

Chapter 11 Financial Markets

What is the Dow? Where is Wall Street? What does a daytrader do? You may have heard these terms but be unsure of exactly what they mean. In this chapter you will learn the meaning of these and other terms from the world of investment. You will also learn how the stock market works and how investors choose from among stocks, bonds, and other standard investments.

Economics Journal

Look through the financial pages of a major newspaper for stock and bond reports. Jot down the kinds of information you find. Then make a list of questions about the information that you don't understand.

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Section 1

Saving and Investing

Preview

Objectives

After studying this section you will be able to:

1. **Understand** how investing contributes to the free enterprise system.
2. **Explain** how the financial system brings together savers and borrowers.
3. **Describe** how financial intermediaries link savers and borrowers.
4. **Identify** the trade-offs among risk, liquidity, and return.

Section Focus

Investment promotes economic growth and contributes to a nation's wealth. The financial system includes savers and borrowers, as well as the institutions that transfer savers' dollars to borrowers. When borrowers invest these funds, they fuel economic growth.

Key Terms

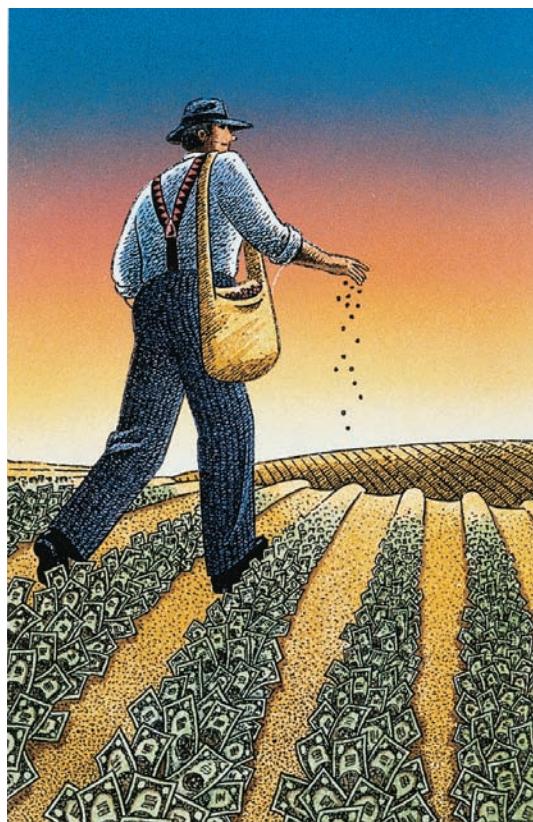
investment
financial system
financial asset
financial intermediary
mutual fund
diversification
portfolio
prospectus
return

If you go to school today, you give up your time now so that you will be prepared for a career in the future. If a firm builds a new plant, it spends money today for the sake of earning more money in the future. A government may spend money today to build a dam to ensure that people will have a source of hydroelectric power in the future. All of these actions represent investments.

In its most general sense, **investment** is the act of redirecting resources from being consumed today so that they may create benefits in the future. In more narrow, economic terms, investment is the use of assets to earn income or profit.

Businesses, in turn, may invest that money in new plants and equipment to increase their production. As these businesses use their investments to expand and grow, they create new and better products and provide new jobs.

investment *the act of redirecting resources from being consumed today so that they may create benefits in the future; the use of assets to earn income or profit*



Investing and Free Enterprise

As you have read, one of the chief advantages of the free enterprise system is that it allows people to make a profit. This profit motive leads individuals and businesses to make investments. Investing, in fact, is an essential part of the free enterprise system.

Investment promotes economic growth and contributes to a nation's wealth. When people deposit money in a savings account in a bank, for example, the bank may then lend the funds to businesses. The busi-

◀ How does this illustration suggest that investment promotes economic growth?

► Documents such as (from left to right) a stock certificate, a savings passbook, and savings bonds are financial assets.



financial system the system that allows the transfer of money between savers and borrowers

financial asset claim on the property or income of a borrower

financial intermediary institution that helps channel funds from savers to borrowers

mutual fund fund that pools the savings of many individuals and invests this money in a variety of stocks, bonds, and other financial assets

The Financial System

In order for investment to take place, an economy must have a financial system. A **financial system** includes savers and borrowers and allows the transfer of money between them to take place.

Financial Assets

When people save, they are, in essence, lending funds to others. As you read in Chapter 10, people can save money in a variety of ways. They may put money in a savings account, purchase a certificate of deposit, or buy a government or corporate bond. In each case, savers obtain a document that confirms their purchase or deposit. These documents may be passbooks, computer printouts, bond certificates, or other records.

Such documents represent claims on the property or income of the borrower. These claims are called **financial assets**, or securities. If the borrower fails to pay back the loan, these documents can serve as proof in court that money was borrowed and that repayment is expected.

For example, suppose you have \$100 in a savings account at your local bank. Your passbook (or computer printout) is proof of the money in your account.

The Flow of Savings and Investments

Figure 11.1 shows how the financial system brings together savers and borrowers, fueling investment and economic growth. On one side are savers—households, individuals, and businesses that lend out their savings in return for financial assets. On the

other side are borrowers—governments and businesses—who invest the money they borrow to build roads, factories, and homes. Borrowers may also use these funds to develop new products, create new markets, or provide new services.

Financial Intermediaries

Savers and borrowers may be linked directly. As you examine Figure 11.1, you will notice that borrowers and savers may also be linked through a variety of institutions pictured as “in between” the two. These **financial intermediaries** are institutions that help channel funds from savers to borrowers. They include the following:

- *Banks, Savings and Loan Associations, and Credit Unions* As you read in Chapter 10, banks, S&Ls, and credit unions take in deposits from savers, then lend out some of these funds to businesses and individuals.
- *Finance companies* Finance companies make loans to consumers and small businesses. Because finance companies sometimes lend money to people who do not repay their loans, they take on a high degree of risk. Finance companies, therefore, charge borrowers higher fees and interest rates to cover their losses from the loans that are not repaid.
- *Mutual funds* **Mutual funds** pool the savings of many individuals and invest this money in a variety of stocks, bonds, and other financial assets. Mutual funds allow people to invest in a broad range of companies in the stock market. This way,

investors do not risk their savings by purchasing the stock of only one or two companies that might do poorly.

- **Life insurance companies** The main function of life insurance is to provide financial protection for the family or other beneficiaries of the insured. Working members of a family, for example, may buy life insurance policies so that if they die, money will be paid to survivors to make up for lost income. Insurance companies collect payments called premiums from the people who buy insurance. They lend out part of the premiums they collect to investors.
- **Pension funds** A pension is income that a retiree receives after working a certain number of years or reaching a certain age. In some cases, injuries may qualify a working person for pension benefits. Employers may contribute to the pension fund on behalf of their employees, they may withhold a percentage of workers' salaries to deposit in a pension fund, or they may do both. Employers set up pension funds to collect deposits and distribute payments. Pension fund managers invest these deposits in stocks, bonds, and other financial assets.

Now that you know something about the types of financial intermediaries, you may wonder why savers don't deal directly with investors. The answer is that, in general, dealing with financial intermediaries offers three advantages. Intermediaries share risks, provide information, and provide liquidity to investors.

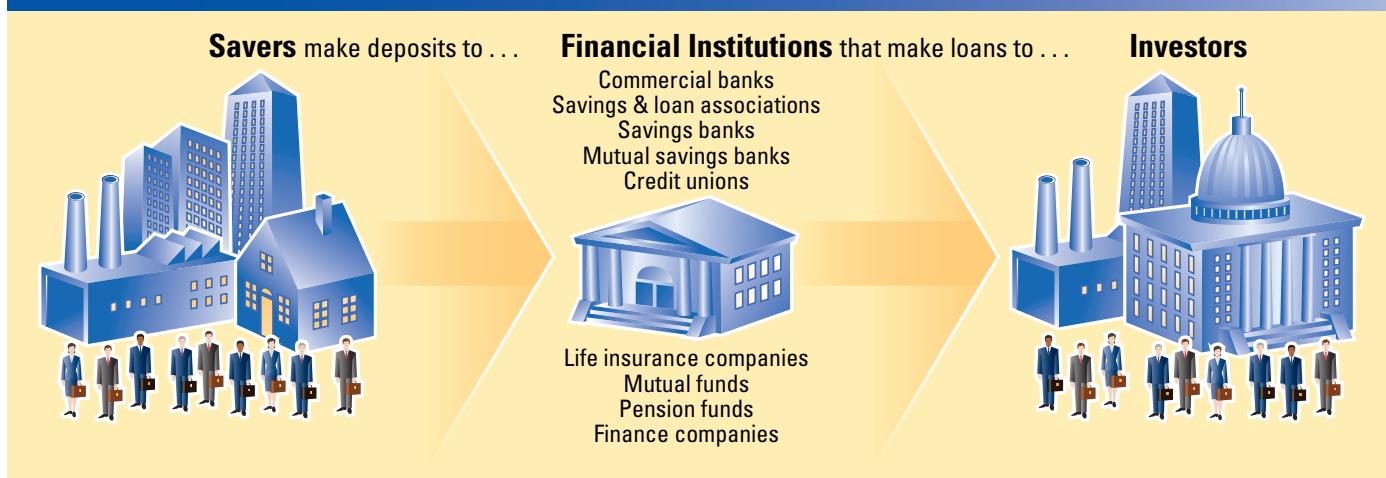
diversification
spreading out investments to reduce risk

Sharing Risk

As a saver, you may not want to invest your entire life savings in a single company or enterprise. For example, if you had \$500 to invest and your neighbor was opening a new restaurant, would you give her the entire \$500? Since it is estimated that more than half of all new businesses fail, you probably would not want to risk all of your money. Instead, you would want to spread the money around to various businesses to reduce the chances of losing your entire investment.

This strategy of spreading out investments to reduce risk is called **diversification**. If you deposited \$500 in the bank or bought shares of a mutual fund, those institutions could pool your money with other people's savings and put your money to work by making a variety of investments.

Figure 11.1 Financial Intermediaries



BUILDING KEY CONCEPTS

Financial intermediaries, including banks and other financial institutions, accept funds from savers and make loans to investors. Investors include entrepreneurs, businesses, and other borrowers. **Economic Institutions** What advantages do financial intermediaries provide for savers?



Investors must weigh the risks explained in this chart against the potential rate of return on their investment.

Income What additional examples can you think of to illustrate each of the types of risk explained in the chart?

Figure 11.2 Types of Risk

Name	Description	Example
Credit risk	Borrowers may not pay back the money they have borrowed, or they may be late in making payments.	You lend \$20 to your cousin, who promises to pay you back in two weeks. When your cousin fails to pay you on time, you don't have money for the basketball tickets you had planned to buy.
Liquidity risk	You may not be able to convert the investment back into cash quickly enough for your needs.	Your CD player is worth \$100. You need cash to buy concert tickets, so you decide to sell your CD player. To convert your CD player into cash on short notice, you have to discount the price to \$75.
Inflation rate risk	Inflation rates erode the value of your assets.	Ricardo lends Jeff \$1,000 for one year at 10 percent interest. If the inflation rate is 12 percent, Ricardo loses money.
Time risk	You may have to pass up better opportunities for investment.	Lili invests \$100 in May's cleaning business, to be repaid at 5 percent interest one year later. Six months later, Lili is unable to invest in Sonia's pet-sitting business, which pays 10 percent interest, because she has already invested her savings.

portfolio a collection of financial assets

prospectus an investment report to potential investors

return the money an investor receives above and beyond the sum of money initially invested

In other words, financial intermediaries diversify your investments and thus reduce the risk that you will lose all of your funds if a single investment fails.

Providing Information

Financial intermediaries are also good sources of information. Your local bank collects information about borrowers by monitoring their income and spending. So do finance companies when borrowers fill out credit applications. Mutual fund managers know how the stocks in their **portfolios**, or collections of financial assets, are performing. As required by law, all intermediaries provide this information to potential investors in an investment report called a **prospectus**. Financial intermediaries reduce the costs in time and money that lenders and borrowers would pay if they had to search out such information about investment opportunities on their own.

Providing Liquidity

Financial intermediaries also provide investors with liquidity. (Recall that liquidity is the ease with which people can convert an asset into cash.) It is intermediaries that provide this liquidity in the financial system.

Suppose, for example, that you decide to invest in a mutual fund. You keep the investment for two years, but then must sell it to pay your college tuition. If you had purchased an investment-quality painting instead, you would need to find another investor who would buy the art from you. As you can see, financial intermediaries and the liquidity they provide are crucial to meeting borrowers' and lenders' needs in our increasingly complex financial system.

Risk, Liquidity, and Return

As you have read, most decisions involve trade-offs. For example, the trade-off for going to a movie may be two additional hours of sleep. Saving and investing involves trade-offs as well.

Return and Liquidity

Suppose you save money in a savings account. Savings accounts are good ways to save when you need to be able to get to your cash for immediate use. On the other hand, savings accounts pay relatively low interest rates, about 2 to 3 percentage points below a certificate of deposit (CD). In other words, savings accounts are liquid, but they have a low return. **Return** is the

money an investor receives above and beyond the sum of money initially invested.

What if, however, you suddenly inherit \$5,000? You do not need ready access to those funds, since your part-time job pays your day-to-day expenses. If you are willing to give up some degree of ready access to your money, you can earn higher interest rates than offered by a savings account. For example, you can invest your money in a certificate of deposit that pays 4 percent interest. You would not be allowed to withdraw your money for, say, two years without paying a penalty. Therefore, before buying the CD, you would want to weigh the greater return on your investment against the loss of liquidity.

Return and Risk

Certificates of deposit (up to \$100,000) are considered very safe investments because they are insured by the federal government. When you buy a CD, you are giving up liquidity for a certain period of time, but you are not risking losing any money. What if, however, you decided to invest the money in a new company that your friends are starting? If the company succeeds, you

could double your investment. If it fails, however, you could lose all or part of the money you invested.

To take another example, suppose your savings account is earning 2 percent interest. Would you be willing to lend money to your friend Emily for that same 2 percent interest rate, knowing that she rarely pays back loans on time? Probably not. For you to lend Emily the money, she would have to offer you a higher return than the bank could offer. This higher return would help offset the greater risk that Emily will not repay the loan on time. Likewise, investors and lenders must consider the degree of risk involved in an investment and decide what return they would require to make up for that risk.

The higher the potential return, the riskier the investment. Whenever individuals evaluate an investment, they must balance the risks involved with the rewards they expect to gain from the investment.

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In the News Read more about return and risk in "How Much Risk Can You Tolerate," an article in The Wall Street Journal Classroom Edition.

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Section 1 Assessment

Key Terms and Main Ideas

1. How does investing promote financial growth?
2. Explain how savers, borrowers, and **financial intermediaries** contribute to the **financial system**.
3. Describe three roles of financial intermediaries.
4. Explain the following statement in your own words. "The higher the potential **return** on an **investment**, the higher the risk."

Applying Economic Concepts

5. **Critical Thinking** Explain why a student with \$500 in a savings account is participating in the American financial system.
6. **You Decide** Suppose your cousin Bill asks to borrow \$50 from you for concert tickets. Bill has offered to pay you interest on the loan. What factors should you consider before you decide how much interest to charge?

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7. **Try This** What are three questions concerning risk, return, and liquidity that you would ask a financial advisor before investing your savings?
8. **You Decide** Explain the potential risks and returns of the following savings plans and investments. (a) a savings account (b) a certificate of deposit (c) your neighbor's successful pet care service

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Profile

Warren Buffett (b. 1930)

When Warren Buffett was 5 years old, he set up a stand to sell lemonade—not in front of his own house, but at a friend's house on another street, where the traffic was heavier. The son of an Omaha, Nebraska, stockbroker, Buffett announced while still in grade school that he intended to be rich before he was 35. Today, Buffett is widely considered to be a financial genius and is one of the most successful investors in the world.



The Oracle of Omaha

At age 14, Warren Buffett bought 40 acres of land and rented it to a farmer. By the age of 21, Buffett had accumulated nearly \$10,000. Nearly every dollar of the \$20 billion he is worth today can be traced back to that original bankroll. Because of this phenomenal success, he is known as the financial “Oracle of Omaha.”

Investing the Buffett Way

Buffett learned how to invest at Columbia University, where he earned a master’s degree in business in 1951. A professor taught him to pick his investments by doing his own research. “You’re not right or wrong because 1,000 people agree with you or disagree with you,” the professor told him. “You’re right because your facts and reasoning are right.”

Buffett has continued to follow that advice to this day. He will not invest in a business he does not understand. For this reason, he has shied away from high-tech companies and focuses on communications, retail, and insurance companies. He avoided the rise and fall of the dot-coms.

Buffett chooses companies whose stock is selling for less than it is worth. If such a

company is well managed, has few competitors, and is concentrating on what it does best, he will buy stock and wait for it to go up.

For example, many analysts predicted in 1963 that American Express would go out of business after it suffered a major financial setback. In Omaha, Buffett saw that people were still using their American Express charge cards. Ignoring the experts, he bought 5 percent of American Express. Five years later, the stock was worth nearly six times what he paid for it.

The Berkshire Hathaway Company

Buffett objects to those who label his Berkshire Hathaway investment company a mutual fund. Because it owns Dairy Queen, GEICO Insurance, and Executive Jet outright—and holds controlling interests in other corporations—Buffett prefers to think of it as a holding company.

The cost of Berkshire Hathaway stock, as much as \$75,500 a share in 2003, puts it beyond the reach of most investors. That’s fine with Buffett. Not only does the high price make Berkshire Hathaway the “Rolls Royce” of investing, it also limits trading in the company’s shares on the stock market.

CHECK FOR UNDERSTANDING

1. Source Reading

Summarize Warren Buffett’s approach to investing by creating a list of his “dos” and “don’ts” when deciding whether to buy stock in a company.

2. Critical Thinking

Why might it be a plus for a company to have such a high share price that trading in its stock is discouraged? What drawbacks might there be for a company in this situation?

3. Problem Solving

Is Buffett’s firm a mutual fund or a holding company? Use the Internet and other resources to learn more about Berkshire Hathaway in order to support your response.

Section 2

Bonds and Other Financial Assets

Preview

Objectives

After studying this section you will be able to:

1. **Describe** the characteristics of bonds as financial assets.
2. **Identify** different types of bonds.
3. **Describe** the characteristics of other types of financial assets.
4. **Explain** four different types of financial asset markets.

Section Focus

Corporations and governments borrow money by selling bonds and other financial assets. The corporation or government pays the purchaser interest on the bonds and repays the principal, or money borrowed, at a specified time.

Key Terms

coupon rate
maturity
par value
yield
savings bond
municipal bond
corporate bond

Securities and Exchange Commission
junk bond
capital market
money market
primary market
secondary market

How do borrowers raise money for investment? One of the most important ways is by selling bonds. As you read in Chapter 8, bonds are certificates sold by a company or government to finance projects or expansion.

For example, starting in 1942, the United States Department of Treasury launched bond drives to encourage Americans to buy “war bonds”—government savings bonds that helped finance World War II. Movie stars and war heroes urged the public to buy bonds. Even school children brought their dimes and quarters to school each week, buying defense stamps that would eventually add up to the price of a war bond.

Bonds as Financial Assets

Bonds are basically loans, or IOUs, that represent debt that the government or a corporation must repay to an investor. Bonds typically pay the investor a fixed amount of interest at regular intervals for a fixed amount of time. Bonds are generally lower-risk investments. As you might expect from your reading about the relationship between risk and return, the rate of return on bonds is usually also lower than for other investments.

The Three Components of Bonds

Bonds have three basic components:

- **Coupon rate** The **coupon rate** is the interest rate that the bond issuer will pay to the bondholder.
- **Maturity** **Maturity** is the time at which payment to the bondholder is due.

coupon rate *the interest rate that a bond issuer will pay to a bondholder*

maturity *the time at which payment to a bondholder is due*



◀ This poster used powerful images to convince people to buy war bonds during World War II.

par value the amount that an investor pays to purchase a bond and that will be repaid to the investor at maturity

yield the annual rate of return on a bond if the bond were held to maturity

Different bonds have different lengths of maturity. Bonds typically mature in 10, 20, or 30 years.

- **Par value** A bond's **par value** is the amount that an investor pays to purchase the bond and that will be repaid to the investor at maturity. Par value is also called *face value* or *principal*.

Suppose that you buy a \$1,000 bond from the corporation Jeans, Etc. The investor who buys the bond is called the "holder." The seller of a bond is the "issuer." You are therefore the holder of the bond, and Jeans, Etc. is the issuer. The components of this bond are as follows:

- **Coupon rate:** 5 percent, paid to the bondholder annually
- **Maturity:** 10 years
- **Par Value:** \$1,000

Figure 11.3 Discounts from Par

1. Sharon buys a bond with a par value of \$1,000 at 5 percent interest.



Bond purchase without discount from par

2. Interest rates go up to 6 percent.

3. Sharon needs to sell her bond. Nate wants to buy it, but is unwilling to buy a bond at 5 percent interest when the current rate is 6 percent.

4. Sharon offers to discount the bond, taking \$40 off the price and selling it for \$960.

5. Nate accepts the offer. He now owns a \$1,000 bond paying 5 percent interest, which he purchased at a discount from par.



Bond purchase with discount from par



Investors can earn money by buying bonds at a discount, called a discount from par.

Interest Rates How do interest rates affect bond prices?

How much money will you earn from this bond, and over what period of time? The coupon rate is 5 percent of \$1,000 per year. This means that you will receive a payment of \$50 (.05 times \$1,000) each year for ten years, or a total of \$500 in interest. In ten years, the bond will have reached maturity, and Jeans, Etc. will retire the debt. This means that the company's debt to you will have ended, and that Jeans, Etc. will pay you the par value of the bond, or \$1,000. Thus, for your \$1,000 investment, you will have received \$1,500 over a period of ten years.

Not all bonds are held to maturity. Over their lifetime they might be bought or sold, and their price may change. Because of these shifts in price, buyers and sellers are interested in a bond's yield, or yield to maturity. **Yield** is the annual rate of return on the bond if the bond were held to maturity (5 percent in the example above involving Jeans, Etc.).

Buying Bonds at a Discount

Investors earn money from interest on the bonds they buy. They can also earn money by buying bonds at a discount, called a discount from par. In other words, if Nate were buying a bond with a par value of \$1,000, he may be able to pay only \$960 for it. When the bond matures, Nate will redeem the bond at par, or \$1,000. He will thus have earned \$40 on his investment, in addition to interest payments from the bond issuer.

Why would someone sell a bond for less than its par value? The answer lies in the fact that interest rates are always changing. For example, suppose that Sharon buys a \$1,000 bond at 5 percent interest, which is the current market rate. A year later, she needs to sell the bond to help pay for a new car. By that time, however, interest rates have risen to 6 percent. No one will pay \$1,000 for Sharon's bond at 5 percent interest when they could go elsewhere and buy a \$1,000 bond at 6 percent interest. For Sharon to sell her bond at 5 percent, she will have to sell it at a discount. (See Figure 11.3.)

Figure 11.4 Bond Ratings

Standard & Poor's		Moody's	
Highest investment grade	AAA	Best quality	Aaa
High grade	AA	High quality	Aa
Upper medium grade	A	Upper medium grade	A
Medium grade	BBB	Medium grade	Baa
Lower medium grade	BB	Possesses speculative elements	Ba
Speculative	B	Generally not desirable	B
Vulnerable to default	CCC	Poor, possibly in default	Caa
Subordinated to other debt rated CCC	CC	Highly speculative, often in default	Ca
Subordinated to CC debt	C	Income bonds not paying income	C
Bond in default	D	Interest and principal payments in default	D



Standard & Poor's and Moody's rate bonds according to their assessments of the issuer's ability to make interest payments and to repay the principal when the bond matures.

Income What bond rating carries the least risk?

Bond Ratings

How does an investor decide which bonds to buy? Investors can check bond quality through two firms that publish bond ratings. Standard & Poor's and Moody's rate bonds on a number of factors, including the issuer's ability to make future interest payments and to repay the principal when the bond matures. These companies' rating systems rank bonds from the highest investment grade (AAA in the Standard & Poor's system or Aaa in the Moody's rating system) to the lowest (D in both systems). A bond rating of D generally means that the bond is in default—that is, the issuer has not kept up with interest payments or has defaulted on paying principal.

The higher the bond rating, the lower the interest rate the company usually has to pay to get people to buy its bonds. For example, a AAA bond may be issued at a 5 percent interest rate. A BBB bond, however, may be issued at a 7.5 percent interest rate. The buyer of the AAA bond trades off a lower interest rate for lower risk. The buyer of the BBB bond trades greater risk for a higher interest rate.

Similarly, the higher the bond rating, the higher the price at which the bond will sell. For example, a \$1,000 bond with an AAA

(or “triple A”) rating may sell at \$1,100. A \$1,000 bond with a BBB rating may sell for only \$950 because of the increased risk that the seller could default.

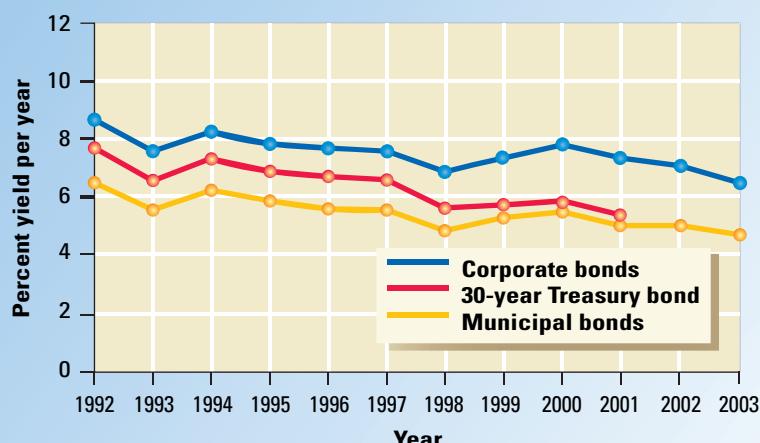
In essence, holders of bonds with high ratings who keep their bonds until maturity face relatively little risk of losing their investment. Holders of bonds with lower ratings, however, take on more risk in return for potentially higher interest payments.

Advantages and Disadvantages to the Issuer

From the point of view of the investor, bonds are good investments because they are relatively safe. Bonds are desirable from the issuer's point of view as well, for two main reasons:

- Once the bond is sold, the coupon rate for that bond will not go up or down. For example, when Jeans, Etc. sells bonds, it knows in advance that it will be making fixed payments for a specific length of time.
- Unlike stockholders, bondholders do not own a part of the company. Therefore, the company does not have to share profits with its bondholders if the company does particularly well.

Figure 11.5 Average Bond Yields, 1992–2003



Source: *Statistical Abstract of the United States*, 1997 and 2004–2005



From the early 1990s to the start of the 2000s, bond yields dipped slightly for all three types of bonds shown. Corporate bonds, however, continued to have the highest yield. **Income** Which of the three types of bonds would you expect to carry the least risk? Explain your answer.

savings bond
low-denomination bond issued by the United States government

On the other hand, bonds also pose two main disadvantages to the issuer:

1. The company must make fixed interest payments, even in bad years when it does not make money. In addition, it cannot change its interest payments even when interest rates have gone down.

Figure 11.6 Treasury Bonds, Notes, and Bills

	Treasury Bond	Treasury Note	Treasury Bill
Term	long-term	intermediate-term	short-term
Maturity	from 10 to 30 years	from 2 to 10 years	3, 6, or 12 months
Liquidity and safety	safe	safe	liquid and safe
Minimum purchase	\$1,000	\$1,000	\$1,000
Denomination	\$1,000	\$1,000	\$1,000



Treasury bonds, notes, and bills represent debt that the government must repay the investor.

Government How do these three types of government securities differ?

2. If the firm does not maintain financial health, its bonds may be downgraded to a lower bond rating and thus may be harder to sell unless they are offered at a discount.

Types of Bonds

Despite these risks to the issuer, when corporations or governments need to borrow funds for long periods, they often issue bonds. There are several different types of bonds.

Savings Bonds

You may already be familiar with savings bonds, which are sometimes given to young people as gifts. **Savings bonds** are low-denomination (\$50 to \$10,000) bonds issued by the United States government. The government uses funds from the sale of savings bonds to help pay for public works projects like buildings, roads, and dams. Like other government bonds, savings bonds have virtually no risk of default, or failure to repay the loan.

The federal government pays interest on savings bonds. However, unlike most other bond issuers, it does not send interest payments to bondholders on a regular schedule. Instead, the purchaser buys a savings bond for less than par value. For example, you can purchase a \$50 savings bond for only \$25. When the bond matures, you receive the \$25 you paid for the bond plus \$25 in interest.

Treasury Bonds, Bills, and Notes

The United States Treasury Department issues Treasury bonds, as well as Treasury bills and notes (T-bills and T-notes). These investments offer different lengths of maturity, as shown in Figure 11.6. Backed by the “full faith and credit” of the United States government, these securities are among the safest investments in terms of default risk. The federal government temporarily stopped selling 30-year bonds in 2001, upsetting many investors who like safe, long-term investments.



Municipal Bonds

State and local governments and municipalities (government units with corporate status) issue bonds to finance such improvements as highways, state buildings, libraries, parks, and schools. These bonds are called **municipal bonds**, or “munis.”

Because state and local governments have the power to tax, investors can assume that these governments will be able to keep up with interest payments and repay the principal at maturity. Standard & Poor’s and Moody’s therefore consider most municipal bonds to be safe investments, depending upon the financial health of a particular state or town. In addition, the interest paid on municipal bonds is not subject to income taxes at the federal level or in the issuing state. Because they are relatively safe and are tax-exempt, “munis” are very attractive to investors.

Corporate Bonds

As you read in Chapter 8, corporations issue bonds to help raise money to expand their businesses. These **corporate bonds** are issued in fairly large denominations, such as \$1,000, \$5,000, and \$10,000. The interest on corporate bonds is taxed as ordinary income.

Unlike city and other governments, corporations have no tax base to help guarantee

▲ Municipal bonds, or munis, help finance local projects such as libraries and schools.

their ability to repay their loans, so these bonds have moderate levels of risk. Investors in corporate bonds must depend on the success of the corporation’s sales of goods and services to generate enough income to pay interest and principal.

Corporations that issue bonds are watched closely not only by Standard & Poor’s and Moody’s, but also by the **Securities and Exchange Commission** (SEC). The SEC is an independent government agency that regulates financial markets and investment companies. It enforces laws prohibiting fraud and other dishonest investment practices.

Junk Bonds

Junk bonds, or high-yield securities, are lower-rated, and potentially higher-paying, bonds. They became especially popular investments during the 1980s and 1990s,

municipal bond a bond issued by a state or local government or municipality to finance such improvements as highways, state buildings, libraries, parks, and schools

corporate bond a bond that a corporation issues to raise money to expand its business

Securities and Exchange Commission an independent agency of the government that regulates financial markets and investment companies

junk bond a lower-rated, potentially higher-paying bond



Global Connections

International Bonds The United States government isn't the only government that issues bonds. Many other countries, including Saudi Arabia, Germany, and Japan, also issue bonds. International bonds are usually issued in large denominations, starting at \$1 million. In addition, principal and coupon payments are often made in foreign currencies. The investors, therefore, cannot know what the value of payments will turn out to be. **What are two drawbacks to buying international bonds?**

when large numbers of aggressive investors made—but also sometimes lost—large sums of money buying and selling these securities.

Junk bonds have been known to pay over 12 percent interest at a time when government bonds are yielding only about 8 percent interest. On the other hand, junk bonds also carry bond ratings of “lower medium grade” or “speculative” (BB, Ba, or lower). Investors in junk bonds therefore face a strong possibility that some of the issuing firms will default on their debt.



▲ From what you have read, how accurate is the cartoonist's view of junk bonds?

Nevertheless, in many cases junk bonds have enabled companies to undertake activities that would otherwise have been impossible to complete. (For more information on how to follow the progress of a stock by reading stock market reports, see page 284.)

Other Types of Financial Assets

In addition to bonds, investors may choose other financial assets. These include certificates of deposit and money market mutual funds, as well as stock. You will read more about stock in Section 3.

Certificates of Deposit

Certificates of deposit (CDs) are one of the most common forms of investment. As you read in Chapter 10, CDs are available through banks, which lend out the funds deposited in CDs for a fixed amount of time, such as 6 months or a year.

CDs are attractive to small investors because they cost as little as \$100. Investors can also choose among many terms of maturity. This means that if an investor foresees a future expenditure, such as college tuition or a major home improvement, he or she can buy a CD that matures just before the expenditure is due.

Money Market Mutual Funds

Money market mutual funds are special types of mutual funds. As you read in Section 1, businesses collect money from individual investors and then buy stocks, bonds, or other financial assets to form a mutual fund.

In the case of money market mutual funds, intermediaries buy short-term financial assets. Investors receive higher interest on a money market mutual fund than they would receive from a savings account. On the other hand, money market mutual funds are not covered by FDIC insurance. (As you read in Chapter 10, FDIC insurance protects bank deposits up to \$100,000 per account). This makes them slightly riskier than savings accounts.

Financial Asset Markets

Financial assets, including bonds, certificates of deposit, and money market mutual funds, are traded on financial asset markets. The various types of financial asset markets are classified in different ways.

Capital and Money Markets

One way to classify financial asset markets is according to the length of time for which funds are lent. This type of classification includes capital markets and money markets.

- **Capital markets** Markets in which money is lent for periods longer than a year are called **capital markets**. Financial assets that are traded in capital markets include long-term CDs and corporate and government bonds that require more than a year to mature.
- **Money markets** Markets in which money is lent for periods of less than a year are called **money markets**. Financial assets that are traded in money markets include short-term CDs, Treasury bills, and money market mutual funds.

Primary and Secondary Markets

Markets may also be classified according to whether assets can be resold to other buyers. This type of classification includes primary and secondary markets.

- **Primary markets** Financial assets that can be redeemed only by the original holder are sold on **primary markets**. Examples include savings bonds, which are non-transferable (that is, the original buyer cannot sell them to another buyer). Small certificates of deposit are also in the primary market because investors would most likely cash them in early rather than try to sell them to someone else.
- **Secondary markets** Financial assets that can be resold are sold on **secondary markets**. This option for resale provides liquidity to investors. If there is a strong secondary market for an asset, the investor knows that the asset can be resold fairly quickly without a penalty, thus providing the investor with ready cash. The secondary market also makes possible the lively trade in stock that is the subject of the next section.

capital market market in which money is lent for periods longer than a year

money market market in which money is lent for periods of less than a year

primary market market for selling financial assets that can only be redeemed by the original holder

secondary market market for reselling financial assets

Section 2 Assessment

Key Terms and Main Ideas

1. Describe two ways in which investors can earn money from bonds.
2. Why are bond ratings useful to investors?
3. Describe five different types of bonds.
4. How do **capital markets** and **money markets** differ?

Applying Economic Concepts

5. **Math Practice** Suppose that you buy a bond for \$100 that pays 4 percent interest per year. How much money will you have earned when the bond reaches maturity in five years?
6. **Decision Making** Suppose that you have saved \$1,000. In which of the financial assets described in this section would you invest? Explain your choice.

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7. **Critical Thinking** Which bond would you expect to be more expensive, a bond with a AAA rating or a bond with a BBB rating? (Assume that both bonds pay the same rate of interest.)
8. **Try This** Assume that you are an investment advisor with a client who is interested in buying bonds. Create a fact sheet that shows your client the different types of bonds and their characteristics.



For: Math Activity
Visit: PHSchool.com
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Skills for LIFE

Predicting Consequences

Economists, politicians, and entrepreneurs use economic data as a window into the future. On the basis of past events and the current situation, they sometimes try to predict how an economy or an individual market will behave. Thousands of variables and events have an impact on an economy, so predictions will not always come true. However, one can observe broad trends in an economy and try to imagine what will happen if these trends continue into the future. Follow the steps below to analyze the table and use the data to make predictions about the American economy.

1. Identify the kinds of information in the table. The table below lists the rate of growth of Gross Domestic Product (GDP) each year from 1996 to 2002. Also listed is the discount lending rate, one of the key factors that determines how expensive it is to borrow money to start a new business or invest in capital. The higher the discount rate, the more expensive it is to borrow money. A relatively high discount rate can cause slow GDP growth, while a low discount rate may encourage economic growth the following year. Because the discount rate can change several times during the year, rates are given for the end of December. Read the column headings and introductory notes for the table. (a) What information does this table give you for each year?

2. Look for relationships within the data.

Lower interest rates encourage people to invest in new businesses because the cost of borrowing money is lower. Because too much borrowing can lead to inflation, the Federal Reserve Bank will raise the discount rate if there is a lot of new investment in the economy. (a) In which year did the U.S. economy grow most quickly? (b) How did the interest rates in 2001 compare with rates in other years? (c) What is a possible relationship between interest rates in 2000 and economic growth in 2001?

Additional Practice

Using the Internet or your local library, locate recent articles about the state of the economy and interest rates. What indicators do economists use to judge the health of the economy? Based on these indicators, do you think interest rates will go up, stay the same, or go down in the near future? Explain.

GDP Growth, 1996–2002

Year	GDP Growth (1996 dollars)	Discount rate on January 1	Discount Rate on December 31	Rate Change
1996	4.3%	5.25%	5%	-.25%
1997	4.4%	5%	5%	0%
1998	4.3%	5%	4.5%	-.5%
1999	4.1%	4.5%	5%	+.5%
2000	3.8%	5%	6%	+1%
2001	0.3%	6%	1.25%	-4.75%
2002	2.4%	1.25%	.75%	-.5%

Sources: Bureau of Economic Analysis; *The World Almanac 2003*

Section 3

The Stock Market

Preview

Objectives

After studying this section you will be able to:

1. **Understand** the benefits and risks of buying stock.
2. **Describe** how stocks are traded.
3. **Identify** how stock performance is measured.
4. **Explain** the causes and effects of the Great Crash of 1929.

Section Focus

Corporations sell stock to raise money for starting, running, or expanding their businesses. Investors buy stocks to profit through regular payments, called dividends, or by selling the stock at a price higher than the purchase price. Stocks are traded on secondary markets called stock exchanges.

Key Terms

share	futures
equities	options
capital gain	call option
capital loss	put option
stock split	bull market
stockbroker	bear market
brokerage firm	The Dow
stock	S & P 500
exchange	Great Crash
Nasdaq	speculation
OTC market	

The New York Stock Exchange is a tangle of telephones, video monitors, computer screens, and frantic activity. The wrong decision may mean the difference between gaining or losing thousands of dollars. This is one of the places where stock is bought and sold—and fortunes are made and lost. Just what is stock, exactly how is it traded, and when is it a good investment?

Buying Stock

Besides bonds, corporations can raise funds by issuing stock, which represents ownership in the corporation. Stock is issued in portions known as **shares**. By selling shares of stock, corporations raise money to start, run, and expand their businesses. Stocks are also called **equities**, or claims of ownership in the corporation.

Benefits of Buying Stock

There are two ways for stockholders to make a profit:

- **Dividends** As you read in Chapter 8, many corporations pay out part of their profits as dividends to their stockholders. Dividends are usually paid four times a

year (quarterly). The size of the dividend depends on the corporation's profit. The higher the profit, the larger the dividend per share of stock.

share portion of stock

equities claims of ownership in a corporation



▲ Daytime at the Chicago Board of Trade (top photo) shows the frantic pace of trade. The frenzied pace of a day of trading is perhaps even better suggested by a view of the Chicago Stock Exchange at night (bottom photo).

THE WALL STREET JOURNAL. CLASSROOM EDITION

In the News Read more about stock trading in "How to Get Started in Online Trading," an article in The Wall Street Journal Classroom Edition.

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capital gain the difference between a higher selling price and a lower purchase price, resulting in a financial gain for the seller

capital loss the difference between a lower selling price and a higher purchase price resulting in a financial loss to the seller

stock split the division of a single share of stock into more than one share

stockbroker a person who links buyers and sellers of stock

- **Capital gains** A second way an investor can earn a profit is to sell the stock for more than he or she paid for it. The difference between the higher selling price and the lower purchase price is called a **capital gain**. An investor who sells a stock at a price lower than the purchase price, however, suffers a **capital loss**.

Types of Stock

Stock may be classified in several ways, such as whether or not it pays dividends.

- **Income stock** This stock pays dividends at regular times during the year.
- **Growth stock** This stock pays few or no dividends. Instead, the issuing company reinvests its earnings in its business. The business (and its stock) thus increases in value over time.

Stock may also be classified as to whether stockholders have a vote in company policy.

- **Common stock** Investors who buy common stock are voting owners of the company. They usually receive one vote for each share of stock owned. They may use this vote, for example, to elect the company's board of directors. In some cases, a relatively small group of people may own enough shares to give them control over the company.
- **Preferred stock** Investors who buy preferred stock are nonvoting owners of the company. Owners of preferred stock, however, receive dividends before the owners of common stock. If the company goes out of business, preferred stockholders get their investments back before common stockholders.

Stock Splits

Owners of common stock may sometimes vote on whether to initiate a stock split. A **stock split** means that each single share of stock splits into more than one share. A

company may seek to split a stock when the price of stock becomes so high that it discourages potential investors from buying it.

For example, suppose you own 200 shares in a sporting goods company called Ultimate Sports. Each share is worth \$100. After the split, you own two shares of Ultimate Sports stock for every single share you owned, so that you now own 400 shares. Because the price is divided along with the stock, however, each share is now worth only \$50. Although the split has not immediately resulted in any financial gain, shareholders like stock splits because prices tend to rise afterward.

Risks of Buying Stock

Purchasing stock is risky because the firm selling the stock may earn lower profits than expected, or it may lose money. If so, the dividends will be smaller than expected or nothing at all, and the market price of the stock will probably decrease. If the price of the stock decreases, investors who choose to sell their stock will get less than they paid for it, experiencing a capital loss.

How do the risk and rate of return on stocks compare to the risk and rate of return on bonds? As you have read, investors expect higher rates of return when they take on greater risk. Because of the laws governing bankruptcy, stocks are more risky than bonds. When a firm goes bankrupt, it sells its assets (such as land and equipment) and then pays its creditors, including bondholders, first. Stockholders receive dividends only if there is money left over after bondholders are paid. As you might expect, because stocks are riskier than bonds, the returns on stocks are generally higher.

How Stocks Are Traded

Suppose you decide that you want to buy stock. Do you call up the company and place an order? Probably not, because very few companies sell stock directly. Instead, you would contact a **stockbroker**, a person who links buyers and sellers of stock.

Stockbrokers usually work with individual investors, advising them to buy or sell particular stocks.

Stockbrokers work for **brokerage firms**, or businesses that specialize in trading stocks. Stockbrokers and brokerage firms cover their costs and earn a profit by charging a commission, or fee, on each stock transaction. Sometimes they also act as dealers of stock, meaning that they buy shares at a lower price and sell them to investors at a slightly higher price, profiting from the difference, or “spread.”

Stock Exchanges

Stock is bought and sold on **stock exchanges**, or markets for buying and selling stock. These markets act as secondary markets for stocks and bonds. Most newspapers publish data on transactions in major stock exchanges. (See Figure 11.7 to learn how to read a newspaper stock market report.)

Major United States stock exchanges include the New York Stock Exchange

(NYSE) and Nasdaq. In addition, a large number of people trade stocks on the Internet. (See Skills for Life on page 284 to learn more about reading a stock market report on the Internet.)

brokerage firm a business that specializes in trading stocks

stock exchange a market for buying and selling stock

The New York Stock Exchange

The New York Stock Exchange (NYSE) is the country’s largest and most powerful exchange. The NYSE began in 1792 as an informal, outdoor exchange under a now-famous buttonwood tree in New York’s financial district. Over time, as the financial market developed and the demand to buy and sell financial assets grew, the exchange moved indoors and became restricted to a limited number of members, who buy “seats” allowing them to trade on the exchange. Today, new technologies make trading so fast that a transaction takes only an instant.

The NYSE handles stock and bond transactions for only the largest and most established companies in the country. The largest and best-known companies listed

Figure 11.7 Reading a Newspaper Stock Report

52 Weeks											
Hi	Lo	Stock	Sym	DIV	Yld %	PE	Vol 100s	Hi	Lo	Close	Net Chg
40.38	22.50	Disney	DIS	0.21	0.70	40.00	74244.00	30.56	29.69	29.75	-0.25
52.56	26.94	DoleFood	DOL	0.40	1.30	72.00	2927.00	31.75	31.38	31.63	0.44
22.75	12.88	DominRes	DOM	2.56	15.80	...	288.00	16.19	15.88	16.19	0.13
16.50	5.06	DonnaKrn	DK	1283.00	9.88	8.88	9.88	0.88	...
22.38	12.13	Donnelly A	DON	0.40	2.90	21.00	270.00	13.75	13.25	13.75	0.56
136.88	74.69	DowChem	DOW	3.48	2.50	25.00	13513.00	138.00	132.38	136.94	3.38

52 Weeks Hi and Lo: the highest and lowest prices paid for the stock over the past year

PE: The price-to-earnings (PE) ratio is equal to the stock’s current price divided by the company’s earnings per share the previous year.

Hi and Lo: the highest and lowest prices paid for the stock on that day

Close: the price paid for the stock in the last trade of the day

Net Chg: how much the stock moved up or down during the day

Vol 100s: This column lists the number of shares sold (in hundreds). Multiply this number by 100 to find out how many shares were traded for that day.

Yld %: Yield is equal to the dividend as a percentage of the stock price.

Div: Most companies send dividends, or payments, to shareholders. Div shows the amount of the dividend in dollars per share.



Many newspapers publish daily reports of stock market transactions. The explanations of the abbreviations in this sample report will help you read stock market reports in your own daily paper.

Income Which of the companies listed pays the highest dividend?



▲ Stockbrokers link buyers and sellers of stock.

OTC market an electronic marketplace for stocks and bonds

Nasdaq American market for OTC securities

futures contracts to buy or sell at a specific date in the future at a price specified today

options contracts that give investors the choice to buy or sell stock and other financial assets

call option the option to buy shares of stock at a specified time in the future

put option the option to sell shares of stock at a specified time in the future

on the NYSE are referred to as blue chip companies. Blue chip stocks are often in high demand because investors expect the companies to continue to do business profitably for a long time.

The OTC Market

Despite the importance of organized stock exchanges like the New York Stock Exchange, many stocks, as well as bonds, are not traded on the floor of stock exchanges. Instead, they are traded on the **OTC market**, that is, over-the-counter, or electronically. Investors may buy directly from a dealer or from a broker who will search the market for the best price.

Nasdaq

Nasdaq (the National Association of Securities Dealers Automated Quotations) is the American market for over-the-counter securities. Nasdaq was created in 1971 to help solve the problem of fragmentation in the OTC market by using automation. By the 1990s, it had grown into the second largest securities market in the United States and the third largest in the world, linking markets in the United States, Asia, and Europe. Because it does not have a trading floor, Nasdaq's trading information is

simultaneously broadcast to some 360,000 computer terminals throughout the world.

Futures and Options

Futures are contracts to buy or sell commodities at a specific date in the future at a price specified today. For example, a buyer and seller might agree today on a price of \$4.50 for a bushel of soybeans six or nine months in the future. The buyer would pay some portion of the money today, and the seller would deliver the goods in the future. Many of the markets in which futures are bought and sold are associated with grain and livestock exchanges. These markets include the New York Mercantile Exchange and the Chicago Board of Trade.

Similarly, **options** are contracts that give investors the choice to buy or sell stock and other financial assets. Investors may buy or sell a particular stock at a particular price up until a certain time in the future—usually three to six months. The option to buy shares of stock at a specified time in the future is known as a **call option**.

For example, you may pay \$10 per share today for a call option. The call option gives you the right, but not the obligation, to purchase a certain stock at a price of, say, \$100 per share. If at the end of six months, the price has gone up to \$115 per share, your option still allows you to purchase the stock for the agreed-upon \$100. You thus earn \$5 per share (\$15 minus the \$10 you paid for the call option). If, on the other hand, the price has dropped to \$80, you can throw away the option and buy the stock at the going rate.

The option to sell shares of stock at a specified time in the future is called a **put option**. Suppose that you, as the seller, pay \$5 for the right to sell a particular stock that you do not yet own at \$50 per share. If the price per share falls to \$40, you can

buy the share at that price and require the contracted buyer to pay the agreed-upon \$50. You would then make \$5 on the sale (\$10 minus the \$5 you paid for the put option). If the price rises to \$60, however, you can throw away the option and sell the stock for \$60.

Daytrading

Most people who buy stock hold their investment for a period of time—sometimes many years—with the expectation that it will grow in value. Recently, however, a different type of stock trading, called daytrading, has become popular. Daytraders try to predict minute-by-minute price changes based on computer programs that tell the trader when to buy and sell. These traders might make dozens of trades a day in hopes of making a profit. Unfortunately, daytrading is a risky business in which traders can lose a great deal of money.

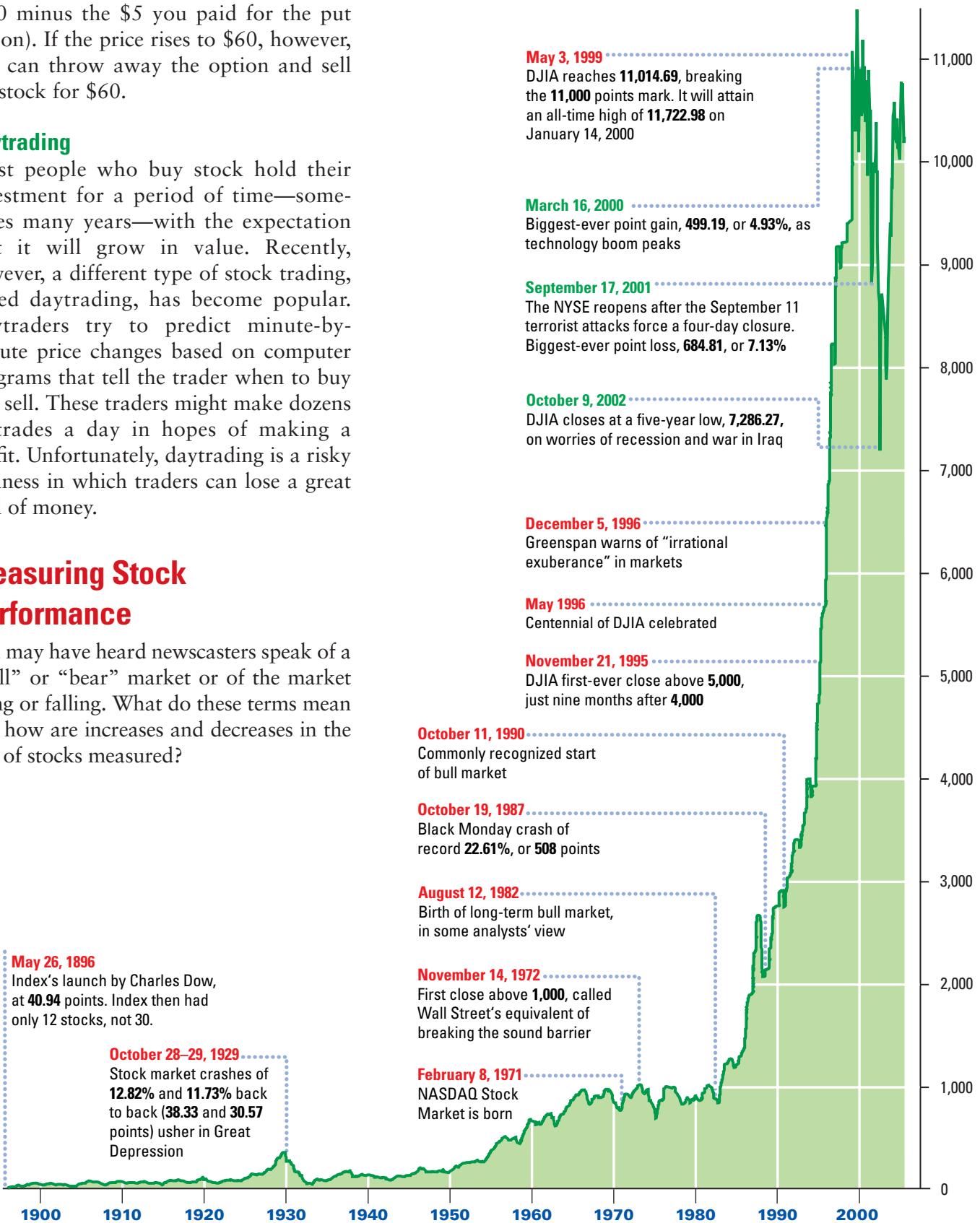
Measuring Stock Performance

You may have heard newscasters speak of a “bull” or “bear” market or of the market rising or falling. What do these terms mean and how are increases and decreases in the sale of stocks measured?

May 26, 1896
Index's launch by Charles Dow, at **40.94** points. Index then had only 12 stocks, not 30.

October 28–29, 1929
Stock market crashes of **12.82%** and **11.73%** back to back (**38.33** and **30.57** points) usher in Great Depression

Figure 11.8 The Dow, 1896–2005



Source: *The Wall Street Journal; Yahoo! Finance*

bull market a steady rise in the stock market over a period of time

bear market a steady drop in the stock market over a period of time

The Dow index that shows how certain stocks have traded

S & P 500 index that shows the price changes of 500 different stocks

Great Crash the collapse of the stock market in 1929

speculation the practice of making high-risk investments with borrowed money in hopes of getting a big return

Bull and Bear Markets

When the stock market rises steadily over a period of time, a **bull market** exists. On the other hand, when the stock market falls for a period of time, people call it a **bear market**. In a bull market, investors expect an increase in profits and thus buy stock. During a bear market, investors sell stock in expectation of lower profits. The 1980s and 1990s brought the longest sustained bull market in the nation's history. A multi-year bear market began in 2000.

The Dow Jones Industrial Average

The Dow (The Dow Jones Industrial Average) has shown how certain stocks have traded daily since 1896. To make sure that the stocks remain representative of the stock market as a whole, over the years the companies on the Dow have changed. Today, the stocks on the Dow represent 30 large companies in various industries, such as food, entertainment, and technology.

S & P 500

The **S & P 500** (Standard & Poor's 500) gives a broader picture of stock performance. It tracks the price changes of 500 different stocks as a measure of overall stock market performance. The S&P 500 reports mainly

on stocks listed on the NYSE, but some of its stocks are traded on the Nasdaq and OTC markets.

The Great Crash of 1929

Like the 1980s and 1990s, the 1920s saw a long-term bull market. Unfortunately, this period ended in a horrifying collapse of the stock market known as the **Great Crash**. The causes of this collapse contain important lessons for investors today.

Investing During the 1920s

When President Herbert Hoover took office in 1929, the United States economy seemed to be in excellent shape. The stock market is widely viewed as the nation's main economic indicator, and the stock market was soaring. In 1925, the market value of all stocks had been \$27 billion. By early October 1929, combined stock values had hit \$87 billion, rising by almost \$11.4 billion in 1928 alone.

Signs of Trouble

Despite widespread optimism about continuing prosperity, there were signs of trouble. A relatively small number of companies and families held much of the nation's wealth. Many farmers and workers, on the other hand, were suffering financially. In addition, many ordinary people went into debt buying consumer goods such as refrigerators and radios—new and exciting inventions at the time—on credit. Finally, industries were producing more goods than consumers could buy. As a result, some industries, including the important automobile industry, developed large surpluses of goods, and prices began to slump.

Another economic danger sign was the debt that investors were piling up by playing the stock market. The dizzying climb of stock prices encouraged widespread **speculation**, the practice of making high-risk investments with borrowed money in hopes of getting a big return. To make matters worse, before World War I, only the wealthy had bought and sold



▲ As stock market prices fell in 1929, nervous investors crowded onto Wall Street hoping to hear the latest news.

shares in the stock market. Now, however, the press was reporting stories of ordinary people making fortunes in the stock market. Small investors thus began speculating in stocks, often with their life savings.

To attract less-wealthy investors, stockbrokers encouraged a practice called buying on margin. Buying on margin allowed investors to purchase a stock for only a fraction of its price and borrow the rest from the brokerage firm. Brokers' loans to these investors went from about \$5 million in mid-1928 to \$850 million in September 1929. The Hoover administration did little to discourage such borrowing.

The Crash

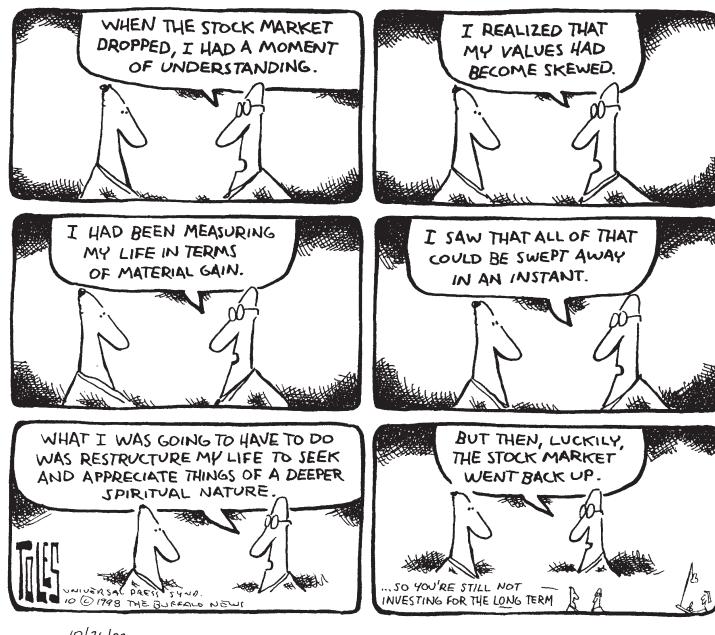
By September 3, 1929, the Dow had reached an all-time high of 381. The rising stock prices dominated the news. Eager investors filled brokerage firms to catch the latest news coming in on ticker tape. Prices for many stocks soared far above their real values in terms of the company's earnings and assets.

After their peak in September, stock prices began to fall. Some brokers demanded repayment of loans. When the stock market closed on Wednesday, October 23, 1929, the Dow had dropped 21 points in an hour. The next day, worried investors began to sell, and stock prices fell further. Business and political leaders told the public not to worry about their losses, but widespread panic began.

By Monday, October 28, 1929, the value of shares of stock were dropping to a fraction of what people had paid for them. Investors all over the country were therefore racing to get what was left of their money out of the stock market. On October 29, 1929, known as Black Tuesday, a record 16.4 million shares were sold, compared with the average 4 to 8 million shares per day earlier in the year. The Great Crash had begun.

The Aftermath of the Crash

During the bull market that led up to the Crash, about 4 million people had invested in the stock market. Although they were



▲ What does the cartoonist suggest about investors in the 1990s who assumed that the stock market would only keep climbing?

the first to feel the effects of the Crash, eventually the whole country was affected. The Crash contributed to the Great Depression, in which millions of Americans lost their jobs, homes, and farms.

Mistakes in monetary policy slowed the nation's recovery. In 1929, the Fed had begun limiting the money supply in order to discourage excessive lending. With too little money in circulation, individuals and businesses could not spend enough to help the economy improve.

After the Depression, many people saw stocks as risky investments to be avoided. In 1980, only about 2.5 percent of American households held stock. Gradually, however, attitudes began to change. The development of mutual funds also made it easy to own a wide range of stocks. Americans became more comfortable with stock ownership.

After a period of very strong growth, stocks crashed again on "Black Monday," October 18, 1987. The Dow Jones

FAST FACT

The story of the rise, fall, and recovery of General Motors offers a lesson for investors who saw technology stocks soar, then rapidly lose value in the late 1990s and early 2000s. When William C. Durant founded General Motors in the early 1900s, investment capital poured in. GM stock rose more than 5,500% from 1914 to 1920. When the overcrowded auto industry began to disappoint investors in the early 1920s, however, auto stocks plummeted, and GM stock lost two-thirds of its value in six months. Eventually, of course, GM recovered and prospered.

► Following the September 11, 2001, terrorist attacks, the American flag draped over the New York Stock Exchange symbolized American unity and patriotism.



lost 22.6% of its value that day—nearly twice the one-day loss that began the Crash of 1929. This time the market rebounded on each of the next two days, and impact on the economy was much less severe. The Fed moved quickly to add liquidity and reduce interest rates to stimulate economic growth. Within two years, the Dow returned to pre-crash levels.

The Market Today

During the second half of the 1990s, stock prices rose dramatically. Many people bought stock for the first time or invested in new technology companies. At the end of the 1990s, almost half of American households owned mutual funds.

By 2000, however, investors had become worried that most companies could not make enough money to justify their high stock prices. Stocks fell, and many investors lost most or all of their prior gains. The following year, an economic recession and terrorist attacks further battered the stock market.

In 2002, several large corporations, including Enron and WorldCom, declared bankruptcy and revealed that they had issued false financial reports for several years. Stock prices fell even more as investors questioned how much they really knew about the companies they had invested in. The federal government introduced new rules for corporations to restore confidence in the market. The stock market recovered, but it remained below the peak values reached during the bull market of the 1990s.

Section 3 Assessment

Key Terms and Main Ideas

1. What are two benefits and two risks of buying stock?
2. Identify two **stock exchanges** and describe the differences between them.
3. Describe two popular indexes of stock performance.
4. What were three causes of the **Great Crash**?

Applying Economic Concepts

5. **Critical Thinking** Many people believe that electronic trading services will replace stockbrokers in the future. What might be the advantages and disadvantages of this development?
6. **Critical Thinking** What might be the advantages and disadvantages of trading in futures and options? Choose a specific example to support your conclusions.

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For: Self-quiz with vocabulary practice
Web Code: mna-4117

7. **Try This** What three questions would you ask a stockbroker before buying a company's stock?
8. **You Decide** Would you advise a friend to become a daytrader? Explain your answer.
9. **You Decide** Suppose you were given \$1,000 to invest in the stock market. How would your choice of stock be influenced by the fact that you will soon need to pay college tuition?

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Real-life Case Study

The Fate of the Dot-Coms

The “dot-coms” are companies that sprang up to take advantage of the potential business opportunities offered by the Internet. The first of these companies to take off provided services directly relating to the Internet—companies like America Online and Netscape. Right behind them came a big group of “B2C” companies, businesses marketing products to consumers. Amazon.com is the best known of these, but there were hundreds—even thousands—more looking for a share of consumers’ spending.



▲ What does the cartoon suggest about investing in dot-coms?

reality, they were probably never as good as people thought at the height of the market, or as bad as people thought after the fall. Certainly the Internet will continue to expand, and its use in business will grow. Companies that are able to develop useful Web-based services may find that they grow more steadily, but more reliably, than during the boom years.

Applying Economic Ideas

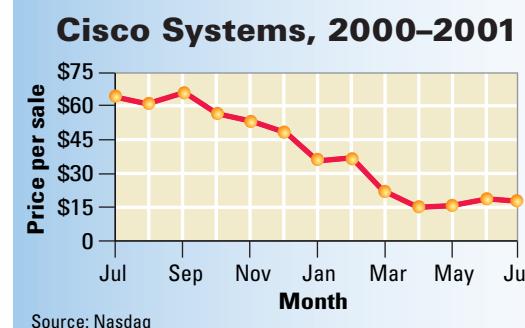
1. Why did the initial success of dot-coms make it easier for other dot-com companies to get started?
2. What might a dot-com entrepreneur have done to avoid the “boom and bust” cycle that many technology stocks experienced?

Unlimited Potential? Many dot-coms were started by young entrepreneurs with more vision than experience. Companies like Amazon declared that making a profit in the short term was less important than developing a large market share for the long run. Even though the companies were losing money, and often did not expect to be profitable for years, excited investors flocked to the stocks. Stock prices soared, which in turn generated more excitement, attracted more investors, and pushed stock prices even higher. Venture capitalists funded fledgling companies and pushed them quickly to market in order to take advantage of the hot stock market.

The Fall of the Dot-Coms In the middle of 2000, Internet stocks fell sharply as investors became concerned about the lack of profits. The companies could stay in business if investors were willing to put up more money or if they had profits to reinvest. Otherwise, they could quickly run out of money. Many dot-coms filed for bankruptcy protection or closed their doors entirely. Investors saw the value of their holdings plummet.

The Future of the Dot-Coms After the fall of technology stocks, many formerly enthusiastic entrepreneurs and investors began to think that dot-coms would never be a good investment. In

▼ One technology stock, Cisco Systems, reflected the decline of the value of dot-coms in 2001.



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Chapter 11 Assessment

Chapter Summary

A summary of major ideas in Chapter 11 appears below. See also the **Guide to the Essentials of Economics**, which provides additional review and test practice of key concepts in Chapter 11.

Section 1 Saving and Investing (pp. 271–275)

Saving and **investment** are essential parts of the American free enterprise system. In our financial system, institutions called **financial intermediaries** bring together savers and borrowers to channel funds for investment. Investors must weigh potential risks and **returns** when choosing among the many types of investments available.

Section 2 Bonds and Other Financial Assets (pp. 277–283)

Businesses and governments issue bonds and other financial assets in order to finance expansion. Bonds are relatively low-risk investments for purchasers, who generally receive the purchase price of the bond plus interest when the bond matures. Other financial assets, such as money market mutual funds and certificates of deposit, offer additional investment opportunities.

Section 3 The Stock Market (pp. 285–292)

The stock market is another way for people to invest their earnings. Stocks offer possibilities for high return, but also present certain risks. Major **stock exchanges** in the United States include the New York Stock Exchange and the **Nasdaq**, an electronic stock exchange. Stock performance is measured by **The Dow** and the **S & P 500**. The **Great Crash** of 1929 dealt the stock market one of its worst economic blows in our history. Following a period of distrust of the stock market in the decades after the Crash, however, investors returned to the stock market in great numbers.

Key Terms

Match the following terms with the definitions listed below. You will not use all of the terms.

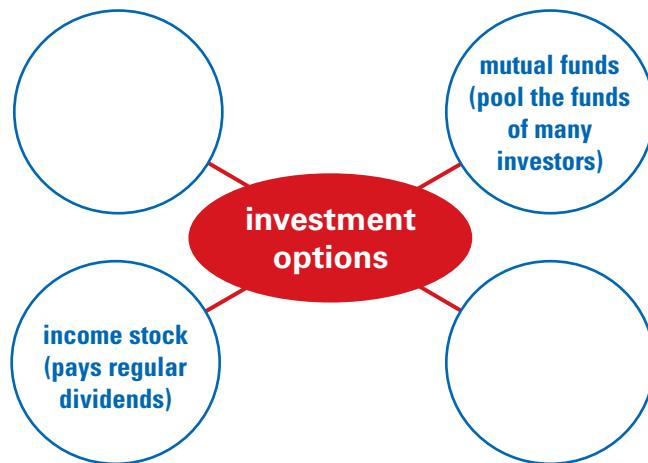
brokerage firm
junk bonds
bull market
coupon rate
investment
speculation

portfolio
financial intermediary
maturity
diversification
capital gain

1. Spreading out your investments to reduce risk
2. Difference between a higher selling price and a lower purchase price
3. The interest rate to be paid to the bondholder
4. A period of time during which the stock market steadily rises
5. An action taken today that will create benefits in the future
6. Institution that helps channel funds from savers to investors
7. Lower-rated, higher-paying bonds
8. The practice of making high-risk investments in hopes of getting a big return
9. Collection of financial assets

Using Graphic Organizers

10. On a separate sheet of paper, copy the web map below. Complete the web map by writing and describing examples of investment options in the circles. More circles may be added.



Reviewing Main Ideas

11. What do financial intermediaries do?
12. How do bond ratings influence which bonds investors buy? How are bond ratings established?
13. Describe three ways that stocks are traded.
14. How does diversification strengthen an investor's portfolio?

Critical Thinking

15. **Drawing Conclusions** Using evidence from the chapter, support the following statement: Savings and investments play an essential role in the free enterprise system.
16. **Making Comparisons** Compare different means by which savings can be invested and the risks each strategy poses to the consumer.
17. **Drawing Conclusions** Review the causes of the Great Crash of 1929. What lessons can investors learn from the Crash?
18. **Demonstrating Reasoned Judgment** Analyze the economic impact of investing in the stock and bond market.

Problem-Solving Activity

19. Suppose that you have been handed \$10,000. Now, create your own hypothetical investment portfolio that best suits your needs and goals. What types of financial intermediaries will you use? Will you invest more money in stocks, bonds, or other financial assets?

Skills for Life

Predicting Consequences Review the steps shown on page 284; then answer the following questions using the table below.

20. What is the topic of the table?
21. What economic indicators does the table show?
22. What time period do the data cover?
23. Identify two trends that you can find in these data.
24. How might you explain these trends in the data?

Stock Market Data

	Number of Shares Traded (millions)	Dow Jones Industrial Average (average daily close)
January 2007	35,410	11,359.25
February 2007	42,491	12,014.98
March 2007	47,345	11,895.42
April 2007	41,109	11,012.01
May 2007	39,882	10,891.11

Data are fictional.

Economics Journal



Synthesizing Information Review the list of questions you created at the beginning of the chapter. Use what you have learned in the chapter to answer your questions. Research any remaining questions in the library or on the Internet.

Progress Monitoring Online

For: Chapter 11 Self-Test Visit: PHSchool.com
Web Code: mna-4111

As a final review, take the Economics Chapter 11 Self-Test and receive immediate feedback on your answers. The test consists of 20 multiple-choice questions designed to test your understanding of the chapter content.

Making Investment Decisions

Long ago, many people saved their money by tucking it away in a sugar bowl or underneath a mattress. These are relatively safe, but not very profitable, options for savings. Today, there are a wide number of investment options available to help your savings multiply. Banks offer various types of savings accounts and certificates of deposit (CDs). These are safe and accrue small amounts of interest. More aggressive investments, such as mutual funds, government bonds, and stocks and bonds, potentially offer greater returns, but are relatively risky.

In this simulation, you and your group are trying to raise enough money to pay for all 100 students in your senior class to visit a nearby amusement park. You plan to take the trip in one year, and you have already saved some money. You want to earn as much interest or dividends as you can, but you only have one year. How will you make your money grow?

Materials

Paper
Calculator



▲ How will you raise enough money to pay for a senior class trip to an amusement park?

Preparing the Simulation

The best way to make sound investments is to understand your choices thoroughly. Your task in this simulation is to determine the best way to raise enough money for your senior trip in only one year.

Step 1: First, form fundraising groups of five to eight students. Each fundraising group will begin with \$5,000 to invest for one year.

Step 2: Your goal is to raise enough money for everyone in your senior class to spend a Senior Weekend at a nearby amusement park. There are 100 students in your senior class, and you have figured out that it will cost \$8,000 to buy two-day passes for everyone.

Conducting the Simulation

The simulation will consist of two parts. First, you will discuss your investment options and make your choices. Then you will calculate the results and discover how much you would have made—or lost.

Step 1: First, examine your investment options. Of all the options available, you have narrowed down your choices to the five shown in the investment choices chart. Some of your choices have guaranteed returns on your investment, but others do not. Be sure you understand the risks as well as the potential returns of each kind of investment.

Step 2: As a group, discuss your philosophy of investing. Do you want to take risks in hopes of a higher return? Would you rather avoid risk in your investments, but earn a smaller return?

As you discuss each fundraising choice, keep these questions in mind:

- Does this alternative guarantee a certain rate of return, or might the rate of return vary?
- Is this choice aggressive enough to earn the necessary amount of money in one year?
- What is the risk associated with this investment choice?

Step 3: Decide how to invest your group's \$5,000. Make an investments and returns chart like the one on this page, and record your investment choices.

Step 4: Now, suppose it is one year later, and it is time to analyze the results of your investment decisions. Your teacher will provide you with the performance figures for each investment option. Using that information, calculate your profits and losses on stock and mutual funds. Figure out the interest you would have accumulated from bank deposits or CDs.

Investments and Returns Chart		
Choices	Amount Invested	Amount of Return
Gibraltar Bank Savings Account	\$	\$
One-Year Certificate of Deposit (CD)	\$	\$
Rock Solid Mutual Fund	\$	\$
Hurrah! Stock	\$	\$
Wycombe and Marlow Health Care	\$	\$
Totals	\$	\$

Fundraising Options

Options	Potential Return
Deposit the money in a bank <i>Gibraltar Bank Savings Account</i> A traditional savings account at your local bank is fully guaranteed by the FDIC, and deposits can be withdrawn at any time.	2% guaranteed
<i>One-Year Certificate of Deposit</i> This CD is fully guaranteed by the FDIC, but deposits may only be withdrawn after the end of one full year.	4% guaranteed
Invest in the stock market <i>Rock Solid Mutual Fund</i> This mutual fund invests in blue chip stocks, which are stocks for large, well-established companies that expect slow and steady growth.	8% return last year; return not guaranteed
<i>Hurrah! (individual company stock)</i> This brand-new technology company has been all over the news in the last few weeks. The new technology it developed has revolutionized how companies conduct business across the Internet.	brand new; no data to determine how this stock will perform
<i>Wycombe and Marlow Health Care</i> This company is in financial trouble but could turn itself around. The bonds it has issued are considered junk bonds; if the company is able to pay interest on the bonds, investors will make a healthy profit.	15%, if the company can pay the interest when it is due

Simulation Analysis

As a final step, meet with the other fundraising groups and compare your investment choices and their results.

1. How many of the groups met their goal of turning their \$5,000 into \$8,000 in one year?
2. Which group's investments earned the most? Did this group take risks or make "safe" choices?
3. Did any groups lose money? Was it because they took risks? Or were there changes in the economy over the year?
4. **Identifying Alternatives** If you could do this simulation again, would you have made different investment choices? Why or why not?