

16 Managing Finances

Investing in Green

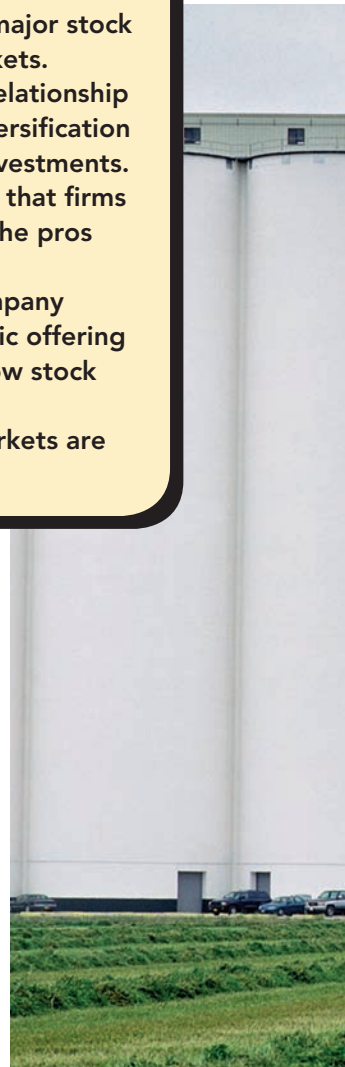
Traders are accustomed to using financial markets for investing in just about everything, ranging from pig bellies to movie production, in hopes of gaining a profit. New financial markets for commodities known as carbon credits, however, are driven, not just by profit motive, but by a sense of social responsibility. The economic incentives of emissions trading (ET) bring together both environmental polluters and green investors in an effort to both turn a profit and save the planet. In 2009, the U.S. Congress proposed a version of ET called Cap and Trade.

Here's how ET works: Regulators in various countries are setting limits on the amounts of industrial pollutants that can be released. A leading example, the European Union's Emissions Trading Scheme (ETS), was started by the European Commission in 2005 to meet carbon reductions in accordance with the Kyoto Protocol on Climate Change. The ETS annually sets a cap for the total amount of carbon dioxide (CO₂) emissions allowed for each EU member state and company. The state totals and the EU total cannot exceed the caps.

Companies are issued a permit containing a number of "credits" (or "allowances") representing the right to emit a certain amount of CO₂. Any company producing below its CO₂ cap can sell its surplus allowances to other, more pollution-prone companies that need more credits to keep operating. That's where trading comes into play—it's like a stock

After reading this chapter, you should be able to:

- 1** Explain the concept of the time value of money and the principle of compound growth.
- 2** Identify the investment opportunities offered by mutual funds and exchange-traded funds.
- 3** Describe the role of securities markets and identify the major stock exchanges and stock markets.
- 4** Describe the risk–return relationship and discuss the use of diversification and asset allocation for investments.
- 5** Describe the various ways that firms raise capital and identify the pros and cons of each method.
- 6** Identify the reasons a company might make an initial public offering of its stock and explain how stock value is determined.
- 7** Explain how securities markets are regulated.



exchange that quickly matches up buyers and sellers of emissions credits.

With emissions trading, environmentally oriented companies (so-called green companies) sell unneeded emissions allowances and gain a financial return on past investments for reducing pollution. Such companies view environmental cleanup not as an expense, but as a responsible investment. Other companies, finding it cheaper to avoid such investments, are facing higher costs as they bid for others' unused carbon credits. The trading scheme is adding a new financial incentive for cleaner industries that reduce carbon emissions and other greenhouse gases.¹

Our opening story continues on page 436.

WHAT'S IN IT FOR ME?

Emissions trading is just one of countless activities drawing investors of every kind to the world's financial markets. Businesses from all over the world, representing every industry, converge there each day, seeking funds that can be used to finance their endeavors and pay off their debts. Individual investors gather as well, in person or—more often—online, looking to make their money “work” for them. This chapter will help you understand the various ways this is possible, whether your goals are short- or long-term, whether you are motivated by the desire for profit or security, or simply because you enjoy the challenges inherent in the successful raising and investing of capital.

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1 Explain the concept of the time value of money and the principle of compound growth.

Maximizing Capital Growth

Wise investments are the key to growing your money, especially if you are seeking to build capital to start your own business or simply as a cushion for a sound financial future. In searching for investment opportunities, a number of concepts come into play for evaluating alternative investments and sorting out the good from the bad.

The Time Value of Money and Compound Growth

The **time value of money**, perhaps the single most important concept in business finance, recognizes the basic fact that, while it's invested, money grows by earning interest or yielding some other form of return. Time value stems from the principle of **compound growth**—the cumulative growth from interest paid to the investor over given time periods. With each additional time period, interest payments accumulate and earn more interest, thus multiplying the earning capacity of the investment.

The Rule of 72

How long does it take to double an investment? A handy rule of thumb is called the “Rule of 72.” You can find the number of years needed to double your money by dividing the annual interest rate (in percent) into 72. If, for example, you reinvest annually at 8 percent, you'll double your money in about 9 years:

$$\frac{72}{8} = 9 \text{ years to double the money}$$

The Rule of 72 can also calculate how much interest you must get if you want to double your money in a given number of years: Simply divide 72 by the desired number of years. If you want to double your money in 10 years, you need to get 7.2 percent:

$$\frac{72}{10} = 7.2 \text{ percent interest needed to double the money}$$

The lesson for the investor is clear: seek *higher* interest rates because money will double more frequently.

Making Better Use of Your Time Value What if you invested \$10,000 at seven percent interest for one year? You would earn \$700 on your \$10,000 investment. If you reinvested the principal amount plus the interest you earned during the first year, and reinvested interest annually for another four years, you'd end up with \$14,025. Now, if you were planning for retirement and reinvested that money at the same interest rate for another 25 years, you could retire with \$76,122—almost eight times the amount you started with!

Figure 16.1 illustrates how the returns from an initial investment of \$10,000 accumulate substantially over longer periods of time. Notice that the gains for the last 10 years are much greater than for the first 10 years, illustrating the power of compound growth. Each year, the interest rate is applied to a larger sum. Notice also the larger gains from higher interest rates. Even a seemingly small increase in interest rates, from 7% to 8%, results in much larger accumulations.

As you can see from Figure 16.1, the best way to take advantage of the time value of money is to obtain a high rate of return on your investment. However, various kinds of investments offer opportunities for fulfilling different financial objectives, such as aggressive growth, financial safety, and others.



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Gain hands-on experience through an interactive, real-world scenario. This chapter's simulation entitled Conducting a SWOT Analysis is located at www.mybizlab.com.

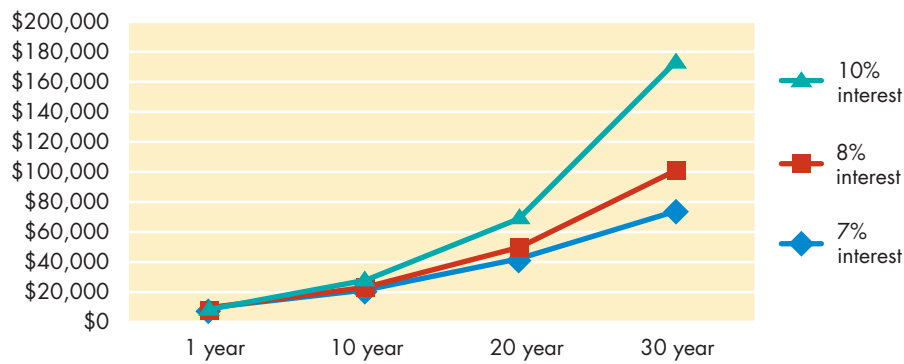


Figure 16.1 Amount to Which an Initial \$10,000 Investment Grows

Common Stock Investments

History has shown that one way to achieve a high rate of return, compared with many other ways, is to invest in the stock market. A **stock** is a portion of the ownership of a corporation. The company's total ownership is divided into small parts, called *shares*, that can be bought and sold to determine how much of the company (how many shares of stock) is owned by each shareholder. This widespread ownership has become possible because of the availability of different types of stocks and because markets have been established that enable individuals to conveniently buy and sell them.

While several types of stock exist, common stock is the most prominent. A share of **common stock** is the most basic form of ownership in a company. Individuals and other companies purchase a firm's common stock in the hope that it will increase in value and provide dividend income; in addition, each common share has a vote on major issues that are brought before the shareholders.

Stock values are usually expressed in two different ways: as market value and book value.

- 1 A stock's real value is its **market value**—the current price of a share in the stock market. Market value reflects the amount that buyers are willing to pay for a share of the company's stock.
- 2 The **book value** for a share of common stock is determined as the firm's owners' equity (from the balance sheet) divided by the number of common shares owned by all shareholders. Book value is used as a comparison indicator because the market value for successful companies is usually greater than its book value. Thus, when market price falls to near book value, some profit-seeking investors buy the stock on the principle that it is underpriced and will increase in the future.

Investment Traits of Common Stock Common stocks are among the riskiest of all investments. Uncertainties about the stock market itself can quickly change a given stock's value. Furthermore, when companies have unprofitable years, or when economic conditions go sour, they often cannot pay dividends and potential investors become wary of future stock values, so share price drops. U.S. stocks, for example, lost over half their value in the recession years 2008 and early 2009. On

Time Value Of Money principle that invested money grows, over time, by earning interest or some other form of return

Compound Growth compounding of interest over time—with each additional time period, interest returns accumulate

Stock portion of ownership of a corporation

Common Stock most basic form of ownership, including voting rights on major issues, in a company

Market Value current price of a share of stock in the stock market

Book Value value of a common stock expressed as the firm's owners' equity divided by the number of common shares

the upside, however, common stocks offer high growth potential; when a company's performance brightens, because of public acceptance of a hot new product, for example, share price can sharply increase. Historically, stock values generally rise with the passage of time. By mid-2011, U.S. stocks had recovered their lost values.

Dividends A **dividend** is a payment to shareholders, on a per-share basis, from the company's earnings. Dividend payments are optional and variable—the corporation's board of directors decides whether and when a dividend will be paid, as well as the amount that is best for the future of the company and its shareholders. Many companies distribute between 30 and 70 percent of their profits to shareholders. The so-called **blue-chip stocks**—those issued by the strongest, well-established, financially sound and respected firms, such as Coca-Cola and ExxonMobil—have historically provided investors steady income through consistent dividend payouts. However, some firms, especially fast-growing companies, do not pay dividends; instead, they use cash earnings for expanding the company so that future earnings can grow even faster. What's more, any company can have a bad year and decide to reduce or omit dividend payments to stockholders.

2 Identify the investment opportunities offered by mutual funds and exchange-traded funds.

Investing to Fulfill Financial Objectives

As an alternative to buying stock, mutual funds and exchange-traded funds are popular because they offer attractive investment opportunities for various financial objectives and often do not require large sums of money for entry. In addition, the simple and easy transaction process makes them accessible to the public.

Mutual funds are created by companies such as T. Rowe Price and Vanguard that pool cash investments from individuals and organizations to purchase bundles of stocks, bonds, and other securities. The bundles are expected to appreciate in market value and otherwise produce income for the mutual fund and its investors. Thus, investors, as part owners, expect to receive financial gains as the fund's assets become increasingly valuable. If you invest \$1,000 in a mutual fund with assets worth \$100,000, you own 1 percent of that fund. Investors in **no-load funds** are not charged sales commissions when they buy into or sell out of funds. Investors in **load funds** generally pay commissions of 2 percent to 8 percent.

Reasons for Investing

It's relatively easy to open a mutual fund account online or by phone. There are numerous funds that meet any chosen financial objective. The funds vary in their investment goals: Different funds are designed to appeal to the different motives and goals of investors. Three of the most common objectives are financial stability, conservative growth, and aggressive growth.

- **Stability and Safety** Funds stressing safety seek only modest growth with little fluctuation in principal value regardless of economic conditions. They include *money market mutual funds* and other funds that preserve the fund holders' capital and reliably pay current income. Typical assets of these funds include lower-risk U.S. corporate bonds, U.S. government bonds, and other similarly safe short-term securities that provide stable income from interest and dividends.
- **Conservative Capital Growth** Mutual funds that stress preservation of capital and current income, but also seek some capital appreciation, are called *balanced funds*. Typically, these funds hold a mixture of long-term municipal bonds, corporate bonds, and common stocks with good dividend-paying records for steady income. The common stocks offer potential for market appreciation (higher market value), though there is always the risk of price declines if the general stock market falls.

- **Aggressive Growth** *Aggressive growth funds* seek maximum long-term capital growth. They sacrifice current income and safety by investing in stocks of new (and even troubled) companies, firms developing new products and technologies, and other higher-risk securities. They are designed for investors who can accept the risk of loss inherent in common stock investing with severe price fluctuations, but also the potential for superior returns over time.

Most Mutual Funds Don't Match the Market

Many, but not all, mutual funds are managed by “experts” who select the fund’s stocks and other securities that provide the fund’s income. Unfortunately, some estimates indicate that up to 80 percent of these managed funds do not perform as well as the average return of the overall stock market, due to costly management expenses and underperforming stocks.² This underperformance disadvantage has resulted in the emergence of passively managed mutual funds such as index funds, which nearly match the performance of a particular market. As an example, the widely watched S&P 500 market index, which is discussed later, consists of 500 specific common stocks. Any mutual fund company can establish its own index fund by purchasing shares of those same 500 companies, thus matching the market performance of the S&P 500. The selection of which stocks to purchase in an index fund is relatively automatic—it holds many of the same stocks as the market it tracks—and requires little human input, thus reducing management expenses.

Exchange-Traded Funds

As with an index mutual fund, an **exchange-traded fund (ETF)** is a bundle of stocks (or bonds) that are in an index that tracks the overall movement of a market; unlike a mutual fund, however, an ETF can be traded like a stock. Each share of an ETF rises and falls as market prices change continuously for the market being tracked.

Advantages of ETFs ETFs offer three areas of advantage over mutual funds: They can be traded throughout the day like a stock, they have low operating expenses, and they do not require high initial investments. Because they are traded on stock exchanges (hence, “exchange traded”), ETFs can be bought and sold—priced continuously—any time throughout the day. This *intraday trading* means you can time your transaction during the day to buy or sell when (or if) the market reaches a desired price. Mutual fund shares, in contrast, are priced once daily, at the end of the day. Thus, when you buy or sell during the day, you don’t find out the share price until after the day has ended.

Whereas many mutual funds pass the costs of expensive active management onto shareholders, an ETF is bound by a rule that specifies what stocks will be purchased and when; once the rule is established, little or no active human decisions are involved. The *lower annual operating expenses* mean that, for the buy-and-hold investor, annual fees for ETFs are as low as 0.09 percent of assets; annual fees for mutual funds average 1.4 percent.³

Finally, unlike mutual funds, ETFs require no minimum investment, meaning they offer *ease of entry* for investors getting started without much money.⁴ On the other hand, because ETFs must be bought and sold through a broker, they require

Dividend payment to shareholders, on a per-share basis, out of the company’s earnings

Blue-Chip Stock common stock issued by a well-established and respected company with a sound financial history and a stable pattern of dividend payouts

Mutual Fund company that pools cash investments from individuals and organizations to purchase a portfolio of stocks, bonds, and other securities

No-load Fund mutual fund in which investors pay no commissions when they buy in or sell out

Load Fund mutual fund in which investors are charged sales commissions when they buy in or sell out

Exchange-Traded Fund (ETF) bundle of stocks or bonds that are in an index that tracks the overall movement of a market but, unlike a mutual fund, can be traded like a stock

payment of a brokerage commission (transaction fees). Traders who buy and sell frequently can end up paying more in transactions fees, even surpassing a mutual fund's high management expenses.⁵

3 Describe the role of securities markets and identify the major stock exchanges and stock markets.

The Business of Trading Securities

Stocks, bonds, and mutual funds are known as **securities** because they represent *secured*, or financially valuable claims on the part of investors. The markets in which stocks and bonds are sold are called **securities markets**. By facilitating the buying and selling of securities, the securities markets provide the capital that companies rely on for survival. Mutual funds, on the other hand, are not bought and sold on securities markets, but are managed by financial professionals in the investment companies that create, buy, and sell the funds.

Primary and Secondary Securities Markets

In **primary securities markets**, new stocks and bonds are bought and sold by firms and governments. Sometimes, new securities are sold to single buyers or small groups of buyers. These so-called *private placements* are desirable because they allow issuers to keep their plans confidential.

Most new stocks and some bonds are sold on the wider public market. To bring a new security to market, the issuing firm must get approval from the U.S. **Securities and Exchange Commission (SEC)**—the government agency that regulates U.S. securities markets. The firm also relied, traditionally, on the services of an **investment bank**—a financial institution that specialized in issuing and reselling new securities. All that changed, however, in the financial collapse of 2008, when the bankruptcy of Lehman Brothers became the largest bankruptcy in U.S. history, Bear Stearns was purchased by JPMorgan Chase, and the two remaining large U.S. investment banks—Morgan Stanley and Goldman Sachs—were allowed to become bank holding companies (much like a commercial bank).⁶ Although the companies' structures have changed, they still provide three important investment banking services:

- 1 They advise companies on the timing and financial terms of new issues.
- 2 They *underwrite*—that is, they buy and assume liability for—new securities, thus providing the issuing firms with 100 percent of the money (less commission). The inability to resell the securities is a risk that the banks must bear.
- 3 They create distribution networks for moving new securities through groups of other banks and brokers into the hands of individual investors.

New securities, however, represent only a small portion of traded securities. *Existing* stocks and bonds are sold in the much larger **secondary securities market**, which is handled by such familiar bodies as the New York Stock Exchange and, more recently, by online trading with electronic communication networks.

Stock Exchanges

Most of the buying and selling of stocks, historically, has been handled by organized stock exchanges. A **stock exchange** is an organization of individuals coordinated to provide an institutional auction setting in which stocks can be bought and sold.



Peter Foley/EPA/Newscom

Founded in 1792 and located at the corner of Wall and Broad Streets in New York City, the New York Stock Exchange sees billions of shares change hands each day.

The Trading Floor Each exchange regulates the places and times at which trading may occur. The most important difference between traditional exchanges and the electronic market is the geographic location of the trading activity. Brokers at an exchange trade face-to-face on the *trading floor* (also referred to as an *outcry market*). The electronic market, on the other hand, conducts trades electronically among thousands of dealers in remote locations around the world.

Trading floors today are equipped with vast arrays of electronic communications equipment for displaying buy and sell orders or confirming completed trades. A variety of news services furnish up-to-the-minute information about world events and business developments. Any change in these factors, then, may be swiftly reflected in share prices.

The Major Stock Exchanges Among the stock exchanges that operate on trading floors in the United States, the New York Stock Exchange is the largest. Today it faces stiff competition from both the electronic market in the United States—NASDAQ—and large foreign exchanges, such as those in London and Tokyo.

The New York Stock Exchange For many people, “the stock market” means the *New York Stock Exchange (NYSE)*. Founded in 1792, the NYSE is the model for exchanges worldwide. The merger with Euronext in 2007 formed NYSE Euronext, bringing together marketplaces across Europe and the United States. Only firms meeting certain minimum requirements—earning power, total value of outstanding stock, and number of shareholders—are eligible for listing on the NYSE.⁷

Today’s NYSE is a *hybrid market* that utilizes both floor and electronic trading. When a client places an order through a brokerage house or online, it is transmitted to a broker on the NYSE floor. Floor brokers who want to trade that stock meet together to agree on a trading price based on supply and demand, and the order is executed. Alternatively, buyers can use the NYSE’s Direct+ service to automatically execute trades electronically.

Global Stock Exchanges As recently as 1980, the U.S. market accounted for more than half the value of the world market in traded stocks. Market activities, however, have shifted as the value of shares listed on foreign exchanges continues to grow. Table 16.1 identifies several stock exchanges, among hundreds of exchanges around the world, and

TABLE 16.1 Selected Global Stock Exchanges and Markets⁹

Country/Region	Stock Exchange	Total Value of Trades, Year Ended 31 December 2010 (billions of U.S. dollars)
Australia	Australian Securities Exchange	1,602
Brazil	Sao Paulo Stock Exchange	868
Canada	Toronto Stock Exchange	1,368
China	Shanghai Stock Exchange	4,496
Hong Kong	Hong Kong Stock Exchange	1,496
Japan	Tokyo Stock Exchange	3,787
United Kingdom	London Stock Exchange	2,741
United States/Europe	NYSE/Euronext	19,813

Securities stocks, bonds, and mutual funds representing secured, or asset-based, claims by investors against issuers

Securities Markets markets in which stocks and bonds are sold

Primary Securities Market market in which new stocks and bonds are bought and sold by firms and governments

Securities and Exchange Commission (SEC) government agency that regulates U.S. securities markets

Investment Bank financial institution that specializes in issuing and reselling new securities

Secondary Securities Market market in which existing (not new) stocks and bonds are sold to the public

Stock Exchange an organization of individuals to provide an institutional auction setting in which stocks can be bought and sold

the annual dollar volume of shares traded at each exchange. While new exchanges are emerging in Vietnam, Laos, and Rwanda, earlier startups are flourishing in cities from Shanghai to Warsaw, and others are merging or partnering in different regions. NYSE Euronext, for example, gained a valuable presence in the Middle East by joining with Qatar Exchange, which enables Qatar to become a stronger international exchange.⁸

The NASDAQ Market The **National Association of Securities Dealers Automated Quotation (NASDAQ) system**, the world's oldest electronic stock market, was established in 1971. Whereas buy and sell orders to the NYSE are gathered on the trading floor, NASDAQ orders are gathered and executed on a computer network connecting 350,000 terminals worldwide. Currently, NASDAQ is working with officials in an increasing number of countries in replacing the trading floors of traditional exchanges with electronic networks like NASDAQ's.

The stocks of some 3,000 companies, both emerging and well known, are traded by NASDAQ. Examples include Marvell, Apple, Microsoft, and Staples. Although the volume of shares traded surpasses that of the New York Stock Exchange, the total market value of NASDAQ's U.S. stocks is less than that of the NYSE.

International Consolidation and Cross-Border Ownership A wave of technological advances, along with regulatory and competitive factors, is propelling the consolidation of stock exchanges and the changeover from physical to electronic trading floors across international borders. Electronic communication networks have opened the door to around-the-clock and around-the-globe trading. Every major European stock exchange had gone electronic by the close of the twentieth century, and the United States is catching up. Stock exchanges that don't have enough savvy with electronic technologies to stay competitive are merging or partnering with those having more advanced trading systems. The intensified competition among stock exchanges is resulting in speedier transactions and lower transaction fees for investors.¹⁰

Non-Exchange Trading: Electronic Communication Networks

The SEC in 1998 authorized the creation of **electronic communication networks (ECNs)**—electronic trading systems that bring buyers and sellers together outside traditional stock exchanges by automatically matching buy and sell orders at specified prices. ECNs have gained rapid popularity because the trading procedures are fast and efficient, often lowering transaction costs per share to mere pennies. They also allow after-hours trading (after traditional markets have closed for the day) and protect traders' anonymity.¹¹

ECNs must register with the SEC as broker-dealers. The ECN then provides service to subscribers, that is, other broker-dealers and institutional investors. Subscribers can view all orders at any time on the system's website to see information on what trades have taken place and at what times.¹² Individual investors must open an account with a subscriber (a broker-dealer) before they can send buy or sell orders to the ECN system.

Individual Investor Trading

While half of all U.S. citizens have some form of ownership in stocks, bonds, or mutual funds, more than half of the adults have holdings worth \$5,000 or more.¹³ Many of these investors are novices who seek the advice of experienced professionals, or brokers. Investors who are well informed and experienced, however, often prefer to invest independently without outside guidance.

Stock Brokers Some of the people on the trading floor are employed by the stock exchange. Others are trading stocks for themselves. Many, however, are **stock brokers** who earn commissions by executing buy and sell orders for outside customers. Although they match buyers with sellers, brokers do not own the securities. They earn commissions from the individuals and organizations for whom they place orders.

Discount Brokers As with many other products, brokerage assistance can be purchased at either discount or at full-service prices. Discount brokers, such as E*TRADE

and Scottrade, offer well-informed individual investors who know what they want to buy or sell a fast, low-cost way to participate in the market. Sales personnel receive fees or salaries, not commissions. Unlike many full-service brokers, many discount brokers do not offer in-depth investment advice or person-to-person sales consultations. They do, however, offer automated online services, such as stock research, industry analysis, and screening for specific types of stocks.

Full-Service Brokers Despite the growth in online investing, full-service brokers remain an important resource, both for new, uninformed investors and for experienced investors who don't have time to keep up with all the latest developments. Full-service firms such as Merrill Lynch offer clients consulting advice in personal financial planning, estate planning, and tax strategies, along with a wider range of investment products. In addition to delivering and interpreting information, financial advisors can point clients toward investments that might otherwise be lost in an avalanche of online financial data.

Online Investing The popularity of online trading stems from convenient access to the Internet, fast, no-nonsense transactions, and the opportunity for self-directed investors to manage their own investments while paying low fees for trading.

Online investors buy into and sell out of the stocks of thousands of companies daily. Consequently, keeping track of who owns what at any given time has become a monumental burden. Relief has come from **book-entry ownership**. Historically, shares of stock have been issued as physical paper certificates; now they are simply recorded in the companies' books, thereby eliminating the costs of storing, exchanging, and replacing certificates.

Tracking the Market Using Stock Indexes

For decades investors have used stock indexes to measure market performance and to predict future movements of stock markets. Although not indicative of the status of individual securities, **market indexes** provide useful summaries of overall price trends, both in specific industries and in the stock market as a whole. Market indexes, for example, reveal bull and bear market trends. **Bull markets** are periods of rising stock prices, generally lasting 12 months or longer; investors are motivated to buy, confident they will realize capital gains. Periods of falling stock prices, usually 20 percent off peak prices, are called **bear markets**; investors are motivated to sell, anticipating further falling prices.

As Figure 16.2 shows, the past three decades have been characterized primarily by bull markets, including the longest in history, from 1981 to the beginning of 2000. In contrast, the period 2000 to 2003 was characterized by a bear market. The period 2007–2009 was the second-worst bear market of all time, exceeded only by that of 1929–1932.¹⁴ The data that characterize such periods are drawn from four leading market indexes: the Dow Jones, Standard & Poor's, NASDAQ Composite, and the Russell 2000 (not shown in Figure 16.2).

National Association Of Securities Dealers Automated Quotation (NASDAQ) System world's oldest electronic stock market consisting of dealers who buy and sell securities over a network of electronic communications

Electronic Communication Network (ECN) electronic trading system that brings buyers and sellers together outside traditional stock exchanges

Stock Broker individual or organization that receives and executes buy and sell orders on behalf of outside customers in return for commissions

Book-Entry Ownership procedure that holds investors' shares in book-entry form, rather than issuing a physical paper certificate of ownership

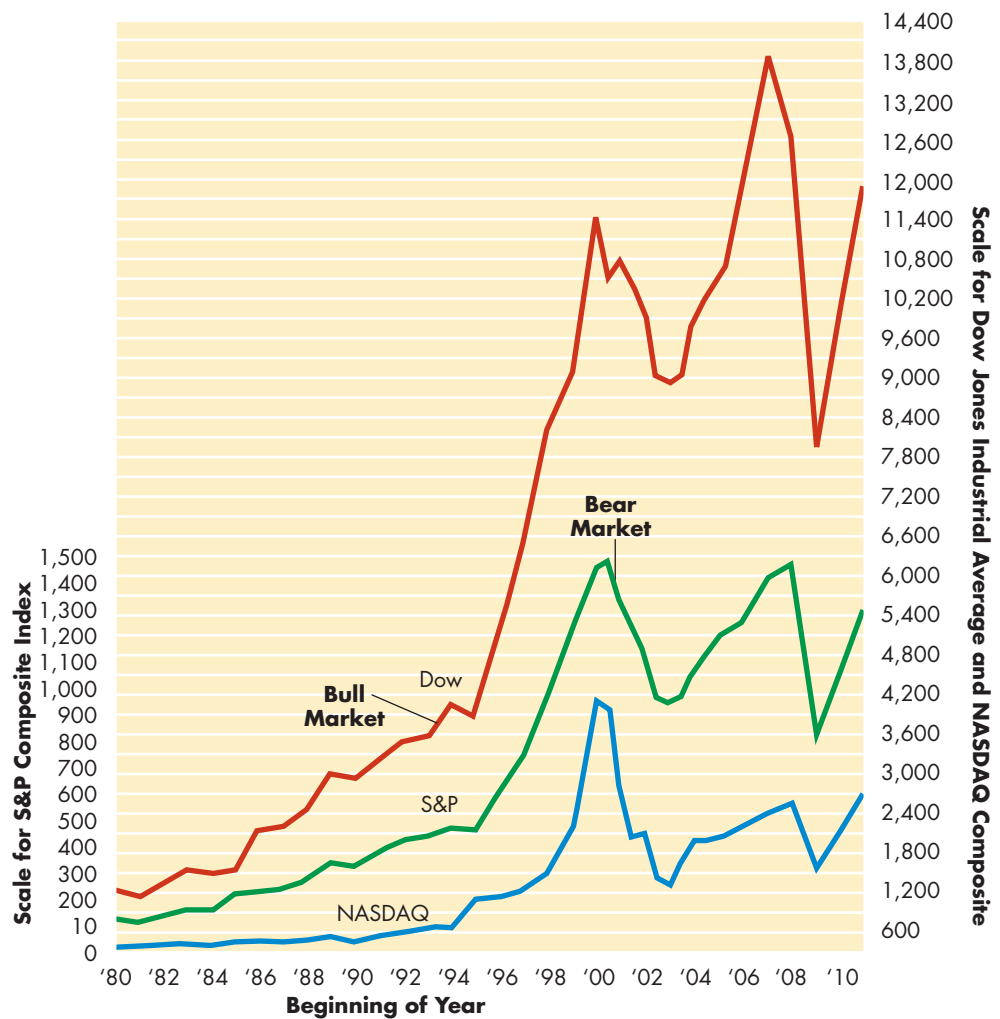
Market Index statistical indicator designed to measure the performance of a large group of stocks or track the price changes of a stock market

Bull Market period of rising stock prices, lasting 12 months or longer, featuring investor confidence for future gains and motivation to buy

Bear Market period of falling stock prices marked by negative investor sentiments with motivation to sell ahead of anticipated losses

Figure 16.2 Bull and Bear Markets

Source: Dow Jones Industrial Average, "MSN.com, at <http://moneycentral.msn.com/investor/charts/chartdl.aspx?PT=7&compsyms=&D4=1&DD=1&D5=0&DCS=2&MA0=0&MA1=0&CP=1&C5=1> Yahoo! Finance, at <http://finance.yahoo.com>.



The Dow The Dow Jones Industrial Average (DJIA) is the oldest and most widely cited U.S. market index. It measures the performance of the industrial sector of the U.S. stock markets by focusing on just 30 blue-chip, large-cap companies as reflectors of the economic health of the many similar U.S. firms. The Dow is an average of the stock prices for these 30 large firms, and traders and investors use it as a traditional barometer of the market's overall movement. Because it includes only 30 of the thousands of companies on the market, the Dow is only an approximation of the overall market's price movements.

Over the decades, the Dow has been revised and updated to reflect the changing composition of U.S. companies and industries. Recent modifications occurred in 2008–2009, when three companies were added—Kraft Foods, insurance giant Travelers Companies, and technology titan Cisco Systems—replacing insurance company American International Group, banker Citigroup, and auto icon General Motors. Replacing the three outgoing firms, all facing substantial financial and restructuring upheavals, the new additions better represent today's food- and technology-based economy and the prominence of the financials industry.¹⁵

The S&P 500 Because it considers very few firms, the Dow is a limited gauge of the overall U.S. stock market. The **S&P 500**—the Standard and Poor's Composite Index—is a broader report, considered by many to be the best single indicator of the U.S. equities market. It consists of 500 large-cap stocks, including companies from various sectors—such as information technology, energy, industrials, financials, health care, consumer staples, and telecommunications—for a balanced representation of the overall large-cap equities market.

ENTREPRENEURSHIP AND NEW VENTURES

An Entrepreneurship of Evil

Bernard Madoff's scheme was not a new idea; it dates back to 1899, when a New Yorker, William Miller, cheated investors out of \$1 million. Miller's method was popularized by Boston businessman Charles Ponzi, who, in 1919 to 1920, swindled millions of dollars from unsuspecting investors; he expected to net a 50 percent profit in 90 days. Madoff's contribution to Ponzi-scheme history is the enormity of its size and duration: It reached more than \$50 billion, perhaps up to \$65 billion, and lasted at least 10 years. So convincing was his sales pitch that the \$100,000 minimum investment was paid willingly by a star-studded list, including the Wilpon family (owner of the New York Jets), actor Kevin Bacon, Baseball Hall of Famer Sandy Koufax, and Steven Spielberg, along with a host of banks, universities, churches, and charities.

Ponzi victims over the decades fit a certain pattern: Many are unsophisticated investors, do not rely on a professional representative, believe that unusually high returns are realistic, and place unfounded faith in personal relationships and tips that lure them into making bad decisions. That's how Ponzi connivers operate—by offering abnormally large returns, deflecting prying questions and doubts with personal reassurances and high dividends, and bolstering the scheme's allure by paying high returns to early investors by using new money raised from new clients. As word of high payoffs spreads, more new investors are attracted; otherwise, the scheme falls apart, and the investments disappear. Without an ever-growing pool of new clients, the payoff money runs dry.

Madoff's scheme collapsed when nervous investors, worried about the economic downturn in 2008, asked to withdraw their money. As new money ran dry, the fraud was soon exposed; a federal judge, calling the scheme especially evil, ordered that Bernard Madoff Investment Securities LLC be liquidated, and sentenced Madoff to a 150-year prison term. Meanwhile, victims have filed more than 15,000 claims against the fraud. Investor claims may be eligible for up to \$500,000 each from the Securities Investment Protection Corporation (SIPC), a private fund authorized by Congress



Steven Hirsch/Splash News/Newscom

to protect securities investors. Some of the massive losses, but certainly not all, may be recovered from the liquidated company's assets. Meanwhile, the end question from Madoff's evil remains unanswered: What percentage of losses will be recovered?¹⁶

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The NASDAQ Composite Because it considers more stocks, some Wall Street observers regard the **NASDAQ Composite Index** as one of the most useful of all market indexes. Unlike the Dow and the S&P 500, all NASDAQ-listed companies, not just a selected few, are included in the index for a total of approximately 3,000 firms, mostly in the U.S. but in other countries as well. However, it includes a high proportion of technology companies, including small-company stocks, and a smaller representation of other sectors—financial, consumer products, and industrials.

Dow Jones Industrial Average (DJIA) oldest and most widely cited market index based on the prices of 30 blue-chip, large-cap industrial firms on the NYSE

S&P 500 market index of U.S. equities based on the performance of 500 large-cap stocks representing various sectors of the overall equities market

Nasdaq Composite Index market index that includes all NASDAQ-listed companies, both domestic and foreign, with a high proportion of technology companies and small-cap stocks

The Russell 2000 Investors in the U.S. small-cap market are interested in the **Russell 2000 Index**—a specialty index that measures the performance of the smallest U.S. companies based on market capitalization. As the most quoted index focusing on the small-cap portion of the U.S. economy, its stocks represent a range of sectors such as financials, consumer discretionary, health care, technology, materials, and utilities.

Index-Matching ETFs Countless other specialty indexes exist for specific industries, countries, and economic sectors to meet investors’ diverse needs. Additionally, many exchange-traded funds are available to investors for duplicating (or nearly duplicating) the market performance of popular stock-market indexes. For example, one ETF, Standard & Poor’s Depository Receipts (SPDRS, known as *Spiders*), owns a portfolio of stocks that matches the composition of the S&P 500 index. Similarly the Fidelity® NASDAQ Composite Index® Tracking Stock holds a portfolio of equities for tracking the NASDAQ Composite Index.

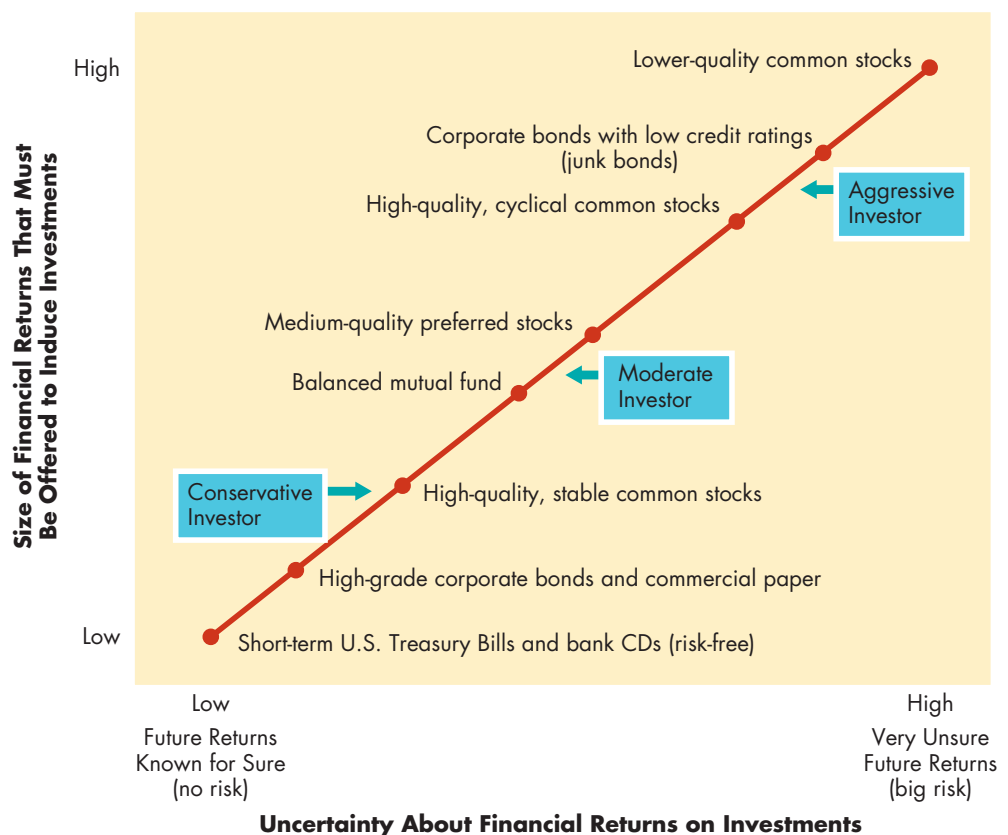
4 Describe the risk–return relationship and discuss the use of diversification and asset allocation for investments.

The Risk–Return Relationship

Individual investors have different motivations and personal preferences for safety versus risk. That is why, for example, some individuals and firms invest in stocks while others invest only in bonds. While all investors anticipate receiving future cash flows, some cash flows are more certain than others. Investors generally expect to receive higher returns for higher uncertainty. They do not generally expect large returns for secure, stable investments like government-insured bonds. Each type of investment, then, has a **risk–return (risk–reward) relationship**: Whereas safer investments tend to offer lower returns, riskier investments tend to offer higher returns (rewards).

Figure 16.3 shows the general risk–return relationship for various financial instruments, along with the types of investors they attract. Thus, conservative investors, who have a low tolerance for risk, will opt for no-risk U.S. Treasury Bills, or even intermediate-term high-grade corporate bonds that rate low in terms of risk on future

Figure 16.3 Potential Financial Returns Rise with Riskier Investments.
 Carl Beidelman, *The Handbook of International Investing* (Chicago, 1987), p. 133. © The McGraw-Hill Companies, Inc.



returns, but also low on the size of expected returns. The reverse is true of aggressive investors who prefer the higher risks and potential returns from long-term junk bonds and common stocks.¹⁷

Investment Dividends (or Interest), Appreciation, and Total Return

In evaluating potential investments, investors look at returns from dividends (or from interest), returns from price appreciation, and total return.

Dividends The returns from stock dividends are commonly referred to as the **current dividend yield** (or, in the case of interest from a loan, the **interest dividend yield**), and are figured by dividing the yearly dollar amount of dividend income by the investment's current market value. In 2011, for example, each share of AT&T stock was receiving annual dividends payments of \$1.72. If, on a particular day, the share price was \$31.80, the current yield would be 5.41% ($\$1.72/\31.80×100). This dividend can then be compared against current yields from other investments. Larger dividend yields, of course, are preferred to smaller returns.

Fantasy Stock Markets Enthusiasts of baseball, football, and hockey aren't the only fans energized by fantasy games. Fantasy stock markets are all the rage for learning how securities markets work, for trying your hand at various investment strategies, and earning a fantasy fortune (or going broke!). Internet-based games, including free ones such as *Wall Street Survivor* and *How the Market Works*, provide an investment experience that is educational, challenging, and entertaining. Starting with an initial sum in virtual cash with which to manage their own fantasy portfolio of real companies, participants must live with real market results. It's a learn-by-doing experience—using web-based symbol lookups to enter stock-ticker symbols, searching various information sources for research on companies of interest, making buy-and-sell decisions, and then discovering the financial results as real market prices change for the portfolio holdings. Many students and business practitioners are finding these “games” to be a valuable resource for learning the “how to” of online investing.

Price Appreciation Another source of returns depends on whether the investment is increasing or decreasing in dollar value. **Price appreciation** is an increase in the dollar value of an investment. Suppose, for example, you purchased a share of AT&T stock for \$31.80, then sold it one year later for \$33.40. The price appreciation is \$1.60 ($\$33.40 - 31.80$). This profit, realized from the increased market value of an investment, is known as a **capital gain**.

Total Return The sum of an investment's current dividend (interest) yield and capital gain is referred to as its total return. Total return cannot be accurately evaluated until it's compared to the investment that was required to get that return. Total return as a percentage of investment is calculated as follows:

$$\text{Total return (\%)} = (\text{Current dividend payment} + \text{Capital gain}) / \text{Original investment} \times 100.$$

Russell 2000 Index specialty index that uses 2,000 stocks to measure the performance of the smallest U.S. companies

Risk-Return (Risk-Reward) Relationship principle that safer investments tend to offer lower returns whereas riskier investments tend to offer higher returns (rewards)

Current/Interest Dividend Yield yearly dollar amount of income divided by the investment's current market value, expressed as a percentage

Price Appreciation increase in the dollar value of an investment at two points in time (the amount by which the price of a security increases)

Capital Gain profit realized from the increased value of an investment

To complete our AT&T example, the total return as a percentage of our one-year investment would be 10.44% $[(\$1.72 + \$1.60)/\$31.80 \times 100]$. Note that larger total returns are preferred to smaller ones.

Managing Risk with Diversification and Asset Allocation

Investors seldom take an extreme approach—total risk or total risk avoidance—in selecting their investments. Extreme positions attract extreme results; instead, most investors select a mixed portfolio of investments—some riskier and some more conservative—that, collectively, provides the overall level of risk and financial returns that feels comfortable. After determining the desired *risk-return* balance, they then achieve it in two ways: through *diversification* and *asset allocation*.

Diversification **Diversification** means buying several different kinds of investments rather than just one. For example, diversification as applied to common stocks means that you invest in stocks of several different companies. The risk of loss is reduced by spreading the total investment across different stocks because although any one stock may tumble, the chances are less that all of them will fall at the same time. More diversification is gained when assets are spread across a variety of investment alternatives—stocks, bonds, mutual funds, precious metals, real estate, and so on. Among the tragedies in recent years are sufferings of the lifelong employees who did not have diversified investments and, instead, had all their retirement funds invested in their firm's stock. This was an extremely risky position, as they sorrowfully learned. When their firm's stock took a free fall due to a market collapse or scandals, their retirement funds disappeared.

Asset Allocation **Asset allocation** is the proportion—the relative amounts—of funds invested in (or allocated to) each of the investment alternatives. You may decide for example, to allocate 50 percent of your funds to common stocks, 25 percent to a money market mutual fund, and 25 percent to a U.S. Treasury bond mutual fund. Ten years later, with more concern for financial safety, you may decide on a less risky asset allocation of 20 percent, 40 percent, and 40 percent in the same investment categories, respectively. In this example, the portfolio has been changed from moderate-risk to lower-risk investments for the purpose of preserving the investor's accumulated capital. The asset allocation was changed accordingly.

Performance Differences for Different Portfolios Once an investment objective with acceptable risk level is chosen, the tools of diversification and asset allocation are put to use in the investor's portfolio. A **portfolio** is the combined holdings of all the financial investments—stocks, bonds, mutual funds, real estate—of any company or individual.

Just like investors, investment funds have different investment objectives—ranging from aggressive growth/high risk to stable income/low volatility—and their holdings are diversified accordingly among hundreds of company stocks, corporate bonds, or government bonds that provide the desired orientation. The money in a diversified portfolio is allocated in different proportions among a variety of funds; if all goes according to plan, most of these funds will meet their desired investment objectives and the overall portfolio will increase in value.

5 Describe the various ways that firms raise capital and identify the pros and cons of each method.

Financing the Business Firm

If you invest wisely, you may earn enough money to start your own firm—but that's only the first step in the complicated process of financing a business. Every company needs cash to function. Although a business owner's savings may be enough to get a firm up and running, businesses depend on sales revenues to survive. When current sales revenues are insufficient to pay for expenses, firms tap into various other sources of funds, typically starting with the owners' savings—as discussed in Chapter 14, owners contribute funds, or paid-in capital, from their

own pockets. If a firm needs more money, they can turn to borrowing from banks, soliciting cash from private outside investors, or selling bonds to the public.

Secured Loans for Equipment

Money to purchase new equipment often comes in the form of loans from commercial banks. In a **secured loan (asset-backed loan)** the borrower guarantees repayment of the loan by pledging the asset as **collateral** to the lender. That is, if the borrower defaults, or fails to repay the loan, the bank can take possession of his or her assets and sell them to recover the outstanding debt. However, as we learned in the 2007–2009 recession, assets from loans defaulted by businesses and home buyers may have little or no value.

Principal and Interest Rates The amount of money that is loaned and must be repaid is called the **loan principal**. However, borrowers also pay the lender an additional fee, called **interest**, for the use of the borrowed funds. The amount of interest owed depends on an **annual percentage rate (APR)** that is agreed on between the lender and borrower. The interest amount is found by multiplying the APR by the loan principal.

Working Capital and Unsecured Loans from Banks

Firms need more than just fixed assets for daily operations; they need current, liquid assets available to meet short-term operating expenses such as employee wages and marketing expenses. The firm’s ability to meet these expenses is measured by its working capital:

$$\text{Working capital} = \text{Current assets} - \text{Current liabilities}$$

Positive working capital means the firm’s current assets are large enough to pay off current liabilities (see Chapter 14). Negative working capital means the firm’s current liabilities are greater than current assets, so it may need to borrow money from a commercial bank. With an **unsecured loan**, the borrower does not have to put up collateral. In many cases, however, the bank requires the borrower to maintain a *compensating balance*—the borrower must keep a portion of the loan amount on deposit with the bank in a non-interest-bearing account.

Firms with bad credit scores typically cannot get unsecured loans. Because access to such loans requires a good credit history, many firms establish a relationship with a commercial bank and, over time, build a good credit record by repaying loan principal and interest on time.

In extreme conditions, however, even a good credit history may not be enough. During the deepening recession, the cash shortages at most banks prevented loans of nearly any kind to business customers, thereby slowing down the economy even more. Even after vast injections of cash from TARP and other government sources, banks lagged far behind in supplying loans to meet working-capital needs of cash-strapped business borrowers.

Angel Investors and Venture Capital

Once a business has been successfully launched it needs additional capital for growth. Outside individuals who provide such capital are called **angel investors**. In

<p>Diversification purchase of several different kinds of investments rather than just one</p> <p>Asset Allocation relative amount of funds invested in (or allocated to) each of several investment alternatives</p> <p>Portfolio combined holdings of all the financial investments of any company or individual</p> <p>Secured Loan (Asset-Backed Loan) loan to finance an asset, backed by the borrower pledging the asset as collateral to the lender</p>	<p>Collateral asset pledged for the fulfillment of repaying a loan</p> <p>Loan Principal amount of money that is loaned and must be repaid</p> <p>Interest fee paid to a lender for the use of borrowed funds; like a rental fee</p> <p>Annual Percentage Rate (APR) one-year rate that is charged for borrowing, expressed as a percentage of the borrowed principal</p>	<p>Unsecured Loan loan for which collateral is not required</p> <p>Angel Investors outside investors who provide new capital for firms in return for a share of equity ownership</p>
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return for their investment, angel investors typically expect a sizable piece of ownership in the company (up to 50 percent of its equity). They may also want a formal say in how the company is run. If the firm is bought by a larger company or if it sells its stock in a public offering, the angel may receive additional payments.

Angel investors help many firms grow rapidly by providing what is known as **venture capital**—private funds from wealthy individuals or companies (see Chapter 3) that seek investment opportunities in new growth companies. In most cases, the growth firm turns to venture capital sources because they have not yet built enough credit history to get a loan from commercial banks or other lending institutions.

Sale of Corporate Bonds

Corporations can raise capital by issuing bonds. A **corporate bond** is a formal pledge (an IOU) obligating the issuer to pay interest periodically and repay the principal at maturity (a preset future date) to the lender. The federal government also issues bonds to finance projects and meet obligations, as do state and local governments (called *municipal bonds*).

Characteristics of Corporate Bonds The bondholder (the lender) has no claim to ownership of the company and does not receive dividends. However, interest payments and repayment of principal are financial obligations; payments to bondholders have priority over dividend payments to stockholders in cases of financial distress.

Each new bond issue has specific terms and conditions spelled out in a **bond indenture**—a legal document identifying the borrower’s obligations and the financial returns to lenders. One of the most important details is the **maturity date** (or **due date**), when the firm must repay the bond’s **face value** (also called **par value**, or the amount purchased) to the lender.

Corporate bonds have been traditionally issued to fund outstanding debts and major projects for various lengths of time. Short-term bonds mature in less than five years after they are issued. Bonds with 5- to 10-year lives are considered intermediate term, while anything over 10 years is considered long term. Longer-term corporate bonds are somewhat riskier than shorter-term bonds because they are exposed to greater unforeseen economic conditions that may lead to default.

Default and Bondholders’ Claim A bond is said to be in **default** if the borrower fails to make payment when due to lenders. Bondholders may then file a **bondholders’ claim**—a request for court enforcement of the bond’s terms of payment. When a financially distressed company cannot pay bondholders, it may seek relief by filing for **bankruptcy**—the court-granted permission not to pay some or all debts. After a restructured General Motors emerged from bankruptcy in 2009, the holders of GM’s \$24 billion in bonds continue to wonder how much payment, if any, they will recover from the financially strapped company.

Risk Ratings To aid investors in making purchase decisions, several services measure the default risk of bonds. Table 16.2, for example, shows the rating systems of two well-known services, Moody’s and Standard & Poor’s. The highest (safest) grades are AAA and Aaa, and the lowest are C and D, representing very speculative and highly risky bonds. Low-grade bonds are usually called *junk bonds*. Negative ratings do not necessarily keep issues from being successful. Rather, they raise the interest rates that issuers must offer to attract lenders.

Flawed Ratings Misread Recession Risks The financial meltdown of 2008 has raised questions about whether any good purpose is being served by credit-rating

TABLE 16.2 Bond Rating Systems

Rating System	High Grades	Medium Grades (Investment Grades)	Speculative	Poor Grades
Moody’s	Aaa, Aa	A, Baa	Ba, B	Caa to C
Standard & Poor’s	AAA, AA	A, BBB	BB, B	CCC to D

MANAGING IN TURBULENT TIMES

Staying Afloat in a Sea of Falling Home Values

While questions remain on causes of the U.S. credit crisis, consensus has emerged that two financial giants—Fannie Mae and Freddie Mac—contributed significantly to the downfall. Senator John McCain said the companies were the “catalyst—the match that started this forest fire.” Representative Henry Waxman, citing irresponsible investments and ignoring credit risks, noted that the companies’ “own risk managers warned time after time of the dangers of investing in the subprime market.” Unlike prime mortgages, subprime loans are made to high-risk borrowers.²⁰

In 2008, to support the housing market, the U.S. government took over these two companies, which had losses totaling over \$100 billion and which owned or guaranteed nearly \$6 trillion in outstanding home mortgage debt. The top executives at both companies were fired, and day-to-day operations were placed under control of the Federal Housing Finance Agency. The government also committed up to \$200 billion in bailout funds to each firm, if needed, to avoid further meltdown.²¹

Freddie Mac and Fannie Mae, also known as FM2, are federally backed, publicly traded companies chartered by Congress. They were created decades ago to keep the housing market flowing by making home mortgage money more available. FM2 buy mortgage loans from loan-making financial institutions, such as banks, then bundle them together into securities that are insured by FM2 and sold to investors. Before 1992, FM2 applied stricter credit standards, refusing to buy and resell subprime mortgages; banks that made subprime loans had to accept the



Matthew Cavanaugh/EPA/Newscom

Fannie Mae

risks by holding them. When lenders failed to repay, the failed loans became the bank’s loss. Since 1992, with FM2’s acceptance of subprime mortgages, lending risks have been transferred from banks to FM2 on a massive scale. By selling their subprime loans to FM2, banks receive new cash to lend without being saddled with the risky subprimes. As housing values continue to fall and loan defaults grow, the mortgage-backed securities issued by FM2 are under increasing risk of default, and the U.S. government faces prospects of repaying an ocean of money—perhaps more than \$1 trillion—to insured securities investors.²²

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agencies. Among other investors, California Public Employees Retirement Fund (Calpers), the nation’s largest public pension fund, has filed a suit against the three top agencies—Moody’s, Standard & Poor’s, and Fitch—charging losses caused by “wildly inaccurate and unreasonably high” credit ratings. Calpers officials relied on ratings for investments that turned sour—many failing altogether. Skepticism of agencies’ ratings has soared following the collapse of highly rated giants such as Lehman Brothers, Goldman Sachs, and Citigroup, along with high ratings on billions of dollars of mortgage-backed securities that eventually became toxic. Recent lawsuits, including those by the states of Ohio and Connecticut, accuse credit rating agencies of reckless assessments that misled investors.¹⁸

Highly Rated Securities Turn Toxic Mortgage-backed securities (MBS) became a trillion-dollar investment industry during the pre-2007 housing market boom years. Financial institutions bundled home mortgages into packages and resold

Venture Capital private funds from wealthy individuals seeking investment opportunities in new growth companies

Corporate Bond formal pledge obligating the issuer (the company) to pay interest periodically and repay the principal at maturity

Bond Indenture legal document containing complete details of a bond issue

Maturity Date (Due Date) future date when repayment of a bond is due from the bond issuer (borrower)

Face Value (Par Value) amount of money that the bond buyer (lender) lent the issuer and that the lender will receive upon repayment

Default failure of a borrower to make payment when due to a lender

Bondholders’ Claim request for court enforcement of a bond’s terms of payment

Bankruptcy court-granted permission for a company to not pay some or all debts

Mortgage-Backed Security (MBS) mortgages pooled together to form a debt obligation—a bond—that entitles the holder (investor) to cash that flows in from the bundled mortgages

them as securities to eager investors who trusted in the securities' risk ratings given by Moody's, Standard & Poor's, and Fitch. Each MBS is a group of mortgages bundled together to form a debt obligation—a bond—that entitles the holder (investor) to the cash that flows in from the mortgages. Unknown to investors, some \$3 trillion of MBSs contained subprime mortgages—high-risk loans to applicants with bad credit, low income, and low down payments—most of whom had received very high ratings (AAA) by credit-rating agencies. With flawed risk assessments, investors were left with little or nothing when the housing and financial markets collapsed.¹⁹

6 Identify the reasons a company might make an initial public offering of its stock and explain how stock value is determined.

Becoming a Public Corporation

Initial public offerings (IPOs)—the first sale of a company's stock to the general public—are a major source of funds that fuel continued growth for many firms, as well as introduce numerous considerations inherent in running a public company.

Going Public Means Selling Off Part of the Company

Private owners lose some control of the company when shares are sold to the public. Common shareholders usually have voting rights in corporate governance, so they elect the board of directors and vote on major issues put forth at the company's annual shareholders' meeting. Anyone owning a large proportion of the company's shares gains a powerful position in determining who runs the corporation and how.

At an extreme, a **corporate raider**—an investor conducting a type of hostile (unwanted) takeover—buys shares on the open market, attempting to seize control of the company and its assets. The raider then sells off those assets at a profit, resulting in the company's disappearance.

A company is ripe for raiding when its stock price falls so shares can be cheaply bought, although its assets still have high value.

Stock Valuation

There are many factors that affect a stock's value, which in turn affect the value of the business. In addition, different investors measure value differently, and their measurements may change according to circumstance. Because of the uncertainties involved in stock prices, investment professionals believe day-to-day prices to be a generally poor indicator of any stock's real value. Instead, a long-run perspective considers the company's financial health, past history of results and future forecasts, its record for managerial performance, and overall prospects for competing successfully in the coming years. Accordingly, any stock's value today looks beyond the current price and is based on expectations of the financial returns it will provide to shareholders during the long run.

Why Shares Are Different Prices In April 2011 the price of Google Inc. was about \$590 per share on the New York Stock Exchange, while GE shares traded at about \$20, and Delta Airlines shares were priced at about \$10. Berkshire Hathaway shares traded for \$125,000.²³



OVERSTREET/SPA/Newscom

In early 2011 Google shares were trading at \$586 per share.

Why such differences? One reason is supply and demand for each company’s shares; another is because some corporations want the shares to sell within a particular price range, say between \$20 and \$80, believing it will attract a larger pool of investors. If the price gets too high, many investors can’t afford to buy shares. A company can restore shares to the desired lower range by a **stock split**—a stock dividend paid in additional shares to shareholders. Here’s how it works. Suppose company X has 100,000 common shares outstanding that are trading at \$100 per share, but the company wants it priced in the \$20 to \$80 range. X can declare a 2-for-1 stock split, meaning the company gives shareholders one additional share for each share they own. Now X has 200,000 shares outstanding but its financial performance has not changed, so the stock price immediately falls to \$50 per share. Every shareholder’s investment value, however, is unchanged: they previously owned one share at \$100, and now they own two shares at \$50 each.

Comparing Prices of Different Stocks Consider a trading day in early May, 2011 when PepsiCo’s share price was \$69.31, while Coca-Cola was \$28.89 per share. Does the price difference mean that PepsiCo is a better company than Coca-Cola, because its shares are more expensive? Or does it mean that Coke shares are a better value because they can be bought at a lower price than PepsiCo’s? In fact, neither of these two reasons is correct. Share prices alone do not provide enough information to determine which is the better investment. Table 16.3 can help us make a better comparison with further information.

First, earnings per share (EPS) are greater for PepsiCo. Even though you pay more to own a PepsiCo share, earnings per dollar of investment are less than for Coke ($\$3.74 \text{ earnings}/\$69.31 \text{ investment} = \0.054 ; versus $\$1.80 \text{ earnings}/\$28.89 \text{ investment} = \0.062): PepsiCo’s earnings were more than 5 cents for each dollar of its share price, whereas Coca-Cola earned more than 6 cents. Coca-Cola generated more earnings power for each dollar of shareholder investment.

Now consider annual dividends paid to shareholders. The dividend yield from Coca-Cola was 1.84%. That is, the dividend payment amounted to a 1.84% return on the shareholder’s \$28.89 investment, or \$0.53 ($\$28.89 \times 1.84\%$). PepsiCo’s dividend payment was about \$2.04 ($\$69.31 \times 2.95\%$), representing a somewhat larger return (yield) on shareholder investment than Coca-Cola.

Based on this limited information, it’s not clear which of the two companies is the better investment. A more complete evaluation would compare historical performance consistency over a period of several years, along with indicators of each firm’s prospects for the future.

Market Capitalization

A widely used measure of corporate size and value is known as **market capitalization (market cap)**—the total dollar value of all the company’s outstanding shares, calculated as the current stock price multiplied by the number of shares outstanding. As indicated in Table 16.4, the investment industry categorizes firms according to size of capitalization.

Investors typically regard larger market caps as less risky, and firms with small market caps (small-cap firms) as being particularly risky investments.

TABLE 16.3 Financial Comparison: Coca-Cola and PepsiCo²⁴

	Coca-Cola	PepsiCo
Recent price	\$28.89	\$69.31
EPS	\$1.80	\$3.74
Dividend yield	1.84%	2.95%

TABLE 16.4 Corporation Sizes Based on Capitalization

Capitalization Category	Range of Capitalization
Micro-Cap	below \$250 million
Small-Cap	\$250–\$2 billion
Mid-Cap	\$2 billion–\$10 billion
Large-Cap	over \$10 billion

Initial Public Offering (IPO) first sale of a company’s stock to the general public

Stock Split stock dividend paid in additional shares to shareholders, thus increasing the number of outstanding shares

Market Capitalization (Market Cap) total dollar value of all the company’s outstanding shares

Corporate Raider investor conducting a type of hostile corporate takeover against the wishes of the company



In mid-2011 China's CNOOC Ltd. share price was \$17.98, and there were 44.67 billion common shares outstanding. Its market cap was over \$800 billion, making the oil-and-gas producer the largest company in the world.

Frederic J. Brown/AFP/Getty Images/Newscom

Choosing Equity Versus Debt Capital

Firms can meet their capital needs through two sources: debt financing (from outside the firm) or equity financing (putting the owners' capital to work).

Pros and Cons for Debt Financing Long-term borrowing from sources outside the company—**debt financing**—via loans or the sale of corporate bonds is a major component in most U.S. firms' financial planning.

Long-Term Loans Long-term loans are attractive for several reasons:

- Because the number of parties involved is limited, loans can often be arranged very quickly.
- The firm need not make public disclosure of its business plans or the purpose for which it is acquiring the loan. (In contrast, the issuance of corporate bonds requires such disclosure.)

Long-term loans also have some disadvantages. Borrowers, for example, may have trouble finding lenders to supply large sums. Long-term borrowers may also face restrictions as conditions of the loan. For example, they may have to pledge long-term assets as collateral or agree to take on no more debt until the loan is paid.

Corporate Bonds Bonds are attractive when firms need large amounts for long periods of time. The issuing company gains access to large numbers of lenders through nationwide bond markets. On the other hand, bonds entail high administrative and selling costs. They may also require stiff interest payments, especially if the issuing company has a poor credit rating. Bonds also impose binding obligations on the firm, in many cases for up to 30 years, to pay bondholders a stipulated sum of annual or semiannual interest, even in times of financial distress. If the company fails to make a bond payment, it goes into default.

Pros and Cons for Equity Financing Although debt financing often has strong appeal, **equity financing**—looking inside the company for long-term funding—is sometimes preferable. Equity financing includes either issuing common stock or retaining the firm's earnings.

The Expense of Common Stock The use of equity financing by means of common stock can be expensive because paying dividends is more expensive than paying bond interest. Interest paid to bondholders is a business expense and therefore a tax deduction for the firm. Payments of cash dividends to shareholders are not tax deductible.

Retained Earnings as a Source of Capital As presented in Chapter 14, *retained earnings* are net profits retained for the firm's use rather than paid out in dividends to stockholders. If a company uses retained earnings as capital, it will not have to borrow money and pay interest. If a firm has a history of reaping profits by reinvesting retained earnings, it may be very attractive to some investors. Retained earnings, however, mean smaller dividends for shareholders. This practice may decrease the demand for—and the price of—the company's stock.

7 Explain how securities markets are regulated.

Regulating Securities Markets

The U.S. government, along with various state agencies, plays a key role in monitoring and regulating the securities industry.

The Securities and Exchange Commission

The U.S. Securities and Exchange Commission (SEC) is the regulation and enforcement agency that oversees the markets' activities, including the ways securities are issued. The SEC was created in 1934 to prevent the kinds of abuses that led to the stock market crash of 1929. The SEC regulates the public offering of new securities by requiring that all companies file prospectuses before proposed offerings commence. To protect investors from fraudulent issues, a **prospectus** contains pertinent information about both the offered security and the issuing company. False statements are subject to criminal penalties.

The SEC also enforces laws against **insider trading**—the use of special knowledge about a firm for profit or gain. It is illegal, for example, for an employee of a firm to tell others about an anticipated event that may affect the value of that firm's stock, such as an acquisition or a merger, before news of that event is made public. Those in possession of such insider knowledge would have an unfair advantage over other investors.

Regulations Against Insider Trading

In March 2011 the U.S. Attorney began criminal trial in New York against Raj Rajaratnam, founder of Galleon Group, on charges that the billionaire fund manager profited from illegal stock tips with a network of financial insiders. Reports indicate the accused gained profits of up to \$60 million by using illicit information—confidential company information not available to the public—revealing that stock prices of various companies would be increasing or falling. In conjunction with his arrest in 2009, charges were leveled against 26 others in the case—executives and securities traders—nineteen of whom pleaded guilty. In May 2011, Rajaratnam was convicted on 14 charges and faces possible maximum prison sentences totaling up to 205 years. In addition to the criminal trial, he faces additional civil charges brought by the Securities and Exchange Commission. As a U.S. Attorney stated some years earlier, “Insider trading is a crime. Corporate executives are prohibited from enriching themselves while the public remains in the dark about the true financial condition of their companies.”²⁵

The SEC offers a reward to any person who provides information leading to a civil penalty for illegal insider trading. The courts can render such a penalty of up to three times the illegal profit that was gained, and the reward can, at most, be 10 percent of that penalty.

Along with the SEC's enforcement efforts, the stock exchanges and securities firms have adopted self-regulation by participating with the Financial Industry Regulatory Authority (FINRA) in detecting and stopping insider action, and violations of other industry regulations. Established in 2003, FINRA's mission is to protect U.S. investors by overseeing the nation's brokerage firms and securities representatives. The major U.S. stock markets are under contract that allows FINRA to regulate those markets by writing rules, examining securities firms, enforcing the rules, and enforcing federal securities laws as well.



Steven Hirsch/Splash News/Newscom

54-year old Raj Rajaratnam was sentenced to 11 years in federal prison after being convicted for insider trading.

Debt Financing long-term borrowing from sources outside a company

Equity Financing using the owners' funds from inside the company as the source for long-term funding

Prospectus registration statement filed with the SEC, containing information for prospective investors about a security to be offered and the issuing company

Insider Trading illegal practice of using special knowledge about a firm for profit or gain



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Continued from page 415

U.S. Cap and Trade Experiment Is Put on Hold

Amidst an unfavorable political climate, industry objections, and a suspicious EU experience, 2010 legislation to cap U.S. carbon emissions came to an abrupt halt in the Senate. It would have increased costs to businesses and consumers at a time of economic sluggishness, high unemployment, and burgeoning national debt. It would have included a market for trading U.S. emissions allowances. If the legislation had become law, the Chicago Climate Exchange (CCX), with voluntary trading launched in 2003, provided a ready-made market for the new emissions credits; 450 major organizations were CCX members, committed to meeting annual CO₂ reduction targets. Members had received allowances based on measured emissions levels. Thereafter, by exceeding scheduled targets, surplus reductions became unused allowances that could be sold, or banked for later use. Firms failing to meet targets had to purchase allowances on the CCX market.²⁶

Would the U.S. system avoid problems experienced in the EU system? Some say no, because emissions—unlike gold, cattle, and corn—cannot be measured accurately. Some EU companies are believed to be reporting false measurements; by initially exaggerating the firm's emissions, they receive an inflated number of allowances and gain bonus profits by selling the excess allowances. They can also inflate reported emissions reductions and sell the extra allowances for profit.²⁷ Critics also cite the unpredictability of allowance prices on the trading markets—costs for emitting a ton of carbon dioxide vary from below [euro]10 to more than [euro]30. Analysts insist that, until they trade near [euro]100, prices won't encourage serious investments for reducing CO₂ emissions.²⁸

While the EU experience remains controversial and the U.S. cap-and-trade program has stalled, others are going forward. China, for example, is planning to curb inflated greenhouse gas emissions from its expanding manufacturing industries. Striving for a 45 percent reduction of carbon discharges by 2020, climate officials are getting advice from EU leaders for developing China's centralized emissions trading program.²⁹

QUESTIONS FOR DISCUSSION

- 1 If the proposed 2010 legislation had become law, do you believe it would have been desirable for the U.S. cap-and-trade market to become part of a global (multinational) emissions-trading market? Explain why, or why not.
- 2 Should future U.S. emissions-trading markets be regulated? If yes, in what ways and by what regulatory agency? If no, identify possible risks that may result.
- 3 Suppose you are CEO of a firm whose activities are known to release CO₂ emissions. What factors would you consider in evaluating your possible opposition to mandatory emissions reductions? What factors would you consider in evaluating your support of mandatory cap-and-trade?
- 4 Suppose you are a potential investor in several companies in various industries. In what ways would your investment decisions be influenced by enactment of mandatory cap-and-trade legislation?
- 5 Consider a voluntary emissions reduction program that includes allowances trading, such as the Chicago Climate Exchange system, as an alternative to mandatory cap-and-trade. Can a voluntary program succeed in the United States? Explain why, or why not.

SUMMARY OF LEARNING OBJECTIVES MyBizLab

1. Explain the concept of the time value of money and the principle of compound growth. (pp. 416–418)

The time value of money, perhaps the single most important concept in business finance, recognizes the basic fact that, while it's invested, money grows by earning interest or yielding some other form of return. Time value stems from the principle of compound growth—the accumulative growth from interest paid to the investor over given time periods. With each additional time period, interest payments accumulate and earn more interest, thus multiplying the earning capacity of the investment.

2. Identify the investment opportunities offered by mutual funds and exchange-traded funds. (pp. 418–420)

As an alternative to buying stock, mutual funds and exchange-traded funds are popular because they offer attractive investment opportunities for various financial objectives and often do not require large sums of money for entry. In addition, the simple and easy transaction process makes them accessible to the public. It's relatively easy to open a mutual fund account online or by phone. There are numerous funds that meet any chosen financial objective. Three of the most common objectives are financial stability, conservative growth, and aggressive growth. ETFs offer three areas of advantage over mutual funds: They can be traded throughout the day like a stock, they have low operating expenses, and they do not require high initial investments. Because they are traded on stock exchanges (hence, “exchange traded”), ETFs can be bought and sold—priced continuously—any time throughout the day. Mutual fund shares, in contrast, are priced once daily, at the end of the day.

3. Describe the role of securities markets and identify the major stock exchanges and stock markets. (pp. 420–426)

The markets in which stocks and bonds are sold are called securities markets. By facilitating the buying and selling of securities, the securities markets provide the capital that companies rely on for survival. In primary securities markets, new stocks and bonds are bought and sold by firms and governments. *Existing* stocks and bonds are sold in the much larger secondary securities market, which is handled by such familiar bodies as the New York Stock Exchange, the NASDAQ market in the United States, various foreign exchanges such as the London Stock Exchange and the Tokyo Exchange, and by online trading with other stock exchanges around the globe.

4. Describe the risk–return relationship and discuss the use of diversification and asset allocation for investments. (pp. 426–428)

The risk–return relationship is the principle that investors expect to receive higher returns for riskier investments and lower returns for safer investments. Diversification

and asset allocation are tools for helping investors achieve the desired risk–return balance for an investment portfolio. *Diversification* means buying several different kinds of investments to reduce the risk of loss if the value of any one security should fall. *Asset allocation* is the proportion of overall money invested in each of various investment alternatives so that the overall risks for the portfolio are low, moderate, or high, depending on the investor's objectives and preferences.

5. Describe the various ways that firms raise capital and identify the pros and cons of each method. (pp. 428–432)

Firms often begin with the owner's personal savings. As more money is needed it is obtained from banks, cash from private investors, by issuing bonds, or selling stock. Long-term borrowing through loans or the issuing of bonds is attractive because they can be arranged quickly and do not require public disclosure of the borrower's business plans. However, lenders may place restrictions as conditions of the loan. Payments to bondholders have priority over dividend payments to stockholders. If the borrower fails to make a bond or loan payment, even in times of financial distress, the bond goes into default. Equity financing—issuing common stock or retaining the firm's earnings—can be expensive if dividends are paid because dividend payments are not a tax deduction for the firm, whereas interest paid on loans and bonds is a tax-deductible business expense. Going public by issuing common stock gives up part ownership to shareholders, resulting in less control over company issues by the company's founders. Angel investors, too, expect a sizable share of ownership and a formal say in how the company is run.

6. Identify the reasons a company might make an initial public offering of its stock and explain how stock value is determined. (p. 432–434)

The initial public offering (IPO)—the first sale of a company's stock to the general public—is a major source of funds for fueling the growth of many firms. IPOs reach far more potential investors, thereby providing access to a larger pool of funds than is available from the owner's personal funds and other private sources. A stock's real value is its market value—the current price of a share in the stock market. Market value reflects the amount that buyers are willing to pay for a share of the company's stock at any given time. However, the valuing of any stock today looks beyond the current price and is based on expectations of the financial returns it will provide to shareholders during the long run. A long-run perspective considers the company's financial health, past history of results and future forecasts, its record for managerial performance, and overall prospects for competing successfully in the coming years.

7. Explain how securities markets are regulated. (pp. 434–435)

The U.S. Securities and Exchange Commission (SEC) is the regulation agency that oversees the markets' activities. The SEC regulates the public offering of new securities by requiring companies to file prospectuses before proposed offerings commence. The prospectus contains information about the offered security and the

issuing company. False statements are subject to criminal penalties. The SEC also enforces laws against insider trading—the use of special knowledge about a firm for profit or gain. Along with the SEC's enforcement, the stock exchanges and securities firms have adopted self-regulation by participating with the Financial Industry Regulatory Authority (FINRA) in detecting and stopping violations of industry regulations.

KEY TERMS MyBizLab

- | | | |
|--|---|---|
| angel investors (p. 429) | electronic communication network (ECN) (p. 422) | no-load fund (p. 418) |
| annual percentage rate (APR) (p. 429) | equity financing (p. 434) | portfolio (p. 428) |
| asset allocation (p. 428) | exchange-traded fund (ETF) (p. 419) | price appreciation (p. 427) |
| bankruptcy (p. 430) | face value (par value) (p. 430) | primary securities market (p. 420) |
| bear market (p. 423) | initial public offering (IPO) (p. 432) | prospectus (p. 435) |
| blue-chip stock (p. 418) | insider trading (p. 435) | risk–return (risk–reward) relationship (p. 426) |
| bond indenture (p. 430) | interest (p. 429) | Russell 2000 Index (p. 426) |
| bondholders' claim (p. 430) | investment bank (p. 420) | S&P 500 (p. 424) |
| book value (p. 417) | load fund (p. 418) | secondary securities market (p. 420) |
| book-entry ownership (p. 423) | loan principal (p. 429) | secured loan (asset-backed loan) (p. 429) |
| bull market (p. 423) | market capitalization (market cap) (p. 433) | securities (p. 420) |
| capital gain (p. 427) | market index (p. 423) | Securities and Exchange Commission (SEC) (p. 420) |
| collateral (p. 429) | market value (p. 417) | securities markets (p. 420) |
| common stock (p. 417) | maturity date (due date) (p. 430) | stock (p. 417) |
| compound growth (p. 416) | mortgage-backed security (MBS) (p. 431) | stock broker (p. 422) |
| corporate bond (p. 430) | mutual fund (p. 418) | stock exchange (p. 420) |
| corporate raider (p. 432) | NASDAQ Composite Index (p. 425) | stock split (p. 433) |
| current/interest dividend yield (p. 427) | National Association of Securities Dealers Automated Quotation (NASDAQ) system (p. 422) | time value of money (p. 416) |
| debt financing (p. 434) | | unsecured loan (p. 429) |
| default (p. 430) | | venture capital (p. 430) |
| diversification (p. 428) | | |
| dividend (p. 418) | | |
| Dow Jones Industrial Average (DJIA) (p. 424) | | |

QUESTIONS AND EXERCISES

QUESTIONS FOR REVIEW

1. Explain the concept of the *time value of money*.
2. What do mutual funds and exchange-traded funds offer, and how do they work?
3. Identify the various characteristics of corporate bonds.
4. How does the market value of a stock differ from the book value of a stock?
5. How do firms meet their needs through debt financing and equity financing?

QUESTIONS FOR ANALYSIS

- After researching several stocks online, you notice that they have continually fluctuated in price. What might be the reason for this? Is a higher-priced stock a better investment than a lower-priced stock? What factors would you consider in purchasing stocks?
- Which type of fund do you think you would invest in, a mutual fund or an exchange-traded fund? What is the difference, and why would you favor one over the other?
- Suppose that you are a business owner and you need new equipment and immediate funds to meet short-term operating expenses. From what sources could you gain the capital you need, and what are some of the characteristics of these sources?

APPLICATION EXERCISES

- Go to <http://www.sec.gov> to research how a new security is approved by the Securities and Exchange Commission. What is the process involved and how long would it take? Next, contact a financial institution such as Merrill Lynch and request information about their procedures for issuing or reselling new securities. Share this information with your classmates.
- If you are not currently involved in investing, imagine that you are analyzing potential investments to build your portfolio. Create a mock portfolio with the investments you would obtain. How would you apply diversification and asset allocation to ensure that your risk–return balance is at a point at which you are comfortable?

BUILDING YOUR BUSINESS SKILLS

Market Ups and Downs

Goal

To encourage you to understand the forces that affect fluctuations in stock prices.

Background Information

Investing in stocks requires an understanding of the various factors that affect stock prices. These factors may be intrinsic to the company itself or part of the external environment.

- Internal factors relate to the company itself, such as an announcement of poor or favorable earnings, earnings that are more or less than expected, major layoffs, labor problems, new products, management issues, and mergers.
- External factors relate to world or national events, such as wars, recessions, weather conditions that affect sales, the Fed's adjustment of interest rates, and employment figures that are higher or lower than expected.

By analyzing these factors, you will often learn a lot about why a stock did well or why it did poorly. Being aware of these influences will help you anticipate future stock movements.

Method

Step 1

Working alone, choose a common stock that has experienced considerable price fluctuations in the past few years. Here are several examples (but there are many others): IBM, JPMorgan Chase, AT&T, Amazon.com, United Health Care, and Apple. Find the symbol for the stock (for example, JPMorgan Chase is JPM) and the exchange on which it is traded (JPM is traded on the NYSE).

Step 2

Use online searches to find a source that provides a historical picture of daily stock closings. Find your stock, and study its trading pattern.

Step 3

Find four or five days over a period of several months or even a year when there have been major price fluctuations in the stock. Then research what happened on that day that might have contributed to the fluctuation.

Step 4

Write a short analysis that links changes in stock price to internal and external factors. As you analyze the data, be aware that it is sometimes difficult to know why a stock price fluctuates.

Step 5

Get together with three other students who studied different stocks. As a group, discuss your findings, looking for fluctuation patterns.

FOLLOW-UP QUESTIONS

- Do you see any similarities in the movement of the various stocks during the same period? For example, did the stocks move up or down at about the same time? If so, do you think the stocks were affected by the same factors? Explain your thinking.
- Based on your analysis, did internal or external factors have the greater impact on stock price? Which factors had the more long-lasting effect? Which factors had the shorter effect?
- Why do you think it is so hard to predict changes in stock price on a day-to-day basis?

EXERCISING YOUR ETHICS: INDIVIDUAL EXERCISE

Are You Endowed with Good Judgment?

The Situation

Every organization faces decisions about whether to make conservative or risky investments. Let's assume that you have been asked to evaluate the advantages and drawbacks of conservative versus risky investments, including all relevant ethical considerations, by Youth Dreams Charities (YDC), a local organization that assists low-income families in gaining access to educational opportunities. YDC is a not-for-profit firm that employs a full-time professional manager to run daily operations. Overall, governance and policy making reside with a board of directors—10 part-time, community-minded volunteers who are entrusted with carrying out YDC's mission.

For the current year, 23 students receive tuition totaling \$92,000 paid by YDC. Tuition comes from annual fund-raising activities (a white-tie dance and a seafood carnival) and from financial returns from YDC's \$2.1 million endowment. The endowment has been amassed from charitable donations during the past 12 years, and this year it has yielded some \$84,000 for tuitions. The board's goal is to increase the endowment to \$4 million in five years to provide \$200,000 in tuition annually.

The Dilemma

Based on the finance committee's suggestions, the board is considering a change in YDC's investment policies. The current,

rather conservative, approach invests the endowment in low-risk instruments that have consistently yielded a 5-percent annual return. This practice has allowed the endowment to grow modestly (at about 1 percent per year). The remaining investment proceeds (4 percent) flow out for tuition. The proposed plan would invest one-half of the endowment in conservative instruments and the other half in blue-chip stocks. Finance committee members believe that—with market growth—the endowment has a good chance of reaching the \$4 million goal within five years. While some board members like the prospects of faster growth, others think the proposal is too risky. What happens if, instead of increasing, the stock market collapses and the endowment shrinks? What will happen to YDC's programs then?

QUESTIONS TO ADDRESS

1. Why might a conservative versus risky choice be different at a not-for-profit organization than at a for-profit organization?
2. What are the main ethical issues in this situation?
3. What action should the board take?

EXERCISING YOUR ETHICS: TEAM EXERCISE

Serving Two Masters: Torn Between Company and Client

The Situation

Employees in financial services firms are sometimes confronted by conflicting allegiances between the company and its clients. In managing customers' stock portfolios, for example, the best timing for buy and sell decisions for clients' financial positions may not be the most profitable for the financial manager's firm. Investment managers, as a result, must choose a "right" course of action for reconciling possible conflicting interests.

The Dilemma

George Michaels is a customer portfolio manager employed by Premier Power Investments Company, one of the top 10 financial services firms on the West Coast. His 35 clients—individual investors—have portfolios with market values ranging from \$400,000 to \$4 million in stocks, bonds, and mutual funds. Clients generally rely on George's recommendations to buy, sell, or hold each security based on his knowledge of their investment goals and risk tolerance, along with his experience in keeping up with market trends and holding down transaction costs. Premier Power Investments

Company earns sales commissions ranging from 2 percent to 4 percent of market value for each buy and sell transaction.

On Monday morning, George's boss, Vicky Greene, informs George that due to Premier Power Investments Company's sagging revenues, it is to everyone's benefit to increase the number of transactions in customers' portfolios. She suggests that he find some different and attractive securities to replace existing securities for his customers. As George thinks about possible ways for accelerating his buy and sell recommendations, he has qualms about the motivation behind Vicky's comments. He is unsure what to do.

Team Activity

Assemble a group of four to five students and assign each group member to one of the following roles:

- George Michaels (employee)
- Vicky Greene (employer)
- Portfolio owner (customer)
- Owner (one of many outside shareholders of Premier Power Investments Company)
- SEC representative (use this role only if your group has at least five members)

ACTION STEPS

- 1 Before hearing any of your group's comments on this situation, and from the perspective of your assigned role, do you think there are any ethical issues with this situation? If so, write them down.
- 2 Return to your group and reveal any ethical issues that were identified by each member. Be especially aware to see if the different roles resulted in different kinds of ethical issues. Why might role differences result in dissimilar priorities on ethical issues?
- 3 For the various ethical issues that were identified, decide as a group which one is the most important for Premier Power Investments to resolve. Which issue is second in importance?
- 4 From an ethical standpoint, what does your group finally recommend be done to resolve the most important ethical issue? To resolve the second most important ethical issue?

VIDEO EXERCISE MyBizLab**Capital Advisors****Learning Objectives**

The purpose of this video is to help you:

- 1 Explain how companies use debt and equity to finance their operations.
- 2 Describe the advantages and disadvantages of debt and equity financing.
- 3 Understand how individuals make investment decisions over their lifetime.

Synopsis

While many businesses will remain small, many entrepreneurs wish to expand their operations, yet lack the money to do so. Companies may fund their expansion through issuing securities (stocks and bonds) or finding venture capital. While issuing securities provides the money needed for a company to grow, it also provides an investment opportunity for individuals and businesses. Investing in securities can allow an investor to build wealth through the accumulation of income or appreciation in value. Those who wish to purchase stock may consider income, blue chip, growth, cyclical, or defensive stocks, depending on their investment objectives. A more balanced portfolio may be achieved through additional investment in secured or unsecured corporate bonds. While some investors prefer to select individual securities for their portfolios, many others rely on mutual funds. Mutual funds are professionally managed portfolios of securities. They provide diversification of risk and greater liquidity than investment in individual stocks or bonds. However, investors in mutual funds

will pay a portion of their earnings for management expenses. By carefully considering their investment options, individuals may invest in securities and build wealth for the future.

DISCUSSION QUESTIONS

- 1 What are the two general options for companies that wish to raise money for expansion?
- 2 What are the advantages and disadvantages of bonds as a way of raising capital?
- 3 What are the advantages and disadvantages of stocks as a way of raising capital?
- 4 What questions should an investor ask before investing in securities?
- 5 How do investment decisions change over a client's lifetime?

Online Exploration

The website of the Securities and Exchange Commission describes a threefold mission: protecting investors; maintaining fair, orderly, and efficient markets; and facilitating capital formation. As people depend on the securities markets to save for retirement, pay for college, and allow for the purchase of a home, protecting investors is central to the commission's activities. The SEC's investor website (www.investor.gov) provides a wealth of information for those who are considering investing in the market, including suggestions for investing across the life cycle, financial calculators, and worksheets. From the "Introduction to the Markets" link, click on the option "Roadmap to Saving and Investing". The first step in creating a financial plan is establishing goals. Identify at least three tools for setting financial goals.

END NOTES

- ¹ John Carey, "House Passes Carbon Cap-and-Trade Bill," *Bloomberg Businessweek*, June 26, 2009, at http://www.businessweek.com/blogs/money_politics/archives/2009/06/house_passes_ca.html.
- ² "Advantages and Disadvantages of Mutual Funds," *The Motley Fool*, at <http://www.fool.com>, accessed February

11, 2008; "Who Pays for Cap and Trade?" *The Wall Street Journal*, March 9, 2009, at <http://online.wsj.com/article/SB123655590609066021.html>.

- ³ "Why Exchange-Traded Funds?" *Yahoo! Finance Exchange-Traded Funds Center*, at <http://finance.yahoo.com/etf/education/02>, on January 16 2008.

- ⁴ Andrew Bary, "Embracing ETFs," *Barron's*, November 15, 2010, pages 29–34.
- ⁵ *Ibid.*
- ⁶ "U.S. Investment Banking Era Ends," *UPI.com*, September 22, 2008, at http://www.upi.com/Business_News/2008/09/22/US-Investment-banking-era-ends/UPI-96221222086983/.
- ⁷ New York Stock Exchange, July 22, 2009, at <http://www.nyse.com>.
- ⁸ "The State of Qatar Launches 'Qatar Exchange' as it Signs Today Formal Terms of Strategic Partnership with NYSE Euronext," *NYSE News Release*, June 19, 2009, at <http://www.nyse.com/press/1245406656784.html>.
- ⁹ "List of Stock Exchanges," Based on http://en.wikipedia.org/wiki/List_of_stock_exchanges.
- ¹⁰ "Chronology—Recent Consolidation Moves by Exchanges," *Reuters*, February 13, 2008, at <http://www.reuters.com/article/idUSB27064320070223>; Randy Grossman, "The Inevitable Stock Exchange Consolidation," *Advanced Trading*, June 16, 2006, at <http://www.advancedtrading.com/showArticle.jhtml?articleID=196900426>.
- ¹¹ "Electronic Communication Networks (ECNs)," *U.S. Securities and Exchange Commission*, at <http://www.sec.gov/answers/ecn.htm>, accessed July 3, 2008; "Electronic Communication Network," *InvestorWords.com*, at http://www.investorwords.com/1679/Electronic_Communication_Network.html, accessed July 3, 2008.
- ¹² "Electronic Communication Networks (ECNs)," *U.S. Securities and Exchange Commission*, at <http://www.sec.gov/answers/ecn.htm>, accessed July 3, 2008; "Island ECN—How Island Works," at <http://ecommerce.hostip.info/pages/636/Island-ECN-HOW-ISLAND-WORKS.html>, accessed January 16, 2008.
- ¹³ "Just 25% Recognize That Most Americans Are Investors," *Rasmussen Reports*, February 11, 2011, at http://www.rasmussenreports.com/public_content/business/general_business/february_2011/just_25_recognize_that_most_americans_are_investors.
- ¹⁴ Steven E. Norwitz (editor), "A Bear Market of Historic Proportions," *T. Rowe Price Report*, Spring 2009, page 1.
- ¹⁵ "Dow Jones to Change Composition of the Dow Jones Industrial Average," *Dow Jones (Press Release)*, June 1, 2009, at <http://www.djindexes.com/mdsidx/html/pressrelease/press-release-archive.html#20090601>.
- ¹⁶ Alex Altman, "A Brief History of: Ponzi Schemes," *Time*, January 8, 2009, at <http://www.time.com/time/magazine/article/0,9171,1870510,00.html>; "How Much Did Madoff Scheme Cost?" *CNNMoney.com*, January 5, 2009, at <http://money.cnn.com/2009/01/02/news/companies/madoff/index.htm>; "The Man Who Figured Out Madoff's Scheme," *CBS News*, June 14, 2009, at <http://www.cbsnews.com/stories/2009/02/27/60minutes/main4833667.shtml>; Associated Press, "Investors Named in Madoff List," *Columbia Daily Tribune*, February 5, 2009, page 7B; Diana B. Henriques, "Claims Over 15,400 in Fraud by Madoff," *The New York Times*, July 9, 2009, at <http://www.nytimes.com/2009/07/10/business/10madoff.html?ref=nyregion>.
- ¹⁷ Carl Beidelman, *The Handbook of International Investing* (Chicago, 1987), p. 133.
- ¹⁸ Ajay Kumar, "Can We Trust Moody's, Fitch, Standard & Poor?" *CommodityOnline*, at http://www.commodityonline.com/printnews.php?news_id=15888, accessed July 22, 2009; David Evans and Caroline Salas, "Flawed Credit Ratings Reap Profits as Regulators Fail (Update 1)," *Bloomberg.com*, April 29, 2009, at <http://www.bloomberg.com/apps/news?pid=20670001&sid=au4oIx.judz4>; Leslie Wayne, "Calpers Sues over Ratings of Securities," *The New York Times*, July 15, 2009, at <http://www.nytimes.com/2009/07/15/business/15calpers.html>; David Segal, "Ohio Sues Rating Firms for Losses in Funds," *The New York Times*, November 20, 2009, at <http://www.nytimes.com/2009/11/21/business/21ratings.html>; Lynn Hume, "Connecticut AG Sues All Three Rating Agencies, The Bond Buyer, July 31, 2008, at http://www.bondbuyer.com/issues/117_145/-292250-1.html.
- ¹⁹ "Mortgage-Backed Securities," *U.S. Securities and Exchange Commission*, June 25, 2007, at <http://www.sec.gov/answers/mortgage securities.htm>; "Mortgage-Backed Security," *riskglossary.com*, at http://www.riskglossary.com/link/mortgage_backed_security.htm, accessed July 24, 2009.
- ²⁰ David Goldman, "Fannie, Freddie Ignored Warning Signs," *CNNMoney.com*, December 9, 2008, at http://money.cnn.com/2008/12/09/news/economy/fannie_freddie_hearing/index.htm?postversion=2008120910.
- ²¹ Glenn Somerville, "U.S. Seizes Fannie, Freddie, Aims to Calm Markets," *Reuters*, September 7, 2008, at <http://www.reuters.com/article/newsOne/idUSN0527106320080907>.
- ²² Tara Kaprowy, "Root Causes of Financial Crisis Complicated," *The Sentinel Echo*, September 30, 2008, at http://www.sentinel-echo.com/local/local_story_27415452.html; Neil Irwin, "Fed to Pump \$1.2 Trillion into Markets," *The Washington Post*, March 19, 2009, at <http://www.washingtonpost.com/wp-dyn/content/article/2009/03/18/AR2009031802283.html>; David Goldman, "Fannie, Freddie Ignored Warning Signs," *CNNMoney.com*, December 9, 2008, at http://money.cnn.com/2008/12/09/news/economy/fannie_freddie_hearing/index.htm?postversion=2008120910; Joe Reeser, "The Real Cause of the Current Financial Crisis," *OpEdNews.com*, September 27, 2008, at <http://www.opednews.com/articles/The-Real-Cause-of-the-Curr-by-Joe-Reeser-080926-83.html>.
- ²³ New York Stock Exchange at <http://www.nyse.com/>.
- ²⁴ *CNN Money.com*, May 6, 2011 at <http://investing.money.msn.com/investments/company-report?symbol=US%3aPEP>; *CNN Money.com*, May 6, 2011 at <http://investing.money.msn.com/investments/company-report?symbol=CCE>.
- ²⁵ *Reuters*, "Rajaratnam Insider Trading Trial Begins," March 9, 2011, *Huffington Post*, at http://www.huffingtonpost.com/2011/03/09/rajaratnam-trial_n_833326.html; U.S. Department of Justice, "Joseph P. Nacchio Indicted by Federal Grand Jury: Former Chief Executive Officer of Qwest Communications Charged with Insider Trading, Selling Over \$100 Million Stock," (December 20, 2005), at http://lawprofessors.typepad.com/whitecollarcrime_blog/files/nacchio_indictment.pdf.
- ²⁶ Marianne Lavelle, "A U.S. Cap-and-Trade Experiment To End," *National Geographic News*, November 3, 2010,

at <http://news.nationalgeographic.com/news/news/energy/2010/11/101103-chicago-climate-exchange-cap-and-trade-election/>; “US Senate Drops Bill to Cap Carbon Emissions,” *GuardianNews*, July 23, 2010, at <http://www.guardian.co.uk/environment/2010/jul/23/us-senate-climate-change-bill>; Gerard Wynn and Pete Harrison, “U.S. Cap and Trade Plans Risk European Mistakes,” *Reuters*, May 15, 2009, at <http://www.reuters.com/article/2009/05/15/us-carbon-usa-analysis-idUSTRE54E4EZ20090515>; Nathaniel Gronewold, “Chicago Climate Exchange Closes Nation’s First Cap-And-Trade System but Keeps Eye to the Future,” *The New York Times*, January 3, 2011, at <http://www.nytimes>

[.com/cwire/2011/01/03/03climatewire-chicago-climate-exchange-closes-but-keeps-ey-78598.html](http://www.nytimes.com/cwire/2011/01/03/03climatewire-chicago-climate-exchange-closes-but-keeps-ey-78598.html).

- ²⁷ Nathaniel Gronewold, “3. Markets: Europe’s Carbon Emissions Trading—Growing Pains or Wholesale Theft?” *E&E Publishing LLC*, January 31, 2011, at <http://www.eenews.net/public/climatewire/2011/01/31/3>.
- ²⁸ Martin Livermore, “Cap and Trade Doesn’t Work,” *The Wall Street Journal*, June 25, 2009, at <http://online.wsj.com/article/SB124587942001349765.html>.
- ²⁹ “EU Advises China on Cap and Trade,” *Carbon Positive*, November 8, 2010, at <http://www.carbonpositive.net/viewarticle.aspx?articleID=2170>.