Using Accounting Information

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Learning Objectives

What you will be able to do once you complete this chapter:

1. Explain why accurate accounting information and audited financial statements are important.
2. Identify the people who use accounting information and possible careers in the accounting industry.
3. Discuss the accounting process.
4. Read and interpret a balance sheet.
5. Read and interpret an income statement.
6. Describe business activities that affect a firm's cash flow.
7. Summarize how managers evaluate the financial health of a business.

FYI

inside business

Did You Know?

In the United States, Deloitte rings up $10 billion in annual revenue and employs more than 40,000 people, including 9,000 CPAs.

Deloitte Digs Deep into Financial Data

The global accounting powerhouse Deloitte Touche Tohmatsu may have a long name, but it has an even longer history of success. From its earliest 19th-century roots in England, Deloitte has expanded to dozens of nations, with 169,000 employees providing accounting, auditing, consulting, and tax services for clients in many industries. Today, Deloitte's annual worldwide revenue exceeds $26 billion. In the United States, the firm rings up $10 billion in annual revenue and maintains a workforce of more than 40,000 people, including 9,000 certified public accountants (CPAs).

Deloitte has been hired by many well-known U.S. corporations, including Microsoft and H&R Block, to dig deep into their financial data and processes and help them prepare complete and accurate reports about their financial situations, as required by law. Thanks to its global presence, Deloitte has the capabilities and experience to help multinational corporations comply with the accounting and tax regulations of their home countries and the countries in which they do business.

In addition, Deloitte has conducted extensive research into illegal accounting scams, such as reporting nonexistent sales, so it can advise top executives and boards of directors about preventing these kinds of frauds. It also offers consulting services to help companies improve their operations, analyze and manage business risks, and implement new information technology systems. Although most of the firm's work goes on behind the scenes, one of its highest-profile jobs is totaling Grammy votes for the Recording Academy.

Only by attracting, training, and retaining top-notch personnel can Deloitte continue its long tradition of accounting excellence. Its CEO explains: "We work in a highly competitive, knowledge-based profession where having the best resources and the most intellectual capital is a critical determinant of our success." That's why Deloitte's recruiters are always on the road, visiting colleges, universities, and community colleges to identify talented candidates and describe the challenges and rewards of an accounting career. Deloitte has been acclaimed for its long-standing commitment to diversity, which includes such initiatives as mentoring programs for minority and women professionals. Whether the economy is up or down, clients are counting on Deloitte to meet their accounting needs.[1]

For Barry Salzberg, CEO of Deloitte Touche Tohmatsu, Deloitte was his first professional job back in 1977. Now, 32 years later, he is running an accounting firm known around the globe. According to Salzberg, the reason he stayed is "because of what Deloitte offers—an opportunity culture, in which *everyone* has a shot."[2] Deloitte is proud of its people culture where employees from all kinds of backgrounds find a culture in which they have the freedom and flexibility to grow while helping their clients solve their toughest accounting problems. The fact is that without accounting information, managers can't make decisions, investors can't evaluate potential investments, and lenders and suppliers can't extend credit to a business firm. Although accurate accounting information has always been important, it is even more important now in the wake of the recent accounting scandals and the crisis in the banking and financial industries.

Many people have the idea that accountants spend their day working with endless columns of numbers in a small office locked away from other people. In fact, accountants do spend a lot of time at their desks, but their job entails far more than just adding or subtracting numbers. Accountants are expected to share their ideas and the information they possess with people who need the information.

We begin this chapter by looking at why accounting information is important, the recent problems in the accounting industry, and attempts to improve financial reporting. Then we look at how managers, employees, individuals, and groups outside a firm use accounting information. We also identify different types of accountants and career opportunities in the accounting industry. Next, we focus on the accounting process and the basics of an accounting system. We also examine the three most important financial statements: the balance sheet, the income statement, and the statement of cash flows. Finally, we show how ratios are used to measure specific aspects of a firm's financial health.

Why Accounting Information Is Important

1

Explain why accurate accounting information and audited financial statements are important.

Accounting is the process of systematically collecting, analyzing, and reporting financial information. Today, it is impossible to manage a business without accurate and up-to-date information supplied by the firm's accountants. Just for a moment, think about the following three questions:

1. How much profit did a business earn last year?
2. How much tax does a business owe the Internal Revenue Service?
3. How much cash does a business have to pay lenders and suppliers?

In each case, the firm's accountants and its accounting system provide the answers to these questions and many others. Although accounting information can be used to answer questions about what has happened in the past, it can also be used to help make decisions about the future. For these reasons, accounting is one of the most important areas within a business organization.

Because the information provided by a firm's accountants and its accounting system is so important, managers and other groups interested in a business firm's financial records must be able to "trust the numbers." Unfortunately, a large number of accounting scandals have caused people to doubt not only the numbers but also the accounting industry.

Recent Accounting Scandals

Which of the following firms has been convicted or accused of accounting fraud?

a. Enron
b. Lehman Brothers
c. Fannie Mae
d. AIG
e. All of the above

accounting the process of systematically collecting, analyzing, and reporting financial information

Unfortunately, the answer to the question is e—all of the above. Each company is a major U.S. business that has been plagued by accounting problems. These problems led to bankruptcy for Enron and Lehman Brothers and a massive federal bailout for mortgage giant Fannie Mae and insurance giant AIG. The accounting problems at these companies—and similar problems at even more companies—have forced many investors, lenders and suppliers, and government regulators to question the motives behind fraudulent and unethical accounting practices.

Today, much of the pressure on corporate executives to "cook" the books is driven by the desire to look good to Wall Street analysts and investors. Every three months companies report their revenues, expenses, profits, and projections for the future. If a company meets or exceeds "the street's" expectations, everything is usually fine. However, if a company

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This photo says it all! Because a number of the firms listed on this protestor's sign were forced to file for bankruptcy protection or experienced financial difficulties during the recent economic crisis, employees, lenders, and investors made new demands for more financial disclosure and improved accounting procedures.

reports financial numbers that are lower than expected, the company's stock value can drop dramatically. An earnings report that is lower by even a few pennies per share than what is expected can cause a company's stock value to drop immediately by as much as 20 to 30 percent or more. Greed—especially when salary and bonuses are tied to a company's stock value—is another factor that can lead some corporate executives to use questionable accounting methods to inflate a firm's sales revenues and profit amount.

Unfortunately, the ones hurt when companies (and their accountants) report inaccurate or misleading accounting information often are not the high-paid corporate executives. In many cases, it's the employees who lose their jobs, as well as the money they invested in the company's retirement program. In addition, investors, lenders, and suppliers who relied on fraudulent accounting information in order to make a decision to invest in or lend money to the company also usually experience a loss.

In an indirect way, the recent accounting scandals underscore how important accurate accounting information is for a corporation. To see how the auditing process can improve accounting information, read the next section.

Why Audited Financial Statements Are Important

Assume that you are a bank officer responsible for evaluating business loan applications. How do you make a decision to approve or reject a loan request? In this situation, most bank officers rely on the information contained in the firm's balance sheet, income statement, and statement of cash flows, along with other information provided by the prospective borrower. In fact, most lenders insist that these financial statements be audited by a CPA. An **audit** is an examination of a company's financial statements and the accounting practices that produced them. The purpose of an audit is to make sure that a firm's financial statements have been prepared in accordance with **generally accepted accounting principles (GAAPs)**. GAAPs have been developed to provide an accepted set of guidelines and practices for U.S. companies reporting financial information and the accounting profession. At the time of publication, the Financial Accounting Standards Board (FASB), which establishes and improves accounting standards for U.S. companies, is working toward establishing a new set of standards that combines GAAPs with the International Financial Reporting Standards (IFRS) to create one set of accounting standards that can be used by both U.S. and multinational firms. Created by the International Accounting Standards Board, IFRS are now used in more than 100 different countries around the world. For multinational firms, the benefits of global accounting standards are huge because preparing financial statements and accounting records that meet global standards saves both time and money. According to many accounting experts, it's not a question of whether IFRS guidelines will be adopted in the United States but when.[3]

If an accountant determines that a firm's financial statements present financial information fairly and conform to GAAPs, then he or she will issue the following statement:

> *In our opinion, the financial statements . . . present fairly, in all material respects . . . in conformity with generally accepted accounting principles.*

Although an audit and the resulting report do not *guarantee* that a company has not "cooked" the books, it does imply that, on the whole, the company has followed GAAPs. Bankers, creditors, investors, and government agencies are willing to rely on an auditor's opinion because of the historically ethical reputation and independence of auditors and accounting firms. Finally, it should be noted that without the audit function and GAAPs, there would be very little oversight or supervision. The validity of a firm's financial statements and its accounting records would drop quickly, and firms would find it difficult to obtain debt financing, acquire goods and services from suppliers, find investor financing, or prepare documents requested by government agencies.

audit an examination of a company's financial statements and the accounting practices that produced them

generally accepted accounting principles (GAAPs) an accepted set of guidelines and practices for companies reporting financial information and for the accounting profession

Reform: The Sarbanes-Oxley Act of 2002

According to John Bogle, founder of Vanguard Mutual Funds, "Investing is an act of faith. Without that faith—that reported numbers reflect reality, that companies are being run honestly, that Wall Street is playing it straight, and that investors aren't being hoodwinked—our capital markets simply can't function."[4] In reality, what Mr. Bogle says is true. To help ensure that corporate financial information is accurate and in response to the many accounting scandals that surfaced in the last few years, Congress enacted the Sarbanes-Oxley Act. Key components include the following:[5]

- The Securities and Exchange Commission (SEC) is required to establish a full-time five-member federal oversight board that will police the accounting industry.
- Chief executive and financial officers are required to certify periodic financial reports and are liable for intentional violations of securities reporting requirements.
- Accounting firms are prohibited from providing many types of non-audit and consulting services to the companies they audit.
- Auditors must maintain financial documents and audit work papers for five years.
- Auditors, accountants, and employees can be imprisoned for up to 20 years and subject to fines for destroying financial documents and willful violations of the securities laws.
- A public corporation must change its lead auditing firm every five years.
- There is added protection for whistle-blowers who report violations of the Sarbanes-Oxley Act.

Sustaining the Planet

The Global Reporting Initiative

Just as corporations follow a standardized accounting framework for their financial statements, the Global Reporting Initiative wants corporations worldwide to use a standardized framework for reporting their sustainability programs and achievements. Take a look: http://www.globalreporting.org.

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Although most people welcome the Sarbanes-Oxley Act, complex rules make compliance more expensive and time-consuming for corporate management and more difficult for accounting firms. Yet, most people agree that the cost of compliance is justified. As you read the next section, you will see the importance of maintaining accurate accounting information.

Who Uses Accounting Information

2

Identify the people who use accounting information and possible careers in the accounting industry.

Managers and employees, lenders, suppliers, stockholders, and government agencies all rely on the information contained in three financial statements, each no more than one page in length. These three reports—the balance sheet, the income statement, and the statement of cash flows—are concise summaries of a firm's activities during a specific time period. Together they represent the results of perhaps tens of thousands of transactions that have occurred during the accounting period. Moreover, the form of the financial statements is pretty much the same for all businesses, from a neighborhood video store or small dry cleaner to giant conglomerates such as Home Depot, Boeing, and Bank of America. This information has a variety of uses both within the firm and outside it. However, first and foremost, accounting information is management information.

Why do stockholders attend annual meetings? There are many reasons why stockholders—the actual owners of a corporation—attend an annual meeting. For starters, most stockholders want to learn more about the company. Others want to vote in person for the board of directors and approve or reject major corporate actions. Still other stockholders want a chance to ask questions about the corporation's future plans.

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The People Who Use Accounting Information

The primary users of accounting information are *managers*. The firm's accounting system provides information that can be compiled for the entire firm—for each product; for each sales territory, store, or salesperson; for each division or department; and generally in any way that will help those who manage the organization. At a company such as Kraft Foods, for example, financial information is gathered for all its hundreds of food products: Maxwell House Coffee, A1 Steak Sauce, Chips Ahoy Cookies, Jell-O Desserts, Kool Aid, and so on. The president of the company is interested in total sales for all these products. The vice president for marketing for Maxwell House Coffee is interested in national sales. The northeastern sales manager might want to look at sales figures for Kool Aid in New England. For a large, complex organization like Kraft, the accounting system must enable managers to get the information they need.

Much of this accounting information is *proprietary;* it is not divulged to anyone outside the firm. This type of information is used by a firm's managers and employees to plan and set goals, organize, lead and motivate, and control—all the management functions that were described in Chapter 6.

To see how important accounting is, just think about what happens when an employee or a manager asks a supervisor for a new piece of equipment or a salary increase. Immediately, everyone involved in the decision begins discussing how much it will cost and what effect it will have on the firm's profits, sales, and expenses. It is the firm's accounting system that provides the answers to these important questions. In addition to proprietary information used inside the firm, certain financial information must be supplied to lenders, suppliers, stockholders, potential investors, government agencies, and other stakeholders. For more information about the type of information these individuals and organizations need, take a look at Table 17.1.

An important function of accountants is to ensure that such information is accurate and thorough enough to satisfy these outside groups.

Different Types of Accounting

Although many people think that all accountants do the same tasks, there are special areas of expertise within the accounting industry. In fact, accounting is usually broken down into two broad categories: managerial and financial.

Table 17.1 Users of Accounting Information

The primary users of accounting information are a company's managers and employees, although individuals and organizations outside the company also require information on its finances.

Management and Employees	Lenders and Suppliers	Stockholders and Potential Investors	Government Agencies
• Plan and set goals • Organize • Lead and motivate • Control	• Evaluate credit applicants before committing to short- or long-term financing • Evaluate the risk of non-payment before selling goods or services to a firm	• Evaluate the financial health of the firm before purchasing stocks or bonds • Evaluate the risk associated with investing in a company's stocks, bonds, or securities	• Confirm tax liabilities • Confirm payroll deductions • Approve new issues of stocks and bonds

Managerial accounting provides managers and employees within the organization with the information needed to make decisions about a firm's financing, investing, marketing, and operating activities. By using managerial accounting information, both managers and employees can evaluate how well they have done in the past and what they can expect in the future. **Financial accounting**, on the other hand, generates financial statements and reports for interested people outside of an organization. Typically, stockholders, financial analysts, bankers, lenders, suppliers, government agencies, and other interested groups use the information provided by financial accounting to determine how well a business firm has achieved its goals. In addition to managerial and financial accounting, additional special areas of accounting include the following:

- *Cost accounting*—determining the cost of producing specific products or services
- *Tax accounting*—planning tax strategy and preparing tax returns for firms or individuals
- *Government accounting*—providing basic accounting services to ensure that tax revenues are collected and used to meet the goals of state, local, and federal agencies
- *Not-for-profit accounting*—helping not-for-profit organizations to account for all donations and expenditures

Accounting information you can use. To find out more about the accounting profession, career paths, mentoring opportunities, and up-to-date information about the CPA exam, go to the American Institute of CPAs' Web site at http://www.aicpa.org.

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Careers in Accounting

Wanted: An individual with at least two years of college accounting courses. Must be honest, dependable, and willing to complete all routine accounting activities for a manufacturing business. Salary dependent on experience.

Want a job? Positions such as the one described in this newspaper advertisement are increasingly becoming available to those with the required training. According to the *Occupational Outlook Handbook*, published by the Department of Labor, job opportunities for accountants, as well as auditors in the accounting area, are expected to experience much faster-than-average employment growth between now and the year 2018. According to a recent salary survey conducted by the National Association of Colleges and Employers, starting salaries for accountants with a bachelor's degree average $48,993 a year.[6] Job applicants with a two-year degree or with some college accounting courses make less, but still higher than the starting salaries for other entry-level positions.

Accounting can be an exciting and rewarding career—one that offers higher-than-average starting salaries. To be successful in the accounting industry, employees must

- Be responsible, honest, and ethical.
- Have a strong background in financial management.
- Know how to use a computer and software to process data into accounting information.
- Be able to communicate with people who need accounting information.

Today, accountants generally are classified as either private accountants or public accountants. A *private accountant* is employed by a specific organization. A medium-sized or a large firm may employ one or more private accountants to design its accounting information system, manage its accounting department, and provide managers with accounting information, advice, and assistance.

managerial accounting provides managers and employees with the information needed to make decisions about a firm's financing, investing, marketing, and operating activities

financial accounting generates financial statements and reports for interested people outside an organization

SPOTLIGHT

Starting Salaries for Certified Public Accountants (CPAs)

It takes a lot of time and energy to find the right accounting position, but the salary is worth it. Below are starting salaries for CPAs.

Source: The AICPA Web site at http://www.aicpa.org (accessed April 12, 2010).

Individuals, self-employed business owners, and smaller firms that do not require their own full-time accountants can hire the services of public accountants. A *public accountant* works on a fee basis for clients and may be self-employed or be the employee of an accounting firm. Accounting firms range in size from one-person operations to huge international firms with hundreds of accounting partners and thousands of employees. Today, the largest accounting firms, sometimes referred to as the "Big Four," are PricewaterhouseCoopers, Ernst & Young, KPMG, and Deloitte Touche Tohmatsu.

Typically, public accounting firms include on their staffs at least one **certified public accountant (CPA)**, an individual who has met state requirements for accounting education and experience and has passed a rigorous accounting examination. The AICPA uniform CPA examination covers four areas: (1) regulation, taxation, business law, ethics, and professional and legal responsibilities; (2) auditing; (3) business environment and concepts; and (4) financial accounting and reporting. More information about general requirements and the CPA profession can be obtained by contacting the AICPA at http://www.aicpa.org.[7] State requirements usually include a college degree or a specified number of hours of college course work and generally from one to three years of on-the-job experience. Details regarding specific state requirements for practice as a CPA can be obtained by contacting the state's board of accountancy.

Once an individual becomes a CPA, he or she must participate in continuing-education programs to maintain state certification. These specialized programs are designed to provide the current training needed in today's changing business environment.

Certification as a CPA brings both status and responsibility. In addition to auditing a corporation's financial statements, typical services performed by CPAs include planning and preparing tax returns, determining the true cost of producing and marketing a firm's goods or services, and compiling the financial information needed to make major management decisions. Fees for the services provided by CPAs generally range from $50 to $300 an hour.

certified public accountant (CPA) an individual who has met state requirements for accounting education and experience and has passed a rigorous accounting examination prepared by the AICPA

certified management accountant (CMA) an accountant who has met the requirements for education and experience, passed a rigorous exam, and is certified by the Institute of Management Accountants

In addition to CPAs, there are also certified management accountants (CMAs). A **certified management accountant (CMA)** is an accountant who has met the requirements for education and experience, passed a rigorous exam, and is certified by the Institute of Management Accountants. The CMA exam is designed to develop and measure not only accounting skills but also decision-making, financial planning, analysis, and critical-thinking skills. For more information about the CMA exam, visit the Institute of Management Accountants Web site at http://www.imanet.org. Although both CPAs and CMAs can work for the public, a CMA is more likely to work within a large organization. In addition, both types of accountants are excellent career choices.

3

Discuss the accounting process.

The Accounting Process

In Chapter 16, *information* was defined as data presented in a form that is useful for a specific purpose. In this section, we examine accounting as the system for transforming raw financial *data* into useful financial *information*. Then, in the next sections, we describe the three most important financial statements—the balance sheet, income statement, and statement of cash flows—provided by the accounting process.

Career SUCCESS

More Accountants and Auditors Needed!

U.S. businesses and not-for-profit organizations will soon need the services of many more accountants and auditors. The *Occupational Outlook Handbook* forecasts a 22 percent increase in the number of accountants and auditors needed in the nation's workforce by 2018—a higher-than-average occupational growth rate.

Already, the "Big Four" (Deloitte Touche Tohmatsu, Ernst & Young, KPMG, and PricewaterhouseCoopers) are actively recruiting to fill open positions and prepare for the coming boom in demand for such services. All four appear on *Fortune*'s annual list of 100 Best Companies to Work for in America, as well as *BusinessWeek*'s annual list of Best Places to Launch a Career.

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Here's a taste of what the Big Four are doing to attract, develop, and retain career-minded accountants and auditors. Deloitte (http://www.deloitte.com) has created Deloitte University, a $300 million state-of-the-art learning center for companywide technical and leadership training. Ernst & Young (http://www.ey.com) has a wide variety of international assignments to develop, challenge, and motivate its personnel. KPMG (http://www.kpmg.com) encourages work-life balance by granting employees sabbatical leaves for up to three months at 20 percent pay. PricewaterhouseCoopers (http://www.pwc.com) provides on-the-job coaching and networking opportunities to help employees sharpen their skills, learn from experts throughout the organization, and identify new job opportunities internally. Is a Big Four career in your future?

Sources: Alison Maitland, "A Different Way of Working," *Financial Times,* March 22, 2010, http://www.ft.com; Milton Moskowitz, Robert Levering, and Christopher Tkaczyk, "100 Best Companies to Work for in America," *Fortune,* February 8, 2010, 75–88; Lindsey Gerdes, "Best Places to Launch a Career," *BusinessWeek,* September 14, 2009, 32ff; "Accountants and Auditors," *Occupational Outlook Handbook,* December 17, 2009, http://www.bls.gov/oco/ocos001.htm.

The Accounting Equation

The accounting equation is a simple statement that forms the basis for the accounting process. This important equation shows the relationship between a firm's assets, liabilities, and owners' equity.

- **Assets** are the resources a business owns—cash, inventory, equipment, and real estate.
- **Liabilities** are the firm's debts—what it owes to others.
- **Owners' equity** is the difference between total assets and total liabilities—what would be left for the owners if the firm's assets were sold and the money used to pay off its liabilities.

The relationship between assets, liabilities, and owners' equity is shown by the following **accounting equation**:

$$\text{Assets} = \text{liabilities} + \text{owners' equity}$$

Whether a business is a small corner grocery store or a giant corporation such as General Mills, its assets must equal the sum of its liabilities and owners' equity. To use this equation, a firm's accountants must record raw data—that is, the firm's day-to-day financial transactions—using the double-entry system of bookkeeping. The **double-entry bookkeeping system** is a system in which each financial transaction is recorded as two separate accounting entries to maintain the balance shown in the accounting equation. With the double-entry system, an accountant can use the steps in the accounting cycle to generate accounting information and financial statements.

The Accounting Cycle

In the typical accounting system, raw data are transformed into financial statements in five steps. The first three—analyzing, recording, and posting—are performed on a regular basis throughout the accounting period. The last two—preparation of the

assets the resources that a business owns

liabilities a firm's debts and obligations

owners' equity the difference between a firm's assets and its liabilities

accounting equation the basis for the accounting process: *assets = liabilities + owners' equity*

double-entry bookkeeping system a system in which each financial transaction is recorded as two separate accounting entries to maintain the balance shown in the accounting equation trial balance and preparation of the financial statements and closing the books—are performed at the end of the accounting period.

Analyzing Source Documents Basic accounting data are contained in *source documents,* the receipts, invoices, sales slips, and other documents that show the dollar amounts of day-to-day business transactions. The accounting cycle begins with the analysis of each of these documents. The purpose of the analysis is to determine which accounts are affected by the documents and how they are affected.

Recording Transactions Every financial transaction then is recorded in a journal—a process called *journalizing*. Transactions must be recorded in the firm's general journal or in specialized journals. The *general journal* is a book of original entry in which typical transactions are recorded in order of their occurrence. An accounting system also may include *specialized journals* for specific types of transactions that occur frequently. Thus, a retail store might have journals for cash receipts, cash disbursements, purchases, and sales in addition to its general journal.

Posting Transactions After the information is recorded in the general journal and specialized journals, it is transferred to the general ledger. The *general ledger* is a book of accounts containing a separate sheet or section for each account. Today, most businesses use a computer and software to record accounting entries in the general journal or specialized journals and then to post journal entries to the general ledger.

Preparing the Trial Balance A **trial balance** is a summary of the balances of all general ledger accounts at the end of the accounting period. To prepare a trial balance, the accountant determines and lists the balances for all ledger accounts. If the trial balance totals are correct and the accounting equation is still in balance, the accountant can prepare the financial statements. If not, a mistake has occurred somewhere, and the accountant must find it and correct it before proceeding.

Preparing Financial Statements and Closing the Books The firm's financial statements are prepared from the information contained in the trial balance. This information is presented in a standardized format to make the statements as accessible as possible to the various people who may be interested in the firm's financial affairs—managers, employees, lenders, suppliers, stockholders, potential investors, and government agencies. A firm's financial statements are prepared at least once a year and included in the firm's annual report. An **annual report** is a report distributed to stockholders and other interested parties that describes a firm's operating activities and its financial condition. Most firms also have financial statements prepared semiannually, quarterly, or monthly.

Once these statements have been prepared and checked, the firm's books are "closed" for the accounting period, and a *postclosing* trial balance is prepared. Unlike the trial balance just described, the postclosing trial balance generally is prepared after *all* accounting work is completed for one accounting period. If the postclosing trial balance totals agree, the accounting equation is still in balance at the end of the cycle. Only then can a new accounting cycle begin for the next accounting period.

With this brief information about the steps of the accounting cycle in mind, let's now examine the three most important financial statements generated by the accounting process: the balance sheet, the income statement, and the statement of cash flows.

trial balance a summary of the balances of all general ledger accounts at the end of the accounting period

annual report a report distributed to stockholders and other interested parties that describes a firm's operating activities and its financial condition

4

Read and interpret a balance sheet.

The Balance Sheet

Question: *Where could you find the total amount of assets, liabilities, and owners' equity for Hershey Foods Corporation?*

Answer: The firm's balance sheet.

A **balance sheet** (sometimes referred to as a **statement of financial position**) is a summary of the dollar amounts of a firm's assets, liabilities, and owners' equity accounts at the end of a specific accounting period. The balance sheet must demonstrate that assets are equal to liabilities plus owners' equity. Most people think of a balance sheet as a statement that reports the financial condition of a business firm such as the Home Depot or Hershey Foods Corporation, but balance sheets apply to individuals, too. For example, Marty Campbell graduated from college three years ago and obtained a position as a sales representative for an office supply firm. After going to work, he established a checking and savings account and purchased an automobile, stereo, television, and a few pieces of furniture. Marty paid cash for some purchases, but he had to borrow money to pay for the larger ones. Figure 17.1 shows Marty's current personal balance sheet.

Marty Campbell's assets total $26,500, and his liabilities amount to $10,000. Although the difference between total assets and total liabilities is referred to as *owners' equity* or *stockholders' equity* for a business, it is normally called *net worth* for an individual. As reported on Marty's personal balance sheet, net worth is $16,500. The total assets ($26,500) and the total liabilities *plus* net worth ($26,500) are equal. Thus, the accounting equation (Assets = liabilities + owners' equity) is still in balance.

Figure 17.1 Personal Balance Sheet

Often individuals determine their net worth, or owners' equity, by subtracting the value of their liabilities from the value of their assets.

Marty Campbell
Personal Balance Sheet
December 31, 20XX

ASSETS		
Cash	$ 2,500	
Savings account	5,000	
Automobile	15,000	
Stereo	1,000	
Television	500	
Furniture	2,500	
TOTAL ASSETS		$26,500
LIABILITIES		
Automobile loan	$ 9,500	
Credit card balance	500	
TOTAL LIABILITIES		$10,000
NET WORTH (Owners' Equity)		16,500
TOTAL LIABILITIES AND NET WORTH		$26,500

balance sheet (or statement of financial position) a summary of the dollar amounts of a firm's assets, liabilities, and owners' equity accounts at the end of a specific accounting period

Figure 17.2 shows the balance sheet for Northeast Art Supply, a small corporation that sells picture frames, paints, canvases, and other artists' supplies to retailers in New England. Note that assets are reported at the top of the statement, followed by liabilities and stockholders' equity. Let's work through the different accounts in Figure 17.2 from top to bottom.

Assets

On a balance sheet, assets are listed in order from the *most liquid* to the *least liquid*. The **liquidity** of an asset is the ease with which it can be converted into cash.

Current Assets

Current assets are assets that can be converted quickly into cash or that will be used in one year or less. Because cash is the most liquid asset, it is listed first. Next are *marketable securities*—stocks, bonds, and other investments—that can be converted into cash in a matter of days.

Next are the firm's receivables. Its *accounts receivable,* which result from allowing customers to make credit purchases, generally are paid within 30 to 60 days. However, the firm expects that some of these debts will not be collected. Thus, it has reduced its accounts receivables by a 5 percent *allowance for doubtful accounts*. The firm's *notes receivable* are receivables for which customers have signed promissory notes. They generally are repaid over a longer period of time than the firm's accounts receivable.

Northeast's *merchandise inventory* represents the value of goods on hand for sale to customers. Since Northeast Art Supply is a wholesale operation, the inventory listed in Figure 17.2 represents finished goods ready for sale to retailers. For a manufacturing firm, merchandise inventory also may represent raw materials that will become part of a finished product or work that has been partially completed but requires further processing.

Northeast's last current asset is *prepaid expenses,* which are assets that have been paid for in advance but have not yet been used. An example is insurance premiums. They are usually paid at the beginning of the policy year. The unused portion (say, for the last four months of the time period covered by the policy) is a prepaid expense. For Northeast Art, all current assets total $182,000.

Fixed Assets

Fixed assets are assets that will be held or used for a period longer than one year. They generally include land, buildings, and equipment used in the continuing operation of the business. Although Northeast owns no land or buildings, it does own delivery equipment that originally cost $110,000. It also owns furniture and store equipment that originally cost $62,000.

Note that the values of both fixed assets are decreased by their *accumulated depreciation*. **Depreciation** is the process of apportioning the cost of a fixed asset over the period during which it will be used, that is, its useful life. The depreciation amount allotted to each year is an expense for that year, and the value of the asset must be reduced by the amount of depreciation expense. In the case of Northeast's delivery equipment, $20,000 of its value has been depreciated (or used up) since it was purchased. Its value at this time is thus $110,000 less $20,000, or $90,000. In a similar fashion, the original value of furniture and store equipment ($62,000) has been reduced by depreciation totaling $15,000. Furniture and store equipment now has a reported value of $47,000. For Northeast Art, all fixed assets total $137,000.

Intangible Assets

Intangible assets are assets that do not exist physically but that have a value based on the rights or privileges they confer on a firm. They include patents, copyrights, trademarks, and goodwill. By their nature, intangible assets are long-term assets—they are of value to the firm for a number of years.

Northeast Art Supply lists two intangible assets. The first is a *patent* for a special oil paint that the company purchased from the inventor. The firm's accountants

liquidity the ease with which an asset can be converted into cash

current assets assets that can be converted quickly into cash or that will be used in one year or less

fixed assets assets that will be held or used for a period longer than one year

depreciation the process of apportioning the cost of a fixed asset over the period during which it will be used

intangible assets assets that do not exist physically but that have a value based on the rights or privileges they confer on a firm

Figure 17.2 Business Balance Sheet

A balance sheet (sometimes referred to as a statement of financial position) summarizes a firm's accounts at the end of an accounting period, showing the various dollar amounts that enter into the accounting equation. Note that assets ($340,000) equal liabilities plus owners' equity ($340,000).

NORTHEAST ART SUPPLY, INC.

Balance Sheet
December 31, 20XX

ASSETS			
Current assets			
Cash		$ 59,000	
Marketable securities		10,000	
Accounts receivable	$ 40,000		
Less allowance for doubtful accounts	2,000	38,000	
Notes receivable		32,000	
Merchandise inventory		41,000	
Prepaid expenses		2,000	
Total current assets			$182,000
Fixed assets			
Delivery equipment	$110,000		
Less accumulated depreciation	20,000	$ 90,000	
Furniture and store equipment	$62,000		
Less accumulated depreciation	15,000	47,000	
Total fixed assets			137,000
Intangible assets			
Patents		$ 6,000	
Goodwill		15,000	
Total intangible assets			21,000
TOTAL ASSETS			$340,000
LIABILITIES AND STOCKHOLDERS' EQUITY			
Current liabilities			
Accounts payable	$ 35,000		
Notes payable	25,675		
Salaries payable	4,000		
Taxes payable	5,325		
Total current liabilities		$ 70,000	
Long-term liabilities			
Mortgage payable on store equipment	$ 40,000		
Total long-term liabilities		$ 40,000	
TOTAL LIABILITIES			$110,000
Stockholders' equity			
Common stock (25,000×$6)		$ 150,000	
Retained earnings		80,000	
TOTAL OWNERS' EQUITY			230,000
TOTAL LIABILITIES AND OWNERS' EQUITY			$340,000

estimate that the patent has a current market value of $6,000. The second intangible asset, *goodwill,* is the value of a firm's reputation, location, earning capacity, and other intangibles that make the business a profitable concern. Goodwill normally is not listed on a balance sheet unless the firm has been purchased from previous owners. In such a case, the new owners actually have paid an additional amount over and above the fair market value of the firm's assets for goodwill. Goodwill exists because most businesses are worth more as going concerns than as a collection of assets. Northeast Art's accountants included a $15,000 amount for goodwill. The firm's intangible assets total $21,000. Now it is possible to total all three types of assets for Northeast Art. As calculated in Figure 17.2, total assets are $340,000.

Liabilities and Owners' Equity

The liabilities and the owners' equity accounts complete the balance sheet. The firm's liabilities are separated into two categories—current and long-term liabilities.

Current Liabilities A firm's **current liabilities** are debts that will be repaid in one year or less. Northeast Art Supply purchased merchandise from its suppliers on credit. Thus, its balance sheet includes an entry for accounts payable. *Accounts payable* are short-term obligations that arise as a result of a firm making credit purchases.

Notes payable are obligations that have been secured with promissory notes. They are usually short-term obligations, but they may extend beyond one year. Only those that must be paid within the year are listed under current liabilities.

Northeast also lists *salaries payable* and *taxes payable* as current liabilities. These are both expenses that have been incurred during the current accounting period but will be paid in the next accounting period. For Northeast Art, current liabilities total $70,000.

Long-Term Liabilities **Long-term liabilities** are debts that need not be repaid for at least one year. Northeast lists only one long-term liability—a $40,000 *mortgage payable* for store equipment. As you can see in Figure 17.2, Northeast's current and long-term liabilities total $110,000.

Owners' or Stockholders' Equity For a sole proprietorship or partnership, the owners' equity is shown as the difference between assets and liabilities. In a partnership, each partner's share of the ownership is reported separately in each owner's name. For a corporation, the owners' equity usually is referred to as *stockholders' equity*. The dollar amount reported on the balance sheet is the total value of stock plus retained earnings that have accumulated to date. **Retained earnings** are the portion of a business's profits not distributed to stockholders.

The original investment by the owners of Northeast Art Supply was $150,000 and was obtained by selling 25,000 shares at $6 per share. In addition, $80,000 of Northeast's earnings has been reinvested in the business since it was founded. Thus, owners' equity totals $230,000.

As the two grand totals in Figure 17.2 show, Northeast's assets and the sum of its liabilities and owners' equity are equal—at $340,000. The accounting equation (Assets = liabilities + owners' equity) is still in balance.

current liabilities debts that will be repaid in one year or less

long-term liabilities debts that need not be repaid for at least one year

retained earnings the portion of a business's profits not distributed to stockholders

5

Read and interpret an income statement.

The Income Statement

Question: *Where can you find the profit or loss amount for Gap Inc.?*

Answer: The firm's income statement.

An **income statement** is a summary of a firm's revenues and expenses during a specified accounting period—one month, three months, six months, or a year. The income statement is sometimes called the *earnings statement* or *the statement of*

income statement a summary of a firm's revenues and expenses during a specified accounting period

Figure 17.3 Personal Income Statement

By subtracting expenses from income, anyone can construct a personal income statement and determine if he or she has a surplus or deficit at the end of each month.

Marty Campbell
Personal Income Statement
For the month ended December 31, 20XX

INCOME (Take-home pay)		$1,900
LESS MONTHLY EXPENSES		
Automobile loan	$ 250	
Credit card payment	100	
Apartment rent	500	
Utilities	200	
Food	250	
Clothing	100	
Recreation & entertainment	250	
TOTAL MONTHLY EXPENSES		1,650
CASH SURPLUS (or profit)		$ 250

income and expenses. Let's begin our discussion by constructing a personal income statement for Marty Campbell. Having worked as a sales representative for an office supply firm for the past three years, Marty now earns $33,600 a year, or $2,800 a month. After deductions, his take-home pay is $1,900 a month. As illustrated in Figure 17.3, Marty's typical monthly expenses include payments for an automobile loan, credit card purchases, apartment rent, utilities, food, clothing, and recreation and entertainment.

Although the difference between income and expenses is referred to as *profit* or *loss* for a business, it is normally referred to as a *cash surplus* or *cash deficit* for an individual. Fortunately for Marty, he has a surplus of $250 at the end of each month. He can use this surplus for savings, investing, or paying off debts.

Figure 17.4 shows the income statement for Northeast Art Supply. For a business, revenues *less* cost of goods sold *less* operating expenses equals net income.

Revenues

Revenues are the dollar amounts earned by a firm from selling goods, providing services, or performing business activities. Like most businesses, Northeast Art obtains its revenues solely from the sale of its products or services. The revenues section of its income statement begins with gross sales. **Gross sales** are the total dollar amount of all goods and services sold during the accounting period. Deductions made from this amount are

- *Sales returns*—merchandise returned to the firm by its customers
- *Sales allowances*—price reductions offered to customers who accept slightly damaged or soiled merchandise
- *Sales discounts*—price reductions offered to customers who pay their bills promptly

revenues the dollar amounts earned by a firm from selling goods, providing services, or performing business activities

gross sales the total dollar amount of all goods and services sold during the accounting period

Figure 17.4 Business Income Statement

An income statement summarizes a firm's revenues and expenses during a specified accounting period. For Northeast Art, net income after taxes is $30,175.

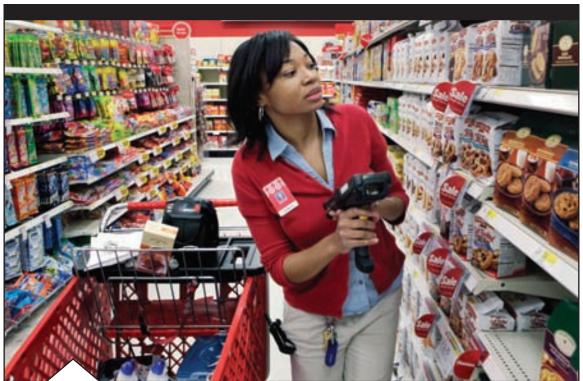
NORTHEAST ART SUPPLY, INC.

Income Statement
For the Year Ended
December 31, 20XX

Revenues			
Gross sales		$465,000	
Less sales returns and allowances	$ 9,500		
Less sales discounts	4,500	14,000	
Net sales			$451,000
Cost of goods sold			
Beginning inventory, January 1, 20XX		$ 40,000	
Purchases	$346,000		
Less purchase discounts	11,000		
Net purchases		335,000	
Cost of goods available for sale		$375,000	
Less ending inventory December 31, 20XX		41,000	
Cost of goods sold			334,000
Gross profit			$117,000
Operating expenses			
Selling expenses			
Sales salaries	$ 22,000		
Advertising	4,000		
Sales promotion	2,500		
Depreciation—store equipment	3,000		
Depreciation—delivery equipment	4,000		
Miscellaneous selling expenses	1,500		
Total selling expenses		$ 37,000	
General expenses			
Office salaries	$ 28,500		
Rent	8,500		
Depreciation—furniture	1,500		
Utilities expense	2,500		
Insurance expense	1,000		
Miscellaneous expense	500		
Total general expense		42,500	
Total operating expenses			79,500
Net income from operations			$ 37,500
Less interest expense			2,000
NET INCOME BEFORE TAXES			$ 35,500
Less federal income taxes			5,325
NET INCOME AFTER TAXES			$ 30,175

net sales the actual dollar amounts received by a firm for the goods and services it has sold after adjustment for returns, allowances, and discounts

cost of goods sold the dollar amount equal to beginning inventory *plus* net purchases *less* ending inventory



Inventory by the numbers. For most retailers, determining the level of available inventory in a store is a very important accounting function. In this photo, Chenille English-Boswell, an executive team leader at a Chicago-area Target Store, checks not only inventory levels but also prices to make sure merchandise is correctly priced.

© AP Images/Charles Rex Arbogast

The remainder is the firm's net sales. **Net sales** are the actual dollar amounts received by the firm for the goods and services it has sold after adjustment for returns, allowances, and discounts. For Northeast Art, net sales are $451,000.

Cost of Goods Sold

The standard method of determining the **cost of goods sold** by a retailing or a wholesaling firm can be summarized as follows:

$$\text{Cost of goods sold} = \text{beginning inventory} + \text{net purchases} - \text{ending inventory}$$

A manufacturer must include raw materials inventories, work in process, finished goods inventory, and direct manufacturing costs in this computation.

According to Figure 17.4, Northeast began its accounting period on January 1 with a merchandise inventory that

Ethical Challenges & SUCCESSFUL SOLUTIONS

Trust and Accounting Fraud

Who's responsible for frauds committed against U.S. businesses? In the past, PricewaterhouseCoopers surveys have revealed an even split between insiders (such as employees and managers) and outsiders (such as customers and intermediaries). More recently, its surveys have found that insiders—mainly middle- and lower-level managers—are now responsible for the majority of frauds such as misappropriating funds and reporting phantom sales. Unfortunately, companies anticipate that such frauds will increase in the coming years.

As a result, companies face a delicate balancing act between showing employees that they're trusted and having internal controls in place to detect and prevent accounting fraud. This is a particular problem in small businesses where staff members must stretch to cover multiple job responsibilities. "Managers and small business owners have a tendency to trust their employees to a higher degree," says an official at the Association of Certified Fraud Examiners. "That level of trust is often betrayed."

Yet the entire workforce could be at risk if an employer falls victim to a scheme that sucks the financial life out of the business. This is why companies are working to strengthen their accounting oversight and hire outside experts to check on internal controls. To foster ethical accounting behavior, professional groups such as the American Institute of CPAs have developed codes of conduct to guide their members.

Sources: Elizabeth Wasserman, "How to Protect Your Business Against Fraud," *Inc.,* March 12, 2010, http://www.inc.com; Tammy Whitehouse, "IIA Offers Fraud Guidance for Internal Auditors," *Compliance Week*, March 2010, 30; Toby J. F. Bishop and Frank E. Hydoski, "Who's Allegedly 'Cooking the Books' and Where?" *Business Crimes Bulletin,* January 1, 2010, n.p.; American Institute of Certified Public Accountants, http://www.aicpa.org/Research/Standards/CodeofConduct/Pages/default.aspx; Emily Chasan, "Global Corporate Accounting Fraud Up Sharply: Survey," *Reuters,* November 19, 2009, http://www.reuters.com.

cost $40,000. During the next 12 months, the firm purchased merchandise valued at $346,000. After deducting *purchase discounts,* however, it paid only $335,000 for this merchandise. Thus, during the year, Northeast had total *goods available for sale* valued at $40,000 plus $335,000, for a total of $375,000.

Twelve months later, at the end of the accounting period on December 31, Northeast had sold all but $41,000 worth of the available goods. The cost of goods sold by Northeast was therefore $375,000 less ending inventory of $41,000, or $334,000. It is now possible to calculate gross profit. A firm's **gross profit** is its net sales *less* the cost of goods sold. For Northeast, gross profit was $117,000.

Operating Expenses

A firm's **operating expenses** are all business costs other than the cost of goods sold. Total operating expenses generally are divided into two categories: selling expenses or general expenses.

Selling expenses are costs related to the firm's marketing activities. For Northeast Art, selling expenses total $37,000. *General expenses* are costs incurred in managing a business. For Northeast Art, general expenses total $42,500. Now it is possible to total both selling and general expenses. As Figure 17.4 shows, total operating expenses for the accounting period are $79,500.

Net Income

When revenues exceed expenses, the difference is called **net income**. When expenses exceed revenues, the difference is called **net loss**. As Figure 17.4 shows, Northeast Art's *net income from operations* is computed as gross profit ($117,000) less total operating expenses ($79,500). For Northeast Art, net income from operations is $37,500. From this amount, *interest expense* of $2,000 is deducted to obtain a *net income before taxes* of $35,500. The interest expense is deducted in this section of the income statement because it is not an operating expense. Rather, it is an expense that results from financing the business.

gross profit a firm's net sales *less* the cost of goods sold

operating expenses all business costs other than the cost of goods sold

net income occurs when revenues exceed expenses

net loss occurs when expenses exceed revenues

One necessary business expense! Without jet airplanes, FedEx cannot provide overnight delivery services to its customers. Started in 1971 by entrepreneur Fred Smith in Memphis, Tennessee, Federal Express now employs 217,000 people and provides worldwide delivery services that generate annual revenues of $36 billion.

© AP Images/ Chris Kasson

Northeast's *federal income taxes* are $5,325. Although these taxes may or may not be payable immediately, they are definitely an expense that must be deducted from income. This leaves Northeast Art with a *net income after taxes* of $30,175. This amount may be used to pay a dividend to stockholders, it may be retained or reinvested in the firm, it may be used to reduce the firm's debts, or all three.

6

Describe business activities that affect a firm's cash flow.

The Statement of Cash Flows

Cash is vital to any business. In 1987, the SEC and the FASB required all publicly traded companies to include a statement of cash flows, along with their balance sheet and income statement, in their annual report. The **statement of cash flows** illustrates how the company's operating, investing, and financing activities affect cash during an accounting period. Whereas a firm's balance sheet reports dollar values for assets, liabilities, and owners' equity and an income statement reports the firm's dollar amount of profit or loss, the statement of cash flow focuses on how much cash is on hand to pay the firm's bills. Executives and managers can also use the information on a firm's statement of cash flows to determine how much cash is available to pay dividends to stockholders. Finally, the information on the statement of cash flows can be used to evaluate decisions related to a firm's future investments and financing needs. Outside stakeholders including investors, lenders, and suppliers are also interested in a firm's statement of cash flows. Investors want to know if a firm can pay dividends in the future. Before extending credit to a firm, lenders and suppliers often use the information on the statement of cash flows to evaluate the firm's ability to repay its debts.

A statement of cash flows for Northeast Art Supply is illustrated in Figure 17.5. It provides information concerning the company's cash receipts and cash payments and is organized around three different activities: operating, investing, and financing.

statement of cash flows
a statement that illustrates how the company's operating, investing, and financing activities affect cash during an accounting period

- *Cash flows from operating activities*. This is the first section of a statement of cash flows. It addresses the firm's primary revenue source—providing goods

Figure 17.5 Statement of Cash Flows

A statement of cash flows summarizes how a firm's operating, investing, and financing activities affect its cash during a specified period—one month, three months, six months, or a year. For Northeast Art, the amount of cash at the end of the year reported on the statement of cash flows is $59,000—the same amount reported for the cash account on the firm's balance sheet.

NORTHEAST ART SUPPLY, INC.

Statement of Cash Flows
For the Year Ended
December 31, 20XX

Cash flows from operating activities		
Net Income		$30,175
Adjustments to reconcile net income to net cash flows		
Depreciation	$ 8,500	
Decrease in accounts receivable	1,000	
Increase in inventory	(5,000)	
Increase in accounts payable	6,000	
Increase in income taxes payable	3,000	13,500
Net cash provided by operating activities		$43,675
Cash flows from investing activities		
Purchase of equipment	$ (2,000)	
Purchase of investments	(10,000)	
Sale of investments	20,000	
Net cash provided by investing activities		8,000
Cash flows from financing activities		
Payments on debt	$(23,000)	
Payment of dividends	(5,000)	
Net cash provided by financing activities		(28,000)
NET INCREASE IN CASH		$23,675
Cash at beginning of year		35,325
CASH AT END OF YEAR		$59,000

and services. Typical adjustments include adding the amount of depreciation to a firm's net income. Other adjustments for increase or decrease in amounts for accounts receivable, inventory, accounts payable, and income taxes payable are also required to reflect a true picture of cash flows from operating activities.

- *Cash flows from investing activities*. The second section of the statement is concerned with cash flow from investments. This includes the purchase and sale of land, equipment, and other assets and investments.
- *Cash flows from financing activities*. The third and final section deals with the cash flow from all financing activities. It reports changes in debt obligation and owners' equity accounts. This includes loans and repayments, the sale and repurchase of the company's own stock, and cash dividends.

The totals of all three activities are added to the beginning cash balance to determine the ending cash balance. For Northeast Art Supply, the ending cash balance is $59,000. Note that this is the same amount reported for the cash account on the firm's balance sheet. Together, the statement of cash flows, balance sheet, and income statement illustrate the results of past business decisions and reflect the firm's ability to pay debts and dividends and to finance new growth.

7

Summarize how managers evaluate the financial health of a business.

Evaluating Financial Statements

All three financial statements—the balance sheet, the income statement, and the statement of cash flows—can provide answers to a variety of questions about a firm's ability to do business and stay in business, its profitability, and its value as an investment.

Using Accounting Information to Evaluate a Potential Investment

Many investors rely on accounting information to gauge the financial health of a business. Today, all three financial statements are included in a corporation's annual report. You can request a current annual report by contacting the corporation by mail or telephone. You can also obtain an annual report and additional accounting information by accessing the firm's Web site. Once at the corporate Web site, click on the button for "Investor Relations" or "Financial Information." Accounting information about a corporation is also available from many professional investment advisory services.

To help evaluate potential investments, investors often use a firm's three financial statements—the information on the balance sheet, income statement, and statement of cash flows. Although the numbers may be frightening, it helps to take a commonsense approach to evaluating accounting information. For example, consider the following questions:

1. Is an increase in sales revenues a healthy sign for a corporation? (Answer: yes)
2. Should a firm's net profit increase or decrease over time? (Answer: increase)
3. Should a corporation's retained earnings increase or decrease over time? (Answer: increase)

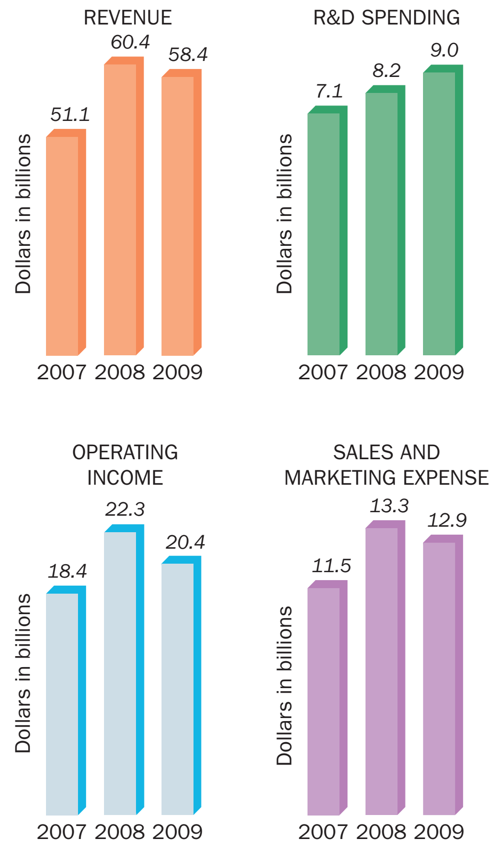
Although the answers to these questions are obvious, you will be surprised by how much you can learn from accounting information if you just spend some time with the numbers. In addition to a commonsense approach to evaluating a firm's accounting information, it helps to remember the following suggestions:

- All three financial statements should be audited by an outside source. The amounts reported on audited financial statements have been examined by an accountant(s) in order to determine if the firm used GAAPs.
- The balance sheet is a snapshot of the corporation's financial position at a single point in time. The dollar amounts for each asset, liability, and owners' equity account reported on a balance sheet will change over time. Therefore, be sure to use the most recent balance sheet available.
- The income statement reports sales revenues, expenses, and profit or loss for a specific period of time. Smart investors look for companies that are not only profitable, but also using new strategies to reduce operating expenses.
- The statement of cash flows indicates how much cash the business has and how it manages the cash that flows into and out of the business. This statement can help you determine if the firm can pay its debts and maintain its ability to borrow money in the future.
- Look at how the numbers relate to each other. For example, investors generally like to see that current assets are greater than current liabilities. This means the firm can pay its short-term liabilities quickly and maintain its ability to borrow additional money when needed.
- Learn how to calculate and interpret financial ratios. Some of the most important financial ratios are discussed in the last part of this chapter.

Sometimes additional information can be obtained by digging deeper into a firm's annual report. Be sure and read the letters from the chairman of the board and chief executive officer that describe the corporation's operations, prospects for the future, new products or services, financial strengths, and any potential problems. In addition, examine the footnotes closely, and look for red flags that may be

Figure 17.6 Comparisons of Present and Past Financial Statements for Microsoft Corporation

Most corporations include in their annual reports comparisions of the important elements of their financial statements for recent years.



Source: Adapted from the Microsoft Corporation 2009 Annual Report, http://www.microsoft.com (accessed April 12, 2010).

in the fine print. Often, the footnotes contain (and sometimes hide) important information about the company and its finances. As one expert put it, "the footnotes are where they bury the bodies."

Finally, most corporations include in their annual reports comparisons of the important elements of their financial statements for recent years. Figure 17.6 shows such comparisons—of revenue, research and development (R&D), operating income, and sales and marketing expenses—for Microsoft Corporation, a world leader in the computer software industry. By examining these data, an operating manager can tell whether R&D expenditures have been increasing or decreasing over the past three years. The vice president of marketing can determine if the total amount of sales and marketing expenses is changing. Stockholders and potential investors, on the other hand, may be more concerned with increases or decreases in Microsoft's revenues and operating income over the same time period.

Comparing Data with Other Firms' Data

Many firms also compare their financial results with those of competing firms and with industry averages. Comparisons are possible as long as accountants follow GAAPs.

Except for minor differences in format and terms, the balance sheet, income statement, and statement of cash flows of Procter & Gamble, for example, will be similar to those of other large corporations, such as Alberto-Culver, Clorox, Colgate-Palmolive, and Unilever, in the consumer goods industry. Comparisons among firms give managers a general idea of a firm's relative effectiveness and its standing within the industry. Competitors' financial statements can be obtained from their annual reports—if they are public corporations. Industry averages are published by reporting services such as D&B (formerly Dun & Bradstreet) and Standard & Poor's, as well as by some industry trade associations.

Still another type of analysis of a firm's financial health involves computation of financial ratios. A **financial ratio** is a number that shows the relationship between two elements of a firm's financial statements. Among the most useful ratios are profitability ratios, short-term financial ratios, activity ratios, and the debt-to-owners'-equity ratio. Like the individual elements in financial statements, these ratios can be compared with the firm's past ratios, with those of competitors, and with industry averages. The information required to form these ratios is found in a firm's balance sheet, income statement, and statement of cash flows (in our examples for Northeast Art Supply, Figures 17.2, 17.4, and 17.5).

Profitability Ratios

A firm's net income after taxes indicates whether the firm is profitable. It does not, however, indicate how effectively the firm's resources are being used. For this latter purpose, three ratios can be computed.

Return on Sales **Return on sales (or profit margin)** is a financial ratio calculated by dividing net income after taxes by net sales. For Northeast Art Supply,

$$\text{Return on sales} = \frac{\text{net income after taxes}}{\text{net sales}} = \frac{\$30{,}175}{\$451{,}000}$$
$$= 0.067, \text{ or } 6.7 \text{ percent}$$

The return on sales indicates how effectively the firm is transforming sales into profits. A higher return on sales is better than a low one. Today, the average return on sales for all business firms is between 4 and 5 percent. With a return on sales of 6.7 percent, Northeast Art Supply is above average. A low return on sales can be increased by reducing expenses, increasing sales, or both.

Return on Owners' Equity **Return on owners' equity** is a financial ratio calculated by dividing net income after taxes by owners' equity. For Northeast Art Supply,

$$\text{Return on owners' equity} = \frac{\text{net income after taxes}}{\text{owners' equity}} = \frac{\$30{,}175}{\$230{,}000}$$
$$= 0.13, \text{ or } 13 \text{ percent}$$

Return on owners' equity indicates how much income is generated by each dollar of equity. Northeast is providing income of 13 cents per dollar invested in the business. The average for all businesses is between 12 and 15 cents. A higher return on owners' equity is better than a low one, and the only practical ways to increase return on owners' equity is to reduce expenses, increase sales, or both.

Earnings per Share From the point of view of stockholders, **earnings per share** is one of the best indicators of a corporation's success. It is calculated by dividing

financial ratio a number that shows the relationship between two elements of a firm's financial statements

return on sales (or profit margin) a financial ratio calculated by dividing net income after taxes by net sales

return on owners' equity a financial ratio calculated by dividing net income after taxes by owners' equity

earnings per share a financial ratio calculated by dividing net income after taxes by the number of shares of common stock outstanding net income after taxes by the number of shares of common stock outstanding. For Northeast Art Supply,

$$\text{Earnings per share} = \frac{\text{net income after taxes}}{\text{common stock shares outstanding}} = \frac{\$30{,}175}{\$25{,}000}$$
$$= \$1.21 \text{ per share}$$

There is no meaningful average for this ratio mainly because the number of outstanding shares of a firm's stock is subject to change as a result of stock splits and stock dividends. In addition, some corporations choose to issue more stock than others. As a general rule, however, an increase in earnings per share is a healthy sign for any corporation.

Short-Term Financial Ratios

Two short-term financial ratios permit managers (and lenders) to evaluate a firm's ability to pay its current liabilities. Before we discuss these ratios, we should examine one other easily determined measure: working capital.

Working Capital **Working capital** is the difference between current assets and current liabilities. For Northeast Art,

Current assets	$182,000
Less current liabilities	70,000
Equals working capital	$112,000

Working capital indicates how much would remain if a firm paid off all current liabilities with cash and other current assets. The "proper" amount of working capital depends on the type of firm, its past experience, and its particular industry. A firm with too little working capital may have to borrow money to finance its operations.

working capital the difference between current assets and current liabilities

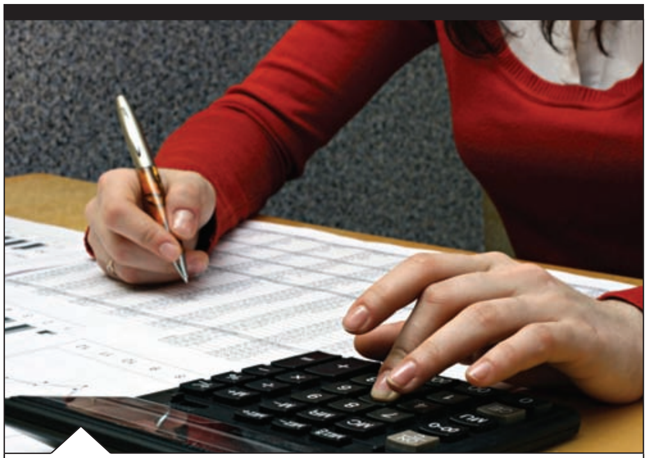
current ratio a financial ratio computed by dividing current assets by current liabilities

acid-test ratio a financial ratio calculated by adding cash, marketable securities, and receivables and dividing the total by current liabilities

Current Ratio A firm's **current ratio** is computed by dividing current assets by current liabilities. For Northeast Art Supply,

$$\text{Current ratio} = \frac{\text{current assets}}{\text{current liabilities}} = \frac{\$182{,}000}{\$70{,}000} = 2.6$$

This means that Northeast Art Supply has $2.60 of current assets for every $1 of current liabilities. The average current ratio for all industries is 2.0, but it varies greatly from industry to industry. A high current ratio indicates that a firm can pay its current liabilities. A low current ratio can be improved by repaying current liabilities, by reducing dividend payments to stockholders to increase the firm's cash balance, or by obtaining additional cash from investors.



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Sometimes accountants dig deeper to get more facts. As part of the accounting process, a firm often calculates financial ratios to evaluate the information on its balance sheet, income statement, and statement of cash flows. Among the most useful are ratios that measure a firm's profitability, ability to pay its debts and borrow money, and inventory turnover.

Acid-Test Ratio This ratio, sometimes called the *quick ratio*, is a measure of the firm's ability to pay current liabilities *quickly*—with its cash, marketable securities, and receivables. The **acid-test ratio** is calculated by adding cash, marketable securities, and receivables and dividing the total by current liabilities. The value of inventory and other current assets is "removed" from current assets because these assets are not converted into cash as easily as cash, marketable securities, and receivables. For Northeast Art Supply,

$$\text{Acid-test ratio} = \frac{\text{cash} + \text{marketable securities} + \text{receivables}}{\text{current liabilities}} = \frac{\$139{,}000}{\$70{,}000}$$
$$= 1.99$$

For all businesses, the desired acid-test ratio is 1.0. Northeast Art Supply is above average with a ratio of 1.99, and the firm should be well-able to pay its current liabilities. To increase a low acid-test ratio, a firm would have to repay current liabilities, reduce dividend payments to stockholders to increase the firm's cash balance, or obtain additional cash from investors.

Activity Ratios

Two activity ratios permit managers to measure how many times each year a company collects its accounts receivables or sells its inventory.

Accounts Receivable Turnover A firm's **accounts receivable turnover** is the number of times the firm collects its accounts receivable in one year. This ratio can be calculated by dividing net sales by accounts receivable. For Northeast Art,

$$\text{Accounts receivable turnover} = \frac{\text{net sales}}{\text{accounts receivable}} = \frac{\$451{,}000}{\$38{,}000}$$
$$= 11.9 \text{ times per year}$$

Northeast Art Supply collects its accounts receivables 11.9 times each year, or about every 30 days. If a firm's credit terms require customers to pay in 25 days, a collection period of 30 days is considered acceptable. There is no meaningful average for this measure mainly because credit terms differ among companies. A high accounts receivable turnover is better than a low one. As a general rule, a low accounts receivable turnover ratio can be improved by pressing for payment of past-due accounts and by tightening requirements for prospective credit customers.

Inventory Turnover A firm's **inventory turnover** is the number of times the firm sells its merchandise inventory in one year. It is approximated by dividing the cost of goods sold in one year by the average value of the inventory.

The average value of the inventory can be found by adding the beginning inventory value and the ending inventory value (given on the income statement) and dividing the sum by 2. For Northeast Art Supply, average inventory is $40,500. Thus

$$\text{Inventory turnover} = \frac{\text{cost of goods sold}}{\text{average inventory}} = \frac{\$334{,}000}{\$40{,}500}$$
$$= 8.2 \text{ times per year}$$

Northeast Art Supply sells its merchandise inventory 8.2 times each year, or about once every 45 days. The average inventory turnover for all firms is about 9 times per year, but turnover rates vary widely from industry to industry. For example, supermarkets may have inventory turnover rates of 20 or higher, whereas inventory turnover rates for furniture stores are generally well below the national average. The quickest way to improve inventory turnover is to order merchandise in smaller quantities at more frequent intervals.

accounts receivable turnover a financial ratio calculated by dividing net sales by accounts receivable

inventory turnover a financial ratio calculated by dividing the cost of goods sold in one year by the average value of the inventory

Debt-to-Owners'-Equity Ratio

Our final category of financial ratios indicates the degree to which a firm's operations are financed through borrowing. Although other ratios can be calculated, the debt-to-owners'-equity ratio is used often to determine whether a firm has too much debt. The **debt-to-owners'-equity ratio** is calculated by dividing total liabilities by owners' equity. For Northeast Art Supply,

$$\text{Debt-to-owners'-equity ratio} = \frac{\text{total liabilities}}{\text{owners' equity}} = \frac{\$110{,}000}{\$230{,}000}$$
$$= 0.48, \text{ or } 48 \text{ percent}$$

A debt-to-owners'-equity ratio of 48 percent means that creditors have provided about 48 cents of financing for every dollar provided by the owners. The higher this ratio, the riskier the situation is for lenders. A high debt-to-owners'-equity ratio may make borrowing additional money from lenders difficult. It can be reduced by paying off debts or by increasing the owners' investment in the firm.

Northeast's Financial Ratios: A Summary

Table 17.2 compares the financial ratios of Northeast Art Supply with the average financial ratios for all businesses. It also lists the formulas we used to calculate

debt-to-owners'-equity ratio a financial ratio calculated by dividing total liabilities by owners' equity

Table 17.2 Financial Ratios of Northeast Art Supply Compared with Average Ratios for All Businesses

Ratio	Formula	Northeast Ratio	Average Business Ratio	Direction for Improvement
Profitability Ratios				
Return on sales	$\frac{\text{net income after taxes}}{\text{net sales}}$	6.7%	4%–5%	Higher
Return on owners' equity	$\frac{\text{net income after taxes}}{\text{owners' equity}}$	13%	12%–15%	Higher
Earnings per share	$\frac{\text{net income after taxes}}{\text{common stock shares outstanding}}$	$1.21 per share	—	Higher
Short-Term Financial Ratios				
Working capital	current assets − current liabilities	$112,000	—	Higher
Current ratio	$\frac{\text{current assets}}{\text{current liabilities}}$	2.6	2.0	Higher
Acid-test ratio	$\frac{\text{cash} + \text{marketable securities} + \text{receivables}}{\text{current liabilities}}$	1.99	1.0	Higher
Activity Ratios				
Accounts receivable turnover	$\frac{\text{net sales}}{\text{accounts receivable}}$	11.9	—	Higher
Inventory turnover	$\frac{\text{cost of goods sold}}{\text{average inventory}}$	8.2	9	Higher
Debt-to-owners'-equity ratio	$\frac{\text{total liabilities}}{\text{owners' equity}}$	48%	—	Lower

Northeast's ratios. Northeast seems to be in good financial shape. Its return on sales, current ratio, and acid-test ratio are all above average. Its other ratios are about average, although its inventory turnover and debt-to-equity ratio could be improved.

This chapter ends our discussion of accounting information. In Chapter 18, we begin our examination of business finances by discussing money, banking, and credit.

return to inside business

Deloitte

Deloitte has the expertise to dig deeply into the financial data of corporations in many industries, from aerospace and automotive products to retailing and real estate. It also offers accounting, auditing, and consulting services to state and local government agencies, helping officials improve productivity, deal with budget realities, and increase transparency.

Knowing that dedicated personnel are the heart of its business and the key to continued success, Deloitte works hard to be an outstanding and understanding employer. When managers conduct employee evaluations, they discuss life goals as well as work goals. The firm's Mass Career Customization program offers a variety of opportunities for balancing personal and professional commitments through telecommuting, flextime, shorter work weeks, time off, and other choices. This human touch has put Deloitte in the public eye and put it on many "best employer" lists, including *Fortune*'s "100 Best Companies to Work For in America" and *BusinessWeek*'s "Best Places to Intern."

Questions

1. When an accounting firm like Deloitte has been hired to sign off on a public corporation's annual report, should it limit its consulting work to avoid being influenced by financial ties to the client? Explain your answer.
2. Why would the Recording Academy hire Deloitte instead of having its own employees count votes for the Grammy awards?

SUMMARY

Summary

CHAPTER REVIEW

1 Explain why accurate accounting information and audited financial statements are important.

Accounting is the process of systematically collecting, analyzing, and reporting financial information. It can be used to answer questions about what has happened in the past; it also can be used to help make decisions about the future. In fact, the firm's accountants and its accounting system often translate goals, objectives, and plans into dollars and cents to help determine if a decision or plan of action makes "financial sense." Unfortunately, a large number of accounting scandals have caused people to doubt the financial information reported by a corporation. The purpose of an audit is to make sure that a firm's financial statements have been prepared in accordance with GAAPs. To help ensure that corporate financial information is accurate and in response to the accounting scandals that surfaced in the last part of the 1990s and the first part of the 21st century, the Sarbanes-Oxley Act was signed into law. This law contains a number of provisions designed to restore public confidence in the accounting industry.

2 Identify the people who use accounting information and possible careers in the accounting industry.

To be successful in the accounting industry, employees must be responsible, honest, and ethical; have a strong background in financial management; know how to use a computer and software to process data into accounting information; and be able to communicate with people who need accounting information. Primarily, management uses accounting information, but it is also demanded by lenders, suppliers, stockholders, potential investors, and government agencies. Although many people think that all accountants do the same tasks, there are special areas of expertise within the accounting industry. Typical areas of expertise include managerial, financial, cost, tax, government, and not-for-profit accounting. A private accountant is employed by a specific organization to operate its accounting system. A public accountant performs these functions for various individuals or firms on a fee basis. Most accounting firms include on their staffs at least one CPA. In addition to CPAs, there are also CMAs.

3 Discuss the accounting process.

The accounting process is based on the accounting equation: Assets = liabilities + owners' equity. Double-entry bookkeeping ensures that the balance shown by the accounting equation is maintained. The accounting process involves five steps: (1) source documents are analyzed, (2) each transaction is recorded in a journal, (3) each journal entry is posted in the appropriate general ledger accounts, (4) at the end of each accounting period, a trial balance is prepared to make sure that the accounting equation is in balance, and (5) financial statements are prepared from the trial balance. A firm's financial statements are included in its annual report. An annual report is a report distributed to stockholders and other interested parties that describes a firm's operating activities and its financial condition. Once statements are prepared, the books are closed. A new accounting cycle then is begun for the next accounting period.

4 Read and interpret a balance sheet.

A balance sheet (sometimes referred to as a statement of financial position) is a summary of a firm's assets, liabilities, and owners' equity accounts at the end of an accounting period. This statement must demonstrate that the accounting equation is in balance. On the balance sheet, assets are categorized as current, fixed, or intangible. Similarly, liabilities can be divided into current liabilities and long-term ones. For a sole proprietorship or partnership, owners' equity is shown as the difference between assets and liabilities. For corporations, the owners' equity section reports the values of stock and retained earnings.

5 Read and interpret an income statement.

An income statement is a summary of a firm's financial operations during the specified accounting period. On the income statement, the company's gross profit is computed by subtracting the cost of goods sold from net sales. Operating expenses and interest expense then are deducted to compute net income before taxes. Finally, income taxes are deducted to obtain the firm's net income after taxes.

6 Describe business activities that affect a firm's cash flow.

Since 1987, the Securities and Exchange Commission (SEC) and the FASB have required all publicly traded companies to include a statement of cash flows in their annual reports. This statement illustrates how the company's operating, investing, and financing activities affect cash during an accounting period. Together, the cash flow statement, balance sheet, and income statement illustrate the results of past decisions and the business's ability to pay debts and dividends as well as to finance new growth.

7 Summarize how managers evaluate the financial health of a business.

The firm's financial statements and its accounting information become more meaningful when compared with corresponding information for previous years, for competitors, and for the industry in which the firm operates. Such comparisons permit managers, employees, lenders, investors, and other interested people to pick out trends in growth, borrowing, income, and other business variables and to determine whether the firm is on the way to accomplishing its long-term goals. A number of financial ratios can be computed from the information in a firm's financial statements. These ratios provide a picture of the firm's profitability, its short-term financial position, its activity in the area of accounts receivable and inventory, and its debt financing. Like the information on the firm's financial statements, these ratios can and should be compared with those of past accounting periods, those of competitors, and those representing the average of the industry as a whole.

Key Terms

You should now be able to define and give an example relevant to each of the following terms:

accounting (499)
audit (500)
generally accepted accounting principles (GAAPs) (500)
managerial accounting (503)
financial accounting (503)
certified public accountant (CPA) (504)
certified management accountant (CMA) (504)
assets (505)
liabilities (505)
owners' equity (505)
accounting equation (505)
double-entry bookkeeping system (505)
trial balance (506)
annual report (506)
balance sheet (or statement of financial position) (507)
liquidity (508)
current assets (508)
fixed assets (508)
depreciation (508)

intangible assets (508)
current liabilities (510)
long-term liabilities (510)
retained earnings (510)
income statement (510)
revenues (511)
gross sales (511)
net sales (512)
cost of goods sold (512)
gross profit (513)
operating expenses (513)
net income (513)
net loss (513)
statement of cash flows (514)
financial ratio (518)
return on sales (or profit margin) (518)
return on owners' equity (518)
earnings per share (518)
working capital (519)
current ratio (519)
acid-test ratio (519)
accounts receivable turnover (520)
inventory turnover (520)
debt-to-owners'-equity ratio (521)

Review Questions

1. What purpose do audits and GAAPs serve in today's business world?
2. How do the major provisions of the Sarbanes-Oxley Act affect a public company's audit procedures?
3. List four groups that use accounting information, and briefly explain why each group has an interest in this information.
4. What is the difference between a private accountant and a public accountant? What are certified public accountants and certified management accountants?
5. State the accounting equation, and list two specific examples of each term in the equation.
6. How is double-entry bookkeeping related to the accounting equation?
7. Briefly describe the five steps of the accounting cycle in order.
8. What is the principal difference between a balance sheet and an income statement?
9. How are current assets distinguished from fixed assets? Why are fixed assets depreciated on a balance sheet?
10. Explain how a retailing firm would determine the cost of goods sold during an accounting period.
11. How does a firm determine its net income after taxes?
12. What is the purpose of a statement of cash flows?
13. For each of the accounts listed below, indicate if the account should be included on a firm's balance sheet, income statement, or statement of cash flows.

Type of Account	Statement Where Reported
Assets	________________
Income	________________
Expenses	________________
Operating activities	________________
Liabilities	________________
Investing activities	________________
Owners' equity	________________

14. How can accounting information help you evaluate a potential investment?
15. Explain the calculation procedure for and significance of each of the following:
    a. One of the profitability ratios
    b. A short-term financial ratio
    c. An activity ratio
    d. Debt-to-owners'-equity ratio

Discussion Questions

1. Why do you think there have been so many accounting scandals in recent years?
2. Bankers usually insist that prospective borrowers submit audited financial statements along with a loan application. Why should financial statements be audited by a CPA?
3. What can be said about a firm whose owners' equity is a negative amount? How could such a situation come about?
4. Do the balance sheet, income statement, and statement of cash flows contain all the information you might want as a potential lender or stockholder? What other information would you like to examine?
5. Why is it so important to compare a firm's current financial statements with those of previous years, those of competitors, and the average of all firms in the industry in which the firm operates?
6. Which do you think are the two or three most important financial ratios? Why?

Video Case 17.1

Accounting Information Helps Level the Playing Field for The Little Guys

As the "leading supplier of exclusive, high-end audio and video electronics for homes, businesses, educational institutions, and other organizations in greater Chicagoland," The Little Guys has built an enviable reputation since its founding in 1994. The Little Guys sells and installs top-brand home audio and theater equipment and does it well. The company prides itself on its highly knowledgeable salespeople and outstanding customer service, and these have helped it survive strong competition from both "big guys" like the Best Buy electronics chain, which has a store not far away, and economic downturns that have cut consumers' buying power. "We have the best employees," says the company's Web site, and "how we treat our customers makes us great."

David Wexler, the store's co-owner, describes how one of the firm's award-winning salespeople deals with his customers, for instance: "If a guy comes in to buy a $50 DVD player, Ed treats him the same as the guy who's spending $500,000 with us. I think that's what keeps people coming back over and over and over. He fights for them. Frankly, sometimes he fights too much for them. But he's their advocate, and they know it."

In response to recession-slowed sales, the company was recently forced to lay some people off and has reorganized departments from advertising to payroll (the latter is a major and complex expense for The Little Guys because its salespeople earn base pay plus a percentage of their sales). In another cost-cutting move, the company also recently moved to a new location not far from its original store, and it's keeping close track of its cash flows in and out. Salespeople are careful about customers' change orders, too, which often cost the company money.

"We're in survival mode as opposed to growth mode," says David Wexler of the downturn. "You can try to put cherries or chocolate sauce on it, but the fact is, it's . . . brutal out there right now . . . . But if there's a thin silver lining to the whole thing, it's that you are cleaning things up and eliminating waste and finding ways to do business better."

With the help of QuickBooks accounting software and a professional accountant who visits regularly, David Wexler and co-owner Evie Wexler have deepened their knowledge of accounting and finance as the business has grown. In the beginning, for instance, they checked sales figures every day, but David quickly realized that this practice created instant information overload. Now he looks at the numbers about every week or ten days, comparing each set with past results, and the accountant comes in at least once each quarter to help with more complex issues like depreciation of assets and equipment for tax purposes. Taxes are a big concern. As Evie Wexler points out, sometimes the firm has to make a special push to sell off inventory in order to generate extra cash flow when taxes are due, or when it wants to purchase new merchandise that customers are asking for and that will therefore sell faster. Keeping warehoused inventory low saves money, too.

One reason cash flow can be slow is that customers often negotiate prices at The Little Guys, so that an expensive system might not only be sold at a discount, but the customer may also be given extra time to pay. That certainly helps make customers happy, but if it means the company is paying its own suppliers on time while customers lag in their payments, cash can get tight. As David explains, that's partly why The Little Guys limits the number of brands it sells and works with only a few suppliers. Establishing good relationships with these suppliers, largely by ordering regularly and paying on time, allows the company to ask them for special discounts or improved payment terms—even when other retailers aren't getting them—and find yet another way to earn a little more profit on the same volume of sales.[8]

Questions

1. Do you think a fairly small company like The Little Guys still needs a professional accountant after its owners have had so much experience running a successful business? Why or why not?
2. Do you think The Little Guys is doing a good job of managing its cash flow? If so, why, and if not, how can the company improve this function?
3. What are some of the factors that contribute to The Little Guys' operating expenses?

Case 17.2

Making the Numbers or Faking the Numbers?

Will sales and profits meet the expectations of investors and Wall Street analysts? Managers at public corporations must answer this important question quarter after quarter, year after year. In an ideal world—one in which the economy never contracts, expenses never go up, and customers never buy competing products—the corporation's share price would soar, and investors would cheer as every financial report showed ever-higher sales revenues, profit margins, and earnings.

In the real world, however, many uncontrollable and unpredictable factors can affect a corporation's performance. Customers may buy fewer units or postpone purchases, competitors may introduce superior products, expenses may rise, interest rates may climb, and buying power may plummet. Faced with the prospect of releasing financial results that fall short of Wall Street's expectations, managers may feel intense pressure to "make the numbers" using a variety of accounting techniques.

For example, some executives at the telecom company WorldCom made earnings look better by booking billions of dollars in ordinary expenses as capital investments. The company was forced into bankruptcy a few weeks after the $11 billion accounting scam was exposed. As another example, top managers at the drug retailer Rite Aid posted transactions improperly to inflate corporate earnings. Later, when Rite Aid had to lower its earnings by $1.6 billion, investors fled and the share price fell.

Under the Sarbanes-Oxley Act, the CEO and CFO now must certify the corporation's financial reports. (For more information about Sarbanes-Oxley, visit http://www.aicpa.org, the Web site of the American Institute of Certified Public Accountants.) Immediately after this legislation became effective, hundreds of companies restated their earnings, a sign that stricter accounting controls were having the intended effect. "I don't mean to sugarcoat the figure on restatements," says Steve Odland, CEO of Office Depot, "but I think it is positive—it shows a healthy system." Yet not all earnings restatements are due to accounting irregularities. "The general impression of the public is that accounting rules are black and white," he adds. "They are often anything but that, and in many instances the changes in earnings came after new interpretations by the chief accountant of the SEC."

Now that stricter regulation has been in force for some time, fewer and fewer corporations are announcing restatements. In 2005, 1,400 companies restated earnings; in 2009, only 630 restated earnings. In fact, corporations and their accounting firms have learned to dig deeper and analyze the process used to produce the figures for financial statements, as well as checking the numbers themselves.

Because accounting rules are open to interpretation, managers sometimes find themselves facing ethical dilemmas when a corporation feels pressure to live up to Wall Street's expectations. Consider the hypothetical situation at Commodore Appliances, a fictional company that sells to Home Depot, Lowe's, and other major retail chains. Margaret, the vice president of sales, has told Rob, a district manager, that the company's sales are down 10 percent in the current quarter. She points out that sales in Rob's district are down 20 percent and states that higher-level managers want him to improve this month's figures using "book and hold," which means recording future sales transactions in the current period.

Rob hesitates, saying that the company is gaining market share and that he needs more time to get sales momentum going. He thinks "book and hold" is not a good business practice, even if it is legal. Margaret hints that Rob will lose his job if his sales figures don't look better and stresses that he will need the book-and-hold approach for one month only. Rob realizes that if he doesn't go along, he won't be working at Commodore for very much longer.

Meeting with Kevin, one of Commodore's auditors, Rob learns that book and hold meets GAAPs. Kevin emphasizes that customers must be willing to take title to the goods before they're delivered or billed. Any book-and-hold sales must be real, backed by documentation such as e-mails to and from buyers, and the transactions must be completed in the near future.

Rob is at a crossroads: His sales figures must be higher if Commodore is to achieve its performance targets, yet he doesn't know exactly when (or if) he actually would complete any book-and-hold sales he might report this month. He doesn't want to mislead anyone, but he also doesn't want to lose his job or put other people's jobs in jeopardy by refusing to do what he is being asked to do. Rob is confident that he can improve his district's sales over the long term. However, Commodore's executives are pressuring Rob to make the sales figures look better right now. What should he do?[9]

Questions

1. What are the ethical and legal implications of using accounting practices such as the book-and-hold technique to inflate corporate earnings?
2. Why would Commodore's auditor insist that Rob document any sales booked under the book-and-hold technique?
3. If you were in Rob's situation, would you agree to use the book-and-hold technique this month? Justify your decision.
4. Imagine that Commodore has taken out a multimillion-dollar loan that must be repaid next year. How might the lender react if it learned that Commodore was using the book-and-hold method to make revenues look higher than they really are?

Building Skills for Career Success

1 JOURNALING FOR SUCCESS

More and more people are using computers and personal finance and accounting software to manage their finances. To complete this journal entry, use the Internet to research the Quicken software package or a software package offered by a local bank or financial institution. Then answer the following questions.

Assignment

1. Today, personal finance and accounting software packages are used by millions of people. Based on your initial research, would you prefer to purchase Quicken software or use a free software package available from a bank or financial institution? Why?

2. Why do you think these money-management software packages have become so popular? Do you think either type of software package could help you manage your finances?

2 EXPLORING THE INTERNET

At the time of this text's publication, the U.S. economy was beginning to recover from an economic crisis. Still, obtaining business loans, home and automobile loans, and consumer credit was more difficult because of tightening of credit policies by major lenders. At the heart of the problem were two large home mortgage lenders—Fannie Mae and Freddie Mac—that provide funds to home mortgage lenders by either purchasing mortgage assets or issuing home mortgage loan guarantees that facilitate the flow of funds into the home mortgage market in the United States. Both firms have also been accused of doctoring earnings and questionable accounting practices.

Assignment

1. Using an Internet search engine such as Google or Yahoo!, locate two or three sites providing information about the recent accounting scandals at these two firms.
2. After examining these sites and reading journal articles, report information about the accounting scandals for each firm. What type of questionable accounting practices occurred in these firms?
3. Based on your assessment of the information you have read, what were the consequences of the questionable accounting practices that occurred?
4. In a two-page report, summarize the questionable accounting practices and what the consequences were for each firm and the executives involved in the scandal.

3 DEVELOPING CRITICAL-THINKING SKILLS

According to the experts, you must evaluate your existing financial condition before establishing an investment plan. As pointed out in this chapter, a personal balance sheet provides a picture of your assets, liabilities, and net worth. A personal income statement will tell you whether you have a cash surplus or cash deficit at the end of a specific time period.

Assignment

1. Using your own financial information from last month, construct a personal balance sheet and personal income statement.
2. Based on the information contained in your personal financial statements, answer the following:
   a. What is your current net worth?
   b. Do you have a cash surplus or a cash deficit at the end of the month?
   c. What specific steps can you take to improve your financial condition?
3. Based on your findings, prepare a plan for improving your financial condition over the next six months.

4 BUILDING TEAM SKILLS

This has been a bad year for Miami-based Park Avenue Furniture. The firm increased sales revenues to $1,400,000, but total expenses ballooned to $1,750,000. Although management realized that some of the firm's expenses were out of control, including cost of goods sold ($700,000), salaries ($450,000), and advertising costs ($140,000), it could not contain expenses. As a result, the furniture retailer lost $350,000. To make matters worse, the retailer applied for a $350,000 loan at Fidelity National Bank and was turned down. The bank officer, Mike Nettles, said that the firm already had too much debt. At that time, liabilities totaled $420,000; owners' equity was $600,000.

Assignment

1. In groups of three or four, analyze the financial condition of Park Avenue Furniture.
2. Discuss why you think the bank officer turned down Park Avenue's loan request.
3. Prepare a detailed plan of action to improve the financial health of Park Avenue Furniture over the next 12 months.

5 RESEARCHING DIFFERENT CAREERS

As pointed out in this chapter, job opportunities for accountants and auditors in the accounting area are expected to experience much faster-than-average employment growth between now and the year 2018. Employment opportunities range from entry-level positions for clerical workers and technicians to professional positions that require a college degree in accounting, management consulting, or computer technology. Typical job titles in the accounting field include bookkeeper, corporate accountant, public accountant, auditor, managerial accountant, and controller.

Assignment

1. Answer the following questions based on information obtained from interviews with people employed in accounting, from research in the library or by using the Internet, or from information gained from your college's career center.
   a. What types of activities would a person employed in one of the accounting positions listed above perform on a daily basis?
   b. Would you choose this career? Why or why not?
2. Summarize your findings in a report.

Graeter's Adds MIS to the Recipe

When a company begins to grow rapidly, it often discovers that it needs to adjust the way it does business to achieve new and more challenging goals. That's certainly been the case for Graeter's, the Cincinnati-based, family-owned maker of premium ice cream.

Husband and wife, Charlie and Regina Graeter, started the company in 1870, making ice cream and chocolates by hand in a small Cincinnati shop and living upstairs. While ice cream was already a novelty product because refrigeration by machine was still unknown, Graeter's ice cream was different from the beginning, relying on fresh seasonal ingredients and a painstaking small-batch production process to yield a deliciously creamy treat. The company was very successful, and for three generations management was content with few changes and slow expansion to a tiny handful of local stores.

GROWTH CALLS FOR NEW METHODS

Today, under the leadership of three of Charlie and Regina's great-grandsons, the insistence on quality, the freshest ingredients, and small-batch production remains. Graeter's ice-cream flavors are still hand-packed. But in almost every other respect, Graeter's is changing rapidly in its fourth generation. In a few months, it has expanded capacity from one factory to three, its staff has grown, it now operates a Web site and ships online orders around the country overnight, it nurtures customer relationships via Facebook and Twitter, it has expanded its retail operation to a few dozen stores in several nearby states, and it is now distributing its products to hundreds of chain supermarkets (such as Kroger) as far away as Denver, Dallas, and Houston. Graeter's even hopes someday to open stores in New York and California.

It would have been impossible for Graeter's to manage all this growth and expansion using only the simple information systems that served the company in its earlier years. "When you come into a small organization, an entrepreneurial organization," says Paul Porcino, a management consultant working with the firm, "there frequently is a very small amount of information, and … it hasn't been pulled together in any meaningful way. So we have done a lot of work up front to define what performances we are going to develop, what are the sales measures, how do we understand the data and information that is out there in terms of helping us run the organization from a strategic perspective, where are we getting margins from? We need to understand that first, so we had to pull together a lot of information."

MIS WILL TRANSFORM DECISION MAKING

"Once this information has been gathered," Porcino says, "it will become input for a whole set of new management information systems, giving Graeter's management team some of the same powerful decision-making tools available to managers in much larger companies. We are going to be… bringing in probably a variety of different information systems, both point-of-sale in retail, so we fully have an understanding of what we are selling, as well as some other financial systems, and probably some human resources information systems…. There will be a fairly radical transformation… in terms of the software that we use…. We'll be in a very different place."

"Previously," says Porcino, "the stores did collect a certain amount of useful information, but it is not really enough to run the company of the future. With new MIS systems in place, we'll know in detail how many t-shirts we sell. We will know how many soda bottles we sell. We will know how many sundaes we sell. If we want, we will know how many ice-cream cones we sell…. Primarily, are we growing? Are we building our sales or reducing our sales?"

Graeter's has already experienced some of the benefits of having better information, particularly information about sales. When management noticed early on that bakery sales weren't up to par, for instance, "we had to adjust," says Porcino. The remedy was surprising: "We actually reduced the number of products we were selling in the store…. It wasn't very clear exactly how much we were selling, but at least [we had] the good-enough gut sense in terms of the ones that were *not* selling, and we… adjusted the total inventory line."

UPGRADING THE ACCOUNTING SYSTEMS

On the reporting side, Graeter's controller David Blink is responsible for preparing "all financial statements, all reports, payroll, [and] any ad hoc reports that any of the managers would need. I handle a lot of the reporting for the retail side as well as the manufacturing side," says Blink. Although an outside payroll company actually cuts the employees' checks, Blink's department is conducting its own information-gathering operation. "We are really tracking payroll right now. We are really working sales and payroll trying to get a real handle on that so I can produce reports for all the managers… biweekly, so it keeps them current and up to date." An outside accounting company also prepares the company's financial statements with information collected by Blink and his staff. "I will make sure everything lines up," he says. "I will add the… vacation time or sick time, and from there I will process the numbers and then forward them."[10]

Questions

1. From the information provided in the case, is Graeter's collecting data primarily from internal sources, external sources, or both? What cautions apply to the sources of its data?
2. Graeter's uses information to track cash, sales revenue, and expenses on a daily basis. How does this type of accounting system encourage effective decision-making and discourage store-level theft?
3. Which of the financial ratios might Graeter's, as a small privately owned business, want to track especially closely? Why?

To access the online *Interactive Business Plan*, go to www.cengagebrain.com.

Now that you have a marketing plan, the next big and important step is to prepare a financial plan. One of the biggest mistakes an entrepreneur makes when faced with a need for financing is not being prepared. Completing this section will show you that if you are prepared and you are credit-worthy, the task may be easier than you think. Remember, most lenders and investors insist that you submit current financial statements that have been prepared by an independent CPA. Chapter 17, "Using Accounting Information," should help you to answer the questions in this part of the business plan.

THE FINANCIAL PLAN COMPONENT

Your financial plan should answer at least the following questions about the investment needed, sales and cash-flow forecasts, breakeven analysis, and sources of funding.

6.1. What is the actual amount of money you need to open your business (start-up budget) and the amount needed to keep it open (operating budget)? Prepare a realistic budget.

6.2. How much money do you have, and how much money will you need to start your business and stay in business?

6.3. Prepare a projected income statement by month for the first year of operation and by quarter for the second and third years.

6.4. Prepare projected balance sheets for each of the first three years of operation.

6.5. Prepare a breakeven analysis. How many units of your products or service will have to be sold to cover your costs?

6.6. Reinforce your final projections by comparing them with industry averages for your chosen industry.

REVIEW OF BUSINESS PLAN ACTIVITIES

Throughout this project you have been investigating what it takes to open and run a business, and now you are finally at the bottom line: What is it going to cost to open your business, and how much money will you need to keep it running for a year? Before tackling the last part of the business plan, review your answers to the questions in each part to make sure that all your answers are consistent throughout the entire business plan. Then write a brief statement that summarizes all the information for this part of the business plan.

The information contained in this section will also assist you in completing the online *Interactive Business Plan.*