UNDERSTANDING FINANCIAL INFORMATION AND ACCOUNTING

R. J. Julia Booksellers

Roxanne Coady knew about accounting, but she realized she wasn't applying that knowledge to the business that she loved. Coady had left a job in accounting to open a business in an area for which she had a passion—books. But if she was going to keep what she loved she was going to have to use her accounting skills to bear on some business problems that were cropping up in her new store.

Roxanne Coady

Coady left her 20-year career as a tax director for BDO Seidman, a New York–based international accounting firm, and the security of a regular paycheck to open R. J. Julia Booksellers in a small Connecticut town. Coady's new company was successful in its first five years, with growth of 30–75 percent. However, after that point the company began experiencing financial problems.

Coady's employees knew that inventory management was unacceptable, and Coady knew that her costs of doing business were too high. The company was no longer making much of a profit. Of course, the irony in this situation was the fact that the owner was once a high-level New York accountant.

CHAPTER 12

LEARNING objectives

After reading this chapter, you should be able to:

1. Describe the importance of financial information and accounting.
2. Define and explain different areas of accounting.
3. List the steps in the accounting cycle.
4. Explain how the major financial statements differ.
5. Explain the importance of ratio analysis in reporting financial information.

After some serious introspection, Coady realized that it was the very motivation that had driven her to become a bookseller—her love of books—that was the source of the problem. She was letting her passion for books take over her decision making. She had ignored budgets and gone on a literary fling, misspending about $250,000 of the money she and her husband had saved. The financial standards of the company were lax to nonexistent and the resulting cash flow was poor.

If her business was to recover from these challenges, Coady knew that her accounting procedures needed to improve. Fortunately, as a former accountant, she was just the woman to take charge!

Coady gathered her staff and told them about the changes that would be made. Those changes included reviewing monthly income statements and cash flow analyses. No longer would book-buying decisions be made intuitively and solely from the heart. She made it a goal to focus on costs, since profit margins in book selling are slim. On the selling as well as the buying side, other employee changes would include the provision of a training manual.

Now, Coady is one of the most successful independent book store owners in the country. In fact, she has recently expanded to a second bookstore.

Sources: Cara Baruzzi, "Madison, Conn., Bookseller Gains Ownership of Second Store," *New Haven Register,* July 7, 2005; Julie Fishman-Lapin, "New Canaan, Conn., Gets an Independent Partner," *Stamford Advocate,* June 23, 2005; Cara Baruzzi, "Old Saybrook, Conn., Retailer Given Business Award," *New Haven Register,* August 26, 2005.

INTRODUCTION TO ACCOUNTING

Although you may not have plans to be an accountant, learning about accounting is extremely important because as a businessperson, you will constantly be dealing in numbers. If you are thinking about buying a business, the numbers will be the key to determining if that business is worth the money. Once you own that business, you will constantly look at numbers to see how well your company is doing.[1] This chapter will discuss some basic information on how businesspeople can use accounting to better understand and control their businesses, even if they do not aspire to become accountants.

Section Outline

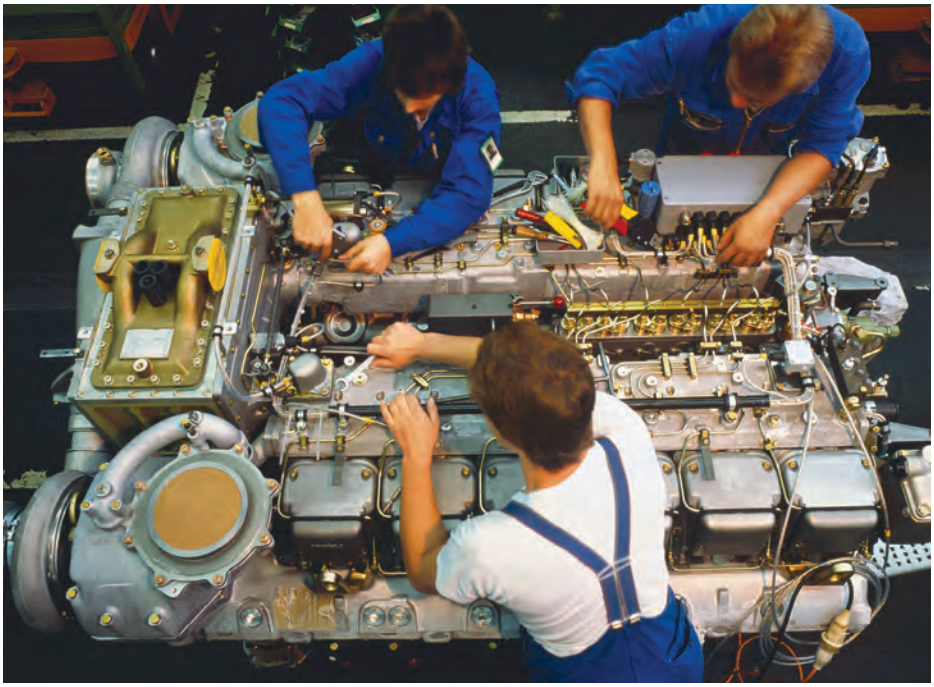
The Importance of Financial Information

- What Is Accounting?

THE IMPORTANCE OF FINANCIAL INFORMATION

The goal of this chapter is not to show you everything there is to know about accounting; rather, its purpose is to expose you to some basics of accounting as well as to some career opportunities in the accounting field. All individuals can benefit personally and professionally by having a basic working knowledge of accounting.

As you read this chapter, keep in mind that there are many terms used that a person who has never been exposed to accounting may



Assembling a marine diesel engine involves many tools, parts, and raw materials. Keeping down costs is the combined effort of managers and accountants.

REAL WORLD BUSINESS APPS

John Miller recently opened a candle store in downtown Dallas, Texas. Since opening, John has continued to expand the variety of candles offered in his store. John has a two-year degree in business and he took two accounting classes. He had planned to do his own books; however, increasingly he does not feel comfortable doing the accounting

for his business. After some thought, he decides he does not have the time even to research the accounting needs of his business and instead sets up a meeting with an accountant who he hopes will help his business manage its finances thoroughly and accurately.

understand to have a different meaning. Consider accounting an entirely new language and it will make the terms in this chapter much easier to comprehend.

In addition, it is important to note that many people use accounting information, not just managers. Suppliers, your competition, and employees are also interested in this kind of information.

Let's start by defining accounting, and then discuss the types of accounting in which you may be involved.

What Is Accounting?

Financial information is primarily based on information generated from accounting. **Accounting** is the recording, classifying, summarizing, and interpreting of financial events and transactions, in order to provide management and other stakeholders the information they need to make good decisions. Financial transactions can include such specifics as buying and selling goods and services, acquiring insurance, paying employees, and using supplies. Once business transactions have been recorded, they are usually classified into groups that have common characteristics. For example, all purchases are grouped together, as are all sales transactions. The method used to record and summarize accounting data into reports is called an *accounting system*, which illustrates the operating performance of the firm and from which management can make informed decisions.

accounting
Recording, classifying, summarizing, and interpreting financial events and transactions to provide management and other interested parties the information they need to make good decisions.

Another major purpose of accounting is to report financial information to people outside the firm, such as owners, creditors, suppliers, investors, and the government (for tax purposes). In sum, accounting is the measurement and reporting of financial information to various users (inside and outside the organization) regarding the economic activities of the firm.

Accounting work is divided into several major areas, which we will discuss next.

Section Outline

Areas of Accounting

- Managerial and Financial Accounting
- Auditing
- Tax Accounting
- Government and Not-for-Profit Accounting
- Accounting Tools
- Sarbanes-Oxley Act

AREAS OF ACCOUNTING

The accounting profession is divided into five key areas: managerial and financial, auditing, tax, governmental, and not-for-profit. All five areas are important, and all create career opportunities for students who are interested in accounting.[2]

Managerial and Financial Accounting

managerial accounting
Provides information and analysis to managers within the organization to assist them in decision making.

financial accounting
Generates information for use outside the organization.

Managerial accounting is used to provide information and analysis to managers *within* the organization to assist them in decision making. **Financial accounting,** on the other hand, generates information for use *outside* the organization.

Managerial accounting is concerned with measuring and reporting costs of production, marketing, and other functions; preparing budgets (planning); checking whether or not units are staying within their budgets (controlling); and designing strategies to minimize taxes (i.e., information and analysis for decision makers within the organization). The information and analysis prepared by financial accounting goes not only to the company owners, managers, and employees, but also to creditors and lenders, employee unions, customers, suppliers, government agencies, and the general public. External users are interested in important financial questions such as: Is the organization profitable? Is it able to pay its bills? How much debt does the organization hold? Financial accountants have the important responsibility of preparing **annual reports** which are yearly statements of the financial condition, progress, and expectations of an organization.

Individuals who desire to work in the accounting field are required to take courses in managerial and financial accounting, and then may elect to pursue a career as a certified management accountant or a certified public accountant. A **certified management accountant (CMA)** is a

All public companies publish annual reports on a yearly basis. Many, such as Target, now use the Internet to post their reports.

professional accountant who has met certain educational and experience requirements, passed a qualifying exam in the field, and been certified by the Institute of Certified Management Accountants. An accountant who passes a series of examinations established by the American Institute of Certified Public Accountants (AICPA) and meets the state's requirement for education and experience earns recognition as a **certified public accountant (CPA).** CPAs find careers as private accountants or public accountants, and are often sought out to fill other financial positions within organizations.[3]

Private accountants work for a single firm, government agency, or nonprofit organization, and are on the payroll of the company or organization. However, not all firms or nonprofit organizations want or need a full-time accountant. Accountants who do not work for a specific company are called **public accountants.** Public accountants can be hired to help businesses with payroll, taxes, and other projects but do not need to be employees of the company, which is useful to know, in case you choose to start your own business.

It is vital for the accounting profession to ensure users of financial information that the information provided to them is accurate, especially in light of the scandals that have spanned this decade. The independent **Financial Accounting Standards Board (FASB)** defines the set of **generally accepted accounting principles (GAAP)** that accountants must follow. If financial reports are prepared in accordance with GAAP, users can expect that the information is reported according to standards agreed on by accounting professionals.[4]

annual report
Yearly statement of the financial condition, progress, and expectations of an organization.

certified management accountant (CMA)
A professional accountant who has met certain educational and experience requirements, passed a qualifying exam in the field, and been certified by the Institute of Certified Management Accountants.

certified public accountant (CPA)
An accountant who passes a series of examinations established by the American Institute of Certified Public Accountants (AICPA) and does accounting work for no one particular firm.

Auditing

The job of reviewing and evaluating the records used to prepare a company's financial statements is referred to as **auditing.** Accountants within the organization often perform internal audits to ensure that proper accounting procedures and financial reporting are being followed.

Public accountants also conduct independent audits of accounting and related records. An **independent audit** is an evaluation, an unbiased opinion, regarding the accuracy of a company's financial statements. An accountant who meets educational requirements can be considered for a professional accreditation. The individual receiving this accreditation or certification is called a *certified internal auditor (CIA).*

Edmund L. Jenkins, chair of the Financial Accounting Standards Board, at the FASB meeting. According to its Web site, the mission of the FASB is to establish and improve standards of financial accounting and reporting for the guidance and education for the public, including issuers, auditors, and users of financial information. (See www.fasb.org/facts.)

private accountant
Accountant who works for a single firm, government agency, or nonprofit organization, on the payroll of the company or organization.

public accountant
Accountant who does not work for a specific company.

Financial Accounting Standards Board (FASB)
The group that oversees accounting practices.

generally accepted accounting principles (GAAP)
A set of principles followed by accountants in preparing reports.

Tax Accounting

Taxes are the price we pay for roads, parks, schools, police protection, the military, and other functions provided by government. Federal, state, and local governments require submission of taxes and forms filed at specific times and in a precise format. Of course, for personal taxes, the deadline to file is once per year, on April 15. Businesses, however, generally have to file and pay taxes on a quarterly basis, and the tax accountants ensure that company taxes are filed correctly.

A tax accountant is trained in tax law and is responsible for preparing tax returns or developing tax strategies to save the company money. Because governments often change tax policies according to specific needs or objectives, the job of the tax accountant is certainly challenging. Also, as the burden of taxes grows in the economy, the role of the tax accountant becomes increasingly important to the organization or entrepreneur.[5]

Government and Not-for-Profit Accounting

Government accounting and not-for-profit accounting meet the needs of organizations whose purpose is not generating a profit, but serving ratepayers, taxpayers, or others according to a duly approved budget. Governments (federal, state, and local) require an accounting system that satisfies the needs of their information users. The primary users of government accounting information are citizens, special interest groups, legislative bodies, and creditors. These users want to ensure that government is fulfilling its obligations and making the proper use of taxpayers' money. Governmental accounting standards are set by the **Governmental Accounting Standards Board (GASB).** There are various national, state, and local agencies that provide opportunities for accounting professionals. Some examples of government agencies are the Federal Bureau of Investigation, the Internal Revenue Service, state departments of natural resources, or county departments of revenue.

Not-for-profit organizations also require accounting professionals. In fact, not-for-profit organizations have a growing need for trained accountants because contributors to nonprofits want to see exactly how and where the funds they contribute are being spent. Charities, such as the United Way or the Red Cross, for example, state universities and colleges, hospitals,

Even charitable organizations such as the Red Cross need accounting employees. Robert P. McDonald serves as the CFO for the Red Cross. He ensures that bookkeeping and financial accounts for the organization are accurate and that funds are spent appropriately.

and labor unions all hire accountants to learn and account for how the funds they raise are being spent.

It is important to note that accounting is different from bookkeeping. **Bookkeeping** is simply the recording of business transactions; accounting goes much further. Accountants, rather than simply recording transactions, classify and summarize financial data according to formal standards and principles.

Accounting Tools

Just as construction workers require tools, accountants also have tools to make their job easier. One such tool is called a **journal,** which is basically a record book. The journal is almost always in electronic format. The journal is where the transactions are kept for each day, week, or month. For example, in a retail store the journal would include the data regarding all of the sales, as well as any new inventory that was received on a specific day. The main purpose of a journal is to have a chronological listing of the business transactions that take place.

Most accountants record financial transactions in two places to ensure the accuracy of the information being recorded. They can then check one list of transactions against the other to make sure the numbers add up in both places. The concept of recording every transaction in two places is called **double-entry bookkeeping.** In double-entry bookkeeping, two separate entries, one each in the journal and the *ledger,* are required for each company transaction. A **ledger** is a specialized accounting book or computer program in which information from accounting journals is recorded into specific categories.

The journal, in other words, does not provide information about the different accounts, but is a log of transactions as they happen. Then, the accountant transfers the information from the journal into the ledger.

For example, a manager might want to know how much money has been spent on supplies for the year. She would not likely go to the journal, because that consists of daily transactions, that are not sorted into categories. Instead, she would look at the ledger under the account "supplies." This type of system allows managers to easily find the data they need to make decisions. Today, computerized accounting programs post information from journals into ledgers daily, or instantaneously, which also makes the manager's job easier.

In the next section, we will discuss the *accounting cycle*. Keep in mind as you read that the goal of this chapter is to give you a basic understanding of accounting, and to remind you that understanding accounting will make you a better manager, employee, or entrepreneur! But first, we will briefly look at an important recent piece of federal legislation pertaining to accounting practices.

auditing
The job of reviewing and evaluating the records used to prepare a company's financial statements.

independent audit
An evaluation and unbiased opinion about the accuracy of a company's financial statements.

Governmental Accounting Standards Board (GASB)
This group sets standards for governmental agencies' accounting practices.

bookkeeping
The recording of business transactions.

journal
Record book in accounting (can also be a computer program).

double-entry bookkeeping
The concept of writing (or typing) every transaction in two places.

ledger
A specialized accounting book or computer program in which information from accounting journals is recorded into specific categories.

THINKING CRITICALLY

The Enron Fallout Fell Out Years Ago

Forget the fraud and conspiracy trial in federal court in Houston. The most important fallout from the collapse of Enron "fell out" many years ago.

It fell out with the 2002 passage of the Sarbanes-Oxley Act, a sweeping piece of federal legislation that changed the way companies must account for their business. It fell out into the trash, along with all those pensions and 401ks that Enron employees had been urged to buy into, and then hold, even when it should have been reasonably clear that the company was in trouble. It fell out with massive layoffs, the civil lawsuits that are still wending their way through the legal system, and the criminal appeals that surely will follow.

The convictions of former Enron chiefs Kenneth Lay (whose conviction was no longer necessary upon his death in 2006) and Jeffrey Skilling may be the final notable act in the grand drama of the company's rocket-rise and startling fall. But its results will not make a meaningful difference in the lives of anyone outside the relatively small circle of participants. The verdict alone will not put significant money back in anyone's pocket, or give the approximately 5,600 former Enron employees their jobs back, or force lawyers and accountants to honestly assess both the law and their clients' books. In Thomas Jefferson's words, it will neither pick your pocket nor break your leg. Lay and Skilling were convicted using federal laws that were around long before anyone knew who or what Enron was.

The great columnist Michael Kinsley once said that sometimes the true scandal is not what was done illegally, but what instead was permitted as a matter of law. Before the collapse of Enron, we now know, accounting rules were so malleable, and corporate oversight by regulators so lax, that any thoughtful and organized gang of corporate thieves could have accomplished what too many of Enron's officers and directors accomplished, before good journalism and market reality did them all in. Before the collapse of Enron, the rest of us had no idea how poorly our lawmakers were watching our captains of industry.

The disgrace wasn't that a bunch of crooks acted like crooks, but that our government, and our professional class of accountants and lawyers, permitted the crimes to take place, and in many ways implemented (or at least excused) the illegal activities. Government will never be able to legislate away greed, arrogance, and opportunism. But that doesn't mean it has to tolerate them, either. And before Enron, under both Republican and Democrat administrations, as the market soared and our portfolios expanded seemingly without end, too many blind eyes were cast from Washington toward Wall Street.

Enter Sarbanes-Oxley (not-so-affectionately known by those who live with it as "SOX"). By far the most important legacy of the corporate scandals of the 1990s, SOX passed as a direct result of the Enron implosion. It requires companies, large and small, to better track and then account for their financial condition. Executives must implement stringent internal protocols to help promote and ensure accounting accuracy and ethical conduct, and then, in many cases, open up the books to independent auditors who cannot have the conflicts-of-interest that marked the shamefully co-dependent relationship between Enron and the now-defunct Arthur Andersen accounting firm. The idea is to make it, if not impossible, then simply a lot harder for a group of executives to hijack a company and use dense "account-ese" to hide their crimes.

Questions

1. How has SOX affected the business environment? Explain.
2. Should the requirements from SOX be relaxed to "ease the pain" of the organizations and accountants? Why or why not?

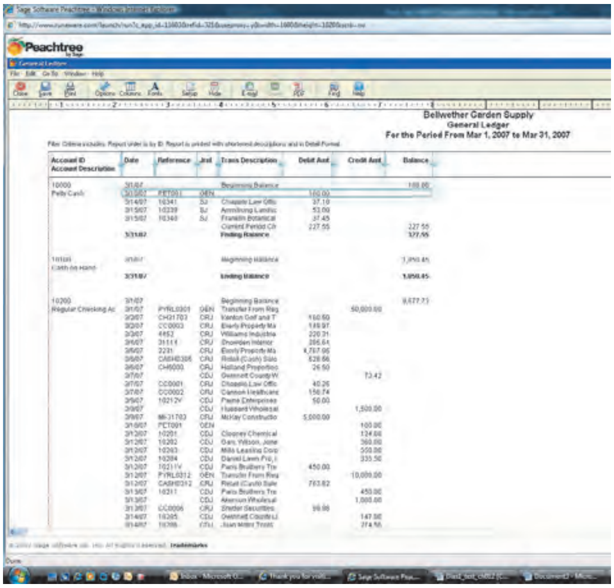
Source: Andrew Cohen, *Washington Post,* May 26, 2006.

Sarbanes-Oxley Act
Signed into law in 2002 after many accounting scandals, the act requires higher standards of accounting practices and auditing firms.

Sarbanes-Oxley Act

We mentioned the **Sarbanes-Oxley Act** in the chapter on ethics, but it is extremely important to mention it again here in our discussion of accounting. As you probably remember, the Sarbanes-Oxley Act was signed into law in 2002 after many accounting scandals had rocked the United States. The act requires higher standards of accounting practices and auditing firms.

This act has critics on both sides. Some businesses feel that the standards are too stringent and hinder their ability to make business decisions.[6] Other businesses feel that this act has bogged down their company accountants to the point that they are unable to make effective financial decisions for the company. However, supporters of the act feel that it protects the American public from financial disasters—such as at Enron, WorldCom, and the many others that occurred as a result of unethical and illegal accounting practices—and if anything, it does not go far enough.[7] See the nearby Thinking Critically box for more information on the Sarbanes-Oxley Act.



Peachtree is accounting software for small- to medium-size businesses. This is an example of what a general ledger looks like using this software program.

SELF-CHECK QUESTIONS

1. Define *accounting*.
2. What is the difference between managerial accounting and financial accounting?
3. Name and describe the five working areas of accounting.

THE SIX-STEP ACCOUNTING CYCLE

The accounting cycle is a six-step procedure that results in the preparation and analysis of the major financial statements. The accounting cycle generally involves the work of both the bookkeeper and the accountant.

The first three steps are the continual operations we discussed previously: (1) analyzing and categorizing documents, (2) putting the information into journals, and (3) posting that information into ledgers, and (4) preparing a *trial balance*. A **trial balance** is a summary of all the financial data in the account ledgers. It is used to check whether the figures are correct and balanced, much the same way that you balance your checkbook and compare it to your bank statement.

trial balance
A summary of all the financial data in the account ledgers to check whether the figures are correct and balanced.

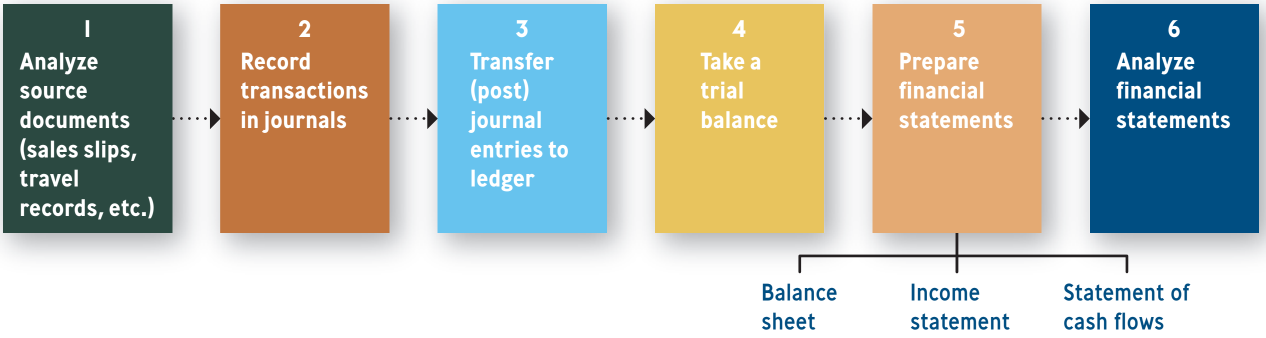


figure 12.1

THE STEPS IN THE ACCOUNTING CYCLE

If the information in the account ledgers is not accurate, it must be corrected before the firm's financial statements are prepared and analyzed in the final two steps: (5) preparing the financial statements, including a *balance sheet, income statement,* and *statement of cash flows,* and (6) analyzing the financial statements and evaluating the overall financial condition of the firm. As you can imagine, computers and accounting software have simplified this process considerably.

Keep in mind that the financial statements are a result of the ongoing work of bookkeepers and managerial accountants, and their recording of daily transactions. In the following section of the chapter we discuss preparation of the financial statements.

Section Outline

Financial Statements

- The Accounting Equation
- The Balance Sheet
- The Income Statement
- The Statement of Cash Flows
- A Word about Depreciation

FINANCIAL STATEMENTS

A **financial statement** is a summary of all the transactions (for example, all expenses and revenues) that have occurred over a particular period. Financial statements indicate a firm's financial health and stability, which is why stockholders (the owners of the firm); bondholders and banks (people and institutions that lend money to the firm); labor unions; employees; and the Internal Revenue Service are all interested in a firm's financial statements.[8] The following are the key financial statements of a business:

1. The *balance sheet,* which reports the firm's financial condition on a specific date.
2. The *income statement (sometimes called a profit and loss statement, or "P & L" for short),* which summarizes revenues, cost of goods, and expenses (including taxes), for a specific period of time and highlights the total profit or loss the firm experienced during that period.
3. The *statement of cash flows,* which provides a summary of money coming into, and going out of, the firm and tracks a company's cash receipts and cash payments.

financial statement
A summary of all the transactions that have occurred over a particular period.

The differences among the financial statements can be summarized this way:

- The *balance sheet* details what the company owns and owes on a certain day.
- The *income statement* shows what a firm sells its products for and what its selling costs are over a specific period.
- The *statement of cash flows* highlights the difference between cash coming into, and cash going out of, a business.

To fully understand important financial information, you must be able to understand the purpose of an organization's financial statements. Let's now explore each statement in more detail.

q: Do you think there might be value in using a company's financial statements to determine if you want to work for that company? Why or why not?

The Accounting Equation

Suppose your company does not owe money to any financial institution (banks, credit card companies, etc). If the company does not owe money, you could say that it has no debt (also called *liabilities*). In this scenario, the company also has assets, which include equipment, cash, and property, and these assets are items for which your company does not owe money. The sum of the value of the assets is your equity. In other words, your assets include anything that your company owns. If your company was to borrow money, it would incur a liability. Your assets are now equal to what you *owe* plus what you own.

Translated into accounting terms:

Assets = Liabilities + Owner's equity

In other words, owner's equity is a way of stating the difference between what is owned versus what is owed. Let's use a specific example to illustrate this point. Assume a person owns a car worth $10,000, but still owes $4,000 on it. The accounting equation would look like this:

Car (assets) = What is owed on the car + Owner's equity

or

$10,000 = $4,000 + $6,000

Study Skills

Make Good Study Habits a Life Skill

A good week of school does not make a college career. The key to long-term success is the ability to consistently produce. Achieving an A or B average, not for one semester but *throughout* your school career, indicates your ability to handle the obligations you must keep and manage with a high level of success!

If this is your mission and you wish to stay on course, then use the following *BORD principle* as a reminder of a method that can best help you do so.

Implement the BORD principle as follows:

- ***B****alance* your responsibilities as a set of priorities.
- ***O****rganize* your daily activities.
- Set a regular ***R****outine* that makes this a normal daily operating process.
- Through ***D****iscipline,* all difficulties you encounter can be kept to a minimum.

As you can see, owner's equity and liabilities will always be the same number as assets. This formula is called the *fundamental accounting equation*.

Let us assume that the $10,000 car is completely paid off; in other words, you do not owe any more money on it. The equation in this situation would be:

$$\$10{,}000 = 0 + \$10{,}000$$

This fundamental equation is the crucial part of the *balance sheet*, which we will cover next.

balance sheet
The financial statement that reports a firm's financial condition at a specific time.

The Balance Sheet

A **balance sheet** is the financial statement that reports a firm's financial condition at a specific time. It is comprised of three major accounts: *assets, liabilities,* and *owner's equity*.[9] The balance sheet gets its name because it shows a balance between two figures: the company's assets on the one hand, and its liabilities plus owner's equity on the other, as we just discussed.

Suppose that you want to know what your financial condition is at a given time. Maybe you want to buy a new house or car; therefore, you need to calculate your available resources. One of the best measuring sticks is your balance sheet. First, add up everything you own—cash, property, money owed you, and so forth (assets). Then subtract from that the money you owe others—credit card debt, IOUs, current car loan, student loans, and so forth (liabilities). The sum equals your net worth, which is the basic principle used for balance sheets.

A balance sheet can help in your personal life, and it can also help you as a manager. For example, as an entrepreneur, you can calculate how much money you owe, how much money you expect to come in, and the value of the business, or owner's equity. This valuable information can help you if you are trying to get a loan, considering growing your business, or considering how much to spend on new inventory or marketing. Again, understanding the balance sheet provides you with an overall picture of your company's financial health, which allows you to make better management decisions.

assets
Economic resources (things of value) owned by a firm.

liquidity
Refers to how fast an asset can be converted into cash.

account receivable
An amount of money owed to the firm that it expects to be paid within one year.

Assets

Assets are economic resources (things of value) owned by a firm. Assets include productive, tangible items (e.g., equipment, buildings, land, furniture, fixtures, and motor vehicles) that help generate income, as well as intangibles with value (e.g., patents, trademarks, copyrights, goodwill, brand names). Think, for example, of the value of brand names, such as Coca-Cola, McDonald's, and Intel. If you were to open an independent fast-food restaurant selling burgers and fries, it may cost you between $40,000 and $50,000 depending on the size of the store, location, and so forth. However, can you imagine what it would cost to open a McDonald's franchise? It is well over $500,000.[10] Why would anyone pay more than 10 times for a McDonald's than what it may cost to open an independent fast-food restaurant? It is the McDonald's goodwill and brand name that brings customers and generates sales. Brand names can be among the firm's most valuable assets.[11]

Liquidity refers to how fast an asset can be converted into cash. For example, an **accounts receivable** is the amount of money owed to the firm that it expects to receive within one year. Accounts receivable are considered liquid assets. Land, however, is not very liquid because it takes time to sell, fill out paperwork, complete legal proceedings, and so on. Thus, assets are divided into three categories according to how quickly they can be turned into cash (see Figure 12.2):

1. *Current assets* are items that can or will be converted into cash within one year. Current assets include cash, accounts receivable, and inventory.
2. *Fixed assets* are long-term assets that are relatively permanent, such as land, buildings, and equipment. These assets are also referred to on the balance sheet as *property, plant, and equipment*.

A company can have many types of assets, including land/buildings (fixed assets), inventory and accounts receivable (current assets), and copyrights and trademarks (intangible assets).

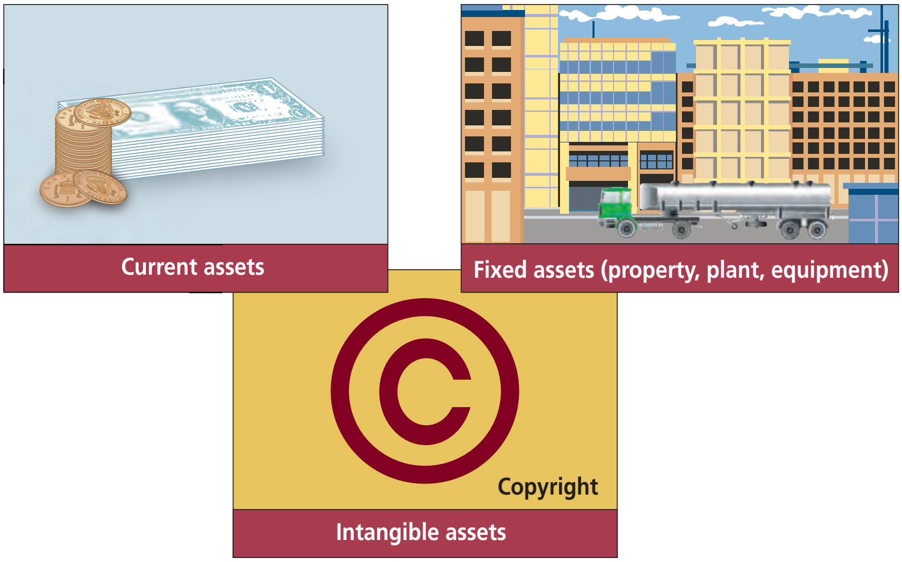


figure 12.2

CLASSIFICATIONS OF ASSETS

Assets are classified by how quickly they can be turned into cash (liquidity). The most liquid are called *current assets*. Those that are hard to sell quickly are called *fixed assets* or *property, plant,* and *equipment*. *Intangible assets* include patents and copyrights.

3. *Intangible assets* are long-term assets that have no real physical form, but do have value. Patents, trademarks, copyrights, and goodwill are examples of intangible assets.

liabilities
What the business owes to others (debts).

Liabilities

Another important accounting term is *liabilities*. **Liabilities** are what the business owes to others (debts). *Current liabilities* are debts due in one year or less; *long-term liabilities* are debts not due for one year or longer. The following are common *liability accounts* recorded on a balance sheet:

1. *Accounts payable* are current liabilities involving money owed to others for merchandise or services purchased on credit, but not yet paid. If you have a bill you haven't paid, you have an account payable.
2. *Notes payable* are short-term or long-term liabilities (e.g., loans from banks) that a business promises to repay by a certain date.
3. *Bonds payable* are long-term liabilities that represent money lent to the firm that must be paid back. If a firm sells someone a bond, it agrees to repay that person the money he or she lent the company, plus interest.

owners' equity
The amount of the business that belongs to the owners minus any liabilities owed by the business.

Your assets minus the amount of money you owe others (liabilities) is called *equity*. The value of what stockholders own in a firm (minus liabilities) is called *stockholders' equity* (or *shareholders' equity*).[12] Because stockholders are the owners of a firm, stockholders' equity can also be called owners' equity. As we discussed earlier, **owners' equity** is the amount of the business that belongs to the owners, minus any liabilities owed by the business. The formula for owners' equity, then, is assets minus liabilities.

Assume you are considering the purchase of a business. The balance sheet is useful because it tells the potential buyer all of the assets the company has, and also what it owes. If a business, for example, had more debt than assets, a person might want to reconsider purchasing that business. For an investor, this financial information is not only useful information, but also extremely important.

income statement
The income statement summarizes all of the resources (called *revenue*) that have come into the firm from operating activities, the money resources that were used up, the expenses incurred in doing business, and what resources were left after all costs and expenses, including taxes, were paid out.

The Income Statement

The financial statement that shows a firm's bottom line—that is, its profit after costs, expenses, and taxes—is the **income statement** (also called the *profit and loss statement*). The income statement summarizes all of the resources (called *revenue*) that have come into the firm from operating activities, the money resources that were used up, the expenses incurred in doing business, and what resources were left after all

VERY VEGETARIAN
Balance Sheet
December 31, 2007

Assets			
① Current assets			
Cash		$ 15,000	
Accounts receivable		200,000	
Notes receivable		50,000	
Inventory		335,000	
Total current assets			$600,000
② Fixed assets			
Land		$ 40,000	
Building and improvements	$200,000		
Less: Accumulated depreciation	−90,000		
		110,000	
Equipment and vehicles	$120,000		
Less: Accumulated depreciation	−80,000		
		40,000	
Furniture and fixtures	$ 26,000		
Less: Accumulated depreciation	−10,000		
		16,000	
Total fixed assets			206,000
③ Intangible assets			
Goodwill		$ 20,000	
Total intangible assets			20,000
Total assets			$826,000
Liabilities and Owners' Equity			
④ Current liabilities			
Accounts payable		$ 40,000	
Notes payable (due June 2008)		8,000	
Accrued taxes		150,000	
Accrued salaries		90,000	
Total current liabilities			$288,000
⑤ Long-term liabilities			
Notes payable (due Mar. 2012)		$ 35,000	
Bonds payable (due Dec. 2017)		290,000	
Total long-term liabilities			325,000
Total liabilities			$613,000
⑥ Owners' equity			
Common stock (1,000,000 shares)		$100,000	
Retained earnings		113,000	
Total owners' equity			213,000
Total liabilities & owners' equity			$826,000

figure 12.3

SAMPLE VERY VEGETARIAN BALANCE SHEET

① Current assets are those items that can be converted into cash within one year.

② Fixed assets are those things such as land or buildings that are permanent.

③ Intangible assets are items of value, like copyrights that don't have a physical form.

④ Current liabilities are payments that are due within one year.

⑤ Long-term liabilities are payments not due for one year or longer.

⑥ Owners' equity is the value of what stockholders own in a firm (also called stockholders' equity).

figure 12.4

SAMPLE VERY VEGETARIAN INCOME STATEMENT

① Revenue is the value of what is received from goods sold, services rendered, and other financial sources.

② Cost of goods sold is the cost of merchandise sold (in retail) or the cost of raw materials or parts used in manufacturing an item.

③ Gross profit is how much the firm earned by selling or buying merchandise.

④ Operating expenses are those expenses incurred while running the business.

⑤ Net income after taxes is the profit or loss over a specific period of time, after subtracting all costs and expenses, including taxes.

VERY VEGETARIAN
Income Statement
For the Year Ended December 31, 2007

① Revenues			
Gross sales		$720,000	
Less: Sales returns and allowances	$ 12,000		
Sales discounts	8,000	−20,000	
Net sales			$700,000
② Cost of goods sold			
Beginning inventory, Jan. 1		$200,000	
Merchandise purchases	$400,000		
Freight	40,000		
Net purchases		440,000	
Cost of goods available for sale	$640,000		
Less ending inventory, Dec. 31		−230,000	
Cost of goods sold			−410,000
③ Gross profit			$290,000
④ Operating expenses			
Selling expenses			
Salaries for salespeople	$ 90,000		
Advertising	18,000		
Supplies	2,000		
Total selling expenses		$110,000	
General expenses			
Office salaries	$ 67,000		
Depreciation	1,500		
Insurance	1,500		
Rent	28,000		
Light, heat, and power	12,000		
Miscellaneous	2,000		
		112,000	
Total operating expenses			222,000
Net income before taxes			$ 68,000
Less: Income tax expense			19,000
⑤ Net income after taxes			$ 49,000

costs and expenses, including taxes, were paid out (see Figure 12.4). The resources (revenue) left over are referred to as *net income* or *net loss*.

The income statement reports the firm's financial operations over a particular period of time, usually a year, a quarter of a year, or a month.[13]

It is the financial statement that reveals whether the business is actually earning a profit or losing money. The formulas used to prepare an income statement are as follows:

$$\text{Revenue} - \text{Cost of goods sold} = \text{Gross profit (also called gross margin)}$$
$$\text{Gross profit} - \text{Operating expenses} = \text{Net income before taxes}$$
$$\text{Net income before taxes} - \text{Taxes} = \text{Net income (or loss)}$$

The income statement includes valuable financial information for stockholders, lenders, investors (or potential investors), suppliers, competitors, and employees. Because this report is so important to businesses, we will define each of the components included in a profit and loss (income) statement. For the remainder of this chapter, all financial information will be based on a company called Very Vegetarian, our fictional retail store.

Revenue

Revenue is the value of what is received from goods sold, services rendered, and other financial sources. Note that there is a difference between revenue and sales. Most revenue (money coming into the firm) comes from sales, but there could be other sources of revenue. For example, a company could earn money by renting a portion of its building to a tenant.

Gross sales are the total of all sales the firm completed. **Net sales** are gross sales minus returns, discounts, and allowances. Returns are merchandise customers send back, discounts are price reductions given to customers, and allowances are any additional costs associated with a specific sale.

revenue
The value of what is received from goods sold, services rendered, and other financial sources.

gross sales
Total of all sales the firm completed.

net sales
Gross sales minus returns, discounts, and allowances.

Cost of Goods Sold (Cost of Goods Manufactured)

The **cost of goods sold (cost of goods manufactured)** is a measure of the cost of merchandise sold, or the cost of the raw materials and supplies used for producing items for sale. So, cost of merchandise sold (for manufacturing) is calculated by determining how much a business earned by selling merchandise over the period being evaluated compared to how much it spent to buy the merchandise. The cost of goods sold includes the raw materials, plus any freight charges paid to transport goods, plus any costs associated with storing the goods. In other words, all the costs of buying and keeping merchandise for sale are included in the cost of goods sold.

Retail is a bit different than manufacturing when calculating cost of goods sold. Remember, most retailers do not buy directly from the manufacturers; they use wholesalers. As a result, retailers do not have to worry about the cost of raw materials, since this cost is already included in the purchase price. As a result, their main concern is purchase price and the storage cost. See the example in Figure 12.5.

cost of goods sold (cost of goods manufactured)
A measure of the cost of merchandise sold, or the cost of the raw materials and supplies used for producing items for sale.

figure 12.5

EXAMPLE OF COST OF GOODS SOLD FOR A RETAIL STORE

These are some of the possible costs for a gallon of milk to a retail store:

Purchase price from wholesaler: $2.10

Freight/Cold storage: $0.10

Total cost to supermarket: $2.20

Total selling price: $2.99

Subtract the two: $0.79 would be the gross margin

gross profit (gross margin)
How much a firm earned by buying (or making) and selling merchandise, without expenses.

When you subtract the cost of goods sold from net sales, the result is called gross profit or gross margin. **Gross profit (gross margin)** is how much a firm earned by buying (or making) and selling merchandise. Understanding this concept is important because as a manager or employee, you can evaluate how much your firm is spending to make the goods, and you can also evaluate how much you earned on the goods, not including the expenses to sell them. However, the gross profit does not tell you everything you need to know about the financial performance of the firm. The income statement also needs to determine the *net* profit or loss a firm experienced. To find out the net profit or loss, you must subtract the business's expenses.

Operating Expenses and Net Profit or Loss

operating expenses
The costs involved in operating a business.

In the process of selling goods or services, a business experiences certain expenses. **Operating expenses** are the costs involved in operating a business, such as rent, salaries, supplies, utilities, insurance, and even depreciation of equipment (we will look at depreciation a little later). Expenses can generally be classified into two categories: selling and general expenses. *Selling expenses* are expenses related to the marketing and distribution of the firm's goods or services, such as salaries for salespeople, advertising, and supplies. *General expenses* are the administrative expenses of the firm, such as office salaries, depreciation, insurance, and rent. Accountants are trained to help businesses record all applicable expenses and find other relevant expenses they need to deduct. There are also nonoperating expenses, such as interest. If a company purchases land and pays 6 percent a year interest on the loan, this interest would be considered a nonoperating expense.

After all expenses are deducted, the firm's *net income before taxes* is determined. Net income is also referred to as *net earnings* or *net profit*. Although you may not realize it, you use income statements all the time in your personal life. For example, if you are preparing a household budget, you must know what your expenses are, such as rent, telephone, and cable TV. You obviously do not want your expenses to be greater than your income—it would mean you are spending too much.

The same is true for companies. A net income statement reveals if the company is spending too much for certain expenses. If so, stockholders may not want to invest in the company, or the business owners may want to consider changing spending habits.[14] On the other hand, if a company is not spending enough in selling expenses, such as marketing, it could mean that it is missing out on selling to potential customers.

Sometimes lack of sales, or too many expenses, can result in cash flow problems. *Cash flow* is the amount of money coming in and going out. Have you ever run out of money a few days before you were to receive your paycheck? *Cash flow statements* help companies prevent this situation from happening.

The Statement of Cash Flows

statement of cash flows
Reports cash receipts and disbursements related to the three major activities of a firm.

The **statement of cash flows** reports cash receipts and disbursements (or money going out of the firm) related to the three major activities of a firm:

- *Operations:* cash transactions associated with running the business.
- *Investments:* cash used in, or provided by, the firm's investment activities.
- *Financing:* cash raised from the issuance of debt, such as taking out a loan

Accountants analyze all of the cash changes and financial transactions that have occurred from operating, investing, and financing the firm's activities and that appear in the statement of cash flows to determine the firm's net cash position. Among other things, the statement of cash flows gives the firm some insight into how to handle cash better, so that no cash flow problems (e.g., having no cash on hand) occur.

The statement of cash flows (see Figure 12.6) may simply seem like a repeat of the income statement, but it is actually quite different because the statement of cash flows shows a cash position—that is, how much money is on hand at any given time. Companies do not want to have too much money on hand, yet they need to have enough to pay their expenses, which is where the statement comes in handy. Although yearly cash flow statements are most common, a cash flow statement can be done on a weekly or monthly basis as well.

Cash flow is the difference between money coming in and money going out of a business. Careful cash flow management is a must for all businesses, such as a ski resort, for instance. Can you think of a key reason why cash flow is important for a ski resort?

figure 12.6

SAMPLE VERY VEGETARIAN STATEMENT OF CASH FLOWS

① Cash receipts from sales, commissions, fees, interest, and dividends. Cash payments for salaries, inventories, operating expenses, interest, and taxes.

② Includes cash flows that are generated through a company's purchase or sale of long-term operational assets, investments in other companies, and lending activities.

③ Cash outflows and inflows associated with the company's equity transactions or borrowing activities.

VERY VEGETARIAN
Statement of Cash Flows
For the Year Ended December 31, 2007

① Cash flows from operating activities		
Cash received from customers	$150,000	
Cash paid to suppliers and employees	(90,000)	
Interest paid	(5,000)	
Income tax paid	(4,500)	
Interest and dividends received	1,500	
Net cash provided by operating activities		$52,000
② Cash flows from investing activities		
Proceeds from sale of plant assets	$ 4,000	
Payments for purchase of equipment	(10,000)	
Net cash provided by investing activities		(6,000)
③ Cash flows from financing activities		
Proceeds from issuance of short-term debt	$ 3,000	
Payment of long-term debt	(7,000)	
Payment of dividends	(15,000)	
Net cash inflow from financing activities		(19,000)
Net change in cash and equivalents		$27,000
Cash balance (beginning of year)		(2,000)
Cash balance (end of year)		$25,000

Regular review of the cash flow statements allows the business owner to be assured he or she will have enough cash on hand to pay employees, and for other immediate needs.[15]

q: In what way might you use a statement of cash flows »» for your personal finances?

To discuss cash flow on a personal level, let's say you borrow $100 from a friend to buy a used bike and agree to pay back your friend at the end of the week. You then sell the bike to someone else for $150, who also agrees to pay you in a week. Unfortunately, at the end of the week

CAREER development

Create a Career Plan

By now, all the improved work habits you have practiced and skill development you have achieved have you ready for successfully establishing your career objectives. However, to ensure all this work will pay off in the short and long term, you need to carefully and consciously create a career plan.

The process of "setting the bar for success" can be powerful for your career. Career plans can be lengthy or brief, but to begin the career plan process, ask yourself three basic questions:

- What are the career goals you would like to set for yourself?
- When would you like to achieve these goals?
- What obstacles exist that might keep you from reaching these goals?

These are powerful questions. They deserve careful thought. If you can answer these three questions with sincere, well-thought-out answers, you are well on your way to establishing a career plan that can enhance your career goals and objectives early on in your career!

the person who bought the bike from you does not have the money, as promised. This person says that he will have to pay you next month. Meanwhile, your friend wants the $100 you agreed to pay her by the end of the week! What seemed like a great opportunity to make an easy $50 profit is not so easy because you owe $100 and have no cash.

What do you do when your friend shows up at the end of the week and demands to be paid? If you were a business, this might cause you to default on the loan and possibly go bankrupt, even though you had the potential for profits. As you can see, it is very possible that a business can increase sales and increase profit, and still suffer greatly from cash flow problems.

A Word about Depreciation

Before we move on, there is one last accounting term we should define—*depreciation*. **Depreciation** is the systematic write-off of the cost of a tangible asset over its estimated useful life. Have you ever heard the comment that a new car depreciates in market value as soon as you drive it off the dealer's lot? The same principle holds true for equipment and other specific assets of the firm that are considered depreciable, such as machinery and computers. Companies are permitted to recapture the cost of these assets over time, using depreciation as an operating expense of the business. There are several ways depreciation can be calculated, but we won't go into that in this book—we will save that for an accounting class.

depreciation
The systematic write-off of the cost of a tangible asset over its estimated useful life.

ETHICAL challenge

The Accounting Hot Seat

Suppose you are the accountant for a small cabinet building shop, and it is the end of January. Your manager, who is also the owner of the business, is in the process of trying to get a loan from the bank. The owner must show financial statements from the previous year. The company had several thousand dollars in sales in January, and the owner wants you to include those sales in the previous year's accounting records. You are worried, because you don't want to upset your boss, but you also want to do what is right.

Questions

1. Is this an ethical dilemma or a basic legal dilemma? Why?
2. Explain how you would handle this situation.

Now that we have gone over the basic accounting statements, in the next section we will talk about how to analyze the financial position of a company.

SELF-CHECK QUESTIONS

1. What does an income statement show? What about a statement of cash flow? What does the balance sheet show?
2. How are these statements useful for small businesses?
3. What is the accounting equation?
4. What is depreciation?

Section Outline

Analyzing Financial Statements: Ratio Analysis

- Liquidity Ratios
- Leverage (Debt) Ratios
- Profitability (Performance) Ratios
- Activity Ratios

ANALYZING FINANCIAL STATEMENTS: RATIO ANALYSIS

Accurate information from the firm's financial statements is the basis of the financial analysis performed by accountants, both inside and outside the firm. Accountants and financial people perform calculations as part of their analysis. These calculations are called ratios. Keep in mind that accountants are not the only individuals who use these ratios. People considering investing in a company can view a company's annual report, perform the calculations, and then decide if they think the company is a good investment. Likewise, people who are considering buying a business would also find financial ratios valuable in order to evaluate whether the purchase is a sound investment or not.

ratio analysis
The assessment of a firm's financial condition and performance through calculations and interpretation of financial ratios developed from the firm's financial statements.

Ratio analysis is the assessment of a firm's financial condition and performance through calculations and interpretation of financial ratios developed from the firm's financial statements. We will perform ratios for the company Very Vegetarian, since we saw its financial statements earlier in this chapter in Figures 12.3, 12.4, and 12.6.

At first glance, ratio analysis may seem complicated. The fact is most of us already use ratios, and often. For example, in basketball, the number of shots made from the foul line is expressed by a ratio: shots made to shots attempted. A player who shoots 85 percent from the foul line is considered an outstanding foul shooter, and the idea is not to foul him or her in a close game.

Whether ratios measure an athlete's performance or the financial health of a business, they provide a good deal of valuable information. Financial ratios provide key insights into how a firm compares to other firms in its industry in the important areas of liquidity (speed of changing assets into cash), debt (leverage), profitability, and business activity.[16] Let's look briefly at four key types of ratios businesses use to measure financial performance.

Liquidity Ratios

As explained earlier, the word *liquidity* refers to how fast an asset can be converted to cash in order to pay a company's short-term debts (liabilities that must be repaid within one year).[17] These short-term debts are of particular importance to creditors of the firm, who expect to be paid on time. Two key liquidity ratios are the current ratio and the acid-test ratio.

The *current ratio* is the ratio of a firm's current assets to its current liabilities. This information can be found on the firm's balance sheet. Look back at Figure 12.3, the sample balance sheet for Very Vegetarian. Very Vegetarian lists current assets of $600,000 and current liabilities of $288,000. The firm therefore has a current ratio of 2.08, which means Very Vegetarian has $2.08 of current assets for every $1.00 of current liabilities. The current ratio was calculated by:

$$\text{Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}$$
$$= \frac{\$600{,}000}{\$288{,}000} = \$2.08$$

Generally, a number higher than two means a company is a safe risk for granting a short-term loan because of the quantity of assets. If the number is lower than two, it is likely the business has few assets and a significant amount of debt. Another way to determine what the current ratio means is by comparing the current ratio of a firm with industry norms.

Another key liquidity ratio, called the *acid-test* or *quick ratio,* measures the cash, marketable securities (such as stocks and bonds), and receivables of a firm, compared to its current liabilities. This ratio is particularly important to firms having difficulty converting inventory into quick cash. It helps answer such questions as: What if sales drop off and we can't sell our inventory? Can we still pay our short-term debt? To answer these questions, the calculation would consist of the following:

$$\text{Acid-test ratio} = \frac{\text{Cash} + \text{Accounts receivable} + \text{Marketable securities}}{\text{Current liabilities}}$$

Looking at our balance sheet for Very Vegetarian once again, the numbers would look like this:

$$\frac{\$265{,}000}{\$288{,}000} = \$0.92$$

A number between 0.50 and 1.0 is usually considered satisfactory, but a ratio under 1.0 could also be a hint of cash flow problems. Because the calculation is based on all of the money coming in versus what is owed, a higher number would indicate the company owes uncomfortably more than the cash it has flowing into the company. Therefore, Very Vegetarian's acid-test ratio of 0.92 could raise concerns that perhaps the firm may not meet its short-term debt and may therefore have to go to a high-cost lender for financial assistance.

Leverage (Debt) Ratios

Leverage (debt) ratios measure the degree to which a firm relies on borrowed funds in its operations. A firm that takes on too much debt could experience problems repaying lenders or meeting promises made to stockholders. The *debt to owners' equity ratio* measures the degree to which the company is financed by borrowed funds that must be repaid. Again, we can use Figure 12.3 to measure Very Vegetarian's level of debt:

The calculation here would be:

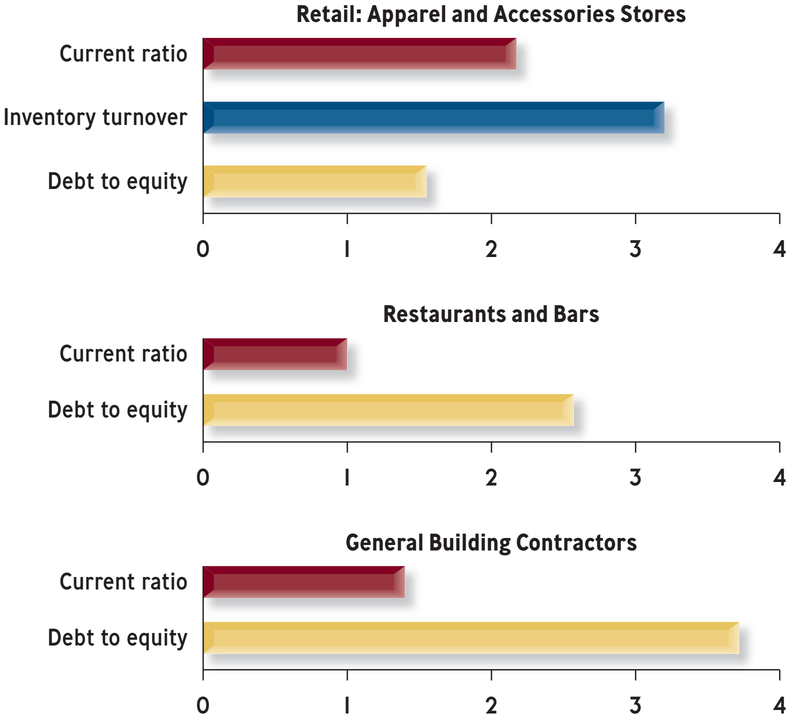
$$\text{Debt to owners' equity ratio} = \frac{\text{Total liabilities}}{\text{Owners' equity}} = \frac{\$613{,}000}{\$213{,}000} = 287\%$$

Anything above 100 percent shows that a firm has more debt than equity. With a ratio of 287 percent, Very Vegetarian has a rather high level of debt compared to its equity, which implies that the firm may be quite risky to lenders and investors. However, it is always important to compare a firm's debt ratios to those of other firms in its industry (see Figure 12.7), because financing operations with debt is more acceptable in some industries than it is in others. Comparisons with past debt ratios can also identify trends that may be occurring within the firm or industry.

One way to determine how to use ratios is to determine the standard for the industry. The Web site www.bizstats.com compiles industry data from annual reports, trade associations, and the Internal Revenue Service and averages the information based on the type of ownership. It even provides information such as average executive compensation for that industry and operating expenses, such as salaries and supplies. The data listed here are for corporations for the first half of 2007:

figure 12.7

INDUSTRY RATIO AVERAGES



So, as a business owner, what does this mean to you? Researching and comparing ratio averages of companies in the same industry can help you set benchmarks and compare how well you are doing with other firms.

Profitability (Performance) Ratios

Profitability (performance) ratios measure how effectively a firm is using its various resources to achieve profits. Management's performance is often measured by these ratios. Three of the more important ratios are earnings per share, return on sales, and return on equity.

The *basic earnings per share (basic EPS) ratio* helps determine the amount of profit earned by a company for each share of outstanding common stock (stock sold on the stock market; we will discuss this concept further in the next chapter).

Earnings per Share

The *diluted earnings per share (diluted EPS) ratio* measures the amount of profit earned by a company for each share of outstanding common stock, but this ratio also takes into consideration stock options, warrants, preferred stock, and convertible debt securities, which can be converted into common stock. For simplicity's sake, we will compute only the basic earnings per share (EPS).[18]

EPS is a very important ratio for a company, because earnings help stimulate growth in the firm and pay for such things as stockholders' dividends. Continued earnings growth is well received by both investors and lenders. The basic EPS ratio calculated for Very Vegetarian is as follows:

$$\text{EPS} = \frac{\text{Net income after taxes}}{\text{Number of common stocks outstanding}}$$

$$= \frac{\$49{,}000}{\$1{,}000{,}000} = \$0.049 \text{ per share}$$

This number is useful for investors, as well as anyone who is considering the purchase of a business. A larger number would mean the company either has high net income after taxes, which is good, or it does not have much outstanding stock.

Return on Sales (Net Profit Margin)

Another reliable indicator of performance is obtained by using a ratio that measures the return on sales based on how much profit a company earns for every dollar it generates in revenue.[19] The formula for return on sales is:

$$\text{Return on sales} = \frac{\text{Net income}}{\text{Net sales}} = \frac{\$49{,}000}{\$700{,}000} = 0.07 \text{ or } 7\%$$

This figure is an indicator of the company's ability to generate income from sales. It is important to compare the net profit margin number to the industry average, as margins for grocery stores can be very low, while profits for other types of retail goods can be high.

Return on Equity

Risk is a market variable that concerns investors. The higher the risk involved in an industry, the higher the return investors expect on their investment. Therefore, the level of risk involved in an industry and the return on investment of competing firms is important in comparing the firm's performance.

Return on equity measures how much was earned for each dollar invested by owners. It shows how well a company manages the money invested in the company. The calculation is:

$$\text{Return on equity} = \frac{\text{Net income after tax}}{\text{Total owners' equity}} = \frac{\$49{,}000}{\$213{,}000} = 23\%$$

A figure of 23 percent means the company gets 23 percent back on each dollar it invests into the business. Similar to the return on sales ratio, it is best to compare this ratio with other firms in the same industry.

Activity Ratios

The last type of ratio we will discuss explores how well a company converts its resources to profits. The *inventory turnover ratio*[20] measures the speed of inventory moving through the firm and its conversion into sales. Inventory sitting by idly in a business costs money. Think of the cost to store inventory in a warehouse, as opposed to the revenue that can be earned when the merchandise is sold.

The more efficiently a firm manages its inventory, the higher the return. The inventory turnover ratio for Very Vegetarian is measured as follows:

$$\text{Inventory turnover} = \frac{\text{Cost of goods sold}}{\text{Average inventory}}$$

$$\frac{\$410{,}000}{\$215{,}000} = 1.9 \text{ times}$$

An acceptable turnover ratio is usually determined industry by industry. In most retail firms, a turnover of 4 would be acceptable, which means that the entire inventory in a company is sold four times per year. A lower number could mean the company is trying to sell obsolete merchandise, or poor buying practices on the part of the organization.

Home Depot stocks over 40,000 items. Imagine managing that entire inventory. Poor inventory turnover results in old merchandise and implies poor buying decisions. What tools are necessary to keep track of incoming and outgoing inventory?

So, You Want to Be . . . an Accounting Professional

As you have learned from this chapter, there are several types of accounting in which you can be involved. What is important is that you choose the area that holds the most interest for you.

A relatively new accounting field, called *forensic accounting,* entails investigating possible securities fraud, contract disputes, and other complex and possibly criminal financial transactions, such as money laundering, or the kinds of problematic accounting involved in the Enron debacle. Forensic accountants have an accounting background, but also have experience in law.

Similar to jobs in information systems, accounting is expected to grow faster than most industries, through the year 2014. This is great news for those of you who may choose accounting as a future career!

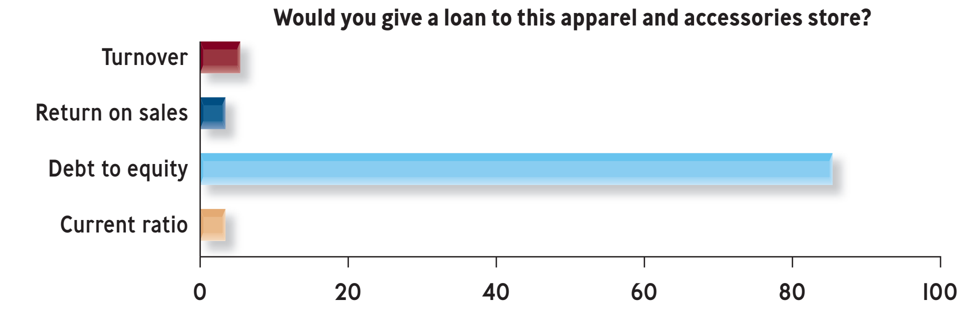
A 2005 salary survey conducted by Robert Half International[21] (a staffing services firm specializing in accounting and finance) concluded that accountants and auditors with less than a year of experience earned between \$28,250 and \$45,000 a year. Those with 1 to 3 years of experience earned between \$33,000 and \$52,000. Senior accountants and auditors earned between \$40,750 and \$69,750, managers between \$48,000 and \$90,000, and directors of accounting and auditing between \$64,750 and \$200,750. As with our discussions of salary in all the Career Spotlight boxes in previous chapters in the book, the variation in salaries reflects differences in size of firm, location, level of education, and professional credentials.

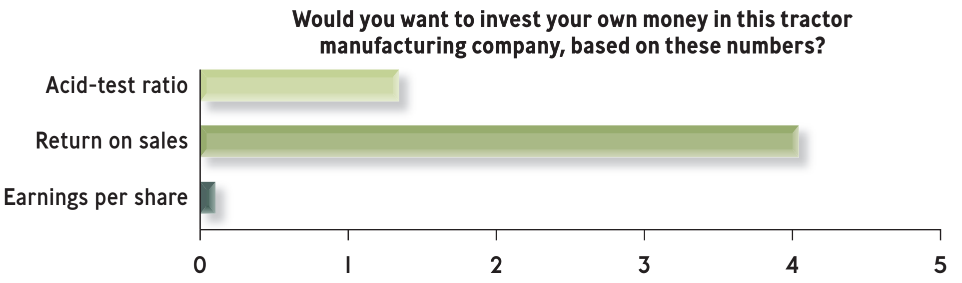
If you want to succeed in business, you need to know about accounting. It is almost impossible to run any size business or understand business operations without being able to read, understand, and analyze accounting reports and financial statements. Accounting reports and financial statements reveal as much about a business's health as pulse rate and blood pressure readings tell us about a person's health.

figure 12.8

PUTTING TOGETHER RATIO ANALYSES

In groups, analyze the following ratios, keeping in mind industry averages might be useful information to have if you were in a situation where you had to make these decisions.





REAL WORLD BUSINESS APPS

John Miller asked his accountant candidate to sit down with him and explain some basic accounting concepts, so he could better understand his financial information for his new store. The accountant, Ashley, explained that she was a certified public accountant, which is different from a private accountant or an auditor. The difference is that she works on several different companies' books at any given time and does not work for any one company. In order to do her job, Ashley had to take exams and pass a test to become a CPA.

Ashley then explained the process she would go through if John hired her to keep his books. First, she would look at all of the transactions for the month. Then, she would record every transaction in a journal. Next, she would use an accounting software program to post those transactions to the ledger (usually in a Microsoft Excel file which records both in the ledger and the journal at the same time), making sure the journal and ledger match. Assuming they did match, she would then prepare a balance sheet, income statement, and statement of cash flows for John's candle business to see how healthy it was. John asked Ashley if she could go over the basics of financial statements, because it had been awhile since he had taken accounting.

She explained that the balance sheet looks at the owner's equity, assets, and debts. The income statement looks at sales and expenses, and then provides a net income figure. Finally, the cash flow statement shows John's cash position during the month.

John asked her, "So what does all this mean to my business?" Ashley replied that John could use those statements to calculate some meaningful information using financial ratios. He could use the information derived from these calculations to see how liquid his business happens to be, and determine how much debt the store has, compared with its assets. He could also see the business profitability and compare it to other stores similar to his. Finally, he could use the activity ratios to determine how quickly turnover occurs at his store. John was especially interested in this number, since his store was a retail store.

John decides to hire Ashley because of her ability, but also because of the customer service she has provided him by explaining her processes to him. John feels confident that with this sort of review, he will be able to analyze his financial statements and even learn to perform some of the ratio calculations himself.

Accountants and other finance professionals use several other specific ratios, in addition to the ones we have briefly discussed here, to learn more about a firm's financial condition. As you continue in your studies and career, you will become familiar with more of them. These ratios can be very useful to business owners, business buyers, and investors. Review Figure 12.8 to try your hand at ratio analysis for two companies.

SELF-CHECK QUESTIONS

1. What is the current ratio used for?
2. What does debt to owners' equity tell us?
3. What is the major benefit of performing a ratio analysis using the financial statements?

summary

This chapter introduced you to the basics of accounting, including basic types of accountants: managerial, financial, auditors, tax accountants, government and not-for-profit, private, and public. Several tools of the accountant were described: journal, double-entry bookkeeping, and ledger. The Financial Accounting Standards Board (FASB) oversees the accounting industry and prescribes the basic principles of the accounting profession, known as generally accepted accounting principles or GAAP.

The Enron scandal and other financial scandals at the turn of the new century resulted in Congress's passing of the Sarbanes-Oxley Act, which prescribes stricter new regulations for the accounting profession and internal accounting procedures in businesses.

The steps of the accounting process were described. First, documents such as sales slips are analyzed. Then, any transaction that occurs within the business is recorded in a journal and in a ledger, called double-entry accounting. Next, a trial balance makes sure the journal and the ledger match up. At that point, financial statements are prepared and analyzed.

The chapter presented a basic discussion of the major financial statements: the balance sheet, the income statement, and the statement of cash flows. The financial statements of a company give a picture of its financial health that is of interest to all stakeholders in the business. The balance sheet reports a firm's financial condition at a specific time and is composed of three major accounts: assets, liabilities, and owner's equity. The income statement shows a firm's bottom line. It is also called a profit and loss statement. The statement of cash flows reports cash receipts and cash disbursements related to operations, investments, and financing.

Finally, the various ratios that can be used to analyze the financial statements were discussed and illustrated. Four major categories of ratios were addressed: liquidity, leverage, profitability, and activity ratios. Again, use of these ratios gives a quick insight into a company's financial condition.

key terms

accounting 387
managerial accounting 388
financial accounting 388
annual report 389
certified management accountant (CMA) 389
certified public accountant (CPA) 389
private accountant 389
public accountant 390
Financial Accounting Standards Board (FASB) 390
generally accepted accounting principles (GAAP) 390
auditing 391
independent audit 391
Governmental Accounting Standards Board (GASB) 391

bookkeeping 391
journal 391
double-entry bookkeeping 391
ledger 391
Sarbanes-Oxley Act 392
trial balance 393
financial statement 394
balance sheet 396
assets 396
liquidity 396
account receivable 396
liabilities 398
owners' equity 398
income statement 398
revenue 401
gross sales 401
net sales 401
cost of goods sold (cost of goods manufactured) 401
gross profit (gross margin) 402
statement of cash flows 403
operating expenses 402
depreciation 405
ratio analysis 407

applying your skills

1. Visit, telephone, or e-mail a CPA from a local company in your area, or talk with a CPA in your college's business department. Ask what challenges, changes, and opportunities he or she foresees in the accounting profession in the next five years. List the forecasts on a sheet of paper and share with your classmates.
2. Obtain the most recent annual report for a company of your choice. (Hint: Choose a company, type it in a search engine, and go to the company Web site and click on where it says "investor relations" or something similar.) Discuss at least two important conclusions auditors reached after reading the financial statements.
3. Place yourself in the role of a small-business consultant. One of your clients, Pretty Fashions, is considering opening two new stores. The problem is that the business often experiences cash flow problems, due to the continuous style changes that occur in the fashion industry. Prepare an e-mail memo to Pretty Fashions explaining the difficulties a firm experiences when it encounters the cash flow problems that typically occur with such change or growth. Think of a business option Pretty Fashions could try in order to avoid cash flow problems.
4. Using the same company you researched earlier to find an annual report, find its financial statements and answer these questions:
    - What is the return on equity figure? What is the return on sales? If this were your business, would you feel comfortable with these results?
    - What is the debt to owners' equity? If you were the owner of this business, would you feel comfortable with this percentage?
    - What is the current ratio for this firm? Acid-test ratio?

5. Find the financial statements of a retail store. Compare the turnover to the industry average, presented under the discussion on activity ratio in this chapter. How does the store compare?
6. Name four ways that accounting information can be used by managers, suppliers, employees, or investors.

the internet in action

1. *Purpose:* To calculate and analyze current ratios and quick (acid-test) ratios.

   Exercise: Thingamajigs and Things, a small gift shop, has total assets of $45,000 (including inventory valued at $30,000) and $9,000 in liabilities. WannaBees, a specialty clothing store, has total assets of $150,000 (including inventory valued at $125,000) and $85,000 in liabilities. Both businesses have applied for loans. Use the calculators on the www.Bankrate.com Web site to answer the following questions:

   - Calculate the current ratio for each company. Comparing the ratios, which company is more likely to get the loan? Why?
   - The quick (acid-test) ratio is considered an even more reliable measure of a business's ability to repay loans than the current ratio. Because inventory is often difficult to liquidate, the value of the inventory is subtracted from the total current assets. Calculate the quick ratio for each business. Do you think either business will get the loan? Why?

2. *Purpose:* To become familiar with annual reports.

   Exercise: Visit www.microsoft.com. Find its annual report and review it.

   - According to its report, what success did Microsoft have over the last year? What challenges does the company have in the future?
   - What was its gross income? Net income?