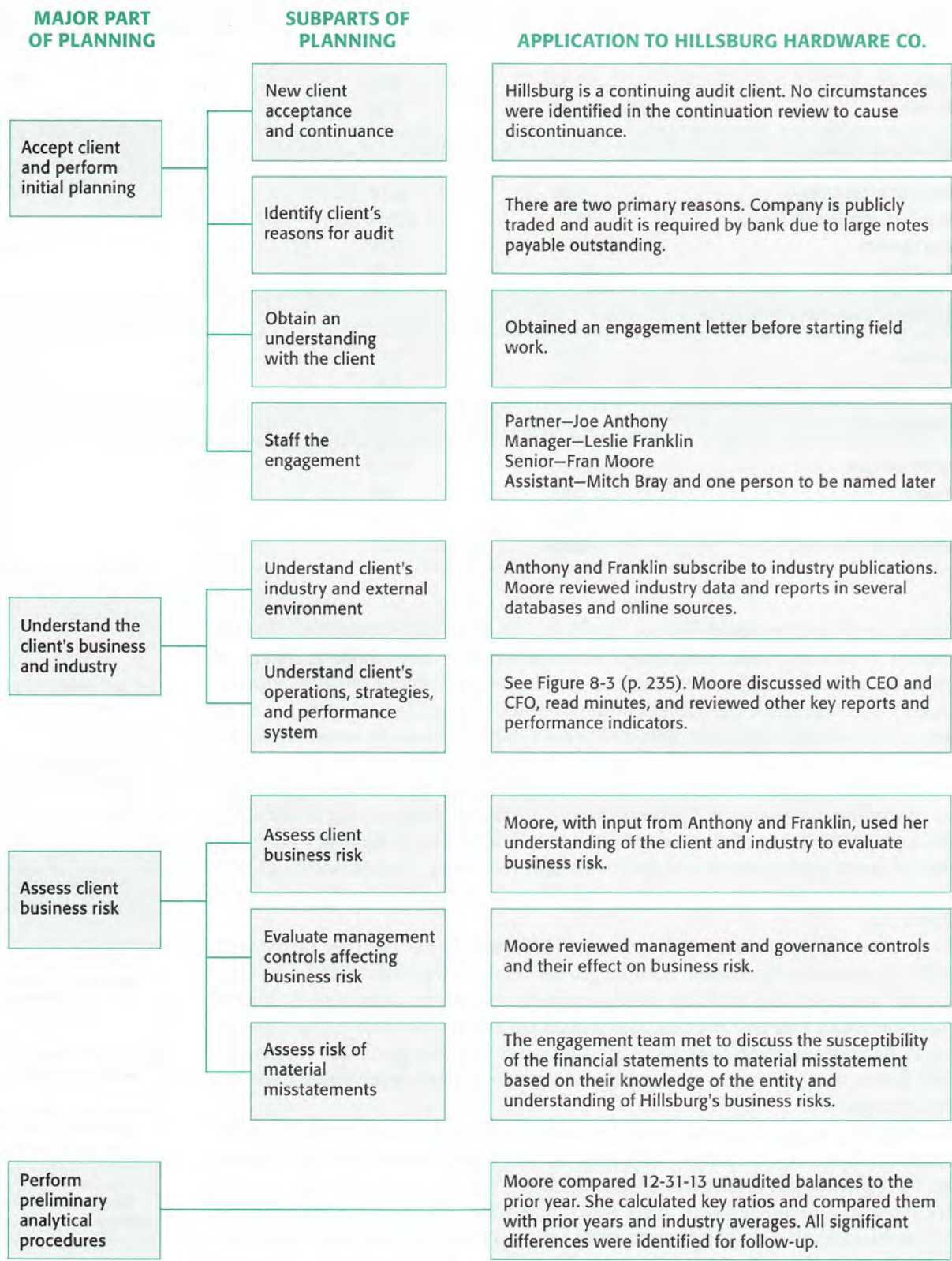


FIGURE 8-5

Key Parts of Planning: Accept Client and Perform Initial Planning, Understand the Client's Business and Industry, Assess Client Business Risk, and Perform Preliminary Analytical Procedures Applied to Hillsburg Hardware Co.



SUMMARY OF THE PARTS OF AUDIT PLANNING

A major purpose of audit planning is to gain an understanding of the client's business and industry, which is used to assess acceptable audit risk, client business risk, and the risk of material misstatements in the financial statements. Figure 8-5 summarizes the four major parts of audit planning discussed in this section and the key components of each part, with a brief illustration of how a CPA firm applied each component to a continuing client, Hillsburg Hardware Co.

There are four additional parts of audit planning that are discussed in subsequent chapters. The four subsequent parts are:

- Set materiality and assess acceptable audit risk and inherent risk (Chapter 9)
- Understand internal control and assess control risk (Chapter 10)
- Gather information to assess fraud risks (Chapter 11)
- Develop an overall audit plan and audit program (Chapter 13)

ANALYTICAL PROCEDURES

Analytical procedures are one of the eight types of evidence introduced in Chapter 7. Because of the increased emphasis on analytical procedures in professional practice, this section moves beyond the preliminary analytical procedures discussed earlier in this chapter to discuss the uses of analytical procedures throughout the audit.

Analytical procedures are defined by auditing standards as *evaluations of financial information through analysis of plausible relationships among financial and nonfinancial data*. Analytical procedures use comparisons and relationships to assess whether account balances or other data appear reasonable relative to the auditor's expectations.

When performing analytical procedures, the auditor's investigation of unusual fluctuations is triggered by relationships among financial and nonfinancial data that differ from expectations developed by the auditor. For example, the auditor might compare current-year recorded commission expense to an expectation of commission expense based on total recorded sales multiplied by the average commission rate as a test of the overall reasonableness of recorded commissions. For this analytical procedure to be relevant and reliable, the auditor has likely concluded that recorded sales are correctly stated, all sales earn a commission, and that the average actual commission rate is readily determinable.

Analytical procedures may be performed at any of three times during an engagement:

1. Analytical procedures are *required* in the *planning phase* to assist in determining the nature, extent, and timing of audit procedures. This helps the auditor identify significant matters requiring special consideration later in the engagement. For example, the calculation of inventory turnover before inventory price tests are done may indicate the need for special care during those tests. Analytical procedures done in the planning phase typically use data aggregated at a high level, and the sophistication, extent, and timing of the procedures vary among clients. For some clients, the comparison of prior-year and current-year account balances using the unaudited trial balance may be sufficient. For other clients, the procedures may involve extensive analysis of quarterly financial statements based on the auditor's judgment.
2. Analytical procedures are often done *during the testing phase* of the audit as a substantive test in support of account balances. These tests are often done in conjunction with other audit procedures. For example, the prepaid portion of each insurance policy might be compared with the same policy for the previous year as a part of doing tests of prepaid insurance. The assurance provided

OBJECTIVE 8-6

State the purposes of analytical procedures and the timing of each purpose.

FIGURE 8-6 Timing and Purposes of Analytical Procedures

| Purpose | Phase | | |
|---|---------------------------|-------------------|-----------------------------|
| | (Required) Planning Phase | Testing Phase | (Required) Completion Phase |
| Understand the client's business and industry | Primary purpose | | |
| Assess going concern | Secondary purpose | | Secondary purpose |
| Indicate possible misstatements (attention directing) | Primary purpose | Secondary purpose | Primary purpose |
| Reduce detailed tests | Secondary purpose | Primary purpose | |

by analytical procedures depends on the predictability of the relationship, as well as the precision of the expectation and the reliability of the data used to develop the expectation. When analytical procedures are used during the testing phase of the audit, auditing standards require the auditor to document in the working papers the expectation and factors considered in its development. The auditor is also required to evaluate the reliability of the data used to develop the expectation, including the source of the data and controls over the data's preparation.

3. Analytical procedures are also *required during the completion phase* of the audit. Such tests serve as a final review for material misstatements or financial problems and help the auditor take a final "objective look" at the audited financial statements. Typically, a senior partner with extensive knowledge of the client's business conducts the analytical procedures during the final review of the audit files and financial statements to identify possible oversights in an audit.

Figure 8-6 shows the purposes of analytical procedures during each of the three phases. The shaded boxes indicate when a purpose is applicable in each phase. More than one purpose may be indicated. Notice how analytical procedures are done during the planning phase for all four purposes, while procedures during the other two phases are used primarily to determine appropriate audit evidence and to reach conclusions about the fair presentation of financial statements.

FIVE TYPES OF ANALYTICAL PROCEDURES

OBJECTIVE 8-7

Select the most appropriate analytical procedure from among the five major types.

The usefulness of analytical procedures as audit evidence depends significantly on the auditor developing an *expectation* of what a recorded account balance or ratio *should be*, regardless of the type of analytical procedures used. Auditors develop an expectation of an account balance or ratio by considering information from prior periods, industry trends, client-prepared budgeted expectations, and nonfinancial information. The auditor typically compares the client's balances and ratios with expected balances and ratios using one or more of the following types of analytical procedures. In each case, auditors compare client data with:

1. Industry data
2. Similar prior-period data

3. Client-determined expected results
4. Auditor-determined expected results
5. Expected results using nonfinancial data

Suppose that you are doing an audit and obtain the following information about the client and the average company in the client's industry:

**Compare Client
and Industry Data**

| | Client | | Industry | |
|----------------------|--------|-------|----------|-------|
| | 2013 | 2012 | 2013 | 2012 |
| Inventory turnover | 3.4 | 3.5 | 3.9 | 3.4 |
| Gross margin percent | 26.3% | 26.4% | 27.3% | 26.2% |

If we look only at client information for the two ratios shown, the company appears to be stable with no apparent indication of difficulties. However, if we use industry data to develop expectations about the two ratios for 2013, we should expect both ratios for the client to increase. Although these two ratios by themselves may not indicate significant problems, this data illustrates how developing expectations using industry data may provide useful information about the client's performance and potential misstatements. Perhaps the company has lost market share, its pricing has not been competitive, it has incurred abnormal costs, or perhaps it has obsolete items in inventory or made errors in recording purchases. The auditor needs to determine if either of the last two occurred to have reasonable assurance that the financial statements are not misstated.

Dun & Bradstreet, Standard and Poor's, and other analysts accumulate financial information for thousands of companies and compile the data for different lines of business. Many CPA firms purchase this industry information for use as a basis for developing expectations about financial ratios in their audits.

The most important benefits of industry comparisons are to aid in understanding the client's business and as an indication of the likelihood of financial failure. They are less likely to help auditors identify potential misstatements. Financial information collected by the Risk Management Association, for example, is primarily of a type that bankers and other credit analysts use in evaluating whether a company will be able to repay a loan. That same information is useful to auditors in assessing the relative strength of the client's capital structure, its borrowing capacity, and the likelihood of financial failure.

However, a major weakness in using industry ratios for auditing is the difference between the nature of the client's financial information and that of the firms making up the industry totals. Because the industry data are broad averages, the comparisons may not be meaningful. Often, the client's line of business is not the same as the industry standards. In addition, different companies follow different accounting methods, and this affects the comparability of data. For example, if most companies in the industry use FiFO inventory valuation and straight-line depreciation and the audit client uses LIFO and double-declining-balance depreciation, comparisons may not be meaningful. This does not mean that industry comparisons should be avoided. Rather, it is an indication of the need for care in using industry data to develop expectations about financial relationships and in interpreting the results. One approach to overcome the limitations of industry averages is to compare the client to one or more benchmark firms in the industry.

Suppose that the gross margin percentage for a company has been between 26 and 27 percent for each of the past 4 years but has dropped to 23 percent in the current year. This decline in gross margin should be a concern to the auditor if a decline is not expected. The cause of the decline could be a change in economic conditions. But, it could also be caused by misstatements in the financial statements, such as sales or purchase cutoff errors, unrecorded sales, overstated accounts payable, or

**Compare Client Data
with Similar
Prior-Period Data**

inventory costing errors. The decline in gross margin is likely to result in an increase in evidence in one or more of the accounts that affect gross margin. The auditor needs to determine the cause of the decline to be confident that the financial statements are not materially misstated.

A wide variety of analytical procedures allow auditors to compare client data with similar data from one or more prior periods. Here are some common examples:

Compare the Current Year's Balance with that of the Preceding Year One of the easiest ways to perform this test is to include the preceding year's adjusted trial balance results in a separate column of the current year's trial balance spreadsheet. The auditor can easily compare the current year's balance and previous year's balance to decide, early in the audit, whether an account should receive more than the normal amount of attention because of a significant change in the balance. For example, if the auditor observes a substantial increase in supplies expense, the auditor should determine whether the cause was an increased use of supplies, an error in the account due to a misclassification, or a misstatement of supplies inventory.

Compare the Detail of a Total Balance with Similar Detail for the Preceding Year If there have been no significant changes in the client's operations in the current year, much of the detail making up the totals in the financial statements should also remain unchanged. By briefly comparing the detail of the current period with similar detail of the preceding period, auditors often isolate information that needs further examination. Comparison of details may take the form of details over time, such as comparing the monthly totals for the current year and preceding year for sales, repairs, and other accounts, or details at a point in time, such as comparing the details of loans payable at the end of the current year with the detail at the end of the preceding year. In each of these examples, the auditor should first develop an expectation of a change or lack thereof before making the comparison.

Compute Ratios and Percent Relationships for Comparison with Previous Years Comparing totals or details with previous years has two shortcomings. First, it fails to consider growth or decline in business activity. Second, relationships of data to other data, such as sales to cost of goods sold, are ignored. Ratio and percent relationships overcome both shortcomings. For example, the gross margin is a common percent relationship used by auditors.

Table 8-2 includes a few ratios and internal comparisons to show the widespread use of ratio analysis. In all these cases, the comparisons should be made with calculations made in previous years for the same client. Many of the ratios and percents used for comparison with previous years are the same ones used for comparison with industry

| TABLE 8-2 Internal Comparisons and Relationships | |
|---|---|
| Ratio or Comparison | Possible Misstatement |
| Raw material turnover for a manufacturing company | Misstatement of inventory or cost of goods sold or obsolescence of raw material inventory |
| Sales commissions divided by net sales | Misstatement of sales commissions |
| Sales returns and allowances divided by gross sales | Misclassified sales returns and allowances or unrecorded returns or allowances subsequent to year-end |
| Bad debt expense divided by net sales | Misstatement in the allowance for bad debts |
| Each of the individual manufacturing expenses as a percent of total manufacturing expense | Significant misstatement of individual expenses within a total |

FIGURE 8-7

Hillsburg Hardware Common-Size Income Statement

**HILLSBURG HARDWARE CO.
COMMON-SIZE INCOME STATEMENT
Three Years Ending December 31, 2013**

| | 2013 | | 2012 | | 2011 | |
|---|----------------------|-------------------|------------------|-------------------|------------------|-------------------|
| | (000) Preliminary | % of Net Sales | (000) Audited | % of Net Sales | (000) Audited | % of Net Sales |
| Sales | \$144,328 | 100.87 | \$132,421 | 100.91 | \$123,737 | 100.86 |
| Less: Returns and allowances | <u>1,242</u> | <u>0.87</u> | <u>1,195</u> | <u>0.91</u> | <u>1,052</u> | <u>0.86</u> |
| Net sales | 143,086 | 100.00 | 131,226 | 100.00 | 122,685 | 100.00 |
| Cost of goods sold | <u>103,241</u> | <u>72.15</u> | <u>94,876</u> | <u>72.30</u> | <u>88,724</u> | <u>72.32</u> |
| Gross profit | <u>39,845</u> | <u>27.85</u> | <u>36,350</u> | <u>27.70</u> | <u>33,961</u> | <u>27.68</u> |
| Selling expense | | | | | | |
| Salaries and commissions | 7,739 | 5.41 | 7,044 | 5.37 | 6,598 | 5.38 |
| Sales payroll taxes | 1,422 | 0.99 | 1,298 | 0.99 | 1,198 | 0.98 |
| Travel and entertainment | 1,110 | 0.78 | 925 | 0.70 | 797 | 0.65 |
| Advertising | 2,611 | 1.82 | 1,920 | 1.46 | 1,790 | 1.46 |
| Sales and promotional literature | 322 | 0.22 | 425 | 0.32 | 488 | 0.40 |
| Sales meetings and training | 925 | 0.65 | 781 | 0.60 | 767 | 0.62 |
| Miscellaneous sales expense | <u>681</u> | <u>0.48</u> | <u>506</u> | <u>0.39</u> | <u>456</u> | <u>0.37</u> |
| Total selling expense | <u>14,810</u> | <u>10.35</u> | <u>12,899</u> | <u>9.83</u> | <u>12,094</u> | <u>9.86</u> |
| Administration expense | | | | | | |
| Executive and office salaries | 5,524 | 3.86 | 5,221 | 3.98 | 5,103 | 4.16 |
| Administrative payroll taxes | 682 | 0.48 | 655 | 0.50 | 633 | 0.52 |
| Travel and entertainment | 562 | 0.39 | 595 | 0.45 | 542 | 0.44 |
| Computer maintenance and supplies | 860 | 0.60 | 832 | 0.63 | 799 | 0.65 |
| Stationery and supplies | 763 | 0.53 | 658 | 0.50 | 695 | 0.57 |
| Postage | 244 | 0.17 | 251 | 0.19 | 236 | 0.19 |
| Telephone and fax | 722 | 0.51 | 626 | 0.48 | 637 | 0.52 |
| Rent | 312 | 0.22 | 312 | 0.24 | 312 | 0.25 |
| Legal fees and retainers | 383 | 0.27 | 321 | 0.25 | 283 | 0.23 |
| Auditing and related services | 303 | 0.21 | 288 | 0.22 | 265 | 0.22 |
| Depreciation | 1,452 | 1.01 | 1,443 | 1.10 | 1,505 | 1.23 |
| Bad debt expense | 3,323 | 2.32 | 3,394 | 2.59 | 3,162 | 2.58 |
| Insurance | 723 | 0.51 | 760 | 0.58 | 785 | 0.64 |
| Office repairs and maintenance | 844 | 0.59 | 538 | 0.41 | 458 | 0.37 |
| Miscellaneous office expense | 644 | 0.45 | 621 | 0.47 | 653 | 0.53 |
| Miscellaneous general expense | <u>324</u> | <u>0.23</u> | <u>242</u> | <u>0.18</u> | <u>275</u> | <u>0.22</u> |
| Total administrative expenses | <u>17,665</u> | <u>12.35</u> | <u>16,757</u> | <u>12.77</u> | <u>16,343</u> | <u>13.32</u> |
| Total selling and administrative expenses | <u>32,475</u> | <u>22.70</u> | <u>29,656</u> | <u>22.60</u> | <u>28,437</u> | <u>23.18</u> |
| Earnings from operations | 7,370 | 5.15 | 6,694 | 5.10 | 5,524 | 4.50 |
| Other income and expense | | | | | | |
| Interest expense | 2,409 | 1.68 | 2,035 | 1.55 | 2,173 | 1.77 |
| Gain on sale of assets | <u>(720)</u> | <u>(0.50)</u> | <u>0</u> | <u>0.00</u> | <u>0</u> | <u>0.00</u> |
| Earnings before income taxes | 5,681 | 3.97 | 4,659 | 3.55 | 3,351 | 2.73 |
| Income taxes | <u>1,747</u> | <u>1.22</u> | <u>1,465</u> | <u>1.12</u> | <u>1,072</u> | <u>0.87</u> |
| Net income | <u>\$ 3,934</u> | <u>2.75</u> | <u>\$ 3,194</u> | <u>2.43</u> | <u>\$ 2,279</u> | <u>1.86</u> |

data. For example, auditors often compare current year gross margin with industry averages, as well as margins for previous years.

Numerous potential comparisons of current- and prior-period data extend beyond those normally available from industry data. For example, the percent of

each expense category to total sales can be compared with that of previous years. Similarly, in a multiunit operation such as a retail chain, internal data comparisons for each unit can be made with previous periods.

Auditors often prepare *common-size* financial statements for one or more years that display all items as a percent of a common base, such as sales. Common-size financial statements allow for comparison between companies or for the same company over different time periods, revealing trends and providing insight into how different companies compare. Common-size income statement data for the past three years for Hillsburg Hardware are included in Figure 8-7 (p. 247). The auditor should calculate income statement account balances as a percent of sales when the level of sales has changed from the prior year—a likely occurrence in many businesses. Hillsburg’s sales have increased significantly over the prior year. Note that accounts such as cost of goods sold, as well as sales salaries and commissions have also increased significantly but are fairly consistent as a percent of sales, which we expect for these accounts.

The auditor is likely to require further explanation and corroborating evidence for the changes in advertising, bad debt expense, and office repairs and maintenance.

- Note that advertising expense has increased as a percent of sales. One possible explanation is the development of a new advertising campaign.
- The dollar amount of bad debt expense has not changed significantly but has decreased as a percent of sales. The auditor needs to gather additional evidence to determine whether bad debt expense and the allowance for doubtful accounts are understated.
- Repairs and maintenance expense has also increased. Fluctuations in this account are not unusual if the client has incurred unexpected repairs. The auditor should investigate major expenditures in this account to determine whether they include any amounts that should be capitalized as a fixed asset.

Compare Client Data with Client-Determined Expected Results

Most companies prepare **budgets** for various aspects of their operations and financial results. Because budgets represent the client’s expectations for the period, auditors should investigate the most significant differences between budgeted and actual results, as these areas may contain potential misstatements. The absence of differences may indicate that misstatements are unlikely. For example, audits of local, state, and federal governmental units commonly use this type of analytical procedure.

When client data are compared with budgets, there are two special concerns. First, the auditor must evaluate whether the budgets were realistic plans. In some organizations, budgets are prepared with little thought or care and therefore are not helpful in developing auditor expectations. A discussion of budget procedures with client personnel can provide insights about this concern. The second concern is the possibility that current financial information was changed by client personnel to conform to the budget. If that has occurred, the auditor will find no differences in comparing actual data with budgeted data, even if there are misstatements in the financial statements. Assessing control risk and detailed audit tests of actual data are usually done to minimize this concern.

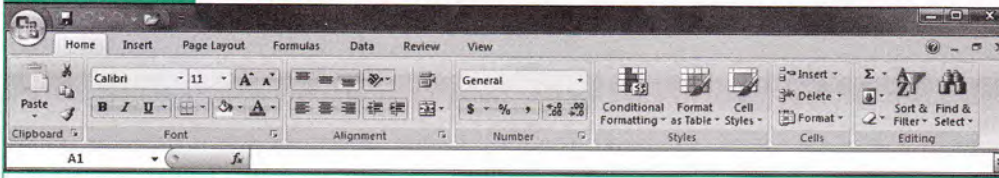
Compare Client Data with Auditor-Determined Expected Results

Another common comparison of client data with expected results occurs when the *auditor calculates the expected balance for comparison with the actual balance*. In this type of analytical procedure, the auditor makes an estimate of what an account balance should be by relating it to some other balance sheet or income statement account or accounts or by making a projection based on nonfinancial data or some historical trend.

Figure 8-8 illustrates how the auditor may make an independent calculation of interest expense on notes payable by multiplying the average ending balances and interest rates for both short-term and long-term notes payable as a substantive test of the reasonableness of recorded interest expense. Notice how the auditor’s substantive analytical procedure begins with the development of the auditor’s expectation of interest

FIGURE 8-8

**Hillsburg Hardware Overall Test of Interest Expense
December 31, 2013**



**Hillsburg Hardware Co.
Overall Test of Interest Expense
12/31/13**

Schedule N-3 Date
Prepared by TM 3/06/14
Approved by JW 3/12/14

Expectation of recorded interest expense:

Short-term loans:

| Month | Month end Balance ^① | Rate ^② |
|-------|--------------------------------|-------------------|
| Jan. | \$ 5,900,000 | 5.50% |
| Feb. | 6,368,000 | 5.50% |
| Mar. | 6,824,000 | 5.75% |
| Apr. | 7,536,000 | 5.75% |
| May | 5,208,000 | 5.25% |
| June | 3,748,000 | 5.50% |
| July | 2,800,000 | 5.25% |
| Aug. | 2,490,000 | 5.50% |
| Sept. | 2,092,000 | 5.25% |
| Oct. | 1,708,000 | 5.50% |
| Nov. | 5,062,000 | 5.75% |
| Dec. | 4,180,000 | 5.50% |
| Total | \$53,916,000 | 66.00% |

Average Monthly Balance
and Interest Rate
(total ÷ 12)

\$ 4,493,000 5.50% \$ 247,115

Long-term loans:

| | | | |
|--|---------------------------|--------------------|------------------------------|
| Beginning balance | \$26,520,000 ^③ | | |
| Ending balance | 24,120,000 ^④ | | |
| | <u>\$50,640,000</u> | 8.50% ^⑤ | |
| Average | \$25,320,000 | 8.50% | <u>2,152,200</u> |
| Auditor expectation of interest expense | | | 2,399,315 |
| Recorded interest expense per general ledger | | | <u>2,408,642^④</u> |
| Difference – over (under) expectation | | | <u>\$ 9,327</u> |

Conclusion: Interest expense appears fairly stated as recorded amount is within 9,327 (.4%) of expected amount.

Tickmark Legend

- ① Monthly balances obtained from general ledger for each month
- ② Estimated based on examination of several notes outstanding each month.
- ③ Agreed to prior year audit workpapers.
- ④ Agrees with December 31, 2013, general ledger and working trial balance.
- ⑤ Agrees with permanent file schedule of long-term debt.

expense for short-term notes payable and combines that with the auditor's calculation of an estimated interest expense for long-term notes payable to arrive at the expected amount of total interest expense of \$2,399,315. Because of the fluctuating nature of the

short-term notes payable balance from month to month, the auditor's calculation of a twelve-month average balance and average interest rate generates a more precise estimate of expected interest expense. Less precision is needed for long-term notes payable given the constant rate of interest across the year and the stable nature of the balance outstanding. This working paper also effectively documents the auditor's expectation that is required by auditing standards for substantive analytical procedures.

Compare Client Data with Expected Results Using Nonfinancial Data

Suppose that you are auditing a hotel. You may develop an expectation for total revenue from rooms by multiplying the number of rooms, the average daily rate for each room, and the average occupancy rate. You can then compare your estimate with recorded revenue as a test of the reasonableness of recorded revenue. The same approach can be applied to create estimates in other situations, such as tuition revenue at universities (average tuition multiplied by enrollment), factory payroll (total hours worked times the wage rate), and cost of materials sold (units sold times materials cost per unit).

The major concern in using nonfinancial data, however, is the accuracy of the data. In the hotel example, you should not use an estimated calculation of hotel revenue as audit evidence unless you are satisfied with the reasonableness of the count of the number of rooms, average room rate, and average occupancy rate. Obviously, the accuracy of the occupancy rate is more difficult to evaluate than the other two items.

COMMON FINANCIAL RATIOS

OBJECTIVE 8-8

Compute common financial ratios.

Auditors' analytical procedures often include the use of general financial ratios during planning and final review of the audited financial statements. These are useful for understanding recent events and the financial status of the business and for viewing the statements from the perspective of a user. The general financial analysis may be effective for identifying possible problem areas, where the auditor may do additional analysis and audit testing, as well as business problem areas in which the auditor can provide other assistance. When using these ratios, auditors must be sure to make appropriate comparisons. The most important comparisons are to those of previous years for the company and to industry averages or similar companies for the same year.

Ratios and other analytical procedures are normally calculated using spreadsheets and other types of audit software, in which several years of client and industry data can be maintained for comparative purposes. Ratios can be linked to the trial balance so that calculations are automatically updated as adjusting entries are made to the client's statements. For example, an adjustment to inventory and cost of goods sold affects a large number of ratios, including inventory turnover, the current ratio, gross margin, and other profitability measures.

We next examine some widely used financial ratios. The following computations are based on the 2013 financial statements of Hillsburg Hardware Co., which appear in the glossy insert to the textbook. These ratios were prepared from the trial balance in Figure 6-4 on page 170.

Short-term Debt-Paying Ability

| | | | |
|-----------------|--|-------------------------------------|--------|
| Cash ratio = | $\frac{\text{cash} + \text{marketable securities}}{\text{current liabilities}}$ | $\frac{828}{13,216}$ | = 0.06 |
| Quick ratio = | $\frac{\text{cash} + \text{marketable securities} + \text{net accounts receivable}}{\text{current liabilities}}$ | $\frac{828 + 18,957 + 945}{13,216}$ | = 1.57 |
| Current ratio = | $\frac{\text{current assets}}{\text{current liabilities}}$ | $\frac{51,027}{13,216}$ | = 3.86 |

Companies need a reasonable level of liquidity to pay their debts as they come due, and these three ratios measure liquidity. It is apparent by examining the three ratios

that the cash ratio may be useful to evaluate the ability to pay debts immediately, whereas the current ratio requires the conversion of assets such as inventory and accounts receivable to cash before debts can be paid. The most important difference between the quick and current ratios is the inclusion of inventory in current assets for the current ratio.

| | |
|--|--|
| Accounts receivable turnover = $\frac{\text{net sales}}{\text{average gross receivables}}$ | $\frac{143,086}{((18,957 + 1,240) + (16,210 + 1,311))/2} = 7.59$ |
| Days to collect receivables = $\frac{365 \text{ days}}{\text{accounts receivable turnover}}$ | $\frac{365 \text{ days}}{7.59} = 48.09 \text{ days}$ |
| Inventory turnover = $\frac{\text{cost of goods sold}}{\text{average inventory}}$ | $\frac{103,241}{(29,865 + 31,600)/2} = 3.36$ |
| Days to sell inventory = $\frac{365 \text{ days}}{\text{inventory turnover}}$ | $\frac{365 \text{ days}}{3.36} = 108.63 \text{ days}$ |

Liquidity Activity Ratios

If a company does not have sufficient cash and cash-like items to meet its obligations, the key to its debt-paying ability is the time it takes the company to convert less-liquid current assets into cash. This is measured by the liquidity activity ratios.

The activity ratios for accounts receivable and inventory are especially useful to auditors, who often use trends in the accounts receivable turnover ratio to assess the reasonableness of the allowance for uncollectible accounts. Auditors use trends in the inventory turnover ratio to identify potential inventory obsolescence. Average days to collect is a different way of looking at the average accounts receivable turnover data. The same is true of average days to sell compared to average inventory turnover.

| | |
|---|---|
| Debt to equity = $\frac{\text{total liabilities}}{\text{total equity}}$ | $\frac{13,216 + 25,688}{22,463} = 1.73$ |
| Times interest earned = $\frac{\text{operating income}}{\text{interest expense}}$ | $\frac{7,370}{2,409} = 3.06$ |

Ability to Meet Long-term Debt Obligations

A company's long-run solvency depends on the success of its operations and on its ability to raise capital for expansion, as well as its ability to make principal and interest payments. Two ratios are key measures creditors and investors use to assess a company's ability to pay its debts.

The debt-to-equity ratio shows the extent of the use of debt in financing a company. If the debt-to-equity ratio is too high, it may indicate that the company has used up its borrowing capacity and has no cushion for additional debt. If it is too low, it may mean that available leverage is not being used to the owners' benefit.

The ability to make interest payments depends on the company's ability to generate positive cash flow from operations. The times interest earned ratio shows whether the company can comfortably make its interest payments, assuming that earnings trends are stable.

A company's ability to generate cash for payment of obligations, expansion, and dividends is heavily dependent on profitability. The most widely used profitability ratio is earnings per share. Auditors calculate additional ratios to provide further insights into operations.

Gross profit percent shows the portion of sales available to cover all expenses and profit after deducting the cost of the product. Auditors find this ratio especially useful for assessing misstatements in sales, cost of goods sold, accounts receivable, and inventory.

Profitability Ratios

Profit margin is similar to gross profit margin but subtracts both cost of goods sold and operating expenses in making the calculations. This ratio enables auditors to assess potential misstatements in operating expenses and related balance sheet accounts.

| | | |
|---------------------------|---|--|
| Earnings per share = | $\frac{\text{net income}}{\text{average common shares outstanding}}$ | $\frac{3,934}{5,000} = 0.79$ |
| Gross profit percent = | $\frac{\text{net sales} - \text{cost of goods sold}}{\text{net sales}}$ | $\frac{143,086 - 103,241}{143,086} = 27.85\%$ |
| Profit margin = | $\frac{\text{operating income}}{\text{net sales}}$ | $\frac{7,370}{143,086} = 0.05$ |
| Return on assets = | $\frac{\text{income before taxes}}{\text{average total assets}}$ | $\frac{5,681}{(61,367 + 60,791)/2} = 0.09$ |
| Return on common equity = | $\frac{\text{income before taxes} - \text{preferred dividends}}{\text{average stockholders' equity}}$ | $\frac{5,681 - 0}{(22,463 + 20,429)/2} = 0.26$ |

Return on assets and return on common equity are measures of overall profitability of a company. These ratios show a company's ability to generate profit for each dollar of assets and equity.

SUMMARY

The first part of this chapter discussed audit planning, including understanding the client's business and industry and performing preliminary analytical procedures to assess client business risk and the risk of material misstatements in the financial statements. Analytical procedures are the evaluation of recorded accounting information by computing ratios and developing other plausible relationships for comparison to expectations developed by the auditor. These analytical procedures are used in planning to understand the client's business and industry and also used throughout the audit to identify possible misstatements, reduce detailed tests, and to assess going-concern issues. The use of analytical procedures has increased because of their effectiveness at identifying possible misstatements at a low cost, and they are required in the planning and completion phases of the audit.

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 opinion has been issued

Audit strategy—overall approach to the audit that considers the nature of the client, risk of significant misstatements, and other factors such as the number of client locations and past effectiveness of client controls

Budgets—written records of the client's expectations for the period; a comparison of budgets with actual results may indicate whether or not misstatements are likely

Client business risk—the risk that the client will fail to achieve its objectives

related to (1) reliability of financial reporting, (2) effectiveness and efficiency of operations, and (3) compliance with laws and regulations

Corporate minutes—the official record of the meetings of a corporation's board of directors and stockholders, in which corporate issues such as the declaration of dividends and the approval of contracts are documented

Engagement letter—an agreement between the CPA firm and the client as to the terms of the engagement for the conduct of the audit and related services

Inherent risk—a measure of the auditor's assessment of the likelihood that there are material misstatements in a segment

before considering the effectiveness of internal control

Initial audit planning—involves deciding whether to accept or continue doing the audit for the client, identifying the client's reasons for the audit, obtaining an engagement letter, and developing an audit strategy

Related party—affiliated company, principal owner of the client company, or any other party with which the client deals, where one of the parties can influence the management or operating policies of the other

Related party transaction—any transaction between the client and a related party

REVIEW QUESTIONS

- 8-1 (Objective 8-1)** What are the benefits derived from planning audits?
- 8-2 (Objective 8-1)** Identify the eight major steps in planning audits.
- 8-3 (Objective 8-2)** What are the responsibilities of the successor and predecessor auditors when a company is changing auditors?
- 8-4 (Objective 8-2)** What factors should an auditor consider prior to accepting an engagement? Explain.
- 8-5 (Objective 8-2)** What is the purpose of an engagement letter? What subjects should be covered in such a letter?
- 8-6 (Objective 8-2)** Who is considered the client when auditing public companies?
- 8-7 (Objective 8-2)** Which services must be preapproved by the audit committee of a public company?
- 8-8 (Objective 8-3)** Explain why auditors need an understanding of the client's industry. What information sources are commonly used by auditors to learn about the client's industry?
- 8-9 (Objective 8-3)** When a CPA has accepted an engagement from a new client who is a manufacturer, it is customary for the CPA to tour the client's plant facilities. Discuss the ways in which the CPA's observations made during the course of the plant tour will be of help in planning and conducting the audit.
- 8-10 (Objective 8-3)** An auditor often tries to acquire background knowledge of the client's industry as an aid to audit work. How does the acquisition of this knowledge aid the auditor in distinguishing between obsolete and current inventory?
- 8-11 (Objective 8-3)** Define what is meant by a related party. What are the auditor's responsibilities for related parties and related party transactions?
- 8-12 (Objective 8-3)** Which types of loans to executives are permitted by the Sarbanes–Oxley Act?
- 8-13 (Objective 8-3)** In recent years the global economy has experienced recession levels unprecedented since the Great Depression and the instability of the Euro continues to cause volatility in stock and bond markets. Why might it be important for you to consider current economic events as part of planning an audit?
- 8-14 (Objective 8-3)** For the audit of Radline Manufacturing Company, the audit partner asks you to carefully read the new mortgage contract with the First National Bank and abstract all pertinent information. List the information in a mortgage that is likely to be relevant to the auditor.
- 8-15 (Objective 8-3)** Identify two types of information in the client's minutes of the board of directors meetings that are likely to be relevant to the auditor. Explain why it is important to read the minutes early in the engagement.
- 8-16 (Objective 8-3)** Identify the three categories of client objectives. Indicate how each objective may affect the auditor's assessment of inherent risk and need for evidence accumulation.
- 8-17 (Objective 8-3)** What is the purpose of the client's performance measurement system? How might that system be useful to the auditor? Give examples of key

performance indicators for the following businesses: (1) a chain of retail clothing stores; (2) an Internet portal; (3) a hotel chain.

8-18 (Objective 8-4) Define client business risk and describe several sources of client business risk. What is the auditor's primary concern when evaluating client business risk?

8-19 (Objective 8-4) Describe top management controls and their relation to client business risk. Give examples of effective management and governance controls.

8-20 (Objectives 8-5, 8-6) What are the purposes of preliminary analytical procedures? What types of comparisons are useful when performing preliminary analytical procedures?

8-21 (Objective 8-6) When are analytical procedures required on an audit? What is the primary purpose of analytical procedures during the completion phase of the audit?

8-22 (Objective 8-7) Gale Gordon, CPA, has found ratio and trend analysis relatively useless as a tool in conducting audits. For several engagements, he computed the industry ratios included in publications by Standard and Poor's and compared them with industry standards. For most engagements, the client's business was significantly different from the industry data in the publication and the client automatically explained away any discrepancies by attributing them to the unique nature of its operations. In cases in which the client had more than one branch in different industries, Gordon found the ratio analysis to be no help at all. How can Gordon improve the quality of his analytical procedures?

8-23 (Objective 8-7) At the completion of every audit, Roger Morris, CPA, calculates a large number of ratios and trends for comparison with industry averages and prior-year calculations. He believes the calculations are worth the relatively small cost of doing them because they provide him with an excellent overview of the client's operations. If the ratios are out of line, Morris discusses the reasons with the client and often makes suggestions on how to bring the ratio back in line in the future. In some cases, these discussions with management have been the basis for management consulting engagements. Discuss the major strengths and shortcomings in Morris's use of ratio and trend analysis.

8-24 (Objective 8-8) Name the four categories of financial ratios and give an example of a ratio in each category. What is the primary information provided by each financial ratio category?

MULTIPLE CHOICE QUESTIONS FROM CPA EXAMINATIONS

8-25 (Objectives 8-1, 8-3) The following questions concern the planning of the engagement. Select the best response.

- a. Which of the following is an effective audit planning procedure that helps prevent misunderstandings and inefficient use of audit personnel?
 - (1) Arrange to make copies, for inclusion in the audit files, of those client supporting documents examined by the auditor.
 - (2) Arrange to provide the client with copies of the audit programs to be used during the audit.
 - (3) Arrange a preliminary conference with the client to discuss audit objectives, fees, timing, and other information.
 - (4) Arrange to have the auditor prepare and post any necessary adjusting or reclassification entries prior to final closing.
- b. Which of the following circumstances would most likely cause an auditor to suspect that material misstatements exist in the financial statements?
 - (1) The assumptions used in developing the prior year's accounting estimates have changed.
 - (2) Differences between reconciliations of control accounts and subsidiary records are not investigated.
 - (3) More confirmation requests were sent this year relative to last year.
 - (4) Management consults with another CPA firm about complex accounting matters.
- c. Which of the following will most likely indicate the existence of related parties?
 - (1) Writing down obsolete inventory prior to year end.
 - (2) Failing to correct deficiencies in the client's internal control.

- (3) An unexplained increase in gross margin.
 - (4) Borrowing money at a rate significantly below the market rate.
- d. Which of the following is least likely to be included in the auditor's engagement letter?
- (1) Details about the preliminary audit strategy.
 - (2) Overview of the objectives of the engagement.
 - (3) Statement that management is responsible for the financial statements.
 - (4) Description of the level of assurance obtained when conducting the audit.

8-26 (Objective 8-2) The following questions pertain to client acceptance. Choose the best response.

- a. When approached to perform an audit for the first time, the CPA should make inquiries of the predecessor auditor. This is a necessary procedure because the predecessor may be able to provide the successor with information that will assist the successor in determining whether
 - (1) the predecessor's work should be used.
 - (2) the company follows the policy of rotating its auditors.
 - (3) in the predecessor's opinion internal control of the company has been satisfactory.
 - (4) the engagement should be accepted.
- b. A successor would most likely make specific inquiries of the predecessor auditor regarding
 - (1) specialized accounting principles of the client's industry.
 - (2) the competency of the client's internal audit staff.
 - (3) the uncertainty inherent in applying sampling procedures.
 - (4) disagreements with management as to auditing procedures.
- c. Which of the following circumstances would most likely pose the greatest risk in accepting a new audit engagement?
 - (1) Staff will need to be rescheduled to cover this new client.
 - (2) There will be a client-imposed scope limitation.
 - (3) The firm will have to hire a specialist in one audit area.
 - (4) The client's financial reporting system has been in place for 10 years.

8-27 (Objectives 8-5, 8-6, 8-7, 8-8) The following questions concern the use of analytical procedures during an audit. Select the best response.

- a. Analytical procedures used in planning an audit should focus on identifying
 - (1) material weaknesses in internal control.
 - (2) the predictability of financial data from individual transactions.
 - (3) the various assertions that are embodied in the financial statements.
 - (4) areas that may represent specific risks relevant to the audit.
- b. For all audits of financial statements made in accordance with auditing standards, the use of analytical procedures is required to some extent

| | In the Planning Stage | As a Substantive Test | In the Completion Stage |
|-----|--------------------------|--------------------------|----------------------------|
| (1) | Yes | No | Yes |
| (2) | No | Yes | No |
| (3) | No | Yes | Yes |
| (4) | Yes | No | No |

Required

- c. Which of the following situations has the best chance of being detected when a CPA compares 2013 revenues and expenses with the prior year and investigates all changes exceeding a fixed percent?
 - (1) An increase in property tax rates has not been recognized in the company's 2013 accrual.
 - (2) The cashier began lapping accounts receivable in 2013.
 - (3) Because of worsening economic conditions, the 2013 provision for uncollectible accounts was inadequate.
 - (4) The company changed its capitalization policy for small tools in 2013.

- d. Which of the following would not be considered to be an analytical procedure?
- (1) Estimating payroll expense by multiplying the number of employees by the average hourly wage rate and the total hours worked.
 - (2) Projecting the error rate by comparing the results of a statistical sample with the actual population characteristics.
 - (3) Computing accounts receivable turnover by dividing credit sales by the average net receivables.
 - (4) Developing the expected current year sales based on the sales trend of the prior five years.

DISCUSSION QUESTIONS AND PROBLEMS

8-28 (Objectives 8-2, 8-3, 8-4, 8-5) The following are various activities an auditor does during audit planning.

1. Determine the likely users of the financial statements.
2. Identify whether any specialists are required for the engagement.
3. Send an engagement letter to the client.
4. Tour the client's plant and offices.
5. Compare key ratios for the company to those for industry competitors.
6. Review management's risk management controls and procedures.
7. Review accounting principles unique to the client's industry.
8. Identify potential related parties that may require disclosure.

Required

For each procedure, indicate which of the first four parts of audit planning the procedure primarily relates to: (1) accept client and perform initial audit planning; (2) understand the client's business and industry; (3) assess client business risk; (4) perform preliminary analytical procedures.

8-29 (Objective 8-3) In your audit of Canyon Outdoor Provision Company's financial statements, the following transactions came to your attention:

1. Canyon Outdoor's operating lease for its main store is with York Properties, which is a real estate investment firm owned by Travis Smedes. Mr. Smedes is a member of Canyon Outdoor's board of directors.
2. One of Canyon Outdoor's main suppliers for kayaks is Hessel Boating Company. Canyon Outdoor has purchased kayaks and canoes from Hessel for the last 25 years under a long-term contract arrangement.
3. Short-term financing lines of credit are provided by Cameron Bank and Trust. Suzanne Strayhorn is the lending officer assigned to the Canyon Outdoor account. Suzanne is the wife of the largest investor of Canyon Outdoor.
4. Hillsborough Travel partners with Canyon Outdoor to provide hiking and rafting adventure vacations. The owner of Hillsborough Travel lives in the same neighborhood as the CEO of Canyon Outdoor. They are acquaintances, but not close friends.
5. The board of directors consists of several individuals who own stock in Canyon Outdoor. At a recent board meeting, the board approved its annual dividend payable to shareholders effective June 1.

Required

- a. Define what constitutes a "related party."
- b. Which of the preceding transactions would most likely be considered to be a related party transaction?
- c. What financial statement implications, if any, would each of the above transactions have for Canyon Outdoor?
- d. What procedures might auditors consider to help them identify potential related party transactions for clients like Canyon Outdoor?

8-30 (Objective 8-3) The minutes of the board of directors of the Cala Catalogue Company for the year ended December 31, 2013, were provided to you.

Meeting of February 15, 2013

Kamila Saleh, chairman of the board, called the meeting to order at 4:00 pm. The following directors were in attendance:

| | | |
|------------------|---------------|------------|
| Yehaya Ali | Rabi Fayed | Essam Saad |
| Bahir El Malky | Emad Mandany | Kateb Utu |
| Miriam Kalyani | Wasim Aziz | |
| Ferran Amanullah | Najjar Hassan | |

The minutes of the meeting of October 11, 2012, were read and approved.

Reem Al Amon, president, discussed the new marketing plan for wider distribution of catalogues in the southwestern Jordan market. She made a motion for approval of increased expenditures of approximately \$500,000 for distribution costs that was seconded by Utu and unanimously passed.

The unresolved dispute with the Income and Sales Tax Department over the tax treatment of leased office buildings was discussed with Basil Makay, attorney. However, Mr. Makay does not believe the matter will be resolved for another few months nor does he foresee a favorable settlement.

Najjar Hassan recommended that the computer equipment that was no longer being used in the Amman office, because of new equipment acquired in 2012, be donated to the Iman Vocational School for use in their repair and training program. Yehaya Ali seconded the motion and it was unanimously passed.

Annual cash dividends were unanimously approved as being payable April 30, 2013, for stockholders of record on April 15, 2013, as follows:

- Class A common – \$10 per share
- Class B common – \$5 per share

Officers' bonuses for the year ended December 31, 2012, were approved for payment March 1, 2013, as follows:

| | |
|----------------------------------|-----------|
| Reem Al Amon – President | \$130,000 |
| Bahir Malky – Vice President | \$60,000 |
| Rabi Fayed – Controller | \$60,000 |
| Wasim Aziz – Secretary-treasurer | \$45,000 |

Meeting of September 16, 2013

Kamila Saleh, chairman of the board, called the meeting to order at 4:00 pm. The following directors were in attendance:

| | | |
|------------------|---------------|------------|
| Yehaya Ali | Rabi Fayed | Essam Saad |
| Bahir El Malky | Emad Mandany | Kateb Utu |
| Miriam Kalyani | Wasim Aziz | |
| Ferran Amanullah | Najjar Hassan | |

The minutes of the meeting of February 15, 2013, were read and approved.

Reem Al Amon, president, discussed the improved sales and financial condition for 2013. She was pleased with the results of the catalogue distribution and cost control for the company. Possible online marketing was also briefly discussed. No action would be taken at this time.

The nominations for officers were made as follows:

| | |
|--------------------------|----------------------------------|
| President – Reem Al Amon | Vice President – Bahir Malky |
| Controller – Rabi Fayed | Secretary-treasurer – Wasim Aziz |

The nominees were elected by unanimous voice vote.

4% salary increases were recommended for all officers for the year 2014. Reem Al Amon recommended that salary increases be approved, seconded by Najjar Hassan, and was unanimously approved.

| | Salary | |
|---------------------------------|-----------|-----------|
| | 2013 | 2014 |
| Reem Al Amon, President | \$200,000 | \$230,000 |
| Bahir Malky, Vice President | \$170,000 | \$175,000 |
| Rabi Fayed, Controller | \$170,000 | \$175,000 |
| Wasim Aziz, Secretary-Treasurer | \$110,000 | \$115,000 |

Kateb Utu recommended that the company consider adopting a pension/profit-sharing plan for all employees as a way to provide greater incentives for employees to stay with the company. Considerable discussion ensued. The members agreed that Utu should discuss the legal and tax implications of the proposal with attorney Basil Makay as well as Fudail and Jawas, a CPA firm knowledgeable about pension and profit-sharing plans.

Kateb Utu discussed expenditure of \$40,000 for acquisition of a new computer system for the Amman office to replace equipment that was purchased in 2012 and has proven ineffective. A settlement has been tentatively reached to return the equipment for a refund of \$21,000. Utu recommended that both transactions be approved, seconded by Kalyani and unanimously approved.

Wasim Aziz recommended that a loan of \$360,000, from the Amman Federal Bank and Trust, be approved. The interest is floating at 2% above prime. The loan is collateralized by accounts receivable, with the loan balance not to exceed 75% of current accounts receivable. Seconded by Amanullah and unanimously approved.

Bahir El Malky, chair of the audit committee, recommended that the CPA firm of El Sayid and Shakran be selected again for the company's annual audit and related tax work for the year ended December 31, 2013. Seconded by Ali and unanimously approved.

Meeting adjourned 7:00 pm.

Wasim Aziz, Secretary

Required

- If you are the company's auditor, how do you determine that all minutes have been made available to you?
- Read the minutes of the meetings of February 15 and September 16. Use the following format to list and explain information that is relevant for the 2013 audit:

| Information Relevant to 2013 Audit | Audit Action Required |
|------------------------------------|-----------------------|
|------------------------------------|-----------------------|

-
-

- Read the minutes of the meeting of February 15, 2013. Did any of the information pertain to the December 31, 2012, audit? Explain what the auditor should have done during the December 31, 2012, audit with respect to 2013 minutes.

8-31 (Objective 8-6) Analytical procedures are an important part of the audit process and consist of the evaluation of financial information by the study of plausible relationships among financial and nonfinancial data. Analytical procedures may be done during planning, as a substantive test, or as a part of the overall review of an audit.

The following are various statements regarding the use of analytical procedures:

- Should focus on enhancing the auditor's understanding of the client's business and the transactions and events that have occurred since the last audit date.
- Should focus on identifying areas that may represent specific risks relevant to the audit.
- Require documentation in the working papers of the auditor's expectation of the ratio or account balance.
- Do not result in detection of misstatements.
- Designed to obtain evidential matter about particular assertions related to account balances or classes of transactions.
- Generally use data aggregated at a lower level than the other stages.
- Should include reading the financial statements and notes to consider the adequacy of evidence gathered.
- Not required during this stage.
- Involve reconciliation of confirmation replies with recorded book amounts.
- Use the preliminary or unadjusted working trial balance as a source of data.
- Expected to result in a reduced level of detection risk.

For each of the 11 statements, select the stage of the audit for which the statement is most accurate using the following responses:

Required

1. Planning the audit
2. Substantive testing
3. Overall review
4. Statement is not correct concerning analytical procedures.*

8-32 (Objectives 8-5, 8-7, 8-8) You are auditing payroll for the Morehead Technologies company for the year ended October 31, 2013. Included next are amounts from the client's trial balance, along with comparative audited information for the prior year.

| | Audited Balance 10/31/2012 | Preliminary Balance 10/31/2013 |
|-------------------------------|-------------------------------|-----------------------------------|
| Sales | \$ 51,316,234 | \$ 57,474,182 |
| Executive salaries | 546,940 | 615,970 |
| Factory hourly payroll | 10,038,877 | 11,476,319 |
| Factory supervisors' salaries | 785,825 | 810,588 |
| Office salaries | 1,990,296 | 2,055,302 |
| Sales commissions | 2,018,149 | 2,367,962 |

You have obtained the following information to help you perform preliminary analytical procedures for the payroll account balances.

1. There has been a significant increase in the demand for Morehead's products. The increase in sales was due to both an increase in the average selling price of 4 percent and an increase in units sold that resulted from the increased demand and an increased marketing effort.
 2. Even though sales volume increased there was no addition of executives, factory supervisors, or office personnel.
 3. All employees including executives, but excluding commission salespeople, received a 3 percent salary increase starting November 1, 2012. Commission salespeople receive their increased compensation through the increase in sales.
 4. The increased number of factory hourly employees was accomplished by recalling employees that had been laid off. They receive the same wage rate as existing employees. Morehead does not permit overtime.
 5. Commission salespeople receive a 5 percent commission on all sales on which a commission is given. Approximately 75 percent of sales earn sales commission. The other 25 percent are "call-ins," for which no commission is given. Commissions are paid in the month following the month they are earned.
- a. Use the final balances for the prior year included above and the information in items 1 through 5 to develop an expected value for each account, except sales.
 - b. Calculate the difference between your expectation and the client's recorded amount as a percentage using the formula (expected value - recorded amount)/expected value.

Required

8-33 (Objectives 8-3, 8-7, 8-8) You've been asked to review the gross margin percent for Erie Books for the years 2010 through 2013. You find there's been a significant decline during this time. Here are the numbers:

| | 2013 | 2012 | 2011 | 2010 |
|-------------------|-----------|-----------|-----------|-----------|
| Sales (thousands) | \$ 47,175 | \$ 44,039 | \$ 37,073 | \$ 35,035 |
| CGS (thousands) | 30,314 | 27,998 | 23,431 | 22,072 |
| Gross margin | \$ 16,861 | \$ 16,041 | \$ 13,642 | \$ 12,963 |
| Percent | 35.7 | 36.4 | 36.8 | 37.0 |

Your discussion with Erin O'Keefe, the controller, brings to light two possible explanations. She informs you that the industry gross profit percent in the retail book industry declined fairly steadily for 3 years as more people purchase books online, which accounts for part of the decline. She also believes that online shopping and discount

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bookstores prevent the company from rapidly expanding its non-book items, such as magazines, candy, music, DVDs, and many other items sold. O'Keefe feels strongly that these two factors are the cause of the decline.

The following additional information is obtained from independent sources and the client's records as a means of investigating the controller's explanations:

| Year | Erie Books (\$ in thousands) | | | | Industry Gross Profit Percent for Retailers of Books & Related Products |
|------|------------------------------|----------------|-------------------------|-----------------------------|---|
| | Book Sales | Non-book Sales | Book Cost of Goods Sold | Non-book Cost of Goods Sold | |
| 2013 | \$21,500 | \$25,675 | \$13,169 | \$17,145 | 39.8 |
| 2012 | 20,472 | 23,567 | 12,197 | 15,801 | 39.9 |
| 2011 | 17,851 | 19,222 | 10,543 | 12,888 | 40.0 |
| 2010 | 16,995 | 18,040 | 9,961 | 12,111 | 40.4 |

Required

- Evaluate the explanation provided by O'Keefe. Show calculations to support your conclusions.
- Which specific aspects of the client's financial statements require intensive investigation in this audit?

8-34 (Objectives 8-7, 8-8) In the audit of the Worldwide Wholesale Company, you did extensive ratio and trend analysis. No material exceptions were discovered except for the following:

- Commission expense as a percent of sales has stayed constant for several years but has increased significantly in the current year. Commission rates have not changed.
- The rate of inventory turnover has steadily decreased for 4 years.
- Inventory as a percent of current assets has steadily increased for 4 years.
- The number of days' sales in accounts receivable has steadily increased for 3 years.
- Allowance for uncollectible accounts as a percent of accounts receivable has steadily decreased for 3 years.
- The absolute amounts of depreciation expense and depreciation expense as a percent of gross fixed assets are significantly smaller than in the preceding year.

Required

- Evaluate the potential significance of each of the exceptions just listed for the fair presentation of financial statements.
- State the follow-up procedures you would use to determine the possibility of material misstatements.

8-35 (Objectives 8-3, 8-5, 8-8) You have performed preliminary analytical procedures on one of your audit engagements and observed the following independent situations:

- The allowance for obsolete inventory increased from the prior year, but the allowance as a percentage of inventory decreased from the prior year.
- Long-term debt increased from the prior year, but total interest expense decreased as a percentage of long-term debt.
- The dollar amount of operating income is consistent with the prior year although the entity was more profitable on a net income basis.
- The quick ratio decreased from the prior year, although the amount of cash and net accounts receivable is almost the same as the prior year.

Required

Below are possible explanations for each of the observed changes in the financial statement amounts and ratios. For each observed change, select the most likely explanation(s) from the list below. Note: There may be more than one explanation for a given observed change, and an explanation can be used more than once.

- Shipments of inventory sold prior to year end were included in the client's inventory counts as of the balance sheet date.
- Selling and general administrative expenses were lower this year relative to last year.
- Sales have decreased compared to the prior year, and the client is maintaining less inventory as a result.

- d. Portions of existing long-term debt were refinanced at lower interest rates.
- e. The effective tax rate decreased, as compared to the prior year.
- f. The client purchased a large block of inventory on account close to year end.
- g. Sales increased at a greater percentage than cost of goods sold, as compared to the prior year.
- h. Client inventory items are off-site on consignment at retailers and are thus excluded from the year-end inventory counts.
- i. Short-term borrowings were refinanced on a long-term basis at lower interest rates.

8-36 (Objectives 8-3, 8-5, 8-7) Following are the auditor's calculations of several key ratios for Cragston Star Products. The primary purpose of this information is to understand the client's business and assess the risk of financial failure, but any other relevant conclusions are also desirable.

| Ratio | 2013 | 2012 | 2011 | 2010 | 2009 |
|---|--------|--------|--------|--------|--------|
| 1. Current ratio | 2.08 | 2.26 | 2.51 | 2.43 | 2.50 |
| 2. Quick ratio | .97 | 1.34 | 1.82 | 1.76 | 1.64 |
| 3. Times interest earned | 3.50 | 3.20 | 4.10 | 5.30 | 7.10 |
| 4. Accounts receivable turnover | 4.20 | 5.50 | 4.10 | 5.40 | 5.60 |
| 5. Days to collect receivables | 86.90 | 66.36 | 89.02 | 67.59 | 65.18 |
| 6. Inventory turnover | 2.03 | 1.84 | 2.68 | 3.34 | 3.36 |
| 7. Days to sell inventory | 179.80 | 198.37 | 136.19 | 109.28 | 108.63 |
| 8. Net sales divided by tangible assets | .68 | .64 | .73 | .69 | .67 |
| 9. Profit margin | .13 | .14 | .16 | .15 | .14 |
| 10. Return on assets | .09 | .09 | .12 | .10 | .09 |
| 11. Return on equity | .05 | .06 | .10 | .10 | .11 |
| 12. Earnings per share | \$4.30 | \$4.26 | \$4.49 | \$4.26 | \$4.14 |

- a. What major conclusions can be drawn from this information about the company's future?
- b. What additional information would be helpful in your assessment of this company's financial condition?
- c. Based on the preceding ratios, which aspects of the company do you believe should receive special emphasis in the audit?

Required

8-37 (Objectives 8-3, 8-4) The Internet has dramatically increased global e-commerce activities. Both traditional "brick and mortar" businesses and new dot-com businesses use the Internet to meet business objectives. For example, eBay successfully offers online auctions as well as goods for sale in a fixed-price format.

- a. Identify business strategies that explain eBay's decision to offer goods for sale at fixed prices.
- b. Describe three business risks related to eBay's operations.
- c. Acquisitions by eBay in recent years include PayPal, an online payment service, and Skype, an internet communications company. Discuss possible reasons why eBay made these strategic acquisitions.
- d. Four years after acquiring Skype, eBay sold most of its interest in the company. Discuss how that impacts eBay's business risks.
- e. Identify possible risks that can lead to material misstatements in the eBay financial statements if business risks related to its operations, including recent acquisitions and divestitures, are not effectively managed.

Required

CASE

8-38 (Objectives 8-2, 8-3, 8-4) Winston Black was an audit partner in the firm of Henson, Davis & Company. He was in the process of reviewing the audit files for the audit of a new client, McMullan Resources. McMullan was in the business of heavy construction. Black was conducting his first review after the audit was substantially complete. Normally, he

would have done an initial review during the planning phase as required by his firm's policies; however, he had been overwhelmed by an emergency with his largest and most important client. He rationalized not reviewing audit planning information because (1) the audit was being overseen by Sarah Beale, a manager in whom he had confidence, and (2) he could "recover" from any problems during his end-of-audit review.

Now, Black found that he was confronted with a couple of problems. First, he found that the firm may have accepted McMullan without complying with its new-client acceptance procedures. McMullan came to Henson, Davis & Company on a recommendation from a friend of Black's. Black got "credit" for the new business, which was important to him because it would affect his compensation from the firm. Because Black was busy, he told Beale to conduct a new-client acceptance review and let him know if there were any problems. He never heard from Beale and assumed everything was okay. In reviewing Beale's preaudit planning documentation, he saw a check mark in the box "Contact prior auditors" but found no details indicating what was done. When he asked Beale about this, she responded with the following:

"I called Gardner Smith [the responsible partner with McMullan's prior audit firm] and left a voicemail message for him. He never returned my call. I talked to Ted McMullan about the change, and he told me that he informed Gardner about the change and that Gardner said, 'Fine, I'll help in any way I can.' Ted said Gardner sent over copies of analyses of fixed assets and equity accounts, which Ted gave to me. I asked Ted why they replaced Gardner's firm, and he told me it was over the tax contingency issue and the size of their fee. Other than that, Ted said the relationship was fine."

The tax contingency issue that Beale referred to was a situation in which McMullan had entered into litigation with a bank from which it had received a loan. The result of the litigation was that the bank forgave several hundred thousand dollars in debt. This was a windfall to McMullan, and they recorded it as a gain, taking the position that it was non-taxable. The prior auditors disputed this position and insisted that a contingent tax liability existed that required disclosure. This upset McMullan, but the company agreed in order to receive an unqualified opinion. Before hiring Henson, Davis & Company as their new auditors, McMullan requested that the firm review the situation. Henson, Davis & Company believed the contingency was remote and agreed to the elimination of the disclosure.

The second problem involved a long-term contract with a customer in Montreal. Under accounting standards, McMullan was required to recognize income on this contract using the percentage-of-completion method. The contract was partially completed as of year-end and had a material effect on the financial statements. When Black went to review the copy of the contract in the audit files, he found three things. First, there was a contract summary that set out its major features. Second, there was a copy of the contract written in French. Third, there was a signed confirmation confirming the terms and status of the contract. The space requesting information about any contract disputes was left blank, indicating no such problems.

Black's concern about the contract was that to recognize income in accordance with accounting standards, the contract had to be enforceable. Often, contracts contain a cancellation clause that might mitigate enforceability. Because he was not able to read French, Black couldn't tell whether the contract contained such a clause. When he asked Beale about this, she responded that she had asked the company's vice president for the Canadian division about the contract and he told her that it was their standard contract. The company's standard contract did have a cancellation clause in it, but it required mutual agreement and could not be cancelled unilaterally by the buyer.

Required

- Evaluate and discuss whether Henson, Davis & Company complied with auditing standards in their acceptance of McMullan Resources as a new client. What can they do at this point in the engagement to resolve deficiencies if they exist?
- Evaluate and discuss whether sufficient audit work has been done with regard to McMullan's Montreal contract. If not, what more should be done?
- Evaluate and discuss whether Black and Beale conducted themselves in accordance with auditing standards.

INTEGRATED CASE APPLICATION — PINNACLE MANUFACTURING: PART I

8-39 (Objectives 8-3, 8-4, 8-5)

Introduction

This case study is presented in seven parts. Each part deals largely with the material in the chapter to which that part relates. However, the parts are connected in such a way that in completing all seven, you will gain a better understanding of how the parts of the audit are interrelated and integrated by the audit process. The parts of this case appear in the following textbook chapters:

- Part I—Perform analytical procedures for different phases of the audit, **Chapter 8**.
- Part II—Understand factors influencing risks and the relationship of risks to audit evidence, **Chapter 9**.
- Part III—Understand internal control and assess control risk for the acquisition and payment cycle, **Chapter 10**.
- Part IV—Conduct fraud brainstorming and assess fraud risks, **Chapter 11**.
- Part V—Design tests of controls and substantive tests of transactions, **Chapter 14**.
- Part VI—Determine sample sizes using audit sampling and evaluate results, **Chapter 15**.
- Part VII—Design, perform, and evaluate results for tests of details of balances, **Chapter 16**.

Background Information

Your audit firm has recently been engaged as the new auditor for Pinnacle Manufacturing effective for the audit of the financial statements for the year ended December 31, 2013. Pinnacle is a medium-sized corporation, with its headquarters located in Detroit, Michigan. The company is made up of three divisions. The first division, Welburn, has been in existence for 35 years and creates powerful diesel engines for boats, trucks, and commercial farming equipment. The second division, Solar-Electro, was recently acquired from a high-tech manufacturing firm based out of Dallas, Texas. Solar-Electro produces state-of-the-art, solar-powered engines. The solar-powered engine market is relatively new, and Pinnacle's top management believes that the Solar-Electro division will be extremely profitable in the future as the focus on global climate change continues and when highly anticipated EPA regulations make solar-powered engines mandatory for certain public transportation vehicles. Finally, the third division, Machine-Tech, engages in a wide variety of machine service and repair operations. This division, also new to Pinnacle, is currently in its second year of operations. Pinnacle's board of directors has recently considered selling the Machine-Tech division in order to focus more on core operations—engine manufacturing. However, before any sale will be made, the board has agreed to evaluate this year's operating results. Excellent operating results may have the effect of keeping the division a part of Pinnacle for the next few years. The vice president for Machine-Tech is committed to making it profitable.

PART I

The purpose of Part I is to perform preliminary analytical procedures as part of the audit planning process. You have been asked to focus your attention on two purposes of analytical procedures: obtain an understanding about the client's business and indicate where there is an increased likelihood of misstatements.

- a. Refer to the financial statement data in Figure 8-9 (p. 264) for the current year and prior two years. Analyze the year-to-year change in account balance for at least five financial statement line items. Document the trend analysis in a format similar to the following:

Required

| Account Balance | % Change 2012–2013 | % Change 2011–2012 |
|------------------------|-------------------------------|-------------------------------|
| Net sales | | |

FIGURE 8-9

Pinnacle Manufacturing Financial Statements

| Pinnacle Manufacturing Company Income Statement For the Year ended December 31 | | | |
|---|--------------------|--------------------|--------------------|
| | 2013 | 2012 | 2011 |
| Net sales | \$ 150,737,628 | \$ 148,586,037 | \$ 144,686,413 |
| Cost of goods sold | <u>109,284,780</u> | <u>106,255,499</u> | <u>101,988,165</u> |
| Gross profit | 41,452,848 | 42,330,538 | 42,698,248 |
| Operating expenses | <u>37,177,738</u> | <u>38,133,969</u> | <u>37,241,108</u> |
| Income from operations | 4,275,110 | 4,196,569 | 5,457,140 |
| Other revenues and gains | — | — | — |
| Other expenses and losses | <u>2,181,948</u> | <u>2,299,217</u> | <u>2,397,953</u> |
| Income before income tax | 2,093,162 | 1,897,352 | 3,059,187 |
| Income tax | <u>883,437</u> | <u>858,941</u> | <u>1,341,536</u> |
| Net income for the year | 1,209,725 | 1,038,411 | 1,717,651 |
| Earnings per share | \$1.21 | \$1.04 | \$1.72 |

| Pinnacle Manufacturing Company Balance Sheet As of December 31 | | | |
|---|-----------------------|-----------------------|----------------------|
| | 2013 | 2012 | 2011 |
| Assets | | | |
| Current assets | | | |
| Cash and cash equivalents | \$ 7,721,279 | \$ 7,324,846 | \$ 8,066,545 |
| Net receivables | 13,042,165 | 8,619,857 | 7,936,409 |
| Inventory | 32,236,021 | 25,537,198 | 25,271,503 |
| Other current assets | <u>172,278</u> | <u>143,206</u> | <u>131,742</u> |
| Total current assets | 53,171,743 | 41,625,107 | 41,406,199 |
| Property, plant, and equipment | <u>62,263,047</u> | <u>61,635,530</u> | <u>58,268,732</u> |
| Total assets | <u>\$ 115,434,790</u> | <u>\$ 103,260,637</u> | <u>\$ 99,674,931</u> |
| Liabilities | | | |
| Current liabilities | | | |
| Accounts payable | \$ 12,969,686 | \$ 9,460,776 | \$ 7,586,374 |
| Short/current long-term debt | 15,375,819 | 10,298,668 | 9,672,670 |
| Other current liabilities | <u>2,067,643</u> | <u>1,767,360</u> | <u>1,682,551</u> |
| Total current liabilities | 30,413,148 | 21,526,804 | 18,941,595 |
| Long-term debt | <u>24,420,090</u> | <u>22,342,006</u> | <u>22,379,920</u> |
| Total liabilities | 54,833,238 | 43,868,810 | 41,321,515 |
| Stockholders' equity | | | |
| Common stock | 1,000,000 | 1,000,000 | 1,000,000 |
| Additional paid-in capital | 15,717,645 | 15,717,645 | 15,717,645 |
| Retained earnings | <u>43,883,907</u> | <u>42,674,182</u> | <u>41,635,771</u> |
| Total stockholders' equity | <u>60,601,552</u> | <u>59,391,827</u> | <u>58,353,416</u> |
| Total liabilities & stockholders' equity | <u>\$ 115,434,790</u> | <u>\$ 103,260,637</u> | <u>\$ 99,674,931</u> |

b. Calculate at least five common ratios shown on pages 250–252 and document them in a format similar to the following:

| Ratio | 2013 | 2012 | 2011 |
|-------|------|------|------|
|-------|------|------|------|

Current ratio

- c. Based on the analytical procedures calculated in parts a. and b., summarize your observations about Pinnacle's business, including your assessment of the client's business risk.
- d. Go to the Pinnacle link on the textbook Web site (www.pearsonglobaleditions.com/arens) and open the Pinnacle income statement, which is located in the Pinnacle Income Statement worksheet of the Pinnacle_Financials Excel file. Use the income statement information to prepare a common-size income statement for all three years. See

Figure 8-7 (p. 247) for an example. Use the information to identify accounts for which you believe there is a concern about material misstatements. Use a format similar to the following:

| Account Balance | Estimate of \$ Amount of Potential Misstatement |
|-----------------|--|
|-----------------|--|

- e. Use the three divisional income statements in the Pinnacle_Financials Excel file on the Web site to prepare a common-size income statement for each of the three divisions for all three years. Each division's income statement is in a separate worksheet in the Excel file. Use the information to identify accounts for which you believe there is a concern about material misstatements. Use a format similar to the one in requirement d.
- f. Explain whether you believe the information in requirement d. or e. provides the most useful data for evaluating the potential for misstatements. Explain why.
- g. Analyze the account balances for accounts receivable, inventory, and short/current long-term debt. Describe any observations about those accounts and discuss additional information you want to consider during the current year audit.
- h. Based on your calculations, assess the likelihood (high, medium, or low) that Pinnacle is likely to fail financially in the next 12 months.

ACL PROBLEM

8-40 (Objectives 8-5, 8-7) This problem requires the use of ACL software, which is included in the CD attached to the text. Information about installing and using ACL and solving this problem can be found in Appendix, pages 850–854. You should read all of the reference material preceding instructions about “Quick Sort” before locating the appropriate command to answer questions a. through c. For this problem, use the “Inventory” file in the “Inventory_Review” subfolder under tables in Sample_Project. The suggested command or other source of information needed to solve the problem requirement is included at the end of each question.



- a. Obtain and print statistical information for both Inventory Value at Cost and Market Value. Determine how many inventory items have positive, negative, and zero values for both Inventory Value at Cost and Market Values. (Statistics)
- b. Use Quick Sort Ascending and Descending for both Inventory Value at Cost and Market Value (Quick Sort). Use this information and the information from part a. to identify any concerns you have in the audit of inventory.
- c. Calculate the ratio of Inventory Value at Cost to Market Value and sort the result from low to high (Computed Fields and Quick Sort). Identify concerns about inventory valuation, if any.

Required

RESEARCH PROBLEM 8-1: OBTAIN CLIENT BACKGROUND INFORMATION

Planning is one of the most demanding and important aspects of an audit. A carefully planned audit increases auditor efficiency and provides greater assurance that the audit team addresses the critical issues. Auditors prepare audit planning documents that summarize client and industry background information and discuss accounting and auditing issues related to the client's financial statements.

The Securities and Exchange Commission (SEC) Form 10-K filing rules require management of U.S. public companies to include background information about the business, including discussion and analysis by management about the most recent financial condition and results of operations (referred to as MD&A). While these disclosures are primarily intended for current and future investors, they also provide rich information for auditors, especially during the client acceptance and continuance phase of an audit. Additionally, similar disclosures by a client's competitors in their

financial statements may also provide useful industry specific information that can be helpful during audit planning.

Required

- a. Visit the SEC Web site (www.sec.gov) and locate the most recent Form 10-K filing for The Coca-Cola Company (search for “Coca Cola Co”).
- b. Review the information contained in Items 1, 1A, and 7 in the Form 10-K. Describe the nature of information included in each of these sections of the Form 10-K, and discuss how the information might be helpful to auditors in obtaining an understanding of the client’s business and industry.
- c. Locate the most recent Form 10-K filing for PepsiCo, Inc. (search for “PepsiCo”). Review the Items 1, 1A, and 7 disclosures, and describe how the review of the PepsiCo, Inc., disclosures might be informative to auditors of The Coca-Cola Company.