

Understanding Financial Management and Securities Markets

- 16.1** The Role of Finance and the Financial Manager 617
- 16.2** How Organisations Use Funds 619
- 16.3** Obtaining Short-Term Financing 622
- 16.4** Raising Long-Term Financing 624
- 16.5** Equity Financing 626
- 16.6** Securities Markets 630
- 16.7** Buying and Selling at Securities Exchanges 636
- 16.8** Trends in Financial Management and Securities Markets 643

=====

Learning Outcomes

After reading this chapter, you should be able to answer these questions:

- 1. How do finance and the financial manager affect a firm's overall strategy?**
- 2. What types of short-term and long-term expenditures does a firm make?**
- 3. What are the main sources and costs of unsecured and secured short-term financing?**
- 4. What are the key differences between debt and equity, and what are the major types and features of long-term debt?**
- 5. When and how do firms issue equity, and what are the costs?**
- 6. How do securities markets help firms raise funding, and what securities trade in the capital markets?**
- 7. Where can investors buy and sell securities, and how are securities markets regulated?**
- 8. What are the current developments in financial management and the securities markets?**

Vicki Saunders, Venture Capitalist & Entrepreneur

Many women dream of starting their own business. But this involves a large investment of time, dedication, creativity—and money. Even the best ideas fall flat without strong financial backing and fiscal management. Most start-ups don't have a chief financial officer, let alone an unlimited amount of cash to fund their owners' dreams.

According to a recent report, there are more than 11 million woman-owned businesses in the United



EXPLORING BUSINESS CAREERS

Chapter 16 Understanding Financial Management and Securities Markets

States that employ close to 9 million people and generate more than \$1.6 trillion in revenues. And revenues have increased for these businesses more than 35% over the last decade compared to 27% among all U.S. companies. Despite these impressive statistics, less than 4 percent of venture capital funding goes to this group of entrepreneurs. That's where Vicki Saunders and SheEO, her venture capital start-up, come into the picture.

Saunders, who describes herself as a serial entrepreneur, previously cofounded and ran four different business ventures. She believes that the funding universe for women entrepreneurs needs to be fixed and offers her plan via SheEO, a platform to enlist women “activators” to invest money to create a pool of capital distributed to select woman-owned businesses in the form of 0% interest loans that are paid back within five years. The activators are more than just investors, however. Saunders envisions these women as being a crucial part of the businesses in which they invest, by providing operational support, resources for suppliers and other vendors, and a solid networking opportunity for everything from legal support to cultivating new customers. In a recent campaign called Radical Generosity, \$1,000 was raised from each of 500 women, and that pool of \$500,000 was split among five woman-led businesses.

In year three of the funding venture in 2017, SheEO funded 15 companies and invested \$1.5 million. SheEO has funded entrepreneurs working on a variety of businesses, including artificial intelligence, hardware for people with disabilities, food, and education. While SheEO currently operates in four regions, Canada, Los Angeles, San Francisco, and Colorado, Saunders's goals for funding woman-led businesses are lofty. By 2020, Saunders hopes to have a million investors and a billion dollars to fund 10,000 entrepreneurs. But her ultimate goal is to change the culture around how investors support businesses—all businesses. According to Saunders, activating women on behalf of other women will change the world.

Sources: Company website, “About Us,” <https://sheeo.world>, accessed November 5, 2017; Emma Hinchliffe, “SheEO Has a Plan to Build a \$1 Billion Fund for Female Founders,” *Mashable*, <http://mashable.com>, October 24, 2017; Catherine McIntyre, “How Vicki Saunders Plans to Get a Million Women Involved in Venture Capital,” *Canadian Business*, <http://www.canadianbusiness.com>, accessed October 24, 2017; Kimberly Weisul, “Venture Capital Is Broken. These Women Are Trying to Fix It,” *Inc.*, <https://www.inc.com>, accessed October 24, 2017; Geri Stengel, “Women Become Financiers to Disrupt the Funding Landscape for Entrepreneurs,” *Forbes*, <https://www.forbes.com>, October 18, 2017; Kathleen Chaykowski, “Meet the Top Women Investors in VC in 2017,” *Forbes*, <https://www.forbes.com>, April 18, 2017; Jill Richmond, “Everything May Be Broken But This CEO's Glasses Are a Rose Hue,” *Forbes*, <https://www.forbes.com>, December 16, 2016.

In today's fast-paced global economy, managing a firm's finances is more complex than ever. For financial managers, a thorough command of traditional finance activities—financial planning, investing money, and raising funds—is only part of the job. Financial managers are more than number crunchers. As part of the top management team, chief financial officers (CFOs) need a broad understanding of their firm's business and industry, as well as leadership ability and creativity. They must never lose sight of the primary goal of the financial manager: to maximize the value of the firm to its owners.

Financial management—spending and raising a firm's money—is both a science and an art. The science part is analyzing numbers and flows of cash through the firm. The art is answering questions such as these: Is the firm using its financial resources in the best way? Aside from costs, why choose a particular form of financing? How risky is each option? Another important concern for both business managers and investors is understanding the basics of securities markets and the securities traded on them, which affect both corporate

This OpenStax book is available for free at <http://cnx.org/content/col25734/1.7>

Chapter 16 Understanding Financial Management and Securities Markets 617

plans and investor pocketbooks. About 52 percent of adult Americans now own stocks, compared to just 25 percent in 1981.¹

This chapter focuses on the financial management of a firm and the securities markets in which firms raise funds. We'll start with an overview of the role of finance and of the financial manager in the firm's overall business strategy. Discussions of short- and long-term uses of funds and investment decisions follow. Next, we'll examine key sources of short- and long-term financing. Then we'll review the function, operation, and regulation of securities markets. Finally, we'll look at key trends affecting financial management and securities markets.

The Role of Finance and the Financial Manager

1. How do finance and the financial manager affect the firm's overall strategy?

Any company, whether it's a small-town bakery or General Motors, needs money to operate. To make money, it must first spend money—on inventory and supplies, equipment and facilities, and employee wages and salaries. Therefore, finance is critical to the success of all companies. It may not be as visible as marketing or production, but management of a firm's finances is just as much a key to the firm's success.

Financial management—the art and science of managing a firm's money so that it can meet its goals—is not just the responsibility of the finance department. All business decisions have financial consequences. Managers in all departments must work closely with financial personnel. If you are a sales representative, for example, the company's credit and collection policies will affect your ability to make sales. The head of the IT department will need to justify any requests for new computer systems or employee laptops.

Revenues from sales of the firm's products should be the chief source of funding. But money from sales doesn't always come in when it's needed to pay the bills. Financial managers must track how money is flowing into and out of the firm (see [Exhibit 16.2](#)). They work with the firm's other department managers to determine how available funds will be used and how much money is needed. Then they choose the best sources to obtain the required funding.

For example, a financial manager will track day-to-day operational data such as cash collections and disbursements to ensure that the company has enough cash to meet its obligations. Over a longer time horizon, the manager will thoroughly study whether and when the company should open a new manufacturing facility. The manager will also suggest the most appropriate way to finance the project, raise the funds, and then monitor the project's implementation and operation.

Financial management is closely related to accounting. In most firms, both areas are the responsibility of the vice president of finance or CFO. But the accountant's main function is to collect and present financial data. Financial managers use financial statements and other information prepared by accountants to make financial decisions. Financial managers focus on **cash flows**, the inflows and outflows of cash. They plan and monitor the firm's cash flows to ensure that cash is available when needed.

The Financial Manager's Responsibilities and Activities

Financial managers have a complex and challenging job. They analyze financial data prepared by accountants, monitor the firm's financial status, and prepare and implement financial plans. One day they may be developing a better way to automate cash collections, and the next they may be analyzing a proposed acquisition. The key activities of the financial manager are:

618 Chapter 16 Understanding Financial Management and Securities Markets

- *Financial planning*: Preparing the financial plan, which projects revenues, expenditures, and financing needs over a given period.
- *Investment (spending money)*: Investing the firm's funds in projects and securities that provide high returns in relation to their risks.
- *Financing (raising money)*: Obtaining funding for the firm's operations and investments and seeking the best balance between debt (borrowed funds) and equity (funds raised through the sale of ownership in the business).

The Goal of the Financial Manager

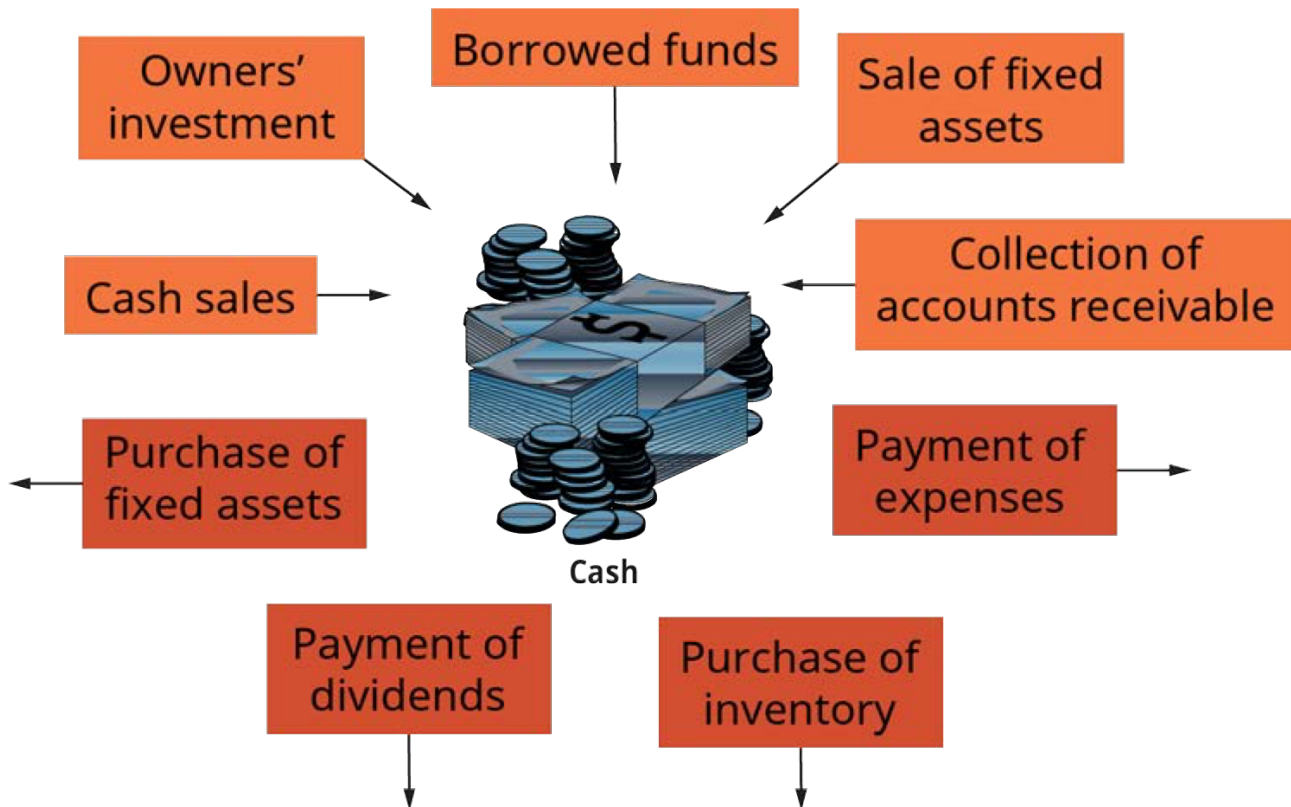
How can financial managers make wise planning, investment, and financing decisions? The main goal of the financial manager is to maximize the value of the firm to its owners. The value of a publicly owned corporation is measured by the share price of its stock. A private company's value is the price at which it could be sold.

To maximize the firm's value, the financial manager has to consider both short- and long-term consequences of the firm's actions. Maximizing profits is one approach, but it should not be the only one. Such an approach favors making short-term gains over achieving long-term goals. What if a firm in a highly technical and competitive industry did no research and development? In the short run, profits would be high because research and development is very expensive. But in the long run, the firm might lose its ability to compete because of its lack of new products.

Exhibit 16.2 How Cash Flows through a Business (Attribution: Copyright Rice University, OpenStax, under CC BY 4.0 license.)

This is true regardless of a company's size or point in its life cycle. At Corning, a company founded more than 160 years ago, management believes in taking the long-term view and not managing for quarterly earnings to satisfy Wall Street's expectations. The company, once known to consumers mostly for kitchen products such as Corelle dinnerware and Pyrex

heat-resistant glass cookware, is today a technology company that manufactures specialized glass and ceramic products. It is a leading supplier of Gorilla Glass, a special type of glass used for the screens of mobile devices, including the iPhone, the iPad, and devices powered by Google's Android operating system. The company was also the inventor of optical fiber and cable for the



This OpenStax book is available for free at <http://cnx.org/content/col25734/1.7>

Chapter 16 Understanding Financial Management and Securities Markets 619

telecommunications industry. These product lines require large investments during their long research and development (R&D) cycles and for plant and equipment once they go into production.
2

This can be risky in the short term, but staying the course can pay off. In fact, Corning recently announced plans to develop a separate company division for Gorilla Glass, which now has more than 20 percent of the phone market—with over 200 million devices sold. In addition, its fiber-optic cable business is back in vogue and thriving as cable service providers such as Verizon have doubled down on upgrading the fiber-optic network across the United States. As of 2017, Corning's commitment to repurposing some of its technologies and developing new products has helped the company's bottom line, increasing revenues in a recent quarter by more than 16 percent.³

As the Corning situation demonstrates, financial managers constantly strive for a balance between the opportunity for profit and the potential for loss. In finance, the opportunity for profit is termed **return**; the potential for loss, or the chance that an investment will not achieve the expected level of return, is **risk**. A basic principle in finance is that the higher the risk, the greater the return that is required. This widely accepted concept is called the **risk-return trade-off**. Financial managers consider many risk and return factors when making investment and financing decisions. Among them are changing patterns of market demand, interest rates, general economic conditions, market

conditions, and social issues (such as environmental effects and equal employment opportunity policies).

1. What is the role of financial management in a firm?
2. How do the three key activities of the financial manager relate?
3. What is the main goal of the financial manager? How does the risk-return trade-off relate to the financial manager's main goal?

How Organisations Use Funds

2. What types of short-term and long-term expenditures does a firm make?

To grow and prosper, a firm must keep investing money in its operations. The financial manager decides how best to use the firm's money. Short-term expenses support the firm's day-to-day activities. For instance, athletic-apparel maker Nike regularly spends money to buy such raw materials as leather and fabric and to pay employee salaries. Long-term expenses are typically for fixed assets. For Nike, these would include outlays to build a new factory, buy automated manufacturing equipment, or acquire a small manufacturer of sports apparel.

Short-Term Expenses

Short-term expenses, often called operating expenses, are outlays used to support current production and selling activities. They typically result in current assets, which include cash and any other assets (accounts receivable and inventory) that can be converted to cash within a year. The financial manager's goal is to manage current assets so the firm has enough cash to pay its bills and to support its accounts receivable and

620 Chapter 16 Understanding Financial Management and Securities Markets

inventory.

Cash Management: Assuring Liquidity

Cash is the lifeblood of business. Without it, a firm could not operate. An important duty of the financial manager is **cash management**, or making sure that enough cash is on hand to pay bills as they come due and to meet unexpected expenses.

Businesses estimate their cash requirements for a specific period. Many companies keep a minimum cash balance to cover unexpected expenses or changes in projected cash flows. The financial manager arranges loans to cover any shortfalls. If the size and timing of cash inflows closely match the size and timing of cash outflows, the company needs to keep only a small amount of cash on hand. A company whose sales and receipts are fairly predictable and regular throughout the year needs less cash than a company with a seasonal pattern of sales and receipts. A toy company, for instance, whose sales are concentrated in the fall, spends a great deal of cash during the spring and summer to build inventory. It has excess cash during the winter and early spring, when it collects on sales from its peak selling season.

Because cash held in checking accounts earns little, if any, interest, the financial manager tries to keep cash balances low and to invest the surplus cash. Surpluses are invested temporarily in **marketable securities**, short-term investments that are easily converted into cash. The financial manager looks for low-risk investments that offer high returns. Three of the most popular marketable securities are Treasury bills, certificates of deposit, and commercial paper. (**Commercial paper** is unsecured short-term debt—an IOU—issued by a financially strong corporation.) Today's financial managers have new tools to help them find the best short-term investments, such as online trading platforms that save time and provide access to more types of investments. These have been especially useful for smaller companies who don't have large finance staffs.

Companies with overseas operations face even greater cash management challenges. Developing the systems for international cash management may sound simple in theory, but in practice it's extremely complex. In addition to dealing with multiple foreign currencies, treasurers must understand and follow banking practices and regulatory and tax requirements in each country. Regulations may impede their ability to move funds freely across borders. Also, issuing a standard set of procedures for every office may not work because local business practices differ from country to country. In addition, local managers may resist the shift to a centralized structure because they don't want to give up control of cash generated by their units. Corporate financial managers must be sensitive to and aware of local customs and adapt the centralization strategy accordingly.

In addition to seeking the right balance between cash and marketable securities, the financial manager tries to shorten the time between the purchase of inventory or services (cash outflows) and the collection of cash from sales (cash inflows). The three key strategies are to collect money owed to the firm (accounts receivable) as quickly as possible, to pay money owed to others (accounts payable) as late as possible without damaging the firm's credit reputation, and to minimize the funds tied up in inventory.

Managing Accounts Receivable

Accounts receivable represent sales for which the firm has not yet been paid. Because the product has been sold but cash has not yet been received, an account receivable amounts to a use of funds. For the average manufacturing firm, accounts receivable represent about 15 to 20 percent of total assets.

This OpenStax book is available for free at <http://cnx.org/content/col25734/1.7>

Chapter 16 Understanding Financial Management and Securities Markets 621

The financial manager's goal is to collect money owed to the firm as quickly as possible, while offering customers credit terms attractive enough to increase sales. Accounts receivable management involves setting credit policies, guidelines on offering credit, credit terms, and specific repayment conditions, including how long customers have to pay their bills and whether a cash discount is given for quicker payment. Another aspect of accounts receivable management is deciding on collection policies, the procedures for collecting overdue accounts.

Setting up credit and collection policies is a balancing act for financial managers. On the one hand, easier credit policies or generous credit terms (a longer repayment period or larger cash discount) result in increased sales. On the other hand, the firm has to finance more accounts receivable. The risk of uncollectible accounts receivable also rises. Businesses consider the impact on sales, timing of cash flow, experience with bad debt, customer profiles, and industry standards when developing their credit and collection policies.

Companies that want to speed up collections actively manage their accounts receivable, rather than passively letting customers pay when they want to. According to recent statistics, more than 90 percent of businesses experience late payments from customers, and some companies write off a percentage of their bad debt, which can be expensive.⁴

Technology plays a big role in helping companies improve their credit and collections performance. For example, many companies use some type of automated decision-making, whether that comes in the form of an ERP system or a combination of software programs and supplemental modules that help companies make informed decisions when it comes to credit and collection processes.⁵

Other companies choose to outsource financial and accounting business processes to specialists rather than develop their own systems. The availability of cutting-edge technology and specialized electronic platforms that would be difficult and expensive to develop in-house is winning over firms of all sizes. Giving up control of finance to a third party has not been easy for CFOs. The risks are high when financial and other sensitive corporate data are transferred to an outside computer system: data could be compromised or lost, or rivals could steal corporate data. It's also harder to monitor an outside provider than your own employees. One outsourcing area that has attracted many clients is international trade, which has regulations that differ from country to country and requires huge amounts of documentation. With specialized IT systems, providers can track not only the physical location of goods, but also all the paperwork associated with shipments. Processing costs for goods purchased overseas are about twice those of domestic goods, so more efficient systems pay off.⁶

Inventory

Another use of funds is to buy inventory needed by the firm. In a typical manufacturing firm, inventory is nearly 20 percent of total assets. The cost of inventory includes not only its purchase price, but also ordering, handling, storage, interest, and insurance costs.

Production, marketing, and finance managers usually have differing views about inventory. Production managers want lots of raw materials on hand to avoid production delays. Marketing managers want lots of finished goods on hand so customer orders can be filled quickly. But financial managers want the least inventory possible without harming production efficiency or sales. Financial managers must work closely with production and marketing to balance these conflicting goals. Techniques for reducing the investment in inventory are inventory management, the just-in-time system, and materials requirement planning.

For retail firms, inventory management is a critical area for financial managers, who closely monitor inventory

622 Chapter 16 Understanding Financial Management and Securities Markets

turnover ratios. This ratio shows how quickly inventory moves through the firm and is turned into sales. If the inventory number is too high, it will typically affect the amount of working capital a company has on hand, forcing the company to borrow money to cover the excess inventory. If the turnover ratio number is too high, it means the company does not have enough inventory of products on hand to satisfy customer needs, which means they could take their business elsewhere.⁷

Long-Term Expenditures

A firm also invests funds in physical assets such as land, buildings, machinery, equipment, and information systems. These are called **capital expenditures**. Unlike operating expenses, which

EXTRA

IMPORTANT

READING

produce benefits within a year, the benefits from capital expenditures extend beyond one year. For instance, a printer's purchase of a new printing press with a usable life of seven years is a capital expenditure and appears as a fixed asset on the firm's balance sheet. Paper, ink, and other supplies, however, are expenses. Mergers and acquisitions are also considered capital expenditures.

Firms make capital expenditures for many reasons. The most common are to expand, to replace or renew fixed assets, and to develop new products. Most manufacturing firms have a big investment in long-term assets. Boeing Company, for instance, puts billions of dollars a year into airplane-manufacturing facilities. Because capital expenditures tend to be costly and have a major effect on the firm's future, the financial manager uses a process called **capital budgeting** to analyze long-term projects and select those that offer the best returns while maximizing the firm's value. Decisions involving new products or the acquisition of another business are especially important. Managers look at project costs and forecast the future benefits the project will bring to calculate the firm's estimated return on the investment. ONCEPT CHECK

1. Distinguish between short- and long-term expenses.
2. What is the financial manager's goal in cash management? List the three key cash management strategies.
3. Describe a firm's main motives in making capital expenditures.

Obtaining Short-Term Financing

3. What are the main sources and costs of unsecured and secured short-term financing?

How do firms raise the funding they need? They borrow money (debt), sell ownership shares (equity), and retain earnings (profits). The financial manager must assess all these sources and choose the one most likely to help maximize the firm's value.

Like expenses, borrowed funds can be divided into short- and long-term loans. A short-term loan comes due within one year; a long-term loan has a maturity greater than one year. Short-term financing is shown as a current liability on the balance sheet and is used to finance current assets and support operations. Short-term loans can be unsecured or secured.

This OpenStax book is available for free at <http://cnx.org/content/col25734/1.7>

Chapter 16 Understanding Financial Management and Securities Markets 623

Unsecured Short-Term Loans

Unsecured loans are made on the basis of the firm's creditworthiness and the lender's previous experience with the firm. An unsecured borrower does not have to pledge specific assets as security. The three main types of unsecured short-term loans are trade credit, bank loans, and commercial paper.

Trade Credit: Accounts Payable

When Goodyear sells tires to General Motors, GM does not have to pay cash on delivery. Instead, Goodyear regularly bills GM for its tire purchases, and GM pays at a later date. This is an example of **trade credit**: the seller extends credit to the buyer between the time the buyer receives the goods

or services and when it pays for them. Trade credit is a major source of short-term business financing. The buyer enters the credit on its books as an **account payable**. In effect, the credit is a short-term loan from the seller to the buyer of the goods and services. Until GM pays Goodyear, Goodyear has an account receivable from GM, and GM has an account payable to Goodyear.

Bank Loans

Unsecured bank loans are another source of short-term business financing. Companies often use these loans to finance seasonal (cyclical) businesses. Unsecured bank loans include lines of credit and revolving credit agreements. A **line of credit** specifies the maximum amount of unsecured short-term borrowing the bank will allow the firm over a given period, typically one year. The firm either pays a fee or keeps a certain percentage of the loan amount (generally 10 to 20 percent) in a checking account at the bank. Another bank loan, the **revolving credit agreement**, is basically a guaranteed line of credit that carries an extra fee in addition to interest. Revolving credit agreements are often arranged for a period of two to five years.

Commercial Paper

As noted earlier, commercial paper is an unsecured short-term debt—an IOU—issued by a financially strong corporation. Thus, it is both a short-term investment and a financing option for major corporations. Corporations issue commercial paper in multiples of \$100,000 for periods ranging from 3 to 270 days. Many big companies use commercial paper instead of short-term bank loans because the interest rate on commercial paper is usually 1 to 3 percent below bank rates.

Secured Short-Term Loans

Secured loans require the borrower to pledge specific assets as collateral, or security. The secured lender can legally take the collateral if the borrower doesn't repay the loan. Commercial banks and commercial finance companies are the main sources of secured short-term loans to business. Borrowers whose credit is not strong enough to qualify for unsecured loans use these loans. Typically, the collateral for secured short-term loans is accounts receivable or inventory. Because accounts receivable are normally quite liquid (easily converted to cash), they are an attractive form of collateral. The appeal of inventory—raw materials or finished goods—as collateral depends on how easily it can be sold at a fair price.

Another form of short-term financing using accounts receivable is **factoring**. A firm sells its accounts receivable outright to a factor, a financial institution (often a commercial bank or commercial finance company) that buys accounts receivable at a discount. Factoring is widely used in the clothing, furniture, and

624 Chapter 16 Understanding Financial Management and Securities Markets

appliance industries. Factoring is more expensive than a bank loan, however, because the factor buys the receivables at a discount from their actual value.

Exhibit 16.3 For businesses with steady orders but a lack of cash to make payroll or other immediate payments, factoring is a popular way to obtain financing. In factoring, a company sells its invoices to a third-party funding source for cash. The factor purchasing the invoices then collects on the due payments over time. Trucking companies with voluminous accounts receivable in the form of freight bills are good candidates for the use of short-term financing such as factoring. *Why might firms choose factoring instead of loans?* (Credit: Mike's Photos/ flickr/ Creative Commons Zero (CC0) license)

Raising Long-Term Financing

4. What are the key differences between debt and equity, and what are the major types and features of long-term debt?

A basic principle of finance is to match the term of the financing to the period over which benefits are expected to be received from the associated outlay. Short-term items should be financed with short-term funds, and long-term items should be financed with long-term funds. Long-term financing sources include both debt (borrowing) and equity (ownership). Equity financing comes either from selling new ownership interests or from retaining earnings. Financial managers try to select the mix of long-term debt and equity that results in the best balance between cost and risk.



1. Distinguish between unsecured and secured short-term loans.
2. Briefly describe the three main types of unsecured short-term loans.
3. Discuss the two ways that accounts receivable can be used to obtain short-term financing.

This OpenStax book is available for free at <http://cnx.org/content/col25734/1.7>

Chapter 16 Understanding Financial Management and Securities Markets 625

Debt versus Equity Financing

Say that the Boeing Company plans to spend \$2 billion over the next four years to build and equip new factories to make jet aircraft. Boeing's top management will assess the pros and cons of both debt and equity and then consider several possible sources of the desired form of long-term financing.

The major advantage of debt financing is the deductibility of interest expense for income tax purposes, which lowers its overall cost. In addition, there is no loss of ownership. The major drawback is **financial risk**: the chance that the firm will be unable to make scheduled interest and principal payments. The lender can force a borrower that fails to make scheduled debt payments into bankruptcy. Most loan agreements have restrictions to ensure that the borrower operates efficiently.

Equity, on the other hand, is a form of permanent financing that places few restrictions on the firm. The firm is not required to pay dividends or repay the investment. However, equity financing gives common stockholders voting rights that provide them with a voice in management. Equity is more costly than debt. Unlike the interest on debt, dividends to owners are not tax-deductible expenses. **Table 16.1** summarizes the major differences between debt and equity financing.

Debt Financing

Long-term debt is used to finance long-term (capital) expenditures. The initial maturities of long-term debt typically range between 5 and 20 years. Three important forms of long-term debt are term loans, bonds, and mortgage loans.

Major Differences between Debt and Equity Financing

EXTRA

IMPORTANT

READING

Have a say in management

Creditors typically have none, unless the borrower defaults on payments. Creditors may be able to place restraints on management in event of default.

Common stockholders have voting rights.

Have a right to income and assets

Debt holders rank ahead of equity holders. Payment of interest and principal is a contractual obligation of the firm.

Equity owners have a residual claim on income (dividends are paid only after paying interest and any scheduled principal) and no obligation to pay dividends.

Maturity (date when debt needs to be paid back)

Table 16.1

Debt has a stated maturity and requires repayment of principal by a specified date.

The company is not required to repay equity, which has no maturity date.

626

Chapter 16 Understanding Financial Management and Securities Markets

Major Differences between Debt and Equity Financing

Tax treatment

Interest is a tax-deductible expense.

Dividends are not tax-deductible and are paid from after-tax income.

Table 16.1

A **term loan** is a business loan with a maturity of more than one year. Term loans generally have maturities of 5 to 12 years and can be unsecured or secured. They are available from commercial banks, insurance companies, pension funds, commercial finance companies, and manufacturers' financing subsidiaries. A contract between the borrower and the lender spells out the amount and maturity of the loan, the interest rate, payment dates, the purpose of the loan, and other provisions such as operating and financial restrictions on the borrower to control the risk of default. The payments include both interest and principal, so the loan balance declines over time. Borrowers try to arrange a repayment schedule that matches the forecast cash flow from the project being financed.

Bonds are long-term debt obligations (liabilities) of corporations and governments. A bond certificate is issued as proof of the obligation. The issuer of a bond must pay the buyer a fixed amount of money—called **interest**, stated as the *coupon rate*—on a regular schedule, typically every six months. The issuer must also pay the bondholder the amount borrowed—called the **principal**, or *par value*—at the bond's maturity date (due date). Bonds are usually issued in units of \$1,000—for instance, \$1,000, \$5,000, or \$10,000—and have initial maturities of 10 to 30 years.

They may be secured or unsecured, include special provisions for early retirement, or be convertible to common stock.

A **mortgage loan** is a long-term loan made against real estate as collateral. The lender takes a mortgage on the property, which lets the lender seize the property, sell it, and use the proceeds to pay off the loan if the borrower fails to make the scheduled payments. Long-term mortgage loans are often used to finance office buildings, factories, and warehouses. Life insurance companies are an important source of these loans. They make billions of dollars' worth of mortgage loans to businesses each year.

Equity Financing

5. When and how do firms issue equity, and what are the costs?

Equity refers to the owners' investment in the business. In corporations, the preferred and common stockholders are the owners. A firm obtains equity financing by selling new ownership shares (external financing), by retaining earnings (internal financing), or for small and growing, typically high-tech, companies, through venture capital (external financing).



1. Distinguish between debt and equity.
2. Identify the major types and features of long term debt.

This OpenStax book is available for free at <http://cnx.org/content/col25734/1.7>

Chapter 16 Understanding Financial Management and Securities Markets 627

Selling New Issues of Common Stock

Common stock is a security that represents an ownership interest in a corporation. A company's first sale of stock to the public is called an *initial public offering (IPO)*. An IPO often enables existing stockholders, usually employees, family, and friends who bought the stock privately, to earn big profits on their investment. (Companies that are already public can issue and sell additional shares of common stock to raise equity funds.)

But going public has some drawbacks. For one thing, there is no guarantee an IPO will sell. It is also expensive. Big fees must be paid to investment bankers, brokers, attorneys, accountants, and printers. Once the company is public, it is closely watched by regulators, stockholders, and securities analysts. The firm must reveal such information as operating and financial data, product details, financing plans, and operating strategies. Providing this information is often costly.

Going public is the dream of many small company founders and early investors, who hope to recoup their investments and become instant millionaires. Google, which went public in 2004 at \$85 a share and soared to \$475 in early 2006 before settling back to trade in the high-300 range in August 2006. More than a decade later, in October 2017, Google continues to be a successful IPO, trading at more than \$990 per share.

In recent years, the number of IPOs has dropped sharply, as start-ups think long and hard about going public, despite the promise of millions of dollars for investors and entrepreneurs. For

EXTRA

IMPORTANT

READING

example, in 2017, Blue Apron, a meal-kit delivery service, went public with an opening stock price of \$10 per share. Several months later, the share price dropped more than 40 percent. Some analysts believe that Amazon's possible entry into the meal-kit delivery sector has hurt Blue Apron's value, as well as the company's high marketing costs to attract and retain monthly subscribers.⁸

Some companies choose to remain private. Cargill, SC Johnson, Mars, Publix Super Markets, and Bloomberg are among the largest U.S. private companies.

628 Chapter 16 Understanding Financial Management and Securities Markets

Exhibit 16.4 Snap Inc., the parent company of Snapchat, went public in 2017 under the ticker symbol "SNAP." The much-anticipated IPO was popular at an opening price of \$17 per share and rose that same day by more than 40 percent, which initially put the company's market capitalization at about \$30 billion. *What are the pros and cons of going public?* (Credit: Tim Savage/ pexels/ Creative Commons Zero (CC0) license)

Dividends and Retained Earnings

Dividends are payments to stockholders from a corporation's profits. Dividends can be paid in cash or in stock. **Stock dividends** are payments in the form of more stock. Stock dividends may replace or supplement cash dividends. After a stock dividend has been paid, more shares have a claim on the same company, so the value of each share often declines. A company does not have to pay dividends to stockholders. But if investors buy the stock expecting to get dividends and the firm does not pay them, the investors may sell their stocks.

At their quarterly meetings, the company's board of directors (typically with the advice of its CFO) decides how much of the profits to distribute as dividends and how much to reinvest. A firm's basic approach to paying dividends can greatly affect its share price. A stable history of dividend payments indicates good financial health. For example, cable giant Comcast has increased its dividend more than 20 percent over the past five years, giving shareholders a healthy return on their investment.⁹

If a firm that has been making regular dividend payments cuts or skips a dividend, investors start thinking it has serious financial problems. The increased uncertainty often results in lower stock prices. Thus, most firms set dividends at a level they can keep paying. They start with a relatively low dividend payout ratio so that they can maintain a steady or slightly increasing dividend over time.

Retained earnings, profits that have been reinvested in the firm, have a big advantage over other sources of equity capital: They do not incur underwriting costs. Financial managers strive to balance dividends and retained earnings to maximize the value of the firm. Often the balance reflects the nature of the firm and its industry. Well-established and stable firms and those that expect only modest growth, such as public utilities,

This OpenStax book is available for free at <http://cnx.org/content/col12573/1.7>

Chapter 16 Understanding Financial Management and Securities Markets 629

financial services companies, and large industrial corporations, typically pay out much of their earnings in dividends. For example, in the 2016 fiscal year, ExxonMobil paid dividends of \$3.08 per share, Altria Group paid \$2.64 per share, Apple paid \$2.23 per share, and Costco paid \$2.00 per share.

Most high-growth companies, such as those in technology-related fields, finance much of their growth through retained earnings and pay little or no dividends to stockholders. As they mature, many decide to begin paying dividends, as Apple decided to do in 2012, after 17 years of paying no annual dividends to shareholders.¹⁰

Preferred Stock

Another form of equity is **preferred stock**. Unlike common stock, preferred stock usually has a dividend amount that is set at the time the stock is issued. These dividends must be paid before the company can pay any dividends to common stockholders. Also, if the firm goes bankrupt and sells its assets, preferred stockholders get their money back before common stockholders do.

Like debt, preferred stock increases the firm's financial risk because it obligates the firm to make a fixed payment. But preferred stock is more flexible. The firm can miss a dividend payment without suffering the serious results of failing to pay back a debt.

Preferred stock is more expensive than debt financing, however, because preferred dividends are not tax-deductible. Also, because the claims of preferred stockholders on income and assets are second to those of debtholders, preferred stockholders require higher returns to compensate for the greater risk.

Venture Capital

Venture capital is another source of equity capital. It is most often used by small and growing firms that aren't big enough to sell securities to the public. This type of financing is especially popular among high-tech companies that need large sums of money.

Venture capitalists invest in new businesses in return for part of the ownership, sometimes as much as 60 percent. They look for new businesses with high growth potential, and they expect a high investment return within 5 to 10 years. By getting in on the ground floor, venture capitalists buy stock at a very low price. They earn profits by selling the stock at a much higher price when the company goes public. Venture capitalists generally get a voice in management through seats on the board of directors. Getting venture capital is difficult, even though there are hundreds of private venture-capital firms in this country. Most venture capitalists finance only about 1 to 5 percent of the companies that apply. Venture-capital investors, many of whom experienced losses during recent years from their investments in failed dot-coms, are currently less willing to take risks on very early-stage companies with unproven technology. As a result, other sources of venture capital, including private foundations, states, and wealthy individuals (called *angel investors*), are helping start-up firms find equity capital. These private investors are motivated by the potential to earn a high return on their investment.

1. Compare the advantages and disadvantages of debt and equity financing.

2. Discuss the costs involved in issuing common stock.
3. Briefly describe these sources of equity: retained earnings, preferred stock, venture capital.

Securities Markets

6. How do securities markets help firms raise funding, and what securities trade in the capital markets?

Stocks, bonds, and other securities trade in securities markets. These markets streamline the purchase and sales activities of investors by allowing transactions to be made quickly and at a fair price. **Securities** are investment certificates that represent either *equity* (ownership in the issuing organization) or *debt* (a loan to the issuer). Corporations and governments raise capital to finance operations and expansion by selling securities to investors, who in turn take on a certain amount of risk with the hope of receiving a profit from their investment.

Securities markets are busy places. On an average day, individual and institutional investors trade billions of shares of stock in more than 10,000 companies through securities markets. *Individual investors* invest their own money to achieve their personal financial goals. **Institutional investors** are investment professionals who are paid to manage other people's money. Most of these professional money managers work for financial institutions, such as banks, mutual funds, insurance companies, and pension funds. Institutional investors control very large sums of money, often buying stock in 10,000-share blocks. They aim to meet the investment goals of their clients. Institutional investors are a major force in the securities markets, accounting for about half of the dollar volume of equities traded.

Types of Markets

Securities markets can be divided into primary and secondary markets. The **primary market** is where *new* securities are sold to the public, usually with the help of investment bankers. In the primary market, the issuer of the security gets the proceeds from the transaction. A security is sold in the primary market just once—when the corporation or government first issues it. The Blue Apron IPO is an example of a primary market offering.

Later transactions take place in the **secondary market**, where *old* (already issued) securities are bought and sold, or traded, among investors. The issuers generally are not involved in these transactions. The vast majority of securities transactions take place in secondary markets, which include broker markets, dealer markets, the over-the-counter market, and the commodities exchanges. You'll see *tombstones*, announcements of both primary and secondary stock and bond offerings, in the *Wall Street Journal* and other newspapers.

The Role of Investment Bankers and Stockbrokers

Two types of investment specialists play key roles in the functioning of the securities markets. **Investment bankers** help companies raise long-term financing. These firms act as intermediaries, buying securities from corporations and governments and reselling them to the public. This process, called **underwriting**, is the main activity of the investment banker, which acquires the security for an agreed-upon price and hopes to be able to resell it at a higher price to make a profit. Investment bankers advise clients on the pricing and structure of

This OpenStax book is available for free at <http://cnx.org/content/col12573/1.7>

Chapter 16 Understanding Financial Management and Securities Markets 631

new securities offerings, as well as on mergers, acquisitions, and other types of financing. Well-known investment banking firms include Goldman Sachs, Morgan Stanley, JP Morgan, Bank of America Merrill Lynch, and Citigroup.

A **stockbroker** is a person who is licensed to buy and sell securities on behalf of clients. Also called *account executives*, these investment professionals work for brokerage firms and execute the orders customers place for stocks, bonds, mutual funds, and other securities. Investors are wise to seek a broker who understands their investment goals and can help them pursue their objectives.

Brokerage firms are paid commissions for executing clients' transactions. Although brokers can charge whatever they want, most firms have fixed commission schedules for small transactions. These commissions usually depend on the value of the transaction and the number of shares involved.

Online Investing

Improvements in internet technology have made it possible for investors to research, analyze, and trade securities online. Today almost all brokerage firms offer online trading capabilities. Online brokerages are popular with “do-it-yourself” investors who choose their own stocks and don't want to pay a full-service broker for these services. Lower transaction costs are a major benefit. Fees at online brokerages range from about \$4.95 to \$8.00, depending on the number of trades a client makes and the size of a client's account. Although there are many online brokerage firms, the four largest—Charles Schwab, Fidelity, TD Ameritrade, and E*Trade—account for more than 80 percent of all trading volume and trillions in assets in customer accounts.¹¹ The internet also offers investors access to a wealth of investment information.

Competition Causes Online Fees to Drop

With the U.S. stock market reaching an all-time high in 2017, private investors continue to look for ways to get in or stay in the market without paying exorbitant fees to execute their own trades. Historically, fees associated with buying and selling stocks have been high and considered one reason why investors sought alternatives via online trading platforms offered by firms such as Fidelity, Charles Schwab, TD Ameritrade, and E*Trade. With advances in technology, including the use of artificial intelligence, the costs associated with handling stock trades has dropped dramatically over the last decade, and investors are looking for the best possible deal.

With competition from companies such as Robinhood, a start-up app that offers \$0 fees for stock trades, online trading firms have rushed to reduce their fees to attract more overall business, and a price war has ensued. Fidelity and Charles Schwab lowered their fees for online stock and exchange-traded funds to \$4.95; Ameritrade and E*Trade reduced their fees from \$9.99 to \$6.95.

So how will these firms continue to make money? They believe that lowering the price of entry for trading stocks will allow them to “sweep up” customer assets—meaning firms have an opportunity to attract new customers who not only will take advantage of low trading fees but will be interested in other financial products offered by these investment companies. Some of the other services being

touted by online trading firms include loaning money to investors to buy stock and cross-selling customers on



632 Chapter 16 Understanding Financial Management and Securities Markets

wealth management services and other investment products.

According to some industry analysts, one downside to matching competitors' low fees could be a strategy of consolidation within the online trading industry. Unless firms can increase their overall business by reaching out to current customers and potential ones, some may be forced to join up with competitors.

Critical Thinking Questions

1. From a business standpoint, do you think the “almost-free” trading fees make sense? Explain.
2. What can online trading firms do to increase their overall business, particularly when it comes to attracting new investors?

Sources: Simone Foxman, “The Future Price of Investing: Zilch,” *Bloomberg Businessweek*, <http://www.bloomberg.com>, October 31, 2017; Evelyn Chang, “Robinhood, Trading App for Millennials, Still Betting on Stocks over Bitcoin,” *CNBC*, <https://www.cnbc.com>, October 10, 2017; Taylor Tepper, “You Probably Have the Wrong Idea When It Comes to Investments. Let’s Fix That,” <http://www.bankrate.com>, July 19, 2017; Trevor Hunnicutt and Tim McLaughlin, “Brokerages’ Race to Zero Fees Points to a Bigger War to Come,” *Reuters*, <https://www.reuters.com>, February 27, 2017.

Investing in Bonds

When many people think of financial markets, they picture the equity markets. However, the bond markets are huge—the Securities Industry and Financial Markets Association (SIFMA) estimates that the global bond market is nearly \$88 trillion. In the United States, companies and government entities sold about \$2 billion in new bond issues in 2016. Average daily trading volume exceeded \$760 billion, with U.S. Treasury securities accounting for more than 60 percent of the total.¹²

Bonds can be bought and sold in the securities markets. However, the price of a bond changes over its life as market interest rates fluctuate. When the market interest rate drops below the fixed interest rate on a bond, it becomes more valuable, and the price rises. If interest rates rise, the bond's price will fall. *Corporate bonds*, as the name implies, are issued by corporations. They usually have a par value of \$1,000. They may be secured or unsecured (called *debentures*), include special provisions for early retirement, or be convertible to common stock. Corporations can also issue *mortgage bonds*, bonds secured by property such as land, buildings, or equipment. Approximately \$1.5 trillion in new corporate bonds were issued in 2016.¹³

In addition to regular corporate debt issues, investors can buy *high-yield*, or *junk*, *bonds*—high-risk, high-return bonds often used by companies whose credit characteristics would not otherwise allow them access to the debt markets. They generally earn 3 percent or more above the returns on high-quality corporate bonds. Corporate bonds may also be issued with an option for the bondholder to

convert them into common stock. These *convertible bonds* generally allow the bondholder to exchange each bond for a specified number of shares of common stock.

This OpenStax book is available for free at <http://cnx.org/content/col25734/1.7>

Chapter 16 Understanding Financial Management and Securities Markets 633

Exhibit 16.5 Elon Musk and his electric car company, Tesla, issued high-yield junk bonds in August 2017 and raised nearly \$1.8 billion to help finance the production and launch of Tesla's new Model 3. Tesla has spent billions of dollars in its efforts to develop electric cars in the past few years. *What are the risks and rewards of buying junk bonds?* (Credit: Steve Jurvetson/ flickr/ Attribution 2.0 Generic (CC BY 2.0))

U.S. Government Securities and Municipal Bonds

Both the federal government and local government agencies also issue bonds. The U.S. Treasury sells three major types of federal debt securities: Treasury bills, Treasury notes, and Treasury bonds. All three are viewed as default-risk-free because they are backed by the U.S. government. Treasury bills mature in less than a year and are issued with a minimum par value of \$1,000. Treasury notes have maturities of 10 years or less, and Treasury bonds have maturities as long as 25 years or more. Both notes and bonds are sold in denominations of \$1,000 and \$5,000. The interest earned on government securities is subject to federal income tax but is free from state and local income taxes. According to SIFMA, a total of \$1.7 trillion U.S. treasuries were issued in 2016, down 20 percent from 2015.¹⁴

Municipal bonds are issued by states, cities, counties, and other state and local government agencies. Almost \$445.8 billion in municipal bonds were issued in 2016.¹⁵ These bonds typically have a par value of \$5,000 and are either general obligation or revenue bonds. *General obligation bonds* are backed by the full faith and credit (and taxing power) of the issuing government. *Revenue bonds*, on the other hand, are repaid only from income generated by the specific project being financed. Examples of revenue bond projects include toll highways and bridges, power plants, and parking structures. Because the issuer of revenue bonds has no legal obligation to back the bonds if the project's revenues are inadequate, they are considered more risky and therefore have higher interest rates than general obligation bonds.

Municipal bonds are attractive to investors because interest earned on them is exempt from federal income

634 Chapter 16 Understanding Financial Management and Securities Markets

tax. For the same reason, the coupon interest rate for a municipal bond is lower than for a similar-quality corporate bond. In addition, interest earned on municipal bonds issued by governments within the taxpayer's home state is exempt from state income tax as well. In contrast, all interest earned on corporate bonds is fully taxable.

Bond Ratings

Bonds vary in quality, depending on the financial strength of the issuer. Because the claims of bondholders come before those of stockholders, bonds are generally considered less risky than stocks. However, some bonds are in fact quite risky. Companies can default—fail to make scheduled interest or principal payments—on their bonds. Investors can use **bond ratings**, letter grades assigned to bond issues to indicate their quality or level of risk. Ratings for corporate bonds are easy to find. The two largest and best-known rating agencies are Moody's and Standard & Poor's (S&P), whose publications are in most libraries and in stock brokerages. **Table 16.2** lists the

EXTRA

IMPORTANT

READING

letter grades assigned by Moody's and S&P. A bond's rating may change if a company's financial condition changes.

Other Popular Securities

In addition to stocks and bonds, investors can buy mutual funds, a very popular investment category, or exchange-traded funds (ETFs). Futures contracts and options are more complex investments for experienced investors.

Mutual Funds

Suppose that you have \$1,000 to invest but don't know which stocks or bonds to buy, when to buy them, or when to sell them. By investing in a mutual fund, you can buy shares in a large, professionally managed portfolio, or group, of stocks and bonds. A **mutual fund** is a financial-service company that pools its investors' funds to buy a selection of securities—marketable securities, stocks, bonds, or a combination of securities—that meet its stated investment goals. Each mutual fund focuses on one of a wide variety of possible investment goals, such as growth or income. Many large financial-service companies, such as Fidelity and Vanguard, sell a wide variety of mutual funds, each with a different investment goal. Investors can pick and choose funds that match their particular interests. Some specialized funds invest in a particular type of company or asset: in one industry such as health care or technology, in a geographical region such as Asia, or in an asset such as precious metals.

Mutual funds are one of the most popular investments for individuals today: they can choose from about 9,500 different funds. Investments in mutual funds are more than \$40 trillion worldwide, of which U.S. mutual funds hold more than \$19 trillion. About 94 million individuals, representing 55 percent of all U.S. households, own mutual funds.¹⁶ Mutual funds appeal to investors for three main reasons:

This OpenStax book is available for free at <http://cnx.org/content/col25734/1.7>

Chapter 16 Understanding Financial Management and Securities Markets 635

Moody's and Standard & Poor's Bond Ratings

Aaa

AAA

Prime-quality investment bonds: Highest rating assigned; indicates extremely strong capacity to pay.

Aa, A

AA, A

High-grade investment bonds: Also considered very safe bonds, although not quite as safe as Aaa/AAA issues; Aa/AA bonds are safer (have less risk of default) than single As.

EXTRA

IMPORTANT

READING

Baa

BBB

Medium-grade investment bonds: Lowest of investment-grade issues; seen as lacking protection against adverse economic conditions.

Ba B

BB B

Junk bonds: Provide little protection against default; viewed as highly speculative.

Caa Ca C

CCC CC C

D

Poor-quality bonds: Either in default or very close to it.

Table 16.2

- They are a good way to hold a diversified, and thus less risky, portfolio. Investors with only \$500 or \$1,000 to invest cannot diversify much on their own. Buying shares in a mutual fund lets them own part of a portfolio that may contain 100 or more securities.
- Mutual funds are professionally managed.
- Mutual funds may offer higher returns than individual investors could achieve on their own.

Exchange-Traded Funds

Another type of investment, the **exchange-traded fund (ETF)**, has become very popular with investors. ETFs are similar to mutual funds because they hold a broad basket of stocks with a common theme, giving investors instant diversification. ETFs trade on stock exchanges (most trade on the American Stock Exchange, AMEX), so their prices change throughout the day, whereas mutual fund share prices, called net asset values (NAVs), are calculated once a day, at the end of trading. Worldwide, ETF assets in 2016 were more than \$3.5 trillion, with the U.S. ETF market accounting for 73 percent of the global market.¹⁷ Investors can choose from more than 1,700 ETFs that track almost any market sector, from a broad market index such as the S&P 500 (described later in this chapter), industry sectors such as health care or energy, and geographical areas such as a particular country (Japan) or region (Latin America). ETFs have very low expense ratios. However, because they trade as stocks, investors pay commissions to buy and sell these shares.

Futures Contracts and Options

Futures contracts are legally binding obligations to buy or sell specified quantities of commodities

(agricultural or mining products) or financial instruments (securities or currencies) at an agreed-on price at a future date. An investor can buy commodity futures contracts in cattle, pork bellies (large

slabs of bacon), eggs, coffee, flour, gasoline, fuel oil, lumber, wheat, gold, and silver. Financial futures include Treasury securities and foreign currencies, such as the British pound or Japanese yen. Futures contracts do not pay interest or dividends. The return depends solely on favorable price changes. These are very risky investments because the prices can vary a great deal.

Options are contracts that entitle holders to buy or sell specified quantities of common stocks or other financial instruments at a set price during a specified time. As with futures contracts, investors must correctly guess future price movements in the underlying financial instrument to earn a positive return. Unlike futures contracts, options do not legally obligate the holder to buy or sell, and the price paid for an option is the maximum amount that can be lost. However, options have very short maturities, so it is easy to quickly lose a lot of money with them.

1. Distinguish between primary and secondary securities markets. How does an investment banker work with companies to issue securities?
2. Describe the types of bonds available to investors and the advantages and disadvantages they offer.
3. Why do mutual funds and exchange-traded funds appeal to investors? Discuss why futures contracts and options are risky investments.

Buying and Selling at Securities Exchanges

7. Where can investors buy and sell securities, and how are securities markets regulated?

When we think of stock markets, we are typically referring to secondary markets, which handle most of the securities trading activity. The two segments of the secondary markets are broker markets and dealer markets, as **Exhibit 16.6** shows. The primary difference between broker and dealer markets is the way each executes securities trades. Securities trades can also take place in alternative market systems and on non-U.S. securities exchanges.

The securities markets both in the United States and around the world are in flux and undergoing tremendous changes. We present the basics of securities exchanges in this section and discuss the latest trends in the global securities markets later in the chapter.

Broker Markets

The **broker market** consists of national and regional securities exchanges that bring buyers and sellers together through brokers on a centralized trading floor. In the broker market, the buyer purchases the securities directly from the seller through the broker. Broker markets account for about 60 percent of the total dollar volume of all shares traded in the U.S. securities markets.

This OpenStax book is available for free at <http://cnx.org/content/col125734/1.7>

Chapter 16 Understanding Financial Management and Securities Markets 637

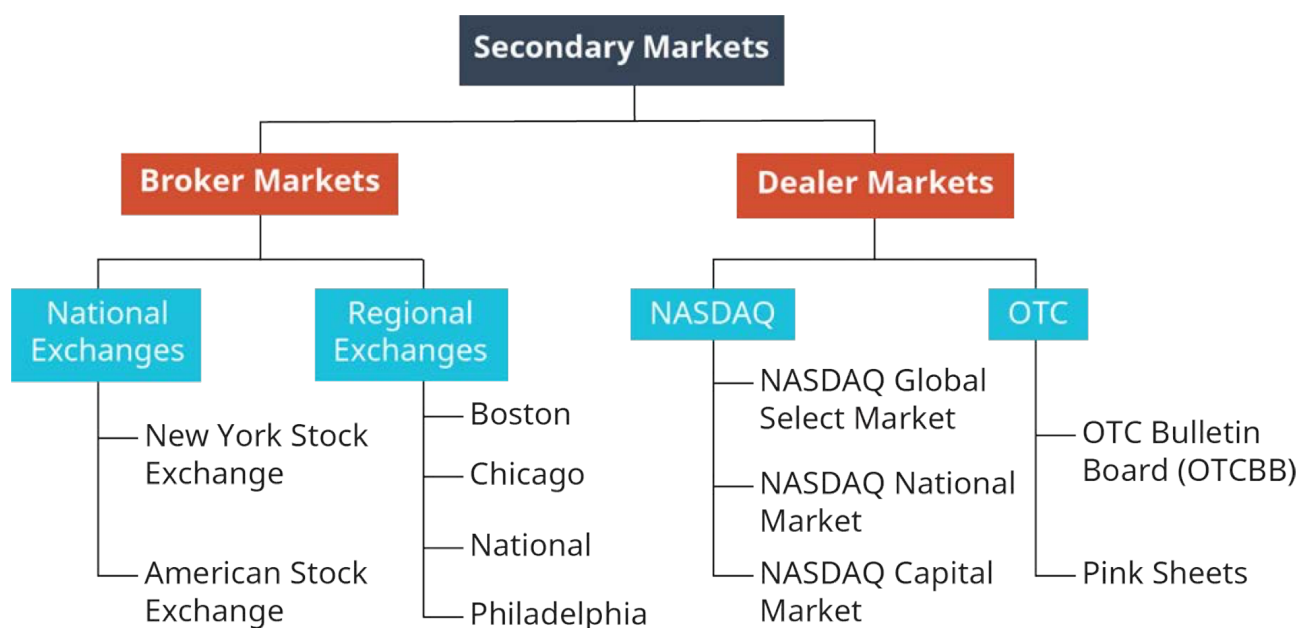


Exhibit 16.6 The Secondary Markets: Broker and Dealer Markets (Attribution: Copyright Rice University, OpenStax, under CC BY 4.0 license.)

New York Stock Exchange

The oldest and most prestigious broker market is the *New York Stock Exchange (NYSE)*, which has existed since 1792. Often called the Big Board, it is located on Wall Street in downtown New York City. The NYSE, which lists the shares of some 2,400 corporations, had a total market capitalization (domestic and foreign companies) of \$25.8 trillion at year-end 2016. On a typical day, more than 3 billion shares of stock are traded on the NYSE.¹⁸ It represents 90 percent of the trading volume in the U.S. broker marketplace. Major companies such as IBM, Coca-Cola, AT&T, Procter & Gamble, Ford Motor Co., and Chevron list their shares on the NYSE. Companies that list on the NYSE must meet stringent listing requirements and annual maintenance requirements, which give them credibility.

The NYSE is also popular with non-U.S. companies. More than 490 foreign companies with a global market capitalization of almost \$63 trillion now list their securities on the NYSE.¹⁹

Until recently, all NYSE transactions occurred on the vast NYSE trading floor. Each of the companies traded at the NYSE is assigned to a trading post on the floor. When an exchange member receives an order to buy or sell a particular stock, the order is transmitted to a floor broker at the company's trading post. The floor brokers then compete with other brokers on the trading floor to get the best price for their customers.

In response to competitive pressures from electronic exchanges, the NYSE created a hybrid market that combines features of the floor auction market and automated trading. Its customers now have a choice of how they execute trades. In the trends section, we'll discuss other changes the NYSE is making to maintain a leadership position among securities exchanges.

Another national stock exchange, the American Stock Exchange (AMEX), lists the securities of more than 700 corporations but handles only 4 percent of the annual share volume of shares traded on U.S. securities exchanges. Because the AMEX's rules are less strict than those of the NYSE, most AMEX firms are smaller and less well known than NYSE-listed corporations. Some firms move up to the NYSE once they qualify for listing there. Other companies choose to remain on the AMEX. Companies cannot be listed on both exchanges at the same time. The AMEX has become a major market, however, for exchange-traded funds and in options

trading.

Exhibit 16.7 The New York Stock Exchange (NYSE) is the largest securities market in the world. Its market capitalization dwarfs both foreign and domestic markets. Unlike other financial markets, the NYSE trades mostly through specialists, financial professionals who match up buyers and sellers of securities, while pocketing the spread between the bid and ask price on market orders. *How does the NYSE's hybrid trading system differ from fully automated, electronic trading?* (Credit: Kevin Hutchison/ flickr/ Attribution 2.0 Generic (CC BY 2.0))

Regional Exchanges

The remaining 6 percent of annual share volume takes place on several regional exchanges in the United States. These exchanges list about 100 to 500 securities of firms located in their area. Regional exchange membership rules are much less strict than for the NYSE. The top regional exchanges are the Boston, Chicago, Philadelphia, and National (formerly the Cincinnati) exchanges. An electronic network linking the NYSE and many of the regional exchanges allows brokers to make securities transactions at the best prices.

The regional exchanges, which have struggled to compete, benefited from the passage of the Securities and Exchange Commission's (SEC's) Regulation NMS (National Market System), which became fully effective in 2007. Regulation NMS makes price the most important factor in making securities trades, and all orders must go to the trading venue with the best price.²⁰

Dealer Markets

Unlike broker markets, **dealer markets** do not operate on centralized trading floors but instead use sophisticated telecommunications networks that link dealers throughout the United States. Buyers and sellers

This OpenStax book is available for free at <http://cnx.org/content/col12573/1.7>

do not trade securities directly, as they do in broker markets. They work through securities dealers called *market makers*, who make markets in one or more securities and offer to buy or sell securities at stated prices. A security transaction in the dealer market has two parts: the selling investor sells his or her securities to one dealer, and the buyer purchases the securities from another dealer (or in some cases, the same dealer).

Exhibit 16.8 The New York Stock Exchange (NYSE) named Stacy Cunningham the first female head of the exchange in its 226-year history. Outside the exchange, the statue "Fearless Girl" by Kristen Virbal stared down the "bull" statue and represented the need for more female representation on the world's most important exchange. *How does the naming of Stacy Cunningham as head of the NYSE demonstrate that the glass ceiling has been shattered?* (Anthony Quintano/ Flickr/ Attribution 2.0 Generic (CC BY 2.0))

NASDAQ

The largest dealer market is the **National Association of Securities Dealers Automated Quotation system**, commonly referred to as NASDAQ. The first electronic-based stock market, the NASDAQ is a sophisticated telecommunications network that links dealers throughout the United States. Founded in 1971 with origins in the over-the-counter (OTC) market, today NASDAQ is a separate securities exchange that is no longer part of the OTC market. The NASDAQ lists more companies than the NYSE, but the NYSE still leads in total market capitalization. An average of 1.6 billion shares were exchanged daily in 2016 through NASDAQ, which is now the largest electronic stock

market.²¹ It provides up-to-date bid and ask prices on about 3,700 of the most active OTC securities. Its sophisticated electronic communication system provides faster transaction speeds than traditional floor markets and is the main reason for the popularity and growth of the OTC market.

In January 2006, the SEC approved NASDAQ's application to operate as a national securities exchange. As a result, the NASDAQ Stock Market LLC began operating independently in August 2006.²² The securities of many well-known companies, some of which could be listed on the organized exchanges, trade on the NASDAQ. Examples include Amazon, Apple, Costco, Comcast, JetBlue, Microsoft, Qualcomm, and Starbucks. The stocks of most commercial banks and insurance companies also trade in this market, as do most government and

640 Chapter 16 Understanding Financial Management and Securities Markets

corporate bonds. More than 400 foreign companies also trade on the NASDAQ. More than a decade ago, the NASDAQ changed its structure to a three-tier market:

- The NASDAQ Global Select Market, a new tier with “financial and liquidity requirements that are higher than those of any other market,” according to NASDAQ. More than 1,000 NASDAQ companies qualify for this group.
- The NASDAQ Global Market (formerly the NASDAQ National Market), which will list about 1,650 companies.
- The NASDAQ Capital Market will replace the NASDAQ Small Cap Market and list about 550 companies. All three market tiers adhere to NASDAQ's rigorous listing and corporate governance standards.²³

The Over-the-Counter Market

The **over-the-counter (OTC) markets** refer to those other than the organized exchanges described above. There are two OTC markets: the *Over-the-Counter Bulletin Board (OTCBB)* and the *Pink Sheets*. These markets generally list small companies and have no listing or maintenance standards, making them attractive to young companies looking for funding. OTC companies do not have to file with the SEC or follow the costly provisions of Sarbanes-Oxley. Investing in OTC companies is therefore highly risky and should be for experienced investors only.

Alternative Trading Systems

In addition to broker and dealer markets, alternative trading systems such as **electronic communications networks (ECNs)** make securities transactions. ECNs are private trading networks that allow institutional traders and some individuals to make direct transactions in what is called the *fourth market*. ECNs bypass brokers and dealers to automatically match electronic buy and sell orders. They are most effective for high-volume, actively traded stocks. Money managers and institutions such as pension funds and mutual funds with large amounts of money to invest like ECNs because they cost far less than other trading venues.

Global Trading and Foreign Exchanges

Improved communications and the elimination of many legal barriers are helping the securities markets go global. The number of securities listed on exchanges in more than one country is growing. Foreign securities are now traded in the United States. Likewise, foreign

investors can easily buy U.S. securities.

Stock markets also exist in foreign countries: more than 60 countries operate their own securities exchanges. NASDAQ ranks second to the NYSE, followed by the London Stock Exchange (LSE) and the Tokyo Stock Exchange. Other important foreign stock exchanges include Euronext (which merged with the NYSE but operates separately) and those in Toronto, Frankfurt, Hong Kong, Zurich, Australia, Paris, and Taiwan.²⁴ The number of big U.S. corporations with listings on foreign exchanges is growing steadily, especially in Europe. For example, significant activity in NYSE-listed stocks also occurs on the LSE. The LSE also is getting a growing share of the world's IPOs. Emerging markets such as India, whose economy has been growing 6 percent or more a year, continue to attract investor attention. The Sensex, the benchmark index of the Bombay Stock Exchange, increased close to 40 percent between 2013 and 2017 as foreign investors continue to pump billions into Indian stocks.²⁵

Why should U.S. investors pay attention to international stock markets? Because the world's economies are

This OpenStax book is available for free at <http://cnx.org/content/col12573/1.7>

Chapter 16 Understanding Financial Management and Securities Markets 641

increasingly interdependent, businesses must look beyond their own national borders to find materials to make their goods and markets for foreign goods and services. The same is true for investors, who may find that they can earn higher returns in international markets.

Regulation of Securities Markets

Both state and federal governments regulate the securities markets. The states were the first to pass laws aimed at preventing securities fraud. But most securities transactions occur across state lines, so federal securities laws are more effective. In addition to legislation, the industry has self-regulatory groups and measures.

Securities Legislation

Congress passed the Securities Act of 1933 in response to the 1929 stock market crash and subsequent problems during the Great Depression. It protects investors by requiring full disclosure of information about new securities issues. The issuer must file a *registration statement* with the SEC, which must be approved by the SEC before the security can be sold.

The *Securities Exchange Act of 1934* formally gave the SEC power to regulate securities exchanges. The act was amended in 1964 to give the SEC authority over the dealer markets as well. The amendment included rules for operating the stock exchanges and granted the SEC control over all participants (exchange members, brokers, dealers) and the securities traded in these markets.

The 1934 act also banned **insider trading**, the use of information that is not available to the general public to make profits on securities transactions. Because of lax enforcement, however, several big insider trading scandals occurred during the late 1980s. The *Insider Trading and Fraud Act of 1988* greatly increased the penalties for illegal insider trading and gave the SEC more power to investigate and prosecute claims of illegal actions. The meaning of *insider* was expanded beyond a company's directors, employees, and their relatives to include anyone who gets private information about a company.

Other important legislation includes the *Investment Company Act of 1940*, which gives the SEC the right to regulate the practices of investment companies (such as mutual funds managed by financial institutions), and the *Investment Advisers Act of 1940*, which requires investment advisers to disclose information about their background. The *Securities Investor Protection Corporation (SIPC)* was established in 1970 to protect customers if a brokerage firm fails, by insuring each customer's account for up to \$500,000.

In response to corporate scandals that hurt thousands of investors, the SEC passed new regulations designed to restore public trust in the securities industry. It issued *Regulation FD* (for “fair disclosure”) in October 2000. Regulation FD requires public companies to share information with all investors at the same time, leveling the information playing field. The *Sarbanes-Oxley Act of 2002* has given the SEC more power when it comes to regulating how securities are offered, sold, and marketed.

Self-Regulation

The investment community also regulates itself, developing and enforcing ethical standards to reduce the potential for abuses in the financial marketplace. The Financial Industry Regulatory Authority (FINRA) oversees the nation's more than 3,700 brokerage firms and more 600,000 registered brokers. It develops rules and regulations, provides a dispute resolution forum, and conducts regulatory reviews of member activities for the protection and benefit of investors.

642 Chapter 16 Understanding Financial Management and Securities Markets

In response to “Black Monday”—October 19, 1987, when the Dow Jones Industrial Average plunged 508 points and the trading activity severely overloaded the exchange's computers—the securities markets instituted corrective measures to prevent a repeat of the crisis. Now, under certain conditions, **circuit breakers** stop trading for a 15-minute cooling-off period to limit the amount the market can drop in one day. Under revised rules approved in 2012 by the SEC, market-wide circuit breakers kick in when the S&P 500 Index drops 7 percent (level 1), 13 percent (level 2), and 20 percent (level 3) from the prior day's closing numbers.²⁶

Blowing the Whistle on Financial Fraud

As part of the 2010 Dodd-Frank legislation passed by Congress in response to the 2008 financial crisis, the Securities and Exchange Commission (SEC) established a whistleblower-rewards program to provide employees and other individuals with the opportunity to report financial securities misconduct. More than seven years after starting the Office of the Whistleblower, the SEC reports that the rewards program has recovered almost \$1 billion in financial penalties from companies that have done things to damage their own reputation as well as those of employees and other stakeholders.

According to a recent SEC report, 2016 was a banner year for individuals reporting financial wrongdoings and whistleblowers being rewarded for what they discovered. In 2016 alone, more than \$57 million was awarded to whistleblowers—an amount greater than the total amount of rewards issued since the program's inception in 2011.

The whistleblower program is based on three key components: monetary awards, prohibition of employer retaliation, and protection of the whistleblower's identity. The program requires the SEC to pay out monetary awards to eligible individuals who voluntarily provide original information about a violation of federal securities laws that has occurred, is ongoing, or is about to take place.

The information supplied must lead to a successful enforcement action or monetary sanctions exceeding \$1 million. No awards are paid out until the sanctions are collected from the offending firm.

A whistleblower must be an individual (not a company), and that individual does not need to be employed by a company to submit information about that specific organization. A typical award to a whistleblower is between 10 and 30 percent of the monetary sanctions the SEC and others (for example, the U.S. attorney general) are able to collect from the company in question.

Through September 2016, the whistleblower program received more than 18,000 tips, with more than 4,200 tips reported in 2016 alone. The program is not limited to U.S. citizens or residents; foreign persons living abroad may submit tips and are eligible to receive a monetary award. In fact, the SEC gave the largest monetary award to date of \$30 million to a foreign national living abroad for original information relating to an ongoing fraud.

Despite criticisms from some financial institutions, the whistleblower-rewards program continues to be a success—reinforcing the point that financial fraud will not go unnoticed by the SEC, employees, and others individuals.

Critical Thinking Questions

1. Despite assurances that companies involved in financial fraud are not allowed to retaliate against

This OpenStax book is available for free at <http://cnx.org/content/col25734/1.7>

Chapter 16 Understanding Financial Management and Securities Markets 643

their accusers, would you blow the whistle on your employer? Why or why not?

2. What can companies do to make sure their employees are aware of the consequences of financial securities fraud? Provide several examples.

Sources: “Office of the Whistleblower,” <https://www.sec.gov>, accessed November 1, 2017; Erika A. Kelton, “Four Important Dodd-Frank Whistleblower Program Developments to Watch for in 2017,” <https://wp.nyu.edu>, accessed November 1, 2017; Jason Zuckerman and Matt Stock, “One Billion Reasons Why the SEC Whistleblower-Reward Program Is Effective,” *Forbes*, <http://www.forbes.com>, July 18, 2017; John Maxfield, “The Dodd-Frank Act Explained,” *USA Today*, <https://www.usatoday.com>, February 3, 2017; Eduardo Singerman and Paul Hugel, “The Tremendous Impact of the Dodd-Frank Whistleblower Program in 2016,” *Accounting Today*, <https://www.accountingtoday.com>, December 28, 2016; Samuel Rubinfeld, “Dodd-Frank Rollback to Spare SEC Whistleblower Program, Experts Say,” *The Wall Street Journal*, <https://www.blogs.wsj.com>, November 15, 2016.



1. How do the broker markets differ from dealer markets, and what organizations compose each of these two markets?
2. Why is the globalisation of the securities markets important to U.S. investors? What are some of the other exchanges where U.S. companies can list their securities?
3. Briefly describe the key provisions of the main federal laws designed to protect securities investors. What is insider trading, and how can it be harmful? How does the securities

industry regulate itself?

Trends in Financial Management and Securities Markets

8. What are the current developments in financial management and the securities markets?

Many of the key trends shaping the practice of financial management echo those in other disciplines. For example, technology is improving the efficiency with which financial managers run their operations. In the wake of a slowing economy and corporate scandals, the SEC assumed a stronger role and implemented additional regulations to protect investors from fraud and misinformation. A wave of merger mania hit the global securities markets as the securities exchanges themselves have begun to consolidate to capture larger shares of the world's trading volume in multiple types of securities. Online brokerage firms are seeking new ways to capture and keep their customers by broadening the services they offer and keeping the fees they charge highly competitive. Let's now look at two key trends in greater detail. In the era of the Sarbanes-Oxley Act, CFOs find themselves balancing a strategic focus with overseeing corporate compliance with the act. The NYSE and NASDAQ are battling for supremacy as the regional exchanges look for niche markets to exploit.

Finance Looks Outward

No longer does finance operate in its own little world of spreadsheets and banking relationships. Most CFOs want the finance function to be viewed by their company's business units as a strategic partner who can

644 Chapter 16 Understanding Financial Management and Securities Markets

contribute to their success. Finance professionals therefore need a broad view of company operations to communicate effectively with business unit managers, board members, creditors, and investors. The goal is productive cooperation and teamwork between finance and the business units to meet corporate objectives. CFOs are more highly visible and active in company management than ever before. They serve as both business partner to the chief executive and a fiduciary to the board.

In the aftermath of recent accounting scandals and the global recession of 2008–2009, CFOs consider accuracy of financial reporting their top priority, and they also must now provide more detailed explanations of what's behind the numbers to board members and other stakeholders. Rather than showering the board with financial reports and statistics, CFOs are crafting more focused presentations that deal with the company's overall financial health and future prospects.²⁷ They must also educate board members about the implications of Sarbanes-Oxley and other legislation, such as Dodd-Frank, and what the company is doing to comply with federal regulations.

Vying for the Crown

The NYSE and NASDAQ continue to wage a heated battle for supremacy in the global securities markets. The NYSE fell behind its more nimble rival, which already had an electronic platform. Its answer was to make sweeping changes in its organizational structure by going public and merging with Archipelago, a major ECN, to enter the electronic marketplace. NASDAQ responded immediately by acquiring another ECN, Instinet's INET. The NYSE then made history by signing an agreement to merge with Euronext and create the first exchange to span the Atlantic. Not to be outdone, the NASDAQ increased its ownership of shares in the London Stock Exchange to 25

percent. These transactions reduced the fragmentation in the marketplace and also eliminated many of the differences between the two exchanges.

But the competition between the two companies continued in 2017, as the London Stock Exchange looks for a buyer after the European Commission refused to allow a merger between LSE and Germany's Deutsche Borse.²⁸ It remains to be seen whether either U.S. exchange is ready to purchase an international exchange; however, their recent strategic moves have made them stronger and more competitive.

1. How has the role of CFO changed since the passage of the Sarbanes-Oxley Act?
2. Describe the major changes taking place in the U.S. securities markets. What trends are driving these changes?

This OpenStax book is available for free at <http://cnx.org/content/col25734/1.7>

Chapter 16 Understanding Financial Management and Securities Markets 645

Key Terms

accounts payable Purchases for which a buyer has not yet paid the seller.

accounts receivable Sales for which a firm has not yet been paid.

bond ratings Letter grades assigned to bond issues to indicate their quality or level of risk; assigned by

rating agencies such as Moody's and Standard & Poor's (S&P).

bonds Long-term debt obligations (liabilities) issued by corporations and governments.

broker markets National and regional securities exchanges that bring buyers and sellers together through

brokers on a centralised trading floor.

capital budgeting The process of analysing long-term projects and selecting those that offer the best

returns while maximising the firm's value.

capital expenditures Investments in long-lived assets, such as land, buildings, machinery, equipment, and

information services, that are expected to provide benefits over a period longer than one year.

cash flows The inflow and outflow of cash for a firm.

cash management The process of making sure that a firm has enough cash on hand to pay bills as they

come due and to meet unexpected expenses.

circuit breakers Corrective measures that, under certain conditions, stop trading in the securities markets

for a short cooling-off period to limit the amount the market can drop in one day.

commercial paper Unsecured short-term debt—an IOU—issued by a financially strong

corporation. **common stock** A security that represents an ownership interest in a corporation.

dealer markets Securities markets where buy and sell orders are executed through dealers, or “market

makers,” linked by telecommunications networks.

dividends Payments to stockholders from a corporation’s profits.

electronic communications networks (ECNs) Private trading networks that allow institutional traders and

some individuals to make direct transactions in the fourth market.

exchange traded fund (ETF) A security similar to a mutual fund; holds a broad basket of stocks with a

common theme but trades on a stock exchange so that its price changes throughout the day.

factoring A form of short-term financing in which a firm sells its accounts receivable outright at a discount to

a factor.

financial management The art and science of managing a firm’s money so that it can meet its

goals. **financial risk** The chance that a firm will be unable to make scheduled interest and principal payments on its

debt.

futures contracts Legally binding obligations to buy or sell specified quantities of commodities or financial

instruments at an agreed-on price at a future date.

insider trading The use of information that is not available to the general public to make profits on

securities transactions.

institutional investors Investment professionals who are paid to manage other people’s money.

interest A fixed amount of money paid by the issuer of a bond to the bondholder on a regular schedule,

typically every six months; stated as the coupon rate.

investment bankers Firms that act as intermediaries, buying securities from corporations and governments

and reselling them to the public.

line of credit An agreement between a bank and a business that specifies the maximum amount of

unsecured short-term borrowing the bank will allow the firm over a given period, typically one year.

marketable securities Short-term investments that are easily converted into cash.

mortgage loan A long-term loan made against real estate as collateral.

646 Chapter 16 Understanding Financial Management and Securities Markets

municipal bonds Bonds issued by states, cities, counties, and other state and local government

agencies. **mutual fund** A financial-service company that pools investors’ funds to buy a selection of securities that

meet its stated investment goals.

National Association of Securities Dealers Automated Quotation (NASDAQ) system The first and largest

electronic stock market, which is a sophisticated telecommunications network that links dealers throughout the United States.

options Contracts that entitle holders to buy or sell specified quantities of common stocks or other financial

instruments at a set price during a specified time.

over-the-counter (OTC) market Markets, other than the exchanges, on which small companies trade;

includes the Over-the-Counter Bulletin Board (OTCBB) and the Pink Sheets.

preferred stock An equity security for which the dividend amount is set at the time the stock is issued and

the dividend must be paid before the company can pay dividends to common stockholders. **primary market** The securities market where new securities are sold to the public.

principal The amount borrowed by the issuer of a bond; also called par value.

retained earnings Profits that have been reinvested in a firm.

return The opportunity for profit.

revolving credit agreement A guaranteed line of credit whereby a bank agrees that a certain amount of

funds will be available for a business to borrow over a given period, typically two to five years.

risk The potential for loss or the chance that an investment will not achieve the expected level of return. **risk-return trade-off** A basic principle in finance that holds that the higher the risk, the greater the return that is required.

secondary market The securities market where old (already issued) securities are bought and sold, or

traded, among investors; includes broker markets, dealer markets, the over-the-counter market, and the commodities exchanges.

secured loans Loans for which the borrower is required to pledge specific assets as collateral, or security. **securities** Investment certificates issued by corporations or governments that represent either equity or

debt.

stock dividends Payments to stockholders in the form of more stock; may replace or supplement cash dividends.

stockbroker A person who is licensed to buy and sell securities on behalf of clients.

term loan A business loan with a maturity of more than one year; can be unsecured or secured.

trade credit The extension of credit by the seller to the buyer between the time the buyer receives the goods or services and when it pays for them.

underwriting The process of buying securities from corporations and governments and reselling them to

the public; the main activity of investment bankers.

unsecured loans Loans for which the borrower does not have to pledge specific assets as security.

Summary of Learning Outcomes

EXTRA

IMPORTANT

READING

16.1 The Role of Finance and the Financial Manager

1. How do finance and the financial manager affect the firm's overall strategy?

Finance involves managing the firm's money. The financial manager must decide how much money is needed and when, how best to use the available funds, and how to get the required financing. The financial manager's responsibilities include financial planning, investing (spending money), and financing (raising money). Maximizing the value of the firm is the main goal of the financial manager, whose decisions often have long-term effects.

This OpenStax book is available for free at <http://cnx.org/content/col25734/1.7>

Chapter 16 Understanding Financial Management and Securities Markets 647

16.2 How Organisations Use Funds

2. What types of short-term and long-term expenditures does a firm make?

A firm incurs short-term expenses—supplies, inventory, and wages—to support current production, marketing, and sales activities. The financial manager manages the firm's investment in current assets so that the company has enough cash to pay its bills and support accounts receivable and inventory. Long-term expenditures (capital expenditures) are made for fixed assets such as land, buildings, equipment and information systems. Because of the large outlays required for capital expenditures, financial managers carefully analyze proposed projects to determine which offer the best returns.

16.3 Obtaining Short-Term Financing

3. What are the main sources and costs of unsecured and secured short-term financing?

Short-term financing comes due within one year. The main sources of unsecured short-term financing are trade credit, bank loans, and commercial paper. Secured loans require a pledge of certain assets, such as accounts receivable or inventory, as security for the loan. Factoring, or selling accounts receivable outright at a discount, is another form of short-term financing.

16.4 Raising Long-Term Financing

4. What are the key differences between debt and equity, and what are the major types and features of long-term debt?

Financial managers must choose the best mix of debt and equity for their firm. The main advantage of debt financing is the tax-deductibility of interest. But debt involves financial risk because it requires the payment of interest and principal on specified dates. Equity—common and preferred stock—is considered a permanent form of financing on which the firm may or may not pay dividends. Dividends are not tax-deductible.

The main types of long-term debt are term loans, bonds, and mortgage loans. Term loans can be unsecured or secured and generally have maturities of 5 to 12 years. Bonds usually have initial maturities of 10 to 30 years. Mortgage loans are secured by real estate. Long-term debt usually costs more than short-term financing because of the greater uncertainty that the borrower will be able to make the scheduled loan payments.

16.5 Equity Financing

5. When and how do firms issue equity, and what are the costs?

The chief sources of equity financing are common stock, retained earnings, and preferred stock. The cost of selling stock includes issuing costs and potential dividend payments. Retained earnings are profits reinvested in the firm. For the issuing firm, preferred stock is more expensive than debt because its dividends are not tax-deductible and its claims are secondary to those of debtholders but less expensive than common stock. Venture capital is often a source of equity financing for young companies.

16.6 Securities Markets

6. How do securities markets help firms raise funding, and what securities trade in the capital markets?

Securities markets allow stocks, bonds, and other securities to be bought and sold quickly and at a fair price. New issues are sold in the primary market. After that, securities are traded in the secondary market. Investment bankers specialize in issuing and selling new security issues. Stockbrokers are licensed professionals who buy and sell securities on behalf of their clients.

In addition to corporate securities, investors can trade U.S. government Treasury securities and municipal bonds, mutual funds, futures, and options. Mutual funds are managed by financial-service companies that pool the funds of many investors to buy a diversified portfolio of securities. Investors choose mutual funds

648 Chapter 16 Understanding Financial Management and Securities Markets

because they offer a convenient way to diversify and are professionally managed. Exchange-traded funds (ETFs) are similar to mutual funds but trade on stock exchanges similar to common stock. Futures contracts are legally binding obligations to buy or sell specified quantities of commodities or financial instruments at an agreed-on price at a future date. They are very risky investments because the price of the commodity or financial instrument may change drastically. Options are contracts that entitle the holder the right to buy or sell specified quantities of common stock or other financial instruments at a set price during a specified time. They, too, are high-risk investments.

16.7 Buying and Selling at Securities Exchanges

7. Where can investors buy and sell securities, and how are securities markets regulated?

Securities are resold in secondary markets, which include both broker markets and dealer markets. The broker market consists of national and regional securities exchanges, such as the New York Stock Exchange, that bring buyers and sellers together through brokers on a centralized trading floor. Dealer markets use sophisticated telecommunications networks that link dealers throughout the United States. The NASDAQ and over-the-counter markets are examples of dealer markets. In addition to broker and dealer markets, electronic communications networks (ECNs) can be used to make securities transactions. In addition to the U.S. markets, more than 60 countries have securities exchanges. The largest non-U.S. exchanges are the London, Tokyo, Toronto, Frankfurt, Hong Kong, and Taiwan exchanges.

The Securities Act of 1933 requires disclosure of important information regarding new securities issues. The Securities Exchange Act of 1934 and its 1964 amendment formally empowered the Securities and Exchange Commission and granted it broad powers to regulate the securities exchanges and the dealer markets. The Investment Company Act of 1940 places investment companies such as companies that issue mutual funds under SEC control. The securities markets

also have self-regulatory groups such as the Financial Industry Regulatory Authority (FINRA) and measures such as “circuit breakers” to halt trading if the S&P 500 Index drops rapidly.

16.8 Trends in Financial Management and Securities Markets

8. What are the current developments in financial management and the securities markets?

The role of the CFO has continued to expand since the passage of the Sarbanes-Oxley Act, with CFOs taking the central role in overseeing corporate compliance with the act and reestablishing public trust. CFOs must look outward and be business focused. Most CFOs are promoting strategic finance and encouraging finance staff to be team players who work closely with business units to achieve corporate goals.

Competition among the world’s major securities exchanges has changed the composition of the financial marketplace. The NYSE and NASDAQ went head to head in the United States. The NYSE became a for-profit company, acquired Archipelago, an electronic exchange, and merged with Euronext to form the first transatlantic exchange. NASDAQ also expanded by acquiring its own ECN and buying a 25 percent stake in the London Stock Exchange, which continues to look for a potential buyer.

Preparing for Tomorrow's Workplace Skills

1. The head of your school’s finance department has asked you to address a group of incoming business students about the importance of finance to their overall business education. Develop an outline with the key points you would cover in your speech. (Information)
2. You are the chief financial officer of Discovery Labs, a privately held biotechnology company that needs to raise \$3 million to fund the development of a new drug. Prepare a report for the board of directors that



This OpenStax book is available for free at <http://cnx.org/content/col25734/1.7>

Chapter 16 Understanding Financial Management and Securities Markets 649

discusses the types of long-term financing available to the firm, their pros and cons, and the key factors to

consider in choosing a financing strategy. (Information)

3. **Team Activity** Does paying dividends enhance the value of a company? Some financial experts caution companies to look long and hard before beginning to pay dividends. They believe that committing yourself to a regular dividend curtails financial flexibility and reduces debt capacity. Dividends might also signal that the company doesn’t have good growth opportunities in which to invest its excess cash. Others counter that dividends can help a company’s stock by making it less volatile. Standard & Poor’s data supports this; typically, dividend-paying stocks in the S&P 500 outperform nonpayers. Divide the class into two teams to debate whether dividends add value to a company’s stock. (Interpersonal,

Information)

4. Research the trends in the IPO marketplace from 2009 to 2017. Then select two IPO success stories and two failures. Prepare a report for the class on their performance. What lessons about the securities markets can you learn from their stories? (Information)
5. While having dinner at a Manhattan restaurant, you overhear two investment bankers at the next table. They are discussing the takeover of Bellamco Industries by Gildmart Corp., a deal that has not yet been announced. You have been thinking about buying Bellamco stock for a while, so the next day you buy 500 shares for \$30 each. Two weeks later, Gildmart announces its acquisition of Bellamco at a price of \$45 per share. Have you fairly earned a profit, or are you guilty of insider trading? What's wrong with insider trading? (Information)
6. **Team Activity** Is joining an investment club a good way to learn about investing in the stock market? Divide the class into groups of five to eight students to develop a strategy to form their own investment club. Use the National Association of Investors Corporation (NAIC) website at <http://www.betterinvesting.org> to learn how investment clubs operate and the investment strategy the organization teaches. Each group should then set up guidelines for their investment club and present their plan to the class. After the presentations, the class members should discuss whether they would prefer to start investing through an investment club or on their own. (Resources, Interpersonal, Information)

Ethics Activity

In late July 2017, senior management at Equifax, a U.S. credit-reporting company, discovered that hackers had stolen the personal data of more than 145 million U.S. customers, including names, birthdates, Social Security numbers, and driver's license information. In addition, the hackers stole credit card information for more than 200,000 Equifax customers.

If that weren't bad enough, reports soon surfaced that three top executives, including Equifax's chief financial officer, sold close to \$2 million in shares of company stock days after learning about the breach and more than a month before the company announced the data hack publicly. In a company statement, Equifax says the executives "had no knowledge that an intrusion had occurred at the time they sold their shares." The day after the company's announcement about the breach, Equifax's stock dropped by double digits, and the Department of Justice opened a criminal investigation.

Less than three weeks after the public announcement, Equifax announced its CEO, Richard Smith, would retire, taking a multimillion-dollar payout with him—even after shareholders lost more than \$5 billion in stock value after the data breach was acknowledged.

Ethical Dilemma: Is it legal for company executives to sell stock shares for financial gain when they know



650 Chapter 16 Understanding Financial Management and Securities Markets

impending bad news will cause the stock price to plummet? Does this constitute insider trading?

EXTRA

IMPORTANT

READING

Sources: Verne Kopytoff, "Equifax Board Reviews Executive Stock Sales after Data Breach," *Fortune*, <http://fortune.com>, September 29, 2017; Jen Wieczner, "Equifax CEO Richard Smith Who Oversaw Breach to Collect \$90 Million," *Fortune*, <http://www.fortune.com>, September 26, 2017; Tom Schoenberg, Anders Melin, and Matt Robinson, "Equifax Stock Sales Are the Focus of U.S. Criminal Probe," *Bloomberg Markets*, <https://www.bloomberg.com>, September 18, 2017; Liz Moyer, "Suspect Trading in Equifax Options before Breach Might Have Generated Millions in Profit," *CNBC*, <https://www.cnbc.com>, September 8, 2017; Alina Selyukh, "3 Equifax Executives Sold Stock Days after Hack That Wasn't Disclosed for a Month," *NPR*, <http://www.npr.org>, September 8, 2017; Anders Melin, "Three Equifax Managers Sold Stock Before Cyber Hack Revealed," *Bloomberg News*, <https://www.bloomberg.com>, September 7, 2017.

Working the Net

1. If factoring accounts receivable is still a mystery to you, visit the 21st Financial Solutions site, <http://www.21stfinancialsolutions.com>. Follow the links on the home page to answer these questions: What are factoring's advantages? What are the additional benefits, and what types of companies can use factoring to their advantage? Then summarize the factoring process.
2. Go to the AdvisoryHQ website at <https://www.advisoryhq.com>, and link to three different venture capital firms listed in the website's "best" list. Compare the firms' investment strategies (industry specialization, age of companies in which they invest, etc.). Also do a web search to check out two angel investor firms. How do their requirements differ from the venture firms?
3. Compare the listing requirements of the NYSE and NASDAQ, using the information at their websites: <http://www.nyse.com> and <http://www.nasdaq.com>. Search the sites for listing requirements. What types of companies qualify for listing on each exchange? Why does NASDAQ offer alternative listing standards?
4. Choose a company currently traded on the NYSE (<http://www.nyse.com>). Find the company's website using a search engine such as Google. At the website, find the firm's investor relations information. Review the information, including, if available, the most recent online annual report. Follow up by researching if any SEC actions have been taken against the firm at the SEC website, <http://www.sec.gov>. Summarize your findings in a brief report that discusses whether you would recommend this company's stock as an investment.
5. Using the information and links available at the Securities Industry and Financial Markets Association's (SIFMA) website, <https://www.sifma.org>, write a brief paper explaining the pros and cons of investing in corporate bonds. In your paper, provide at least three examples of currently available corporate bonds from a site such as <http://www.investinginbonds.com>, and explain why they would be good investments.
6. Research the job responsibilities of a corporate investor relations officer (IRO). If possible, try to interview an IRO, by either phone or email. The National Investor Relations Institute (<http://www.niri.org>), a trade association for IROs, is an alternate source of information. What types of experience and education does an IRO need in order to perform effectively?

How are their roles changing? Write a paper summarizing your findings. (Interpersonal, Information)

Critical Thinking Case

This OpenStax book is available for free at <http://cnx.org/content/col25734/1.7>

Chapter 16 Understanding Financial Management and Securities Markets 651

Blue Apron IPO Leaves a Bad Taste

Founded in 2012, Blue Apron is one of the top meal-kit delivery services doing business in the United States. Started by three cofounders—Matt Salzberg, Matt Wadiak, and Ilia Pappas—Blue Apron provides proportioned ingredients (and recipes) for a meal, delivered to consumers' front doors.

According to recent research, the U.S. meal-kit delivery industry is an \$800 million business with the potential to scale up quickly, as more and more consumers struggle to find time to go grocery shopping, make meals, and spend time with family and friends in their hectic daily lives.

As word spread among foodies about the quality and innovative meals put together by Blue Apron, the company's popularity took off, supported by millions in start-up funding. Costs to scale the business have not been cheap—estimates suggest that Blue Apron's marketing costs have been high.

Despite the challenges, by early 2017 the company was selling more than 8 million meal kits a month and decided to go public in an effort to raise more money and scale its operations, including a new fulfilment facility in New Jersey. According to IPO paperwork filed with the SEC, the company had net revenues of \$84 million in 2014, which increased to \$795 million in 2016. However, those ambitious numbers were not without warnings: company losses increased in the same time period from \$33 million to \$55 million.

Even with those large losses on its balance sheet, Blue Apron decided to go ahead with the IPO and hired Goldman Sachs and Morgan Stanley, two top stock underwriters, to figure out the right price for the initial offering. While Blue Apron and its underwriters were finalising stock prices, Amazon announced plans to acquire Whole Foods—a move that could negatively affect Blue Apron's business going forward.

Even after Amazon's announcement, Blue Apron and its financial advisors priced the initial offering at \$15 to \$17 a share and met with investors across the country to inform them about the IPO, which would value the company on paper at more than \$3 billion. As part of the IPO strategy, Blue Apron executives needed to communicate a strong financial picture while providing potential investors with an honest assessment of investor demand, especially for institutional investors, who typically are repeat buyers when it comes to IPOs.

According to sources close to the IPO experience, Blue Apron's bankers told investors late in the IPO pricing process that they were “closing their order books early,” which meant there was a heightened demand for the stock—a signal that the stock would be priced in the original \$15–\$17 range.

A day later, however, Blue Apron amended its prospectus with a price range between \$10 and \$11 a share, which shocked potential investors—a move greeted with criticism that Blue Apron’s messaging now lacked credibility in the eyes of the investment community if the company priced the IPO \$5 lower per share than originally estimated. With that sudden change in the IPO offering, investors walked away, and the \$10 initial offering for Blue Apron stock actually declined on its first day of trading. As of this writing, the stock has lost close to 40 percent from the original \$10-per-share price.

With continued consolidation in the meal-kit delivery sector inevitable, Blue Apron is at a crossroads when it comes to generating revenue and stabilising costs while trying to sign up more subscribers. One of its competitors, Plated, was recently acquired by the Albertans grocery chain, and Amazon has already trademarked the phrase, “We do the prep. You be the chef,” as it relates to prepared food kits.

Sources: Wolf Richter, “Blue Apron’s Cash Burn Is a Threat Just 3 Months after Its IPO,” *Business Insider*, <http://www.businessinsider.com>, October 19, 2017; Graham Rapier, “Blue Apron CEO: Amazon and Whole Foods Aren’t the Competition,” *Business Insider*, <http://markets.businessinsider.com>, September 13, 2017; Matthew Lynley, “Where Does Blue Apron Go after Amazon Wraps Up Its Whole Foods Deal?” *Tech Crunch*, <https://techcrunch.com>, August 27, 2017; Leslie Picker, “Inside Blue Apron’s IPO: Communication Lapse Chased Away Investors,” *CNBC*, <https://www.cnn.com>, August 23, 2017; Imani Moise, “Blue Apron Co-Founder

652 Chapter 16 Understanding Financial Management and Securities Markets

to Step Aside as Operating Chief,” *The Wall Street Journal*, <https://www.wsj.com>, July 25, 2017; Phil Lempert, “Understanding Blue Apron’s IPO and the Future of Meal Kits,” *Forbes*, <http://www.forbes.com>, June 2, 2017; John Kell, “Meals in the Mail: How Blue Apron Got Started and Where It’s Heading,” *Fortune*, <http://fortune.com>, September 11, 2016.

Critical Thinking Questions

1. **What issues should executives of a company such as Blue Apron consider before deciding to go public? In your opinion, was the company ready for an IPO? Why or why not?**
2. **How else could Blue Apron have raised funds to continue to grow? Compare the risks of raising private funding to going public.**
3. **Use a search engine and a site such as Yahoo! Finance to learn about Blue Apron’s current situation. Prepare a brief summary, including the company’s current financial situation. Is it still a public company, and how has its stock fared? Would you invest in it? Explain your reasoning.**

Sources: Wolf Richter, “Blue Apron’s Cash Burn Is a Threat Just 3 Months after Its IPO,” *Business Insider*, <http://www.businessinsider.com>, October 19, 2017; Graham Rapier, “Blue Apron CEO: Amazon and Whole Foods Aren’t the Competition,” *Business Insider*, <http://markets.businessinsider.com>, September 13, 2017; Matthew Lynley, “Where Does Blue Apron Go after Amazon Wraps Up Its Whole Foods Deal?” *Tech Crunch*, <https://techcrunch.com>, August 27, 2017; Leslie Picker, “Inside Blue Apron’s IPO: Communication Lapse Chased Away Investors,” *CNBC*, <https://www.cnn.com>, August 23, 2017; Imani Moise, “Blue Apron Co-Founder to Step

Aside as Operating Chief,” *The Wall Street Journal*, <https://www.wsj.com>, July 25, 2017; Phil Lempert, “Understanding Blue Apron’s IPO and the Future of Meal Kits,” *Forbes*, <http://www.forbes.com>, June 2, 2017; John Kell, “Meals in the Mail: How Blue Apron Got Started and Where It’s Heading,” *Fortune*, <http://fortune.com>, September 11, 2016.

Hot Links Address Book

1. What challenges do today’s financial managers face? To find out, browse through recent issues of *CFO* magazine at **<http://www.cfo.com>**
2. Find an introduction to the types of cash management services banks offer their customers at the Royal Bank of Canada website, **<https://rbcbank.com>**
3. Start your online exploring at Yahoo! Finance, **<http://finance.yahoo.com>**, which offers everything from breaking business and world news to stock research, portfolio tracking tools, and educational articles.
4. For small businesses just starting out or entrepreneurs who have invented the next great product but need some financial assistance, several crowdfunding platforms can help. Both Kiva (**<https://www.kiva.org>**) and IndieGoGo (**<https://www.indiegogo.com>**) offer loans or financial backing to help people start up new businesses or match potential investors with entrepreneurs looking for some financial backing.
5. The Motley Fool, **<http://www.fool.com>**, is a favorite site for both novice and experienced investors. In addition to the latest stock picks, the website offers detailed information on a variety of topics, such as how to invest, retirement, and personal finance.
6. You’ll find a minicourse on municipal bonds when you click on “Learn More” at the top of the page at **<http://www.investingbonds.com>**.
7. Moneychimp (**<http://www.moneychimp.com>**) strives to educate investors by offering clear, practical articles on a complete range of finance and investing topics, including investment basics, understanding annual reports, stock valuation, and more.

...

This OpenStax book is available for free at <http://cnx.org/content/col25734/1.7>

Chapter 16 Understanding Financial Management and Securities Markets 653

8. Thinking of investing in a particular company? Go to the SEC’s website to access the EDGAR database of the financial reports filed by all public companies with the SEC: **<http://www.sec.gov>**.



THANK YOU VERY MUCH

