

CHAPTER

11

SECTION 1

Savings and Investment

SECTION 2

Investing in a Market Economy

SECTION 3

Buying and Selling Stocks

SECTION 4

Bonds and Other Financial Instruments

CASE STUDY

The Rise and Fall of Dot-Coms

Financial Markets

CONCEPT REVIEW

Voluntary exchange is a trade in which both parties involved believe that what they are getting is worth more than what they are giving up.

CHAPTER 11 KEY CONCEPT

The **financial system** consists of institutions, such as banks, insurance markets, bond markets, and stock markets, that help transfer funds between savers and investors.

WHY THE CONCEPT MATTERS

Do you have a savings account? If so, you play a very important role in our economy. Your savings—what you gave up to get those assets—will be borrowed and invested by businesses and the government to build factories, offices, roads, and so on. The jobs and new products and services created by these investments, in turn, further help to fuel the nation's economy.

Online Highlights

More at ClassZone.com

Economics Update

Go to **ECONOMICS UPDATE** for chapter updates and current news on investing in Internet companies. (See Case Study, pp. 344–345.) ▶

SMART Grapher

Go to **SMART GRAPHER** to complete graphing activities in this chapter.

Interactive Review

Go to **INTERACTIVE REVIEW** for concept review and activities.



"The good news is we've financed another dot.com for no fathomable reason."

Source: www.CartoonStock.com

Why did the dot-com companies experience such a rapid rise and fall? See the Case Study on pages 344–345.

Savings and Investment

OBJECTIVES

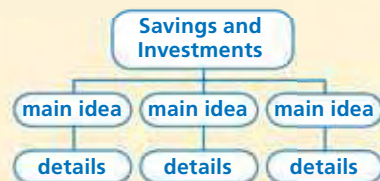
- In Section 1, you will
- identify what constitutes the financial system
 - describe the various financial intermediaries
 - explain how economists categorize the various markets where financial assets are sold

KEY TERMS

savings, p. 318
 investment, p. 318
 financial system, p. 318
 financial asset, p. 319
 financial market, p. 319
 financial intermediary, p. 319
 mutual fund, p. 320
 capital market, p. 322
 money market, p. 322
 primary market, p. 322
 secondary market, p. 322

TAKING NOTES

As you read Section 1, complete a hierarchy diagram to track main ideas and supporting details. Use the Graphic Organizer at [Interactive Review @ ClassZone.com](#)



The Financial System

KEY CONCEPTS

QUICK REFERENCE

Savings is income not used for consumption.

Investment is the use of income today that allows for a future benefit.

The **financial system** is all the institutions that help transfer funds between savers and investors.

There are two things you can do with your money—spend it or save it. **Savings** is income not used for consumption, in other words not spent on immediate wants. Savings that are put to use are investments. In general, **investment** is the use of income today in a way that allows for a future benefit. More specifically, *economic investment* refers to money lent to businesses—to finance the construction of a new factory, for example. *Personal investment* refers to the act of individuals putting their savings into financial assets, such as CDs, stocks, bonds, or mutual funds.

Consider what happens when you put money in a savings account. Through this act, you benefit—your savings account earns interest—but others do too. By saving, you make funds available for the bank to lend. Borrowers use these funds for many purposes, such as investing in new businesses or in new equipment for established businesses. The **financial system**, which consists of institutions such as banks, insurance markets, bond markets, and stock markets, allows for this transfer of funds between savers and investors.

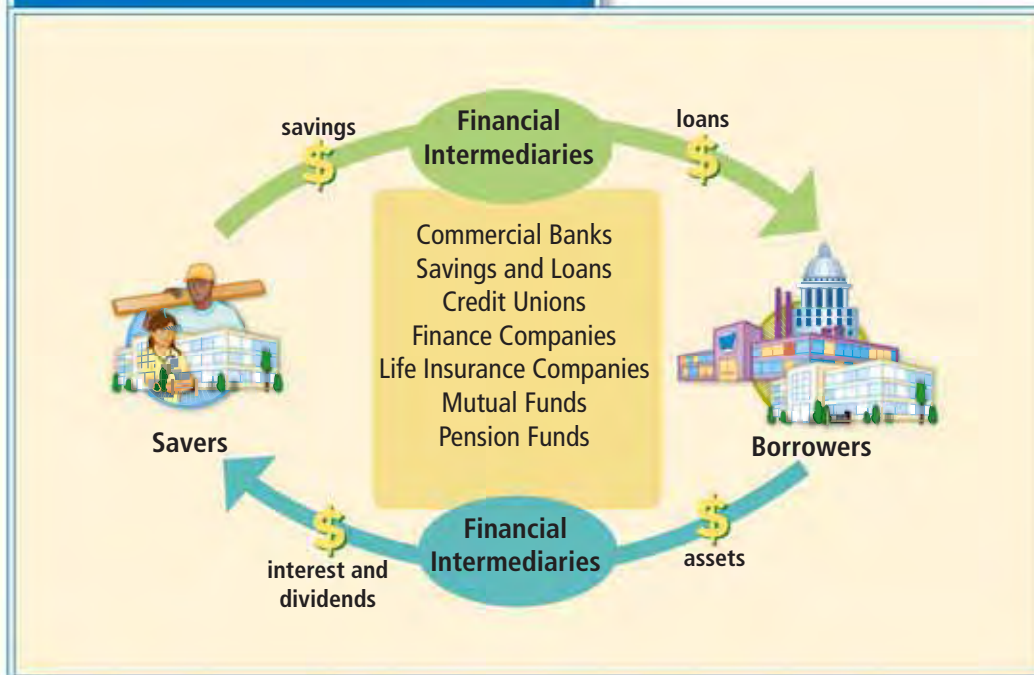


ATM Deposits Using an ATM to make deposits makes saving easy and convenient.

Economics Update

Find an update on saving at [ClassZone.com](#)

FIGURE 11.1 The Financial System



ANALYZE CHARTS

1. What do savers get in exchange for the funds they deposit with financial intermediaries?
2. Why do you think that financial intermediaries perform their vital function? Think back to Chapter 10 if you need help.

Bringing Savings and Investment Together

Individuals and businesses can save surplus funds in many ways, including savings accounts at commercial banks or S&Ls, certificates of deposit (CDs), corporate or government bonds, and stocks. The agent receiving these funds is a borrower, who issues savers written confirmation of the transaction. This written confirmation is called a **financial asset**, or a claim on the property of the borrower.

Sometimes savers and borrowers come together directly in a **financial market**, a situation in which buyers and sellers exchange particular types of financial assets. For example, an individual or business might buy corporate bonds or shares of stock. More often, however, financial intermediaries bring savers, borrowers, and financial assets together. A **financial intermediary** is a financial institution that collects funds from savers and then invests these funds in loans and other financial assets. Figure 11.1 shows how funds flow from savers to investors through the financial markets and financial intermediaries that make up the financial system.

QUICK REFERENCE

A **financial asset** is a claim on the property of the borrower.

A **financial market** is where buyers and sellers exchange financial assets.

A **financial intermediary** is an institution that collects funds from savers and invests the funds in financial assets.

APPLICATION Applying Economic Concepts

- A.** Look again at the example opposite of a person depositing money into a savings account. How is this an example of Adam Smith's "invisible hand"?

Financial Intermediaries

KEY CONCEPTS

Financial intermediaries bring savers and investors together. In Chapter 10, you learned about one group of financial intermediaries—commercial banks, S&Ls, and credit unions. These financial institutions take in deposits from savers and provide loans to individuals and businesses. Many offer other financial assets as well.

Other common financial intermediaries include finance companies, which make small loans; pension funds, which invest money for groups of workers; and life insurance companies, which invest funds collected from policyholders. A **mutual fund** is a pool of money managed by an investment company that gathers money from individual investors and purchases a range of financial assets. Investors own shares of the entire fund based on the amount of their investment. These institutions gather their money in different ways and provide many different financial assets to a variety of investors.

QUICK REFERENCE

A **mutual fund** is an investment company that gathers money from individual investors and purchases a range of financial assets.

The New York Stock Exchange Stocks are an important element of the assets that make up a mutual fund.



EXAMPLE Banking Financial Intermediaries

This group of financial intermediaries includes commercial banks, S&Ls, and credit unions. All of these institutions provide checking and savings accounts. Depositors earn interest on their savings deposits and some checking deposits. Most also offer CDs and money market deposit accounts that pay slightly higher rates of interest. (Figure 11.2 explains how savers earn money from interest.) The federal government insures deposits, including CDs and money market accounts, up to \$100,000 per depositor in any given bank.

These institutions lend a portion of their deposits to borrowers. Banks charge borrowers a higher rate of interest than they pay to savers and hope to earn a profit. The loans are financial assets to the bank. If a borrower does not pay back the loan on time, the bank may repossess the property, such as a home or a car.

Deregulation has allowed banks to offer other financial assets, such as money market mutual funds, stocks, bonds, and insurance. The federal government does not insure funds invested in these financial assets.

EXAMPLE Nonbank Financial Intermediaries

This group of financial intermediaries includes finance companies, mutual funds, pension funds, and life insurance companies. Finance companies make loans to households and small businesses. Generally, the loans are under \$2,000 and are paid back in monthly installments, including interest, over a few years.

A mutual fund pools money from many personal investors. In return, each investor receives shares in a fund that is made up of a large number and variety of stocks, bonds, or other financial assets. Mutual funds make it easier and more affordable for individual investors to own a wide variety of financial assets. Once investors purchase shares of a fund, they allow its managers to make investment decisions.

Pension funds allow employees to save money for retirement and sometimes include contributions from employers. The pension fund then invests these pooled contributions in various financial assets that will increase in value and provide workers with more money when they retire.

Life insurance companies allow individuals to accumulate savings by building cash values and protect against losses from death or disability. Just as banks lend some of their deposits, insurance companies lend or invest some of the income earned from policyholders in a variety of financial assets.

MATH CHALLENGE

FIGURE 11.2 Calculating Interest

Banks pay savers interest in order to use their money. A saver's initial deposit is called the principal. Simple interest is the interest paid on the principal alone. Compound interest is paid on the principal plus any earned interest. The following steps show how an annual rate of 5 percent interest is paid on the principal (\$1,000) over three years.

Year 1 Simple interest is calculated using the following formula:

$$\text{Principal} \times \text{Interest rate} = \text{Interest earned} \quad \$1,000 \times .05 = \$50.00$$

Year 2 The amount in this account is now \$1,050.00. Compound interest, which is paid on the principal plus the earned interest, is calculated as follows:

$$(\text{Principal} + \text{Year 1 interest}) \times \text{Interest rate} = \text{Interest earned} \quad (\$1,000.00 + \$50.00) \times .05 = \$52.50$$

Year 3 There is now \$1,102.50 in the account. Interest continues to compound.

$$(\text{Principal} + \text{Year 1 interest} + \text{Year 2 interest}) \times \text{Interest rate} = \text{Interest earned} \quad (\$1,000.00 + \$50.00 + \$52.50) \times .05 = \$55.13$$

After three years, the total in the account is \$1,157.63.

Using a Formula Instead of using the multiple steps shown above, you can calculate the total value of an account using the following formula (wherein P=principal, r=interest rate, and t=number of years):

$$P(1+r)^t = \text{total value} \quad \$1,000.00(1+.05)^3 = \$1,157.63$$

NEED HELP?



Math Handbook, "Calculating Compound Interest," page R6

APPLICATION Comparing and Contrasting

B. How is a pension fund like a savings account? How is it different?

Financial Asset Markets

KEY CONCEPTS

The different financial assets discussed in this section are bought and sold on various financial markets. Economists tend to categorize these markets based on two factors—time (how long the loan is for) and whether the financial assets can be resold. Based on time, economists distinguish between the **capital market**, the market for buying and selling long-term financial assets, and the **money market**, the market for buying and selling short-term financial assets. In regard to resalability, economists distinguish between the **primary market**, which is the market for buying newly created financial assets directly from the issuing entity, and the **secondary market**, which is the market where financial assets are resold.

QUICK REFERENCE

The **capital market** is where long-term financial assets are bought and sold.

The **money market** is where short-term financial assets are bought and sold.

The **primary market** is for buying financial assets directly from the issuer.

The **secondary market** is where financial assets are resold.

FACTOR 1 Time

There are two time-sensitive markets. Capital markets are markets where assets are held for longer than a year. Some examples of assets sold on the capital market include certain kinds of securities, namely stocks and bonds, mortgages, and long-term CDs. Because these loans are for longer periods of time, the money may be invested in projects that require large amounts of capital, such as buying homes, building new factories, retooling established factories, or financing government projects.

Money markets are markets where loans are made for less than a year. Examples of assets traded in these markets include short-term CDs that depositors can redeem in a few months and Treasury bills, which allow the U.S. government to borrow money for short periods of time.



11A Money Market Deposit Account \$2,500 minimum	2.50%
Passbook Savings Account	3.00%
Statement Savings Account	3.00%
91 Day Money Market Certificate \$2,500 minimum	3.60%
182 Day Money Market Certificate \$2,500 minimum	3.90%
1 Year Certificate \$1,000 minimum	4.35%
1-1/2 Year Certificate \$1,000 minimum	4.50%
2 Year Certificate \$1,000 minimum	4.60%

Return on Investment Time is an important factor in the level of return for many investments.

FACTOR 2 Resalability

There also are two kinds of markets based on whether the financial assets can be resold. Primary markets are markets for financial assets that can be redeemed only by the original buyer. Examples include savings bonds and small denomination CDs. The term *primary market* also refers to the market where the first issue of a stock is sold to the public through investment bankers.

Secondary markets are resale markets for financial assets. These markets offer liquidity to personal investors. So, investors are able to turn their assets into cash relatively quickly. Stocks and bonds, which you'll learn more about later in this chapter, are two of the most prominent financial assets sold on the secondary market.

APPLICATION Analyzing Effects

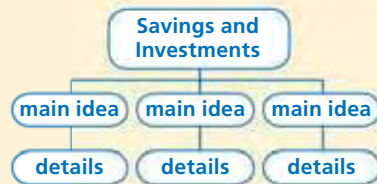
C. Why are stocks and bonds part of the capital market and the secondary market?

SECTION 1 Assessment

REVIEWING KEY CONCEPTS

- Explain the difference between the terms in each of these pairs.
 - savings investment
 - capital market money market
 - primary market secondary market
- What is the purpose of the financial system?
- Why do banks receive financial assets when they make loans?
- How does a mutual fund serve as a financial intermediary?
- What determines whether a loan is part of the capital market or the money market?

6. Using Your Notes What is the relationship between financial intermediaries and the financial system? Refer to your completed hierarchy diagram.



Use the Graphic Organizer at [Interactive Review @ ClassZone.com](#)

CRITICAL THINKING

- 7. Categorizing Information** Which of the following are banking financial intermediaries and which are nonbanking financial intermediaries?
 - Consumer Finance Company
 - Family Life Insurance Company
 - First National Bank
 - Home Savings and Loan
 - Investors' Mutual Fund
 - Employee Credit Union
 - Employee Pension Fund
- 8. Making Inferences** A local bank offers savings accounts that have no minimum balance requirement and pay 3 percent interest per year. Account holders can withdraw any amount of money from their accounts at any time. The bank also offers money market accounts that require a \$500 minimum balance and pay 4 percent interest each year. Account holders are allowed two withdrawals per month, but each must be for at least \$100. Why does the money market account pay a higher interest rate?
- 9. Applying Economic Concepts** Suppose that you deposit \$100 into your savings account, which earns 3 percent interest per year. Use what you've learned about calculating interest to determine how much money you'll have in your account at the end of one year and at the end of six years.
- 10. Challenge** Why might a decrease in household savings have an adverse effect on small businesses in a local community?

ECONOMICS IN PRACTICE



Stock certificates

Identifying Markets

Consider how economists categorize financial markets. Copy the table shown below. Review the bulleted list of financial assets and place each one in the correct location(s) in the table. Assets may be placed in more than one category.

- 15-year mortgage
- 6-month CD for \$1,000
- 2-year CD for \$25,000
- 5-year corporate bond
- 10-year savings bond
- Shares of stock
- 26-week Treasury bill
- 30-year Treasury bond

Capital Market	Money Market
Primary Market	Secondary Market

Challenge Why do savings bonds and small certificates of deposit have less liquidity than shares of stock?

Investing in a Market Economy

OBJECTIVES

- In Section 2, you will
- discuss the issues that should be considered when making investment decisions
 - explain how risk and return are related

KEY TERMS

- investment objective, p. 324
 risk, p. 327
 return, p. 327
 diversification, p. 327

TAKING NOTES

As you read Section 2, complete a chart like the one shown using the key concepts and other helpful words and phrases. Use the Graphic Organizer at **Interactive Review @ ClassZone.com**

Investing in a Market Economy

objectives	risk vs. return

Why Are You Investing?

KEY CONCEPTS

In Section 1, you saw that there are two types of investing: personal and economic. Note that for the remainder of the chapter, we'll be using all forms of the word *invest* as a quick way to refer to personal investing—which is, in effect, saving.

You've now learned that there are a number of assets you can own. But how do you determine which is, or are, right for you? The first thing that you might do is to decide why you are investing. This reason is your **investment objective**, a financial goal that an investor uses to determine if an investment is appropriate. Some possible financial goals are saving money for retirement, for a down payment on a house or an automobile, for college tuition, or for a vacation. Your goal helps you to determine the right investments.

QUICK REFERENCE

An **investment objective** is a financial goal used to determine if an investment is appropriate.

Investment Objectives

Two issues play a major role in determining which investments work best to achieve different investment objectives. The first issue is time. For example, is this a short-term financial goal, such as saving for a vacation, or a long-term financial goal, such as saving for



Savings Goals Saving for a car down payment suggests certain kinds of longer-term investments.

YOUR ECONOMIC CHOICES

INVESTMENT OBJECTIVES

What reasons do you have for investing?

Do you have any investment objectives? Maybe you have a short-term objective, such as saving money to go on spring break. Or your objective is more long term, such as saving for college. What kinds of investments might be appropriate for your objective?



Saving for vacation



Saving for college

retirement? The amount of time you have to build your savings influences the kinds of investments that would be most appropriate.

The second issue is income. How much money do you have available to save after meeting current expenses? The answer to this question is influenced by a series of other questions: Will your income change in the future? Is there money available for emergencies? To respond to all these questions, having a savings plan that is realistic and that is flexible enough to adjust to changing circumstances can be a big help.

Other important questions are: Do you have any outstanding debts? Are you paying taxes on time? Paying off debts is an important first step to investing. Generally, the interest you pay on debts, such as credit card balances, is higher than what you can earn through most investments. Tax considerations are most important for investors with higher incomes who are subject to higher tax rates.

Different types of investments are suitable to various investment objectives. For example, savings for emergencies should be in highly liquid investments, such as savings accounts or money market accounts. With these investments, the risk of loss is low and money can be withdrawn at any time. Saving for a vacation would also require investments that are short-term and liquid. Investors who are saving for longer-term goals may be less concerned with immediate liquidity and may want to invest in stocks that increase in value over a longer period of time. CDs that commit funds for a certain length of time may be chosen to coincide with the timing of certain savings goals, such as making a major purchase or starting college. Many bonds offered by state and local governments offer tax-free earnings.

APPLICATION Drawing Conclusions

- A. Would a CD be a more appropriate way to save for a down payment on a car or for emergencies? Why?

Economics Update

Find an update on investing at ClassZone.com

Melody Hobson: Investing in the Future

FAST FACTS

Melody Hobson

Title: President of Ariel Capital Management, LLC

Born: April 3, 1969, Chicago, Illinois

Major Accomplishment: Educates millions of people about the benefits of investing.

Ariel's Assets Under Management: \$21.3 billion (2005)

Other Roles: Financial contributor to *Good Morning America* on ABC

Board Member: Chicago Public Library, the Field Museum, the Chicago Public Education Fund, and the Sundance Institute

Director: DreamWorks Animation SKG, Inc., the Estée Lauder Companies Inc., and Starbucks Corporation

Economics Update

Find an update on Melody Hobson at ClassZone.com

What do the Chicago Bulls, hip-hop stars, and inner-city elementary school students have in common? All are part of Melody Hobson's efforts to get investment "discussed around every dinner table." Hobson believes that many people lack the necessary knowledge to determine their investment objectives and manage their money to create wealth. How is she trying to change this situation?

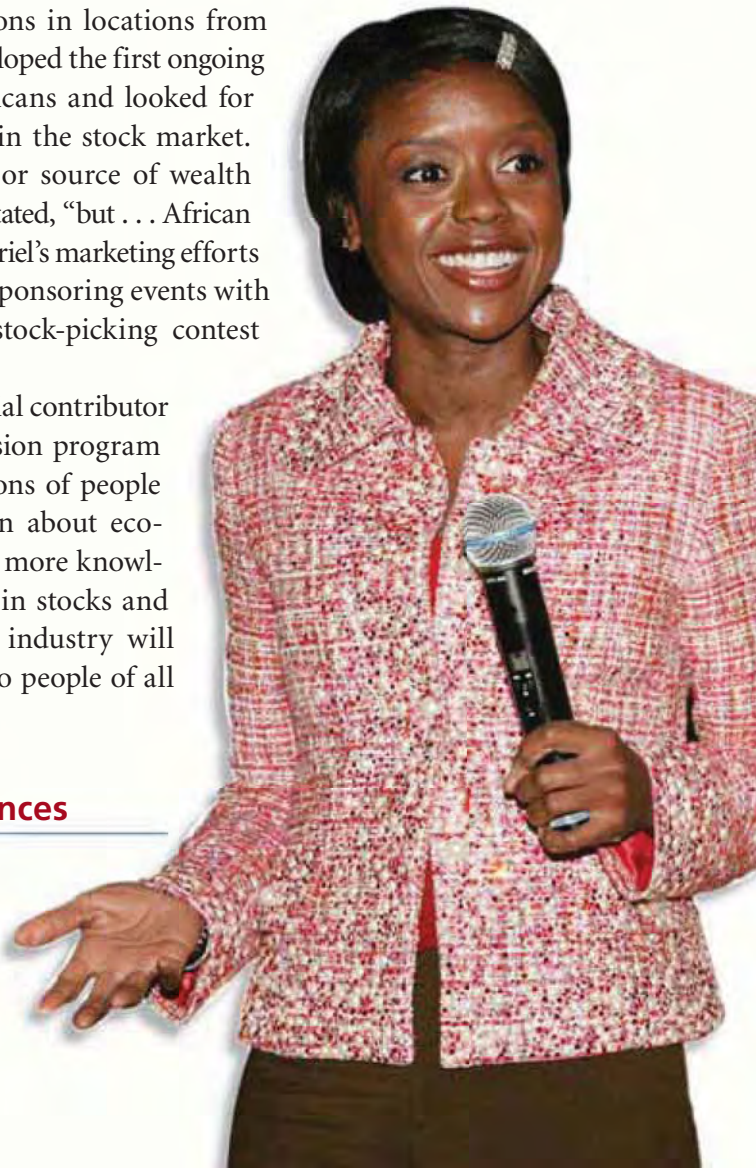
Creating Educated Investors

Melody Hobson discovered her career in investing as a college intern. When she got her degree in 1991, Hobson landed a position in the marketing department at Ariel Capital Management LLC. In 2000, she became the president of the company, making her the most powerful African-American woman in the mutual-fund industry. As president of Ariel, Hobson runs an operation with over \$21 billion in assets.

Ariel was the first minority-owned mutual fund company in the country and pioneered programs to teach inner-city school-children about investing. Hobson's passion for investment education led her to give presentations in locations from PTA meetings to union halls. She developed the first ongoing study of investing by African Americans and looked for ways to increase their participation in the stock market. "The stock market represents a major source of wealth creation in this country," Hobson has stated, "but . . . African Americans have been largely left out." Ariel's marketing efforts to the black community included cosponsoring events with the Chicago Bulls and creating a stock-picking contest involving well-known hip hop stars.

When Hobson became the financial contributor to the *Good Morning America* television program in 2000, she was able to reach millions of people with easy-to-understand information about economic matters. Hobson believes that more knowledge about the benefits of investing in stocks and greater diversity in the investment industry will help bring the benefits of investing to people of all racial and economic backgrounds.

Melody Hobson



APPLICATION Making Inferences

- B. Why might Melody Hobson think it is important for families to talk about investing at the dinner table?

Risk and Return

KEY CONCEPTS

Once investors have decided their financial objectives, there are two other related issues they might consider—risk and return. **Risk** is the possibility for loss on an investment, and **return** is the profit or loss made on an investment.

While savings deposits in banks are insured against loss, most investments carry some possibility of losing part of the money invested. Return may refer to the interest paid on a savings account or CD or the increase in value of a stock over time. Most investors try to balance risk and return through **diversification**, the practice of distributing investments among different financial assets to maximize return and limit risk.

What Kind of Risk Are You Willing to Take?

When most investors think about risk, they think about the possibility of losing some of their initial investment, often referred to as their principal. Even if they don't earn a lot of money on the investment, they want to get back at least what they put in. Investments that guarantee no loss of principal include insured savings deposits and CDs. Bonds that are backed by the U.S. government are also considered to be almost risk-free because it is highly unlikely that the government would not pay back its loans. Almost all other investments carry some risk.

One of the biggest risks investors face, even with safe investments like those described above, is loss of the purchasing power of the money invested due to inflation. (Remember that inflation is a general rise in the level of prices.) That is why many financial advisers warn against investing everything in safe investments that pay a guaranteed rate of interest that may not keep up with inflation.

Other investments, such as stocks and corporate bonds, carry a higher degree of risk because the return depends on how profitable the company is. Investors who purchase stock with the expectation that it will appreciate in value over time may lose some of their money if the company runs into problems or other economic factors affect the value of the stock. In that case, investors may find that they cannot sell the stock for as much as they paid for it, and they suffer a loss. Investors in corporate bonds face similar risks, although bonds are considered less risky than stocks because creditors such as bondholders are paid off before stockholders if a company has financial problems.

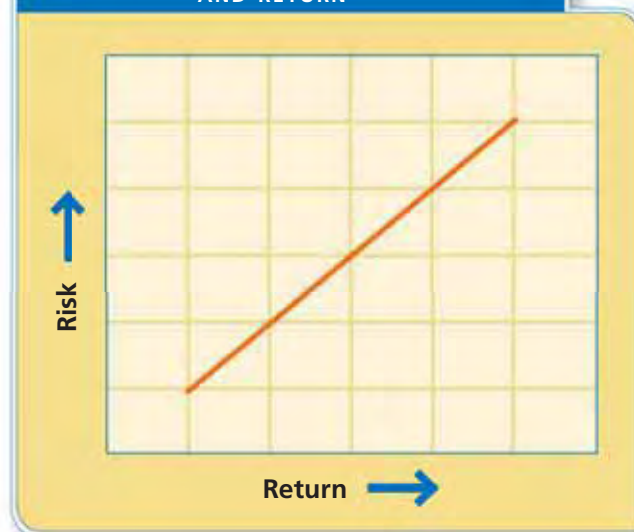
QUICK REFERENCE

Risk is the possibility for loss on an investment.

Return is profit or loss made on an investment.

Diversification is the practice of distributing investments among different financial assets.

FIGURE 11.3 THE RELATIONSHIP OF RISK AND RETURN



Risk and Return
Risk and return have a direct relationship—the higher the risk of the investment, the greater the possible return.

YOUR ECONOMIC CHOICES

RISK AND RETURN

How can you balance risk and return?

When you consider what financial assets further your investment objective, you must address both risk and return. A high-risk investment may bring large returns, but can you absorb the potential losses? A low-risk investment may provide a steady return, but because of inflation you may be losing money. How would you decide which type of investment to make?



▲ Return

▲ Risk

What Kind of Return Do You Want?

When making investment decisions, investors estimate what kind of return they expect to earn. The safest investments, such as Treasury bills, interest-bearing savings accounts, and shorter-term CDs, generally offer the lowest return in the form of fixed rates of interest. The returns on stocks and bonds are not guaranteed and may vary considerably at different times, depending on how the company you invest in performs and the state of the economy as a whole. Generally, stocks provide a higher return over time than do other investments.

As Figure 11.3 on page 327 shows, risk and return are directly related—the greater the possible return, the higher the risk that the investment will lose value. Investors always want the highest return possible, but they must balance that desire with a realistic understanding about the level of risk they can tolerate. The factors of time and income come into play here. People who are investing for retirement over a period of 20 to 30 years may be willing to take more risk by investing in stocks because their investments are likely to increase over that period, even though they might have losses in some years. People with less time and less income to invest might not be willing to risk possible losses.

Diversification is the most common way for investors to maximize their returns and limit their risks. For example, you might put 70 percent of your investments for retirement in a variety of stocks, 20 percent in bonds, and 10 percent in CDs. By spreading out your money in a variety of assets, you have a better chance of offsetting losses from one investment with gains from another. Mutual funds, which invest in a large number of stocks or bonds, help small investors diversify their investments.

APPLICATION Drawing Conclusions

C. Is it possible to have a low-risk, high-return investment? Why or why not?

SECTION 2 Assessment

REVIEWING KEY CONCEPTS

- Use each of the three terms below in a sentence that illustrates the meaning of the term:
 - investment objective
 - return
 - diversification
- What is the relationship between risk and return?
- How would the risk of investing in a single stock compare with the risk of investing in a mutual fund? Why?
- How is diversification related to risk and return?
- How are risk and return related to investment objectives?

6. Using Your Notes How do time and income influence investment objectives? Refer to your completed chart.

Use the Graphic Organizer at **Interactive Review @ ClassZone.com**

Investing in a Market Economy	
objectives	risk vs. return

CRITICAL THINKING

- 7. Comparing and Contrasting** Matthew's parents started saving for his college education when he was born. When Matthew turned 16, he got a part-time job and saved part of his earnings for his college expenses. Compare and contrast the investment objectives of Matthew and his parents and describe the factors that influenced their investment decisions.
- 8. Drawing Conclusions** Ryan owns shares in a single mutual fund that includes stocks and bonds. Maggie invests her money in Treasury bonds, state bonds, and corporate bonds. Joshua invests in shares of stock in five different high-tech companies. Which of these investors best understands the concept of diversification? Give reasons for your answer.
- 9. Applying Economic Concepts** Inez bought 100 shares of a mutual fund for \$10 each and sold them five years later for \$15 each. Ethan put \$1,000 in a 5-year CD and received a total of \$235 in interest. Which investment provided the better return? How does this illustrate the relationship between risk and return?
- 10. Challenge** Stocks that are sold on the secondary market and savings accounts both provide liquidity. For each of these investments, what kinds of risks does this liquidity entail?

ECONOMICS IN PRACTICE



Evaluating Investments

Consider what you have learned about risk and return as they relate to various investments, then study the table below and evaluate each investment.

Identify Risk and Return Place a check mark in the appropriate columns for each investment.

Investment	Risk		Return	
	Low	High	Low	High
\$1,000 CD				
100 shares of a mutual fund				
100 shares of stock				
Corporate bond				
Government bond				
Regular savings account				

Challenge Rank the investments in order from the lowest risk to the highest risk and from the lowest return to the highest return. Make a generalization about risk and return based on your rankings.

Buying and Selling Stocks

OBJECTIVES

- In Section 3, you will
- discuss why people buy stocks
 - describe how stocks are traded
 - explain how the performance of stocks is measured

KEY TERMS

stock exchange, p. 330
 capital gain, p. 330
 common stock, p. 331
 preferred stock, p. 331
 stockbroker, p. 332
 future, p. 333
 option, p. 333
 stock index, p. 334
 bull market, p. 335
 bear market, p. 335

TAKING NOTES

As you read Section 3, complete a cluster diagram using the key concepts and other helpful words and phrases. Use the Graphic Organizer at **Interactive Review @ ClassZone.com**



The Stock Market

KEY CONCEPTS

Recall that in Chapter 8 you learned that corporations raise money through stock and bond issues. You will learn more about the sale—and resale—of stocks in this section. When a company first issues stock, it is sold to investment bankers in the primary market. Known as an initial public offering, or IPO, this is the stock sale that raises money for the corporation.

However, most stock is then resold to investors through a **stock exchange**, a secondary market where securities (stocks and bonds) are bought and sold. Most people buy stocks as a financial investment, with the expectation that the stock price will rise and that they can resell the stock for a profit. Gains made from the sale of securities are called **capital gains**.

QUICK REFERENCE

A **stock exchange** is a market where securities are bought and sold.

Capital gain is profit made from the sale of securities.

Why Buy Stock?

Investors buy stock for two reasons. The first is to earn dividend payments, which are a share of the corporation's profits that are paid back to the corporation's stockholders. The second reason is to earn capital gains by selling the stock at a price greater than the purchase price. If stock is sold below the buying price, the seller makes a capital loss. Investors who want to earn income



from their investment will be most interested in dividends. Those who want to see their investment grow over time will be most interested in potential for capital gain.

As you learned in the previous section, investing in stocks carries a higher risk than most other investments but provides the opportunity for higher returns over time. Corporations are not required to pay dividends, so an investor has no guarantee that they will earn income from stocks. Similarly, there is no guarantee that the stock price will be higher when the investor wants to sell the stock.



No Guarantees Dividend payments are a possibility, not a certainty; stocks come with risk.

Types of Stock

There are essentially two types of stock—common stock and preferred stock. **Common stock** is share of ownership in a corporation, giving holders voting rights and a share of profits. **Preferred stock** is share of ownership in a corporation giving holders a share of profits (paid before common stockholders) but no voting rights. Most people who buy stock choose to buy common stock.

Figure 11.4 shows the similarities and differences between the two types of stock. Notice that both types of stock give a share of ownership in the corporation that entitles a shareholder to receive dividends. The difference is that holders of preferred stock receive guaranteed dividends and will be paid before common stockholders if the company is liquidated. As a tradeoff for this preference, holders of preferred stock generally have no voting rights in the corporation, and their dividends do not increase if the company's stock increases in value. Each holder of common stock generally gets one vote per share owned to elect the board of directors, which makes important decisions about how the company conducts business.

QUICK REFERENCE

Common stock gives shareholders voting rights and a share of profits.

Preferred stock gives shareholders a share of profits but, in general, no voting rights.

FIGURE 11.4 Common Stock and Preferred Stock

Characteristic	Preferred Stock	Common Stock
Share of ownership	Yes	Yes
Eligible for dividends	Yes	Yes
Guaranteed dividends	Yes	No
Voting rights	No	Yes

ANALYZE CHARTS

1. What preference do holders of preferred stock have?
2. What do holders of common stock have that holders of preferred stock do not have?

APPLICATION Drawing Conclusions

- A.** What kind of stock do you think investors who wanted a steady income from their investment would buy? Why?

Trading Stock

KEY CONCEPTS

Most people who invest in stock do so with the hope of earning capital gains when they sell it. Like anything else sold in a free market, stock prices are determined by demand and supply. Some factors that affect stock prices include company profits or losses, technological advances that may affect a company's business or a whole industry, and the overall state of the economy. When investors perceive that a company's value is likely to increase, the demand for the stock will increase and its price will rise. As the price rises, more people will want to sell the stock for a profit.

Few companies sell stock directly to investors. When investors want to buy or sell stock, they use a **stockbroker**, an agent who, for a commission, buys and sells securities for customers. Stockbrokers, sometimes just called brokers, generally work for brokerage firms. Investors may interact with brokers in person, by phone, or online. The broker's primary job is to carry out the investor's instructions to make trades. Some brokers also provide investment advice. Brokers buy and sell stocks for their customers on a variety of stock exchanges.

QUICK REFERENCE

A **stockbroker** buys and sells securities for customers.

Organized Stock Exchanges

The New York Stock Exchange (NYSE) is the oldest and largest of the organized stock exchanges in the United States. It is located on Wall Street in New York City, and the street name has become synonymous with the U.S. stock market. Almost 1.5 billion shares of about 2,800 of the largest and most successful U.S. companies are traded on the NYSE each day. Brokerage firms pay for the privilege of being one of the 1,336 members of the exchange.

Traditionally, trading on the NYSE was in an organized auction format. Each stock had a specified location or trading post on the floor of the exchange. A specialist representing that stock ran the auction that matched buyers and sellers through open bidding to determine the price of shares. Prices for a stock often varied from minute to minute as the auction process continued throughout the day.

Changes in technology have brought changes to the NYSE. Since 1996, floor traders have used small hand-held computers to execute many trades, and more than half of the orders to buy and sell are now sent electronically. In 2006, the NYSE merged with Archipelago Exchange, an electronic trading company. This allowed the NYSE not only to speed up its transactions, but also to trade stocks normally traded in electronic markets.

The smaller American Stock Exchange (AMEX) is also located in New York City. Trading at the AMEX is structured in a similar way to the NYSE, although AMEX-traded companies are generally smaller than those listed on the NYSE. In 2006, AMEX introduced new practices that combined the benefits of floor trading and electronic trading.



Controlled Chaos Don't be fooled by the seeming disorder of the exchange floor. It is a secure and organized trading system.

Electronic Markets

The term *over-the-counter* (OTC) is used to describe the market for stocks that are not traded on the NYSE or AMEX. In 1970, the National Association of Securities Dealers (NASD) introduced a centralized computer system that allows OTC traders around the country to make trades at the best prices possible.

This automated quotation system is known as NASDAQ. In 2005, NASDAQ was the second-largest stock exchange in the world in number of companies listed (about 3,200) and number of shares traded daily. The companies listed on NASDAQ cover many sectors of the U.S. economy, although the majority are involved in technology. The NASD also regulates the OTC Bulletin Board as an electronic market for trading shares in companies that are too small to be traded on NASDAQ.



FIGURE 11.5 SOME NASDAQ STOCKS

Apple Inc.	Peets Coffee & Tea
Dell Inc.	Priceline.com
Fujifilm Corporation	Sirius Satellite Radio
Google	Sun Microsystems Inc.
Intel Corporation	United Stationers Inc.

Futures and Options Markets

Most investors do not trade futures and options because they are complicated and high-risk investments that involve trying to predict the future. A **future** is a contract to buy or sell a stock on a specified future date at a preset price. An investor who wants to buy in the future wants to lock in a low price. An investor who wants to sell in the future wants to lock in a high price.

An **option** is a contract giving the investor the right, but not the obligation, to buy or sell stock at a future date at a preset price. As you can see, the difference between a future and an option is that a futures contract requires the investor to buy or sell, while an option contract offers the possibility of buying or selling but does not require it. In options trading, an investor pays a small fraction of a stock's current price for an option to buy or sell the stock at a better price in the future.

QUICK REFERENCE

A **future** is a contract to buy or sell a stock on a specific future date at a preset price.

An **option** gives an investor the right to buy or sell stock at a future date at a preset price.

Recent Developments

In the late 1990s, new stock market regulations and advances in computer technology changed the way that stocks were traded. Stocks listed on any exchange are now available to any trading firm. The growth of electronic communications networks (ECNs) increased electronic stock trading, especially on the NASDAQ market. Trades now take place 24 hours a day, not just when the stock exchanges are open.

Many individual investors have access to the Internet and have become more knowledgeable about investing. They wanted ways to trade stocks without relying on traditional stockbrokers. The result has been huge growth in online brokerage companies. Investors now have the ability to make trades at any time and generally pay lower commissions than those charged by traditional brokers. Computer technology matches buyers and sellers automatically, providing rapid trades at the best possible prices.

APPLICATION Drawing Conclusions

B. How is NASDAQ similar to the NYSE? How are they different?

Measuring How Stocks Perform

KEY CONCEPTS

About half of all U.S. households now own stocks, and the stock market's performance is followed closely on the nightly news, not just in specialized business media. Perhaps you have heard a statement like this one: "Wall Street responded positively to the latest employment figures, with the Dow making robust gains for the first time in several weeks." The Dow is a **stock index**, an instrument used to measure and report the change in prices of a set of stocks. Stock indexes measure the performance—whether gaining or declining in value—of many individual stocks and the stock market as a whole.

QUICK REFERENCE

A **stock index** measures and reports the change in prices of a set of stocks.

Stock Indexes

Stock indexes provide a snapshot of how the stock market is performing. The Dow—short for the Dow Jones Industrial Average (DJIA)—is the most well known. (For help reading Figure 11.6, turn to the Skillbuilder on page 342.) Other U.S. indexes often cited include the Standard & Poor's 500 (S&P 500) and the NASDAQ Composite. Global stock indexes include the Hang Seng Index (Hong Kong), the DAX (Germany), the Nikkei 225 (Japan), and the FTSE 100 (Britain). Each index measures the performance of a different group of stocks.

Economics Update

Find an update on stocks in the Dow Jones Industrial Average at ClassZone.com

FIGURE 11.6 DOW JONES INDUSTRIAL AVERAGE, 1929–2006



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FIGURE 11.7 THE DOW'S BEST AND WORST YEARS

The Dow's Best Years		
Rank	Year	% Change
1	1915	81.66
2	1933	66.69
3	1928	48.22
4	1908	46.64
5	1954	43.96
The Dow's Worst Years		
Rank	Year	% Change
1	1931	-52.67
2	1907	-37.73
3	1930	-33.77
4	1920	-32.90
5	1937	-32.82

ANALYZE CHARTS

- Does Figure 11.6 suggest a relationship between the level of the DJIA (above) and the volume of shares traded (below)? Explain.
- What were the most recent best and worst years for the Dow?

FIGURE 11.8 THE 30 STOCKS IN THE DJIA

Alcoa Inc.
Altria Group, Inc.
American Express Co.
American International Group Inc.
AT&T Inc.
Boeing Co.
Caterpillar Inc.
Citigroup Inc.
Coca-Cola Co.
Dupont Co.

Exxon Mobil Corp.
General Electric Co.
General Motors Corp.
Hewlett-Packard Co.
Home Depot Inc.
Honeywell International Inc.
Intel Corp.
International Business Machines Corp.
J.P. Morgan & Co.
Johnson & Johnson

McDonald's Corp.
Merck & Co.
Microsoft Corp.
3M
Pfizer Inc.
Procter & Gamble Co.
United Technologies Corp.
Verizon Communications Inc.
Wal-Mart Stores Inc.
Walt Disney Co

The Dow Jones Company, publisher of the *Wall Street Journal* newspaper, first published the DJIA in 1896. The index included the stocks of 12 companies that reflected the economy of the time, which was focused heavily on agriculture and mining. Since 1928, the Dow has included 30 companies. General Electric is the only one of the original companies that is on the current index. As the U.S. economy has changed from agriculture to industry to services, the companies in the index have changed to reflect the most successful companies in the most important sectors of the economy. These stocks are often referred to as blue chip stocks.

The DJIA is a price index, in other words it measures changes in the prices at which the stocks on the index are traded. The original DJIA was the actual average of the prices of the 12 stocks. Now the average is weighted so that higher-priced stocks have more influence on the average than lower-priced stocks. The number that is quoted is not a price but an average measured in points not dollars.

QUICK REFERENCE

A **bull market** occurs when stock market prices rise steadily over time.

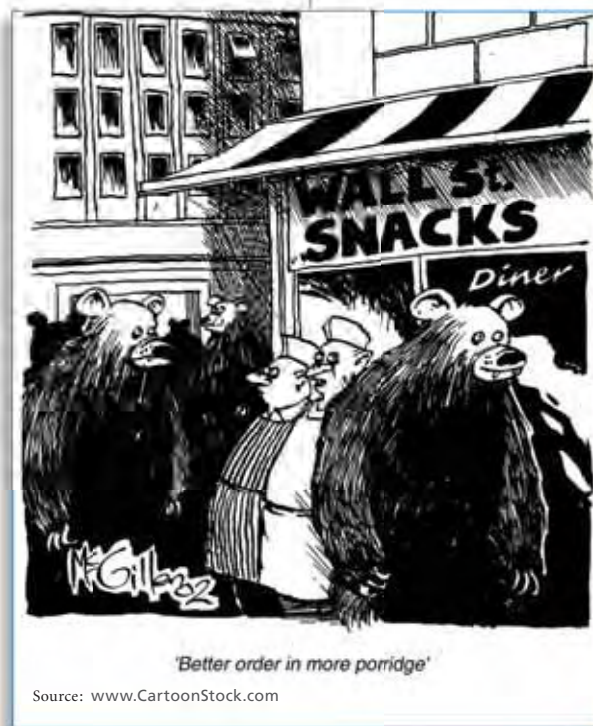
A **bear market** occurs when stock market prices decline steadily over time.

Tracking the Dow

Changes in the Dow reflect trends in stock market prices. The terms *bull market* and *bear market* are commonly used to describe these trends. A **bull market** is a situation where stock market prices rise steadily over a relatively long period of time. A **bear market** is a situation where stock market prices decline steadily over a relatively long period of time. Those who follow the stock market track the Dow and other indexes to determine if the market is trending toward bull or bear.

The first DJIA measure was 40.94. In 1972, it reached 1,000 for the first time, and in May 1999, it topped 11,000. When the Dow hit its all-time high of 11,722.98 on January 14, 2000, it marked the end of the longest bull market in history. During the 1990s the Dow had climbed from 2,800 to its peak. Most bull markets last two to three years.

A well-known bear market followed the Stock Market Crash of 1929. During the 1920s, the Dow had risen from 60 to a high of 381.17 in early September of 1929. In the month after October 29, 1929, it fell to a low of just under 199. The next time it achieved a closing price of 400 was December 29, 1954.



Source: www.CartoonStock.com

Investing Money Overseas

In an increasingly international economy, the NYSE is no longer the “only game in town” for U.S. investors. There are over 20 major stock markets overseas. With U.S. stocks representing only about half of the total value of global markets, international investing has become an important option for Americans.

Investing money overseas offers both advantages and risks. For example, an investment in an emerging country—one with an economy that is rapidly growing—offers the prospect of a greater and more rapid return. Such an investment also may involve greater risk, for political instability in an emerging country can drive stock prices down in a hurry. However, many investors view increased diversification as the primary advantage of investing overseas.



FIGURE 11.9 Leading World Stock Markets

Market	Number of Companies Listed	Value of Stocks (in billions of US dollars)	Main Index
New York Stock Exchange (United States)	2,278	15,138	Dow Jones Industrial Average
Tokyo Stock Exchange (Japan)	2,392	4,550	Nikkei 225
London Stock Exchange (United Kingdom)	3,231	3,718	FTSE 100
Bombay Stock Exchange (India)	4,786	801	Sensex
Sao Paulo Stock Exchange (Brazil)	347	660	Ibovespa
Cairo and Alexandria Stock Exchanges (Egypt)	618	88	CASE 30

Source: World Federation of Exchanges, November 2006 data

CONNECTING ACROSS THE GLOBE

- Synthesizing Economic Information** Do you think it likely that U.S. investment in overseas stock markets will become increasingly common? Explain your answer.
- Drawing Conclusions** Compare the total value of stocks to the number of companies listed. Which two exchanges have the least expensive stocks, on average? Which exchange has the most expensive stocks?

Many factors affect the Dow’s performance. Among these are the market’s previous close, actions by the Federal Reserve that affect interest rates or the money supply, the performance of foreign indexes, and the trade balance between imports and exports.

APPLICATION Drawing Conclusions

- Why have the stocks on DJIA changed over time?

SECTION 3 Assessment

REVIEWING KEY CONCEPTS

- Explain the relationship between the terms in each of these pairs:
 - stock exchange
stockbroker
 - future
option
 - bear market
bull market
- Are owners of common stock generally more interested in dividends or capital gains? Why?
- Why do most people who buy stock choose common stock over preferred stock?
- What is the difference between a bear market and a bull market?
- How has the growth of individual online trading affected stockbrokers?

- 6. Using Your Notes** What are the four different ways that stocks are traded? Refer to your completed cluster diagram.



Use the Graphic Organizer at
Interactive Review @ ClassZone.com

CRITICAL THINKING

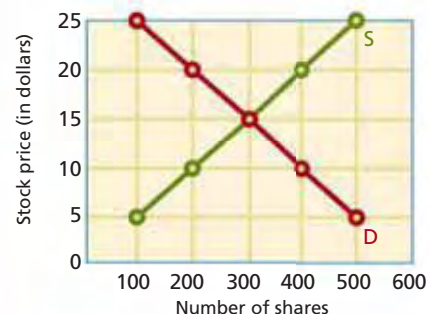
- 7. Applying Economic Concepts** Rachel paid \$10 per share for 100 shares of common stock in her favorite clothing store.
- If she receives 10 cents per share in dividends each year, about how many years would it take her to earn \$100 on her investment?
 - If the share price increases to \$11 in two years and she chooses to sell the stock, how much capital gain would she make?
- 8. Analyzing and Interpreting Data** Rearrange the data in Figure 11.7 into one table in chronological order. Use a plus sign to indicate a best year and a minus sign to indicate a worst year.
- What relationship, if any, do you see between best years and worst years?
 - What does the data reveal about the stock market in the 1930s?
- 9. Challenge** The Standard and Poor's 500 (S&P 500) is an index composed of 500 stocks, while the Dow Jones Industrial Average is composed of 30 stocks. Many analysts feel the S&P 500 is a better representation of the U.S. stock market. Do you agree? Why?

ECONOMICS IN PRACTICE



Analyzing Demand for Stock

The graph below shows the combined market demand and supply curve for the stock of a company that makes mp3 players.



Draw New Demand Curves Copy the graph above on your own paper and draw new demand curves to reflect each of the following scenarios:

- A competitor announces a technological breakthrough that will dramatically cut its production costs.
- The company announces a new product that offers features that consumers have been asking for.

Challenge How does the change in demand in each scenario affect the price of the stock?

Bonds and Other Financial Instruments

OBJECTIVES

- In Section 4, you will
- discuss why people buy bonds
 - describe the different kinds of bonds
 - explain the factors that affect bond trading
 - outline investment options other than stocks and bonds

KEY TERMS

par value, *p.* 338
 maturity, *p.* 338
 coupon rate, *p.* 338
 yield, *p.* 338
 junk bond, *p.* 339

TAKING NOTES

As you read Section 4, summarize what you learn by completing a chart using the key concepts and other helpful words and phrases. Use the Graphic Organizer at [Interactive Review @ ClassZone.com](http://InteractiveReview@ClassZone.com)

Bonds	Other Financial Instruments

Why Buy Bonds?

KEY CONCEPTS

QUICK REFERENCE

Par value is the amount a bond issuer must pay the buyer at maturity.

Maturity is the date when a bond is due to be repaid.

The **coupon rate** is the interest rate a bondholder receives every year until maturity.

Yield is the annual rate of return on a bond.

You learned in Chapter 8 that a bond is a contract issued by a corporation promising to repay borrowed money, plus interest, on a fixed schedule. Governments also issue bonds. The amount that the bond issuer promises to pay the buyer at maturity is its **par value**. **Maturity** is the date when the bond is due to be repaid. The **coupon rate** is the interest rate a bondholder receives every year until a bond matures.

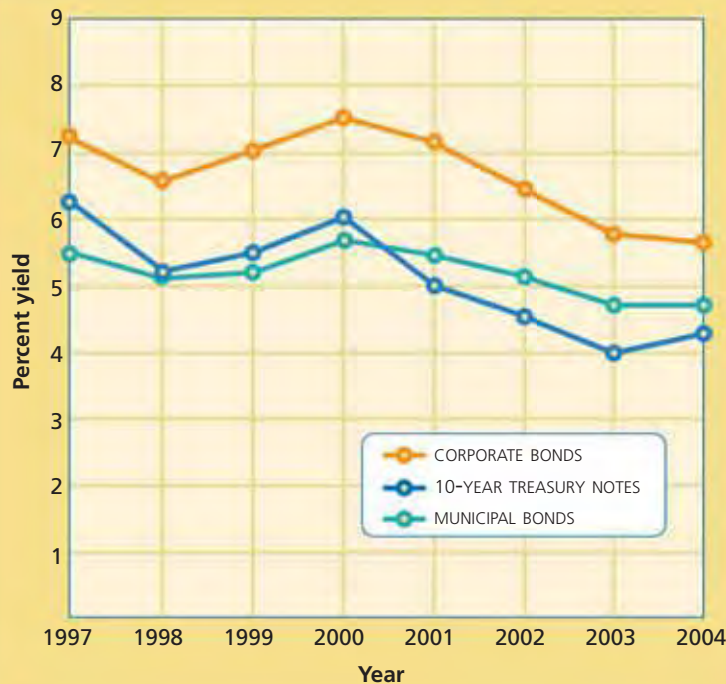
There are two reasons to invest in bonds—the interest paid on bonds and the gains made by selling bonds. Most people buy bonds for the interest. Generally, bonds are considered less risky than stocks because bondholders are paid before stockholders. It is important to determine the **yield**—the annual rate of return—for a bond when deciding to buy and sell bonds. If a bond is sold at par value, the yield is the same as the coupon rate. If a bond is sold for less than par value, the yield will be higher than the coupon rate. On the other hand, if demand is strong and the price of a bond is higher than the par value, the yield will be lower than the coupon rate.

Generally speaking, bonds with longer maturity dates have higher yields than those with shorter dates. This is because there is more uncertainty and risk involved with repayment dates that are farther in the future.

Types of Bonds

Investors may choose to invest in many different kinds of bonds. The yields and risks associated with these bonds vary considerably. As is the case with stocks, the higher the risk the greater the potential yield of a bond. Figure 11.10 shows the yields for different types of bonds. Bonds are classified based on who issues the bonds.

FIGURE 11.9 AVERAGE BOND YIELDS, 1993–2003



Source: *Statistical Abstract of the United States*

ANALYZE GRAPHS

1. Which type of bond had the lowest average yield in most years?
2. Which type of bond carries the highest risk? How do you know?



Corporate bonds
help businesses expand.



Treasury bonds
help keep the federal
government operating.



Municipal bonds
make state and local
projects possible.

The U.S. government issues securities called Treasury bonds, notes, or bills. The different terms denote loans with different maturity dates, with Treasury bonds having the longest maturity (more than ten years) and Treasury bills having the shortest (one year or less). The money borrowed through the sale of these securities helps keep the government running. Because they are backed by the “full faith and credit” of the federal government, these securities are considered to be virtually risk free. Governments all over the world issue bonds for the same reasons as the U.S. government. The risk level of international bonds depends on the financial strength of the particular government.

Bonds issued by state and local governments are called municipal bonds. Funds raised by these bonds finance government projects such as construction of roads, bridges, schools, and other public facilities. The interest earned on many municipal bonds is not subject to federal income tax. Generally, municipal bonds are considered low-risk investments. A major reason for this is that state and local governments collect taxes, so it is assumed that they’ll be able to make interest payments and repay the buyer upon maturity. However, there have been instances of governments being unable to repay bondholders the full amount of their loans.

One way that companies finance expansion is by issuing corporate bonds. These bonds generally pay a higher coupon rate than government bonds because the risk is higher. One kind of corporate bond, a **junk bond**, is considered high risk but has the potential for high yields. The risk involved with investing in junk bonds is similar to that of investing in stocks.

QUICK REFERENCE

Junk bonds are high-risk, high-yield corporate bonds.

Buying Bonds

Investors need to determine their reason for buying bonds in order to purchase the right type of bond. Most investors purchase bonds because they want the guaranteed interest income. Yield will be most important to those investors. Coupon rate and price relative to the par value will determine the yield. Investors who want to sell bonds before they reach maturity study the bond market to see if they can sell their investment at a profit.

Market interest rates are another important consideration for bond investors. There is an inverse relationship between the price of existing bonds and interest rates. For example, as interest rates rise, the price of existing bonds falls because bonds that were issued with a lower interest rate will be less in demand. Conversely, if interest rates fall, the price of existing bonds rises because there will be more demand for those bonds issued at a higher interest rate.

The main risk that bond buyers face is that the issuer will default, or be unable to repay the borrowed money at maturity. Therefore, the level of risk is directly tied to the financial strength of the bond issuer. When governments or corporations want to issue bonds, they pay a credit-rating company to evaluate how likely it is that they will repay the loans. In this way, investors have a standard by which to judge the risk of the bonds. The two most well-known systems of bond ratings are those established by Standard & Poor's and Moody's. These companies use a system of letters to designate the relative credit risk of bonds. Bonds are rated from the lowest risk of U.S. Treasury securities (Aaa or AAA) to the higher risks associated with junk bonds. (See Figure 11.11.)

FIGURE 11.11 Bond Ratings

Bond Rating		Grade	Risk
Moody's	Standard & Poor's		
Aaa	AAA	Investment	Lowest risk
Aa	AA	Investment	Low risk
A	A	Investment	Low risk
Baa	BBB	Investment	Medium risk
Ba, B	BB, B	Junk	High risk
Caa/Ca	CCC/CC/C	Junk	Highest risk
C	D	Junk	In default

ANALYZE TABLES

1. What are the lowest-rated investment grade bonds in each system?
2. Why do junk bonds have lower ratings than investment grade bonds?

APPLICATION Drawing Conclusions

- A. Why is bond yield not always the same as the coupon rate?

Other Financial Instruments

KEY CONCEPTS

Investors have investment options other than bonds and stocks. The most common of these are certificates of deposit (CDs) and money market mutual funds. Both of these investments have very low risk and provide income in the form of interest. Individual investors do not generally sell these financial instruments for profit.

Certificates of Deposit

As you learned earlier, CDs are a form of time deposit offered primarily by banks, savings and loans, and credit unions. Like bonds, CDs have a maturity date (usually 6 months to 5 years), when the investor receives the principal back with interest.

The issuer of the CD pays the investor a rate of either fixed or variable interest during the period that the CD is held. Usually the interest is reinvested in the CD so that the investor enjoys the benefits of compound interest. In general, CDs with longer maturity dates pay higher rates of interest. For example, a 6-month CD might pay 3.4 percent interest while a 5-year CD might pay 4.4 percent.

The federal government insures funds deposited in CDs at most banks and credit unions up to \$100,000 per depositor in any given institution. The main risk that investors in CDs face is the loss of interest or possibly some principal if funds are withdrawn before the maturity date. In addition, investors might face interest-rate risk if rates rise and funds are locked in for a length of time at a lower rate.

Money Market Mutual Funds

Recall from Section 1 that the money market involves financial assets with maturities of one year or less. Also, remember that mutual funds allow investors to buy shares that represent an investment in all the financial assets held by the fund. Money market mutual funds (MMMF) allow investors to own a variety of short-term financial assets, such as Treasury bills, municipal bonds, large-denomination CDs, and corporate bonds.

These mutual funds give investors a higher yield than bank savings accounts, but provide a similar level of liquidity. Investors can redeem their shares by check, by phone, or by electronic transfer to a separate checking account.

Although the federal government does not insure MMMFs, the funds are tightly regulated, and these investments are considered to be quite safe with regard to loss of principal. There is less interest-rate risk than with CDs because the money is not committed for a specified length of time. The yield of the MMMF varies based on the yield of the assets in the fund.



APPLICATION Making Inferences

B. Why do longer-term CDs pay higher interest rates than shorter-term CDs?



For more information on interpreting graphs, see the Skillbuilder Handbook, page R29.

Interpreting Graphs: Online Financial Information

Evaluating means to make a judgment about information. Investors make judgments about stocks based on their analysis of financial information. Many use the Internet as a resource for acquiring minute-to-minute information about stock market trading. The graphs on this page provide information about Apple Computer Inc., a stock traded on the NASDAQ. These graphs, which are updated online throughout trading, offer an example of the type of online information investors use to evaluate stocks.

TIPS FOR EVALUATING ONLINE INFORMATION Use the following guidelines to evaluate economic information online:

Read the title to identify the company for which stock information is shown. Here it is Apple Computer (AAPL), traded on the NASDAQ (Q).

Read the vertical axis. This graph has two parts. The upper part shows the stock's price; the lower part shows the volume of shares traded.

Look for other information This statement shows the lag time for information—15 minutes in this case.



Source: TheGlobeandMail.com

Read the horizontal axis. This graph shows stock prices and volume traded from May 2005 through April 2006.

THINKING ECONOMICALLY Evaluating

1. As an investor, which month would have been best for you to acquire Apple stock? Why?
2. How does the price per share at the beginning of June 2005 compare with the price in mid-January 2006? Use information from the graph in your answer.
3. From January through April of 2006, the price of Apple shares fluctuated greatly. Volume of trading was also very heavy. Are these two facts related? Why?

SECTION 4 Assessment

REVIEWING KEY CONCEPTS

- Use each of the three terms below in a sentence that illustrates the meaning of the term:
 - coupon rate
 - maturity
 - yield
- What does par value represent to the issuer of a bond?
- What is the relationship between par value and maturity?
- When does yield equal the coupon rate?
- Why do junk bonds offer a higher yield than other types of bonds?

6. Using Your Notes Compare the risk of investing in a CD with the risk of investing in a money market mutual fund. Refer to your completed chart.

Bonds	Other Financial Instruments

Use the Graphic Organizer at [Interactive Review @ ClassZone.com](#)

CRITICAL THINKING

- 7. Comparing and Contrasting** Dmitri bought a \$1,000 bond at par value with a coupon rate of 5 percent. He determines the yield by dividing the amount of interest he earns by the price.
 - How much interest would he earn in the first year and what would be the yield?
 - How much interest would he earn in the first year and what would be the yield if he had paid \$950 for the bond? What would be the interest and yield if he paid \$1,050?
- 8. Making Inferences** In 2003, Molly bought a 10-year Treasury note for \$1,000. The market interest rate was 3.5 percent. In 2005, Molly wanted to sell the note to pay for college expenses. Interest rates had risen to 4.5 percent. How would the change in interest rates affect the price that Molly was likely to receive for her note? Give reasons for your answer.
- 9. Applying Economic Concepts** Julie has accumulated \$1,000 in a bank savings account, which pays 2.7 percent interest. She investigates several options and finds that she can invest her money in a 1-year Treasury note paying 4.4 percent interest, a 1-year CD paying 3.9 percent interest, or a money market mutual fund with an average yield of 3.7 percent. What are the pros and cons of each of these investment options?
- 10. Challenge** How would a lower bond rating by Moody's or Standard & Poor's affect the coupon rate that a corporation has to offer when it issues its bonds? Give reasons for your answer.

ECONOMICS IN PRACTICE



Making Investment Decisions

Suppose that you have been advised to invest in bonds. Recall what you have learned about the factors to consider when buying and selling bonds and then complete the following activities.

Ask Investment Questions Fill in the chart by developing a series of questions you might ask to help you decide which type of bond to buy.

Categories of Questions to Ask About Bonds	My Questions
Investment objectives	
Tolerance for risk	
Desired return	
Resalability of bonds	

Challenge How might you apply the concept of diversification to a portfolio of bond investments?

The Rise and Fall of Dot-Coms

Background The availability of products and services on the Internet is old news. But when the Internet first emerged, it provided a unique and exciting tool for almost instant access to potential buyers worldwide. Young people in particular were quick to grasp the possibilities of the electronic marketplace. As a result, many new companies, known as dot-coms, quickly appeared on the Internet.

Like the stock of many companies based on new technologies, the value of dot-com stocks rose quickly. Investors, attracted by the initial success of dot-coms and spurred on by low interest rates in the late 1990s, were quick to join the dot-com boom. The boom, however, proved to be a financial bubble. In 2000 and 2001, the bubble burst as dot-com stocks fell dramatically. Many dot-coms went out of business, and their investors sustained heavy financial losses.

What's the issue? Why did so many dot-com companies fail? Study these sources to discover what investors learned when the dot-com bubble burst.

A. Online Encyclopedia Article

Many young entrepreneurs jumped into the dot-com market, often with disastrous results. This article describes one such venture.

Kozmo.com Offered New Yorkers Free, One-Hour Delivery

Despite millions in capital investment, Kozmo.com's choices led to failure.

Kozmo.com was a venture-capital-driven online company that promised free one-hour delivery of anything from DVDs to Starbucks coffee. It was founded by young investment bankers Joseph Park and Yong Kang in March 1998 in New York City. The company is often referred to as an example of the dot-com excess.

Kozmo promoted an incredible business model; it promised to deliver small goods free of charge. The company raised about \$280 million, including \$60 million from Amazon.com. The business model was heavily criticized by business analysts, who pointed out that one-hour point-to-point delivery of small objects is extremely expensive and there was no way Kozmo could make a profit as long as it refused to charge delivery fees. Not surprisingly, the company failed soon after the collapse of the dot-com bubble, laying off its staff of 1,100 employees and shutting down in April 2001.

Source: Wikipedia.org



Thinking Economically Why do you think Park and Kang were so successful in raising capital to fund their business venture?

B. Cartoon

Cartoonist Andrew Toos drew this commentary about the dot-com bubble.



"The good news is we've financed another dot.com for no fathomable reason."

Source: www.CartoonStock.com

Thinking Economically What comment does the cartoon make about investing in the dot-com financial market?

C. Online News Story

Early dot-coms typically spent huge amounts of money on advertising. This article compares purchases of advertising during the 2000 Super Bowl telecast to Napoleon's 1815 defeat at Waterloo.

The Bubble Bowl

Expensive advertising failed to market dot-com products.

It was just five years ago, although it seems like a different age entirely. It was a time of singing-sock-puppets, 21-year-old chief executives, gravity-defiant stock prices, revolutionary technologies and half-baked business plans.

And in this atmosphere, during the final, halcyon days of the Internet boom, the St. Louis Rams played the Tennessee Titans in Super Bowl XXXIV, a moment that will be forever remembered as the dot-com bubble's Waterloo.

Football fans got a heavy dose of the fever that day: More than a dozen internet companies spent an average of \$2.2 million for 30-second spots, amounting to more than \$40 million of stockholder cash and not-so-hard-won venture capital.

These startups hoped that Super Bowl exposure would sear their web address into the minds of consumers. But most viewers were left with only vague memories of chimpanzees dancing to "La Cucaracha" to promote whatchamacalit.com... while the businesses themselves were left with empty wallets.

Today, most of these Internet pioneers are dead and gone, forgotten as the score of the game (St. Louis 23, Tennessee 16).

Source: "The Bubble Bowl," by David M. Ewalt. *Forbes.com*, January 27, 2005

Thinking Economically Why do you think the author compares the dot-com Super Bowl advertising to Waterloo, a major military defeat?

THINKING ECONOMICALLY Synthesizing

1. During the dot-com bubble, do you think it was relatively easy or difficult for Internet start-up companies to raise capital? Explain your answer, using information from the documents.
2. Why do you think so many dot-coms failed? Use evidence from the documents in your answer.
3. What lessons might investors learn from the information presented in documents A and C?

Review this chapter using interactive activities at **ClassZone.com**

- Online Summary
- Quizzes
- Vocabulary Flip Cards
- Graphic Organizers
- Review and Study Notes

REVIEWING KEY CONCEPTS

Savings and Investment (pp. 318–323)

1. How are savings and investment related?
2. What is the role of financial intermediaries in the circular flow of the financial system?

Investing in a Market Economy (pp. 324–329)

3. Why do investors need to determine their investment objective before they invest?
4. Explain the relationship between risk and return.

Buying and Selling Stocks (pp. 330–337)

5. How do people earn money by investing in stocks?
6. How does the Dow Jones Industrial Average reveal trends in the stock market?

Bonds and Other Financial Instruments (pp. 338–345)

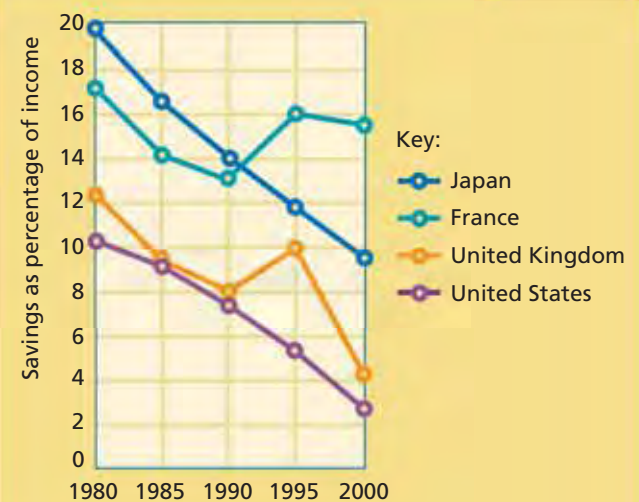
7. What are the two reasons people buy bonds?
8. How are interest rates and bond prices related?

APPLYING ECONOMIC CONCEPTS

Look at the graph below showing savings as a percentage of after-tax income in various countries.

9. Which country has the lowest rate of savings?
10. What is the overall trend from 1980 to 2000?

FIGURE 11.12 SAVINGS RATES IN DIFFERENT COUNTRIES



Source: *Statistical Abstract of the United States*

Online Summary

Complete the following activity either on your own paper or online at **ClassZone.com**

Choose the key concept that best completes the sentence. Not all key concepts will be used.

capital gain	money market
capital market	par value
common stock	preferred stock
coupon rate	primary market
diversification	return
financial asset	risk
financial intermediary	savings
investment	secondary market
investment objective	stock index
maturity	yield

1 is income not used for consumption. 2 is the use of income today that allows for greater production in the future.

A 3 is a claim on the property of a borrower. A 4 collects funds from savers and invests the funds in loans and other financial assets. Examples include banks and mutual funds. The 5 is the market for buying and selling short-term financial assets. The 6 is the market where financial assets are resold.

The two issues that play a major role in setting an 7 are time and income. Investors try to maximize 8 and limit 9 through 10, the practice of distributing investments among different financial assets.

11 is profit made from the sale of securities. 12 is share of ownership in a corporation that gives holders voting rights and a share of the profit. The Dow Jones Industrial Average is a 13 that measures the performance of a group of 30 stocks. 14 is the interest rate paid on a bond. The 15 is the amount that a bond issuer promises to pay the buyer at maturity.

CRITICAL THINKING

- 11. Analyzing Causes and Effects** In 2005, many leading advertisers announced plans to increase use of online advertising and to decrease the amount of advertising dollars spent in traditional print media, such as newspapers. In addition, newspaper circulation figures declined steadily as more people read news on the Internet.
- How was this situation likely to affect the stock prices of online search-engine companies that featured banner ads and sponsored links on their Web pages?
 - How would it affect the stock prices of newspapers? Explain your answers.
- 12. Comparing and Contrasting** What are the similarities and differences between stock dividends, a bond coupon rate, and interest on a CD?
- 13. Drawing Conclusions** Alex, Kate, and Rashid all invested money in a software company. Alex bought a corporate bond, Kate bought shares of common stock, and Rashid bought shares of preferred stock. Which of these investors would be least at risk of losing money if the company became unprofitable?
- 14. Making Inferences** Suppose that you heard the following statement on the financial news: "Bonds fell as the yield on 10-year Treasury notes rose to 4.56 percent, the highest in two years." What does "bonds fell" mean and how is it related to the increase in yield?
- 15. Challenge** Steve purchases an option contract to buy 100 shares of stock in a big high-tech company for \$50 per share in six months. The stock is currently selling for \$40 per share. Steve pays \$5 per share for the option contract. If the share price rises to \$60, Steve exercises his option to buy the shares at \$50 and then resells the stock on the market for \$60 per share. How much profit does Steve make per share? If the price never rises to \$50 before the option expires, how much money does Steve lose?

SIMULATION



Advise Your Clients

Choose a partner. Imagine that you are financial planners whose job is to help clients meet their investment objectives and use diversification to maximize return and limit risk.

Step 1 Make a list of several possible financial instruments that you might recommend and rate them for risk and return.

Step 2 Review each client's objectives and risk tolerance to consider what investments to recommend.

- Carlos and Juanita Diaz want to invest for their two young children's college education. They would like a return of 7 to 10 percent a year and have a moderate tolerance for risk.
- Patrick Hurd is 30 years old and wants to begin saving for his retirement. He wants the highest return possible and is willing to take risks.
- Alison Leveridge has recently retired. She wants to invest the money from her pension fund so that she can have a guaranteed amount of income and little risk of losing her capital.

Step 3 Decide what percentage of each client's money to invest in different types of financial instruments. Create pie graphs to show your recommendations for each client.

Step 4 Present your recommendations to another pair of students. Discuss the choices that each of you made.

Step 5 As a class, discuss how changes in your clients' financial circumstances or changes in the stock market might affect your recommendations.

Use  **SMARTGrapher** @ **ClassZone.com** to complete this activity.