



CHAPTER

**11**

# Financial Markets

## Why It Matters

You have just been hired as a financial planner to provide advice on how to invest wisely and effectively. Miguel, your client, is a widower raising two young children. He wants to be sure that (1) he will have enough money to send his children to college, and (2) he will be financially secure in his retirement. What advice would you give Miguel? Read Chapter 11 to learn more about how people can accomplish their financial goals.

### The BIG Idea

Governments and institutions help participants in a market economy accomplish their financial goals.

Traders on the Chicago Mercantile Exchange

talk to one another with hand signals.



**Economics ONLINE Chapter Overview** Visit the *Economics: Principles and Practices* Web site at [glencoe.com](http://glencoe.com) and click on *Chapter 11—Chapter Overviews* to preview chapter information.



SECTION

1

# Savings and the Financial System

## GUIDE TO READING

### Section Preview

In this section, you will learn how the components of a financial system work together to transfer savings to investors.

### Content Vocabulary

- saving (p. 289)
- savings (p. 289)
- certificate of deposit (p. 290)
- financial asset (p. 290)
- financial system (p. 290)
- financial intermediary (p. 290)
- nonbank financial institution (p. 292)
- finance company (p. 292)
- premium (p. 292)
- pension (p. 292)
- pension fund (p. 292)
- risk (p. 293)

### Academic Vocabulary

- sector (p. 291)
- compensation (p. 294)

### Reading Strategy

**Describing** As you read the section, complete a graphic organizer like the one below by describing how financial intermediaries channel money.

Financial intermediary	Way to channel money

## ISSUES IN THE NEWS

—www.businessweek.com

### Follow My Money

Jonathan Ping is not a financial guru. And he's not a millionaire (yet). He's simply a 27-year-old engineer living with his wife and dog in a rented house in Portland, Oregon. Within the next 18 months he hopes to scrape up \$100,000 for a down payment on a home, and he wants to build a net worth of \$1 million by age 45. So far he's at \$88,953.

How do I know this? It's in bold type in the top right-hand corner of his Web log, where Ping keeps a daily tally of his progress. He's one of more than 150 bloggers, mostly 22 to 35, who have adopted an open-source approach to personal finance. In stark contrast to their parents' generation, for whom comparing incomes can be awkward, if not downright taboo, bloggers list financial information down to the dollar in retirement, brokerage, and savings accounts. They recommend investments, decry credit-card debt, and wallow together over high taxes. ■



For an economic system to grow, it must produce capital—the equipment, tools, and machinery used in production. In order for this to happen, saving must take place. To the economist, **saving** means the absence of spending, while **savings** refers to the dollars that become available when people abstain from consumption.

Our financial system continually evolves to meet the needs of both savers and investors. If you decide to save your income, as Jonathan Ping in the news story and other bloggers are doing, you should learn about some important investment considerations. You also will see that you can choose from a wide variety of options.

**saving** absence of spending that frees resources for use in other activities or investments

**savings** the dollars that become available for investors to use when others save



## **certificate of deposit**

document showing that an investor has made an interest-bearing loan to a financial institution

## **financial asset**

a stock or other document that represents a claim on the income and property of a borrower, such as a CD, bond, Treasury bill, or mortgage

## **financial system**

network of savers, investors, and financial institutions working together to transfer savings for investment uses

## **financial intermediary**

institution that channels savings to investors

## **Personal Finance Handbook**

See pages R6–R9 for more information on saving and investing.

**Saving** When you open a savings account, you make money available for business investments. **How does money from savers reach investors?**

# **Saving and Economic Growth**

**MAIN Idea** The financial system brings savers and borrowers together and helps the economy grow.

**Economics & You** Do you have a personal savings account? Read on to learn how your savings are used to help the economy.

When people save, they make funds available for others to use. Businesses can borrow these savings to produce new goods and services, build new plants and equipment, and create more jobs. Saving thus makes economic growth possible.

## **Savers and Financial Assets**

People can save in a number of ways. They can open a savings account, buy a bond, or purchase a **certificate of deposit**—a document showing that an investor has made an interest-bearing loan to a bank. In each case, savers obtain a receipt for the funds they save.

Economists call these documents **financial assets**—claims on the property and the income of the borrower. The documents are assets because they are property that has value. They represent claims on the borrower because they specify the amount loaned and the terms at which the loan was made.

Stocks, or ownership claims on a corporation, are another type of financial asset. However, because stocks have some unique features that require additional consideration, we will discuss them separately in the last section of this chapter. Collectively, investors have a full range of financial assets from which to choose.

## **The Circular Flow of Finance**

In order for people to use the savings of others, the economy must have a **financial system**—a network of savers, investors, and financial institutions that work together to transfer savings to investors.

The financial system has three parts. The first part is made up of the funds that a saver transfers to a borrower. The second consists of the financial assets that certify conditions of the loan. The third comprises the organizations that bring the surplus funds and financial assets together.

**Financial intermediaries** are the institutions that lend the funds that savers provide. Financial intermediaries include depository institutions such as banks and credit unions, life insurance companies, pension funds, and other institutions that channel savings to borrowers. These institutions are especially helpful to small savers, who have only limited funds available to deposit.





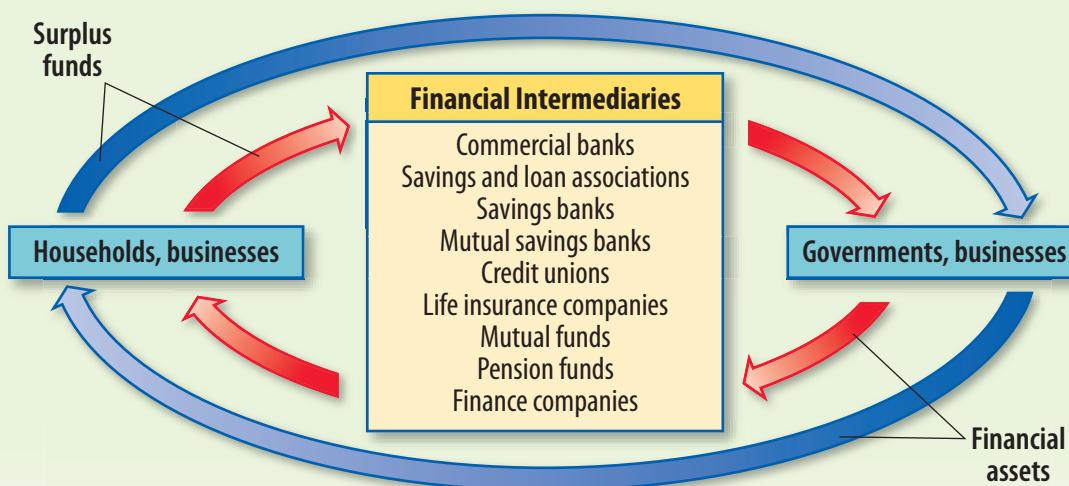
## Figure 11.1 ► Overview of the Financial System

- Financial intermediaries help channel surplus funds from savers to borrowers, who put the money to work. Savers also lend directly to governments and businesses, who issue bonds or other financial assets for the money they borrow.

**Economic Analysis** *What do lenders receive in return for their funds?*

**Charts In Motion**

See StudentWorks™ Plus  
or [glencoe.com](http://glencoe.com).



**Figure 11.1** shows the circular flow that takes place when funds are transferred from savers to borrowers. Savers can provide their funds directly to the borrower. They also can do so indirectly through the many financial intermediaries in the economy, such as banks, life insurance companies, and credit unions. The documents that certify the ownership of the funds—the certificates of deposit, savings and other bank accounts, as well as bonds—are the financial assets that return to the lender.

### Financing Capital Formation

Any sector of the economy can borrow, but governments and businesses are the largest borrowers. If a corporation borrows directly from savers—or indirectly from savers through financial intermediaries—the corporation will issue a bond or other financial asset to the lender. When the government borrows, it issues government bonds or other financial assets to the lender.

Any sector of the economy can supply savings, but households and businesses are the biggest sources of funds. Savers can provide some funds directly to borrowers, as when households or businesses purchase bonds directly from government or businesses.

Capital formation depends on saving and borrowing. When households borrow, they invest some of the funds in homes. When businesses borrow, they invest some of the funds in tools, equipment, and machinery. When governments borrow, they invest some of the funds in highways, hospitals, universities, and other public goods.

In the end, everyone benefits from the financial system. The smooth flow of funds through the system helps ensure that savers will have an outlet for their savings. Borrowers, in turn, will have a source of financial capital that can be invested in capital goods to benefit future economic growth.

**Reading Check Summarizing** How does the financial system bring savers and borrowers together?



**nonbank financial institution**  
nondepository institution that channels savings to investors

**finance company**  
firm that makes loans directly to consumers and specializes in buying installment contracts from merchants who sell on credit

**premium**  
price paid at regular intervals for an insurance policy

**pension** regular payment to someone who has worked a certain number of years, reached a certain age, or has suffered an injury

**pension fund**  
fund that collects and invests income until payments are made to eligible recipients

## Nonbank Financial Intermediaries

**MAIN Idea** Organizations other than banks can transfer money from savers to borrowers.

**Economics & You** Have you ever heard your parents discuss pensions? Read on to learn why these are called nonbank financial intermediaries.

Banks, credit unions, and savings associations obtain funds when they accept regular deposits. Another important group of financial intermediaries is called **nonbank financial institutions**—or non-depository institutions that also channel savings to borrowers. Finance companies, life insurance companies, and pension funds are examples of nonbank financial institutions.

### Finance Companies

A **finance company** is a firm that specializes in making loans directly to consumers. It also buys installment contracts from merchants who sell goods on credit.

Many merchants, for example, cannot afford to wait years for their customers to pay off high-cost items purchased on an installment plan. Instead, a merchant will sell a customer's installment contract to a finance company for a lump sum. This allows the merchant to advertise easy credit terms without actually accepting the full risks of the loan. The finance company then carries the loan full term, absorbing losses for an unpaid account or taking customers to court if they do not pay.

## Did You Know?

**Tough Payoff** Finance companies charge much higher interest rates than banks or credit unions, which makes their loans much more expensive. Let's assume you want a 60-month car loan for \$6,000. A bank loan with an 8-percent interest rate would cost you \$1,300 in interest over the life of the loan. Interest on the same loan at a finance company charging 12 percent interest would total \$2,008, or at 16 percent, \$2,755. A few percentage points make a big difference!

Some finance companies make loans directly to consumers. These companies generally check a consumer's credit rating and will make a loan only if the individual qualifies. Because they make some risky loans and pay more for the funds they borrow, finance companies charge more than commercial banks for loans.

### Life Insurance Companies

Another financial institution that does not get its funds through deposits is the life insurance company. Although its primary purpose is to provide financial protection for the people who are insured, it also collects a great deal of cash.

The head of a family, for example, may purchase a life insurance policy to leave money for a spouse and children in case of his or her death. The **premium** is the price the insured pays for this policy, usually paid monthly, quarterly, or annually for the length of the protection. Because insurance companies collect cash for these premiums on a regular basis, they often lend surplus funds to others.

### Pension Funds

The pension fund is another nondepository financial institution. A **pension** is a regular payment intended to provide income security to someone who has worked a certain number of years, reached a specified age, or suffered a particular kind of injury. A **pension fund** is a fund set up to collect income and disburse payments to those persons eligible for retirement, old-age, or disability benefits.

In the case of private pension funds, employers regularly withhold a percentage of workers' salaries to deposit in the fund. During the 30- to 40-year lag between the time the savings are deposited and the time the workers generally use them, the money is usually invested in high-quality corporate stocks and bonds.

**Reading Check Comparing and Contrasting** How do finance companies, life insurance companies, and pension funds channel savings to borrowers?



## Figure 11.2 ▶ The Power of Compound Interest

► This table shows the balance in an account if monthly deposits of \$10 were compounded monthly. The higher the interest rate and the longer money is invested, the larger the final balance will be.

**Economic Analysis** *How much interest is earned after the first 10 years at 6 percent?*

**Tables In Motion**

See StudentWorks™ Plus or [glencoe.com](http://glencoe.com).

COMPOUND INTEREST						
Annual interest (in percent)	Value at end of year					
	5	10	15	20	25	30
0	\$600	\$1,200	\$1,800	\$2,000	\$2,500	\$3,600
2	\$630	\$1,327	\$2,097	\$2,948	\$3,888	\$4,927
4	\$663	\$1,472	\$2,461	\$3,668	\$5,141	\$6,940
6	\$698	\$1,639	\$2,908	\$4,620	\$6,930	\$10,045
8	\$735	\$1,829	\$3,460	\$5,890	\$9,510	\$14,904
10	\$774	\$2,048	\$4,145	\$7,594	\$13,268	\$22,605
12	\$817	\$2,300	\$4,996	\$9,893	\$18,788	\$34,950

## Basic Investment Considerations

**MAIN Idea** Investors should consider several factors before investing their money.

**Economics & You** Have you thought about investing some of your savings? Read on to learn what factors to consider.

You may want to participate in the financial system by investing in stocks, bonds, and other financial assets. Before you do so, you should be aware of four basic investment considerations.

### Consistency

Most successful investors invest consistently over long periods of time. In many cases, the amount invested is not as important as investing on a regular basis.

**Figure 11.2** shows how a monthly deposit of \$10 would grow over a 5- to 30-year period at various interest rates. Even at modest rates, the balance in the account accumulates fairly quickly. Because \$10 is a small amount, imagine how the account

would grow with a larger deposit! That is why many investment advisers tell people to save something every month.

**risk** situation in which the outcome is not certain, but the probabilities can be estimated

### Simplicity

Most analysts advise investors to stay with what they know. Thousands of investments are available, and many are quite complicated. Knowing a few fundamental principles can help you make good choices among these options.

One rule that many investors follow is to ignore any investment that seems too complicated. Another often-cited rule is that an investment that seems too good to be true probably is. A few investors do get lucky, but most build wealth because they invest regularly, and they avoid the investments that seem too far out of the ordinary.

### Skills Handbook

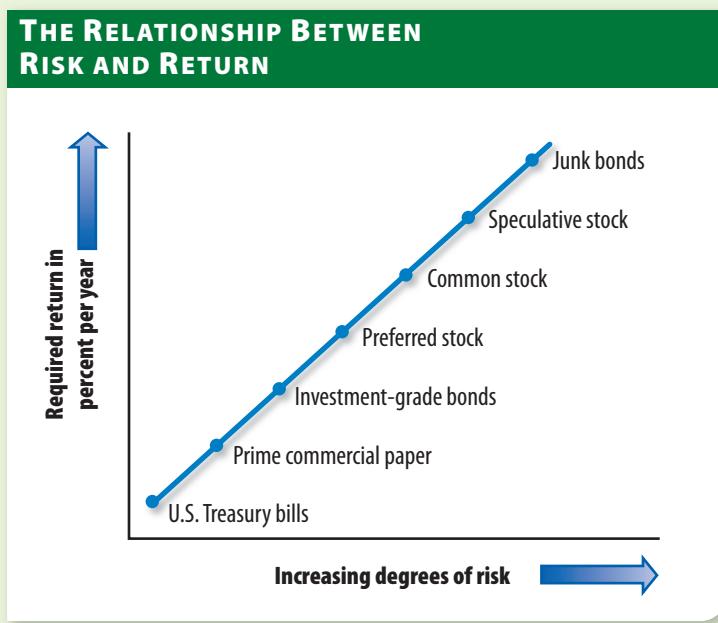
See page R57 to learn about **Interest Rates**.

### The Risk-Return Relationship

Another important factor is the relationship between risk and return. **Risk** is the degree to which the outcome is uncertain but a probable outcome can be estimated. Investors realize that some investments are riskier than others, so they normally



## Figure 11.3 ► Risk and Return



- The level of risk for investments can vary considerably. U.S. Treasury bills are regarded as the safest investments, while speculative stock and junk bonds are considered among the riskiest.

**Economic Analysis** *Why do investors require higher returns for some investments?*

demand higher returns as **compensation**. This relationship between increasing risks and returns is illustrated in **Figure 11.3**.

As an investor, you must consider the level of risk that you can tolerate. If you are comfortable with high levels of risk, then you may want to purchase risky investments that promise high returns. Otherwise consider lower-risk investments instead.

## Investment Objectives

Finally, you need to consider your reason for investing. For example, if you want to cover living expenses during periods of unemployment, you might want to accumulate assets that can easily be converted into cash. If you want to save for retirement, you might want to purchase common stocks that generate dividend income and appreciate in value over time.

Investors have a large number of stocks, financial assets, and other investments from which to choose. The investor's knowledge of his or her own needs is important in making these decisions.

✓ **Reading Check** **Identifying** If you were to invest your money, what would your objectives be?

### SECTION

# 1

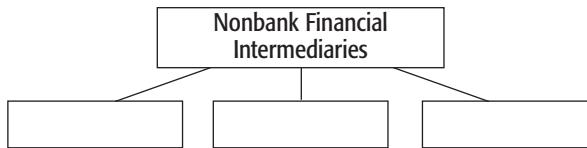
## Review

### Vocabulary

- Explain** the significance of saving, savings, certificate of deposit, financial asset, financial system, financial intermediary, nonbank financial institution, finance company, premium, pension, pension fund, and risk.

### Main Ideas

- Describing** How does saving compare to savings?
- Identifying** Use a graphic organizer like the one below to describe the nonbank financial intermediaries.



- Explaining** Why is consistency important when saving?

### Critical Thinking

- The BIG Idea** What is the relationship between the financial system and the economy?
- Comparing and Contrasting** How do life insurance companies and pension funds differ in the way they serve their clients?
- Analyzing Visuals** Look at Figure 11.2 on page 293. If you invested \$10 a month for 20 years at an annual interest rate of 6 percent, what would be your ending balance? How much of that would be your initial investment? How much would be the interest earned?

### Applying Economics

- Financial Assets** Why is an I.O.U. that you write and give to a friend in payment of a debt considered an example of a financial asset?



# Profiles in Economics

## Sallie Krawcheck (1965– )

- chief financial officer for Citigroup Inc., the world's largest financial institution
- ranked number 6 on *Forbes*'s top 100 of "The World's Most Powerful Women" for 2006

### Indirect Road to Success

While Sallie Krawcheck came to her current position at a fast pace, it was not on a straight path. Armed with a journalism degree, she became an investment banker but did not enjoy it. Instead she decided to pursue an MBA at Columbia University, only to return to investment banking when she could not find other job opportunities. Then, in a quick series of events, Krawcheck got married, had a baby, quit her job, and discovered within just two weeks of quitting that she enjoyed working too much to give it up. She decided to try her hand as a research analyst, but was rejected by every firm except the one—Sanford C. Bernstein—that would eventually help launch her fast-track career.

### Rising Star

As a research analyst, Krawcheck evaluated the stock of financial institutions. She looks back on this time as the best possible training for her future roles. Krawcheck learned to be persistent, work hard, be willing to learn from mistakes and, perhaps most importantly, stand by her decisions: "As an analyst, I was very comfortable being uncomfortable, and as a CFO I have to be comfortable being uncomfortable. I have to be fine with delivering bad news."

Krawcheck's reputation grew along with her success. Called "Mrs. Clean" because of her unwavering insistence on ethics and honesty, she was hired as the CEO of Smith Barney, the research and brokerage division of Citigroup which had gone through a period of ethical turmoil. Two years later, she found herself in the position of CFO at Citigroup, with an annual salary of \$500,000 in 2005. Bonuses and other benefits pushed the total up to nearly \$10 million.



*Sallie Krawcheck thinks that nothing prepared her better for Wall Street than feeling like an outcast in seventh grade. Ready to take contrarian stands today, she believes that one of the best lessons she learned then was to "zig when everyone else is zagging."*

### Examining the Profile

- Identifying** What skills helped Krawcheck most in being promoted and becoming a successful CFO?
- Making Inferences** What lessons do you think Krawcheck learned from her early career?



# Financial Assets and Their Markets

## GUIDE TO READING

### Section Preview

In this section, you will learn about the characteristics of various investments to help with your investments.

### Content Vocabulary

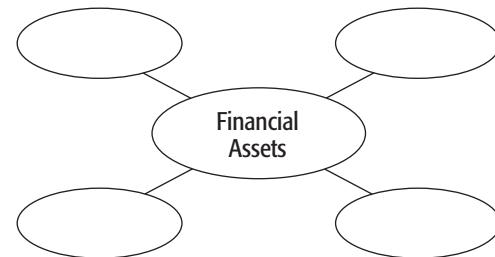
- bond (p. 297)
- coupon rate (p. 297)
- maturity (p. 297)
- par value (p. 297)
- current yield (p. 297)
- junk bond (p. 299)
- municipal bond (p. 299)
- tax-exempt (p. 300)
- savings bond (p. 300)
- beneficiary (p. 301)
- Treasury note (p. 301)
- Treasury bond (p. 301)
- Treasury bill (p. 301)
- Individual Retirement Account (IRA) (p. 302)
- capital market (p. 302)
- money market (p. 302)
- primary market (p. 303)
- secondary market (p. 303)

### Academic Vocabulary

- offset (p. 298)
- presumed (p. 300)

### Reading Strategy

**Identifying** As you read the section, use a graphic organizer similar to the one below to identify and describe at least four financial assets.



## ISSUES IN THE NEWS

—www.usatoday.com

### Want More Interest? Meet Bond, Junk Bond

Let's think about a little number: 4.59%. It's not the percentage of Americans who understand Olympic curling rules. It's the amount of interest you can earn annually on a 10-year Treasury note. That would be \$45.90 a year on a \$1,000 investment. Ah, good times. Good times.

You might be wondering, "Is there any way I can get a bit more interest?" Well, yes. You could invest some of your portfolio in a junk-bond fund. Bonds are long-term, interest-bearing IOUs . . . [and] . . . bonds issued by corporations tend to pay higher interest. That's because they can go bankrupt and default on their bonds. Bonds issued by companies with poor credit ratings pay the highest interest of all. The only problem: When you buy junk bonds at high prices, you run the risk of nastiness if the economy gets smacked. ■



**W**hen you decide to invest your money, you will have a variety of investment options. As you read in the news story, not all options are alike. Some investments carry only a small risk, but they also offer a smaller return. Other investments may offer the

possibility of larger returns, but the higher risk means you may never see that money if the company defaults on its promise to pay.

Many financial assets are available in the market. Before you invest in any of these, it helps to know the risks involved in each.



## Bonds as Financial Assets

**MAIN Idea** A bond is a long-term investment, with the price determined by supply, demand, and the buyer's assessment of repayment risk.

**Economics and You** Have you ever received a government bond as a birthday present? Read on to learn how the value of a bond is determined.

Governments and businesses issue bonds when they need to borrow funds for long periods. A **bond** is a formal long-term contract that requires repayment of borrowed money and interest on the borrowed funds at regular intervals over time.

Increasingly bonds are taking on an international flavor, with companies in one country issuing bonds in another. While this may seem complex, the main components of a bond are relatively simple.

### Bond Components

A bond has three main components: the **coupon rate**, or the stated interest on the debt; the **maturity**, or the life of the bond; and the **par value**, the principal or the total amount initially borrowed that must be repaid to the lender at maturity.

Suppose, for example, that a corporation sells a 6 percent, 20-year, \$1,000 par value bond that pays interest semiannually. The coupon payment to the holder is \$30 semiannually (.06 times \$1,000, divided by 2). When the bond reaches maturity after 20 years, the company retires the debt by paying the holder the par value of \$1,000.

### Bond Prices

The investor views the bond as a financial asset that will pay \$30 twice a year for 20 years, plus a final par value payment of

\$1,000. Investors can offer \$950, \$1,000, \$1,100, or any other amount for this future payment stream. Investors consider changes in future interest rates, the risk that the company will default, and other factors before they decide what to offer. Supply and demand among buyers and sellers will then establish the final price of the bonds.

**bond** contract to repay borrowed money and interest on the borrowed money at regular future intervals

**coupon rate** stated interest on a corporate, municipal, or government bond

**maturity** life of a bond or length of time funds are borrowed

**par value** principal of a bond or total amount borrowed

**current yield** bond's annual coupon interest divided by purchase price; measure of a bond's return

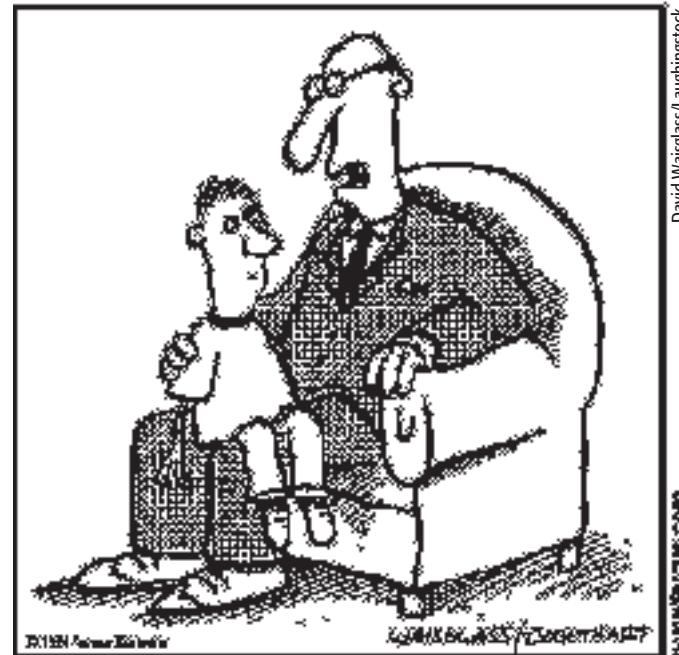
### Bond Yields

In order to compare bonds, investors usually compute the bond's **current yield**, the annual interest divided by the purchase price. If an investor paid \$950 for the bond described above, the current yield would be \$60 divided by \$950, or 6.32 percent. If the investor paid \$1,100 for the bond, the current yield would be \$60 divided by \$1,100, or 5.45 percent.

It may appear as if the issuer fixes the return on a bond when the bond is first issued. However, the interest received and the price paid determine the actual current yield of each bond. The result is that the bond yield, like the bond price, is determined by supply and demand.

## Farcus

by David Waisglass  
Gordon Coulouris



David Waisglass/Laughingstock

**Bonds** Corporate and government bonds are attractive because they can be safe and may be tax-exempt. **How is the actual return of a bond determined?**

"Money isn't everything, son ... there's also stocks, bonds and real estate."



## Bond Ratings

Because the credit-worthiness, or financial health, of corporations and governments differ, all 6 percent, 20-year, \$1,000 bonds will not cost the same. There are no guarantees that the issuer will be around in 20 years to redeem the bond. Therefore, investors will pay more for bonds issued by an agency with an impeccable credit rating. However, investors will pay less for a similar bond if it is issued by a corporation with a low credit rating.

Fortunately, investors have a way to check the quality of bonds. Two major corporations, Standard & Poor's and Moody's, publish bond ratings. They rate bonds on a number of factors, including the basic financial health of the issuer, the expected ability to make the future coupon and principal payments, and the issuer's past credit history.

Bond ratings, shown in **Figure 11.4**, use letters scaled from AAA, which represents the highest investment grade, to D, which generally stands for default. If a bond is in default, the issuer has not kept up with

the interest or other required payments. These ratings are widely publicized, and investors can find the rating of any bond they plan to purchase.

Bonds with high ratings sell at higher prices than do bonds with lower ratings. A 6 percent, 20-year, \$1,000 par value bond with an AAA-grade rating may sell for \$1,100 and have a current yield of 5.45 percent. Another 6 percent, 20-year, \$1,000 par value bond issued by a different company may have a BBB rating, and may therefore only sell for \$950 because of the higher risk. The second bond, however, has a higher current yield of 6.32 percent. This is consistent with the basic risk-return relationship, which states that investors require higher returns to offset increased levels of risk.

Bonds issued by the U.S. government are considered to be the safest of all financial assets because they have almost no risk of ever being in default. Because of this, these bonds also have the lowest yields.

**Reading Check Describing** What factors determine a bond's value?

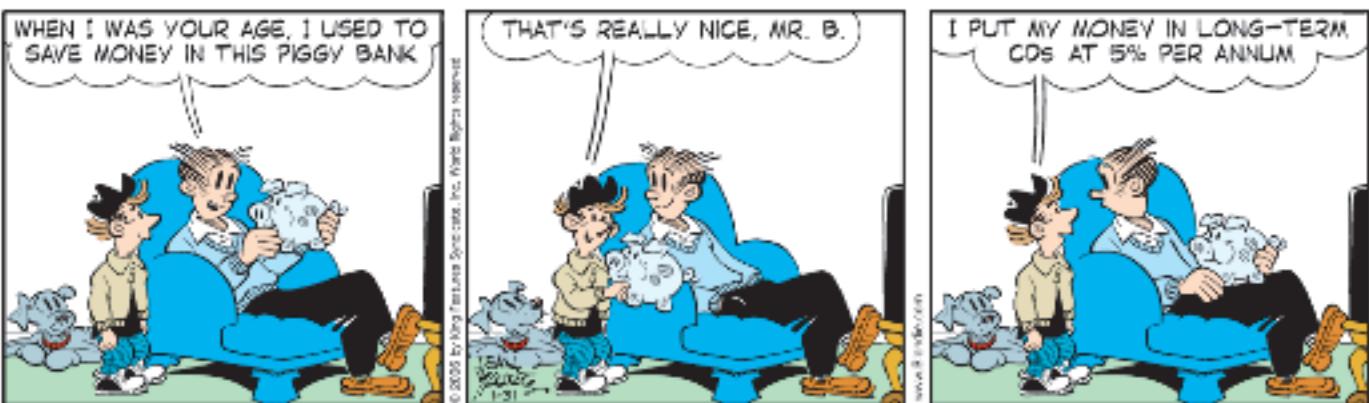
**Figure 11.4 ▶ Bond Ratings**

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

Sources: Standard & Poor's; Moody's.

- Both Standard & Poor's and Moody's publish bond ratings. Junk bonds, those with ratings of BB or Ba and lower, are generally the riskiest types of bonds.

**Economic Analysis** *How do bond ratings affect the price of bonds?*



King Features Syndicate, Inc.

## Financial Assets and Their Characteristics

**MAIN Idea** Investments include CDs, bonds, bills, and IRAs, all of which vary in cost, maturity, and risk.

**Economics and You** Have you seen bank advertisements for CDs? Read to find out how these compare to other investments.

The modern investor has a wide range of financial assets from which to choose. These include certificates of deposit, bonds, and Treasury notes and bills. They vary in cost, maturity, and risk.

### Certificates of Deposit

Certificates of deposit (CDs) are one of the most common forms of investments available. Many people think of them as just another type of account with a bank, but they are really loans investors make to financial institutions. Because banks and other borrowers count on the use of these funds for a certain time period, they usually impose a penalty if people try to cash in their CDs early.

CDs are attractive to small investors because they can cost as little as \$500 or \$1,000. Investors can also select the length of maturity, giving them an opportunity to tailor the expiration date to future expenditures such as college tuition, a vacation, or some other expense.

Finally, the CDs issued by commercial banks, savings banks, and savings associations are included in the \$100,000 FDIC

insurance limit. The National Credit Union Association insures most CDs issued by credit unions.

### Corporate Bonds

Corporate bonds are an important source of corporate funds. Some individual corporate bonds have par values as low as \$1,000, but par values of \$10,000 are more common. The actual prices of the bonds are usually different from the par values.

Investors generally decide on the highest level of risk they are willing to accept. They then try to find a bond that has the best current yield. **Junk bonds**—exceptionally risky bonds with a Standard & Poor's rating of BB or lower, or a Moody's rating of Ba or lower—carry a high rate of return as compensation for the higher possibility of default.

Investors usually purchase corporate bonds as long-term investments, but these bonds can be quickly sold if investors need cash for other purposes. The Internal Revenue Service considers the interest, or coupon, payments on corporate bonds as taxable income, a fact investors must consider when they invest in bonds.

### Municipal Bonds

**Municipal bonds**, or "munis," are bonds issued by state and local governments. States issue bonds to finance highways, state buildings, and some public works. Cities issue bonds to pay for baseball parks and football stadiums, or to fund libraries, parks, and other civic improvements.

**Certificates of Deposit** CDs can vary in cost and length of maturity. **What are other characteristics of Certificates of Deposit?**

**junk bond**  
bond that carries an exceptionally high risk of nonpayment and a low rating

**municipal bond**  
bond, often tax exempt, issued by state and local governments

 **Skills Handbook**  
See page R58 to learn about *Interpreting Cartoons*.



### **tax-exempt**

not subject to tax by federal or state governments

### **savings bond**

low-denomination, non-transferable bond issued by the federal government

Municipal bonds are attractive investments for several reasons. First, they are generally regarded as safe investments. Unlike companies, state and local governments do not go out of business and therefore rarely default. In addition, because governments have the power to tax, it is generally **presumed** that in the future they will be able to pay interest and principal for any bonds they have issued.

More importantly, municipal bonds are generally **tax-exempt**, meaning that the federal government does not tax the interest paid to investors. In some cases, the states issuing the bonds also exempt the interest payments from state taxes, which makes them very attractive to investors. The tax-exempt feature also allows the government agencies to pay a lower rate of interest on the bonds, thereby lowering the government's cost of borrowing.

## CAREERS

### Stockbroker

#### The Work

- \* Supply the latest price quotations on stocks and keep informed about the financial activities of corporations issuing stock
- \* Provide clients with financial counseling and advice on the purchase or sale of particular securities
- \* May design an individual client's financial portfolio, which could include securities, life insurance, corporate and municipal bonds, mutual funds, certificates of deposit, annuities, and other investments



#### Qualifications

- \* Excellent sales skills and communication skills
- \* Ability to act quickly is helpful in building and keeping a strong customer base
- \* College degree in business administration, economics, or finance
- \* Must pass licensing exam

#### Earnings

- \* Median annual earnings: \$69,200

#### Job Growth Outlook

- \* Average

**Source:** *Occupational Outlook Handbook, 2006–2007 Edition*

### Government Savings Bonds

The federal government generates financial assets when it sells savings bonds. **Savings bonds** are low-denomination, nontransferable bonds issued by the U.S. government that are also called EE savings bonds. Investors can purchase them through banks and financial intermediaries, obtain them through payroll-savings plans, or buy them directly from the U.S. Treasury over the Internet. Regardless of how they are purchased, there are two kinds of savings bonds; one is paper-based, and the other is paperless.

The paper bonds are available in denominations ranging from \$50 to \$10,000, and they are purchased at a 50 percent discount from their redemption value. For example, you might obtain a new \$50 savings bond today for \$25, or a \$10,000 bond for \$5,000. You may then have to hold the bond for up to 30 years before you can redeem it for the full face value, depending on the purchase date and the interest rate. The government pays interest on these bonds, but it builds the interest into the redemption price rather than sending checks to millions of investors on a regular basis.

Paperless bonds are purchased directly from the Treasury over the Internet. All an investor has to do is open an account, and the bonds will be issued electronically to the investor's account. The electronic bonds sell at face value, so you pay \$50 for a \$50 bond, or \$10,000 for a \$10,000 bond. Interest is added monthly and compounded semiannually, but to take some of the



uncertainty out of the investment, the U.S. Treasury guarantees that the bond will at least double in value every 20 years.

Savings bonds are popular because they are easy to obtain and there is virtually no risk of default. They cannot be sold to someone else if the investor needs cash, but they can be redeemed early, with some loss of interest, if the investor must raise cash for other purposes. Most investors who purchase long-term savings bonds treat them as a form of automatic savings.

Other investors buy the bonds for their heirs by designating a **beneficiary**, or someone who inherits the ownership of the financial asset if the purchaser dies. A grandmother, for example, may buy EE saving bonds in her name and designate a grandchild as the beneficiary. When the grandmother dies, the beneficiary automatically takes ownership of the savings bond without having to pay any inheritance taxes.

## Treasury Notes and Bonds

When the federal government borrows funds for periods lasting longer than one year, it issues Treasury notes and bonds. **Treasury notes** are United States government obligations with maturities of 2 to 10 years, while **Treasury bonds** have maturity dates ranging from more than 10 to as many as 30 years. The only collateral that secures both is the faith and credit of the United States government.

Treasury notes and bonds come in denominations of \$1,000, which means that small investors can afford to buy them. The notes and bonds are issued electronically, and investors purchase them directly from the U.S. Treasury. Since the investors' accounts are computerized, the Treasury adds the periodic interest payments directly to these accounts rather than mailing checks to the investors.

Although these financial assets have no collateral or backing, they are popular because they are generally regarded as the safest of all financial assets. Due to the trade-off between risk and return, however, these assets also have the lowest returns of all financial assets.

## Treasury Bills

Federal government borrowing generates other financial assets known as **Treasury bills**. A Treasury bill, also called a T-bill, is a short-term obligation with a maturity of 4, 13, or 26 weeks and a minimum denomination of \$1,000.

T-bills do not pay interest directly but instead are sold on a discount basis, much like government savings bonds. For example, an investor may pay the auction price of \$960 for a 26-week bill that matures at \$1,000. The \$30 difference between the amount paid and the amount received

**beneficiary**  
person designated to take ownership of an asset if the owner of the asset dies

**Treasury note**  
U.S. government obligation with a maturity of 2 to 10 years

**Treasury bond**  
U.S. government bond with a maturity of 10 to 30 years

**Treasury bill**  
short-term United States government obligation with a maturity of one year or less in denominations of \$1,000

**Savings Bonds** The federal government issues paper-based EE Savings Bonds in low denominations. *How can you purchase these bonds?*





## Figure 11.5 ► Financial Assets and Their Markets

- Assets in the money or capital market differ in the length of maturity. The ability to sell the asset to someone other than the original issuer determines whether that asset is part of the primary or the secondary market.

**Economic Analysis** *Why do some financial assets, such as CDs, appear in more than one market?*

	Money market (less than 1 year)	Capital market (more than 1 year)
Primary market	Money market mutual funds Small CDs	Government savings bonds IRAs Money market mutual funds Small CDs
Secondary market	Jumbo CDs Treasury bills	Corporate bonds International bonds Jumbo CDs Municipal bonds Treasury bonds Treasury notes

**Individual Retirement Account (IRA)** retirement account in the form of a long-term time deposit, with annual contributions not taxed until withdrawn during retirement

**capital market** market in which financial capital is loaned and/or borrowed for more than one year

**money market** market in which financial capital is loaned and/or borrowed for one year or less

is the investor's return. The investor receives \$30 on a \$960 investment, for a semiannual return of \$30 divided by \$960, or 3.1 percent.

### Individual Retirement Accounts

Many employees invest money in **Individual Retirement Accounts (IRAs)**, long-term, tax-sheltered time deposits that can be set up as part of an individual retirement plan. For example, a worker may decide to deposit \$4,000 annually in such an account. If the worker's spouse does not work outside the home, the spouse also can deposit \$4,000 per year in a separate account.

The worker deducts these deposits from the taxable income, thereby sheltering up to \$8,000 from the individual income tax. Taxes on the interest and the principal will eventually have to be paid. However, the tax-deferment feature gives the worker an incentive to save today, postponing the taxes until the worker is retired and in a lower tax bracket. IRAs cannot be transferred, and penalties exist if they are liquidated early. In addition, the government sets annual contribution limits.

**Reading Check** **Analyzing** What features of a government bond appeal most to you?

## Markets for Financial Assets

**MAIN Idea** Financial assets are grouped into different markets depending on their maturity and liquidity.

**Economics and You** Would you be willing to invest your money for a 20-year term? Read to learn in which market you would be involved.

Investors often refer to markets according to the characteristics of the financial assets traded in them. These markets overlap to a considerable degree.

### Capital Markets

Investors speak of the **capital market** when they mean a market in which money is loaned for more than one year. Long-term CDs and corporate and government bonds that take more than a year to mature belong in this category. Capital market assets are shown in the right-hand column of **Figure 11.5**.

### Money Markets

Investors refer to the **money market** when they mean a market in which money is loaned for periods of less than one year.



The financial assets that belong to the money market are shown in the left-hand column of Figure 11.5.

Note that a person who owns a CD with a maturity of one year or less is involved in the money market. If the CD has a maturity of more than one year, the person is involved in the capital market as a supplier of funds.

Many investors purchase money market mutual funds. These funds are created when stockbrokers or other financial managers pool the deposits of their customers to purchase stocks or bonds. Money market mutual funds usually pay slightly higher interest rates than banks.

## Primary Markets

Another way to view financial markets is to focus on the liquidity of a newly created financial asset. One market for financial assets is the **primary market**, a market where only the original issuer can sell or repurchase a financial asset. Government

savings bonds and IRAs are in this market because neither of them can be transferred. Small CDs are also in the primary market because investors tend to cash them in early if they need cash, rather than trying to sell them to someone else.

**primary market** market in which only the original issuer can sell or repurchase a financial asset

**secondary market** market in which financial assets can be sold to someone other than the original issuer

## Secondary Markets

If a financial asset can be sold to someone other than the original issuer, it then becomes part of the **secondary market**, where existing financial assets can be resold to new owners.

The major difference between the primary and secondary markets is the liquidity the secondary market provides to investors. If a strong secondary market exists for a financial asset, investors know that the asset can be liquidated fairly quickly and without penalty, other than the fees for handling the transaction.

✓ **Reading Check** **Contrasting** How are capital and money markets different? How do primary and secondary markets differ?

SECTION

## 2

## Review

### Vocabulary

1. **Explain** the significance of bond, coupon rate, maturity, par value, current yield, junk bond, municipal bond, tax-exempt, savings bond, beneficiary, Treasury note, Treasury bond, Treasury bill, Individual Retirement Account, capital market, money market, primary market, and secondary market.

### Main Ideas

2. **Explaining** What is the relationship between a bond rating and the price of the bond?
3. **Identifying** Use a graphic organizer like the one below to identify the characteristics of financial assets.

Financial Asset	Characteristics
Certificate of deposit	

4. **Stating** What are markets for financial assets?

### Critical Thinking

5. **The BIG Idea** Why would an investor want to choose a certificate of deposit over a corporate bond?
6. **Comparing and Contrasting** What do corporate bonds, municipal bonds, and government savings bonds have in common? How do they differ?
7. **Drawing Conclusions** Why would someone be willing to invest in “junk” bonds?
8. **Analyzing Visuals** Look at Figure 11.5 on page 302. If you wanted to invest your money for retirement, in which market would you most likely invest? In which market would you invest to save for a vacation? Explain your answer using specific examples of financial assets.

### Applying Economics

9. **Risk-Return Relationship** If you had money to invest, which financial asset or assets, if any, would you choose? Explain your answer in a brief paragraph.



# CASE STUDY

## The NYSE

### Starting Small . . .

On a warm May afternoon in 1792, 24 New York City stockbrokers and merchants met beneath a buttonwood tree to sign an agreement. This deal—the Buttonwood Agreement—marked the creation of the New York Stock Exchange (NYSE).

### . . . and Growing Big

Today the 37,000-square-foot floor of the New York Stock Exchange is where the action is. Although some shares are traded electronically, traders on the floor of the exchange match buyers and sellers of listed stocks in a daily high-stakes dance. Companies pay an initial fee of up to \$250,000 just to be listed on the NYSE, and yearly listing fees can reach \$500,000.

The NYSE, also called the “Big Board,” serves as auctioneer for about 2,600 U.S. and foreign companies. It also works to earn a profit for its own shareholders. After nearly 214 years as a not-for-profit exchange, the NYSE went public on March 8, 2006, selling shares in itself. It also



merged with Archipelago Holdings Inc. and the Pacific Exchange to become the NYSE Group, the largest stock exchange ever.

### Competition From Abroad

After corporate accounting scandals such as Enron were made public in the early 2000s, Congress and the Securities and Exchange Commission instituted the Sarbanes-Oxley Act in 2002. SarbOx created reams of new rules and regulations aimed at eliminating corporate corruption. The fallout from SarbOx has led many investors, companies, and even the NYSE Group itself to look to overseas exchanges, where regulations are less strict. In May 2006, the NYSE announced its \$10 billion intention to merge with Euronext, which runs the Amsterdam, Brussels, Paris, and Lisbon exchanges. By merging with Euronext, the NYSE can bypass the red tape created by SarbOx and tap into new markets.

Market Capitalization* of Listed Companies (in trillions)			
NYSE	NYSE	NYSE % of all	Euronext
2005	\$13.3	33%	\$2.70
2004	\$12.6	34%	\$2.40
2003	\$11.4	36%	\$2.10
2002	\$9.0	39%	\$1.60
2001	\$11.0	41%	\$1.80
2000	\$11.5	37%	\$2.30
1999	\$11.4	32%	\$2.40
1998	\$10.3	39%	\$1.80
1997	\$8.9	40%	\$1.30
1996	\$6.8	34%	\$1.10
1995	\$5.7	33%	\$0.90
1990	\$2.7	28%	\$0.50

\* Number of common shares multiplied by current price of those shares

Source: 2006 NYSE Group, Inc.

### Analyzing the Impact

- Summarizing** Why did the NYSE decide to expand into overseas markets?
- Analyzing Visuals** Look at the market capitalization table. What has happened to NYSE's share of market capitalization since the enactment of SarbOx?

SECTION  
**3**

# Investing in Equities and Options

## GUIDE TO READING

### Section Preview

In this section, you will learn more about the equities, or stocks, that are traded in markets.

### Content Vocabulary

- equities (*p. 306*)
- stockbroker (*p. 306*)
- Efficient Market Hypothesis (EMH) (*p. 307*)
- portfolio diversification (*p. 307*)
- mutual fund (*p. 307*)
- net asset value (NAV) (*p. 307*)
- 401(k) plan (*p. 307*)
- stock exchange (*p. 308*)
- securities exchange (*p. 308*)
- over-the-counter market (OTC) (*p. 309*)
- Dow Jones Industrial Average (DJIA) (*p. 310*)
- Standard & Poor's 500 (S&P 500) (*p. 310*)
- bull market (*p. 310*)
- bear market (*p. 310*)

- spot market (*p. 311*)
- futures contract (*p. 311*)
- option (*p. 311*)
- call option (*p. 311*)
- put option (*p. 311*)

### Academic Vocabulary

- prospects (*p. 306*)
- implication (*p. 307*)

### Reading Strategy

**Describing** As you read the section, use a graphic organizer similar to the one below to describe the different stock markets.

Stock Market	Characteristics
NYSE	

## COMPANIES IN THE NEWS

—www.cme.com

### Snowfall Futures

The Chicago Mercantile Exchange (CME), the world's largest and most diverse financial exchange, announced today that it will begin listing and trading snowfall futures and options. Snowfall futures will be based on a CME Snowfall Index and will be offered initially on two U.S. cities—Boston and New York. These contracts will trade on a monthly basis from October through April.

"CME weather futures provide the safety and soundness investors are seeking to manage their weather-related risk," said CME's Rick Redding. "From municipal snow removal budgets to holiday retail sales, snowfall, or lack thereof, can have a major impact on local and regional economies." ■



**W**hile government bonds rank among the safest financial assets, equities and futures, such as the snowfall futures in the news story, are at the opposite end of the risk spectrum. They offer the lure of large returns—or a complete loss.

Purchasing stock used to be complicated and required professional help. With computers and the Internet, though, today anyone can easily invest in stocks, mutual funds or, as you read in the news story, the snowfall depth futures for New York.



## equities

stocks that represent ownership shares in corporations

## stockbroker

person who buys or sells securities for investors

# Stocks and Efficient Markets

**MAIN Idea** Investors can purchase stock through stockbrokers on exchanges, through mutual funds, or through 401(k) plans.

**Economics and You** Does anyone in your family save for retirement through a 401(k)? Read on to learn how this is a way to invest in the stock market.

**Equities**, or shares of common stocks that represent ownership of corporations, form another type of financial asset that is available to investors.

## Share Values

There are different ways to buy equities. An investor may want to use a **stockbroker**—a person who buys or sells equities for clients. The investor can also open an Internet account with a discount brokerage firm. This allows the investor to buy, sell, and monitor his or her stock portfolio from a personal computer.

The value of a single share of stock depends on several things. Both the number of outstanding shares to be traded and a company's profitability influence the price. Expectations are especially important, because demand for a company's

stock increases when the prospects for its growth improve.

Common to almost all stocks is that their value goes up and down daily, sometimes gaining or losing a few cents a share and at other times gaining or losing much more. This is due to a change in either the supply or the demand for a share of stock.

**Figure 11.6** shows a typical listing of several stocks. During the last 12 months, Exxon stock sold for as much as \$65.96 and as little as \$53.08 a share. Its annual dividend (DIV) is \$1.28, paid in four equal installments. The yield (Yld%) is the dividend divided by the closing price. The PE, or price-earnings ratio, is a stock's closing price divided by annual earnings of each share of common stock outstanding. Finally, Exxon closed at \$60.18, which is \$1.78 lower than the day before, as indicated by the Net Change (NET CHG) column.

## Stock Market Efficiency

Most large equity markets are reasonably competitive, especially if they have a large number of buyers and sellers. When these conditions exist, stocks can be easily bought and sold, so any news that affects the supply or demand for stocks can affect stock prices on a daily basis.

## Skills Handbook

See page R59 to learn about Reading the **Stock Market Report**.

## Figure 11.6 ► A New York Stock Exchange Listing

52 weeks Hi Lo	Stock (SYM)	DIV	Yld%	PE	100s	LAST	NET CHG
42.01 29.98	Estee Lauder (EL)	0.40	1.00	34.02	691	41.16	0.26
65.96 53.08	ExxonMobil (XOM)	1.28	2.10	10.25	25,966	60.18	-1.78
120.01 76.81	Fedex Corp (FDX)	0.32	0.30	20.11	3,175	109.92	-5.51
11.48 6.75	Ford Motor (F)	0.40	5.60	N/A	19,606	6.91	-0.11

- A typical New York Stock Exchange newspaper listing might include the highest and lowest prices for a 52-week period, the annual dividend payment, yield, price-earnings ratio, number of shares traded in 100s, closing price, and price change from the previous day. Other listings on the Internet show even more information.

**Economic Analysis** Which of the stocks had the largest variation in a year?



There is no sure way to invest in stocks in order to always make a profit. Stock prices can vary considerably from one company to the next, and the price of any stock can change dramatically from one day to the next. Because of this variability, investors are always looking at stocks to find the best ones to buy or sell and those to avoid. All of this attention makes the market more competitive.

Many stock market experts subscribe to a theory called the **Efficient Market Hypothesis (EMH)**—the argument that stocks are usually priced correctly and that bargains are hard to find because stocks are followed closely by so many investors. The theory states that each stock is constantly analyzed by many different professional analysts in a large number of stock investment companies. If the analysts observe anything that might affect the fortunes of the companies they watch, they buy or sell the stocks immediately. This in turn causes stock prices to adjust almost immediately to new market information.

The main **implication** for the investor is that if all stocks are priced correctly, it does not matter which ones you purchase. You might be lucky and pick a stock about to go up, or you might get unlucky and pick a stock about to go down. Because of this, **portfolio diversification**—the practice of holding a large number of different stocks so that increases in some stocks can offset declines in others—is a popular strategy.

## Mutual Funds

Because of the advantages of diversification, many investors buy shares in a mutual fund. A **mutual fund** is a company that sells stock in itself to individual investors. It then invests the money it receives in stocks and sometimes bonds issued



[www.CartoonStock.com](http://www.CartoonStock.com)

"This next song's about spreading risk in a volatile market by diversification."

by other corporations. Mutual fund stockholders receive dividends earned from the mutual fund's investments.

Stockholders can also sell their mutual fund shares for a profit, just like other stocks. The market value of a mutual fund share is called the **net asset value (NAV)**—the net value of the mutual fund divided by the number of shares issued by the mutual fund.

Mutual funds allow people to invest in the market without risking all they have in one or a few companies. The large size of the typical mutual fund makes it possible to hire a staff of experts to monitor market conditions and to analyze many different stocks and bonds before deciding which ones to buy or sell.

## 401(k) Plans

Portfolio diversification and the need for retirement planning have also increased the popularity of the **401(k) plan**—a tax-deferred investment and savings plan that acts as a personal pension fund for employees. To contribute to the plan, employees of a company authorize regular payroll deductions. The money from all employees

**Diversification**  
Many investors put their money into a variety of stocks.  
**Why is it a good idea to diversify?**

**Efficient Market Hypothesis (EMH)** argument that stocks are always priced about right because they are closely watched

**portfolio diversification**  
strategy of holding different investments to protect against risk

**mutual fund**  
company that sells stock in itself and uses the proceeds to buy stocks and bonds issued by other companies

**net asset value (NAV)** the market value of a mutual fund share found by dividing the net value of the fund by the number of shares issued

**401(k) plan** tax-deferred investment and savings plan that acts as a personal pension fund for employees



**stock exchange or securities exchange** physical place where buyers and sellers meet to exchange securities

is then pooled and invested in mutual funds or other investments approved by the company.

Contributing to a plan lowers your taxable income because you don't have to pay income taxes on the money you contribute until you withdraw it. An added benefit of a 401(k) plan is that most employers typically match a portion of an employee's contributions.

For example, if your employer matches your contribution at 50 cents on the dollar, you have an immediate 50 percent return on the investment—even before the funds are invested. **Figure 11.7** illustrates that an annual contribution of \$2,000 with an employer match of 25 percent can provide a substantial retirement fund in 30 years.

The 401(k) is popular because it provides a simple, consistent, and relatively safe way for employees to save—and you can take the 401(k) with you if you change jobs.

**Reading Check** **Explaining** What determines the value of a stock?

## Stock Markets and Their Performance

**MAIN Idea** Several different stock markets exist, and each is organized in a different way.

**Economics and You** Have you ever heard the closing bell of the New York Stock Exchange on the news? Read on to learn about different stock markets.

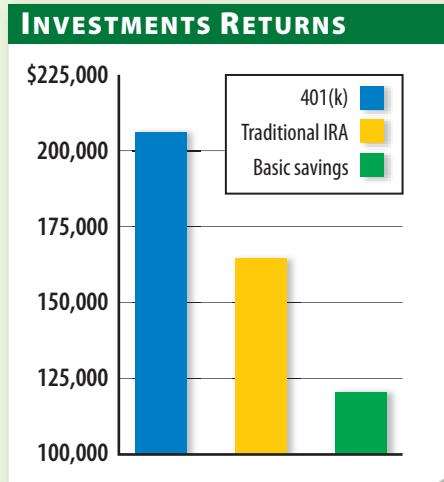
Stocks, like almost everything else, are traded in markets. Investors follow these markets daily because the performance of the market is likely to affect their stocks.

### Stock Exchanges

Historically, investors would gather at an organized **stock or securities exchange**, a place where buyers and sellers meet to trade stocks. An organized exchange gets its name from the way it conducts business. Members pay a fee to join, and trades can only take place on the floor of the exchange.

The oldest, largest, and most prestigious of the organized stock exchanges in the United States is the New York

### Figure 11.7 ► How Much Money Will You Have at Retirement?



**DATA BASED ON:**

- \$2,000 in income invested each year for 30 years
- 8% return on investment
- Company matching 25% of employee contributions
- 28% income tax; 20% capital gains tax (paid yearly for basic savings)

**Charts In Motion**  
See StudentWorks™ Plus  
or [glencoe.com](http://glencoe.com).

► Returns from retirement investment plans vary.

**Economic Analysis** *How much more would a traditional IRA earn than a basic savings plan?*



# The Global Economy & YOU



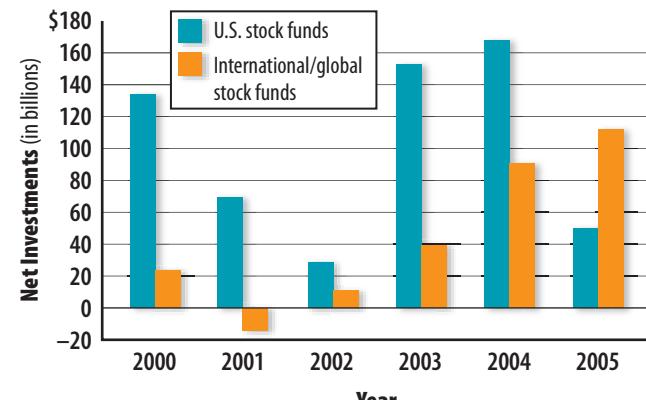
## Sell, надувательство, Verkaufen

After you have saved some money, you may decide to become part-owner of a company by purchasing its stock. Your investment options are not limited to those companies listed on the NYSE, however. The United States is home to an additional nine stock exchanges.

You can also buy stocks in international companies. At last count, nearly 100 world stock exchanges spanned the globe. In 2005 investors spent more on international and global markets than on U.S. stocks.

Where does this global trading take place? Among others, investors can buy and sell on the Bolsa de Comercio de Buenos Aires in Argentina, the Moscow Stock Exchange, or the Tokyo Stock Exchange.

### NATIONAL AND INTERNATIONAL INVESTMENTS



Source: Lipper

Stock Exchange (NYSE), located on Wall Street in New York City. The NYSE lists stocks from about 2,700 companies. The firms have to pay a membership fee. They also must meet profitability and size requirements, which virtually guarantees that they are among the largest and most profitable publicly held companies.

Another national exchange is the American Stock Exchange (AMEX), which also is located in New York City. It features companies that are smaller and more speculative than those listed on the NYSE. Many regional exchanges are located in other cities such as Chicago, Philadelphia, and Memphis. They list corporations that are either too small or too new to be listed on the NYSE or the AMEX.

Organized stock exchanges are found in major cities all over the world, including in developing countries such as Ghana, Pakistan, and China. Developments in computer technology and electronic trading have linked the biggest markets. This means that today you can trade in most major stocks around the clock, somewhere in the world.

## Over-the-Counter Markets

Despite the importance of the organized exchanges, the majority of stocks in the United States are not traded on these exchanges. Instead, they are traded in an **over-the-counter market (OTC)**—an electronic marketplace for securities that are not traded on an organized exchange such as the NYSE.

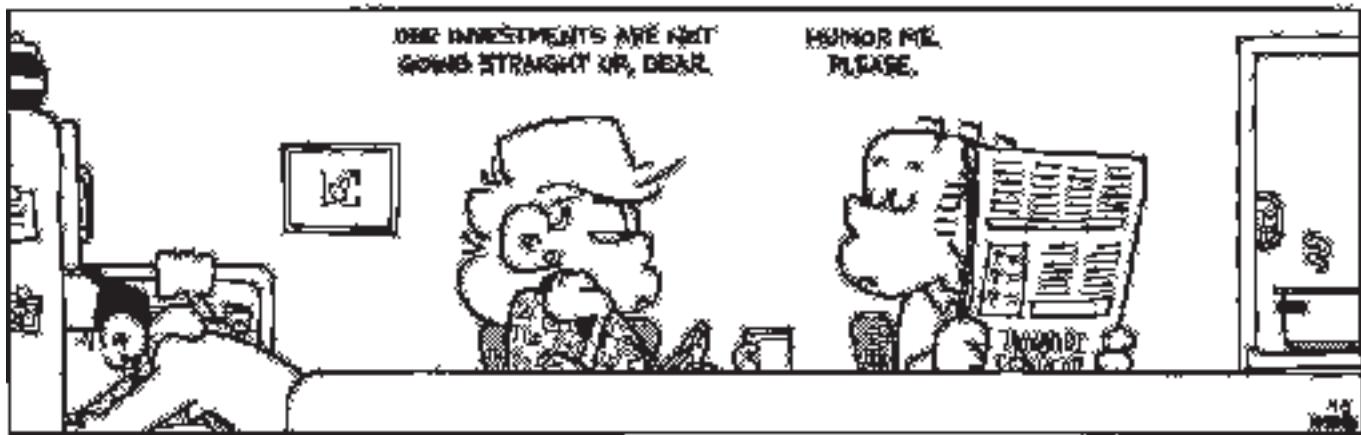
The most important OTC market is the National Association of Securities Dealers Automated Quotation (NASDAQ), the world's largest electronic stock market. Rather than being limited to a single trading location, NASDAQ trading is executed with a sophisticated telecommunications and computer network that connects investors in more than 80 countries. The total number of stocks listed on NASDAQ exceeds the combined total of the NYSE and AMEX.

The organized exchanges and the OTC markets may differ, but this means little to individual investors. An investor who opens an Internet account with a brokerage firm may buy and sell stocks in both markets. When the investor places an order to buy shares, the broker forwards the order



**Student Web Activity** Visit the *Economics: Principles and Practices* Web site at [glencoe.com](http://glencoe.com) and click on *Chapter 11—Student Web Activity* for an activity on the stock market.

**over-the-counter market (OTC)**  
electronic marketplace for securities not listed on organized exchanges such as the NYSE



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**Performance of Stocks** Investors use several indicators to help with their investments.

#### **What does the DJIA measure?**

**Dow Jones Industrial Average (DJIA)** measure of stock market performance based on 30 representative stocks

**Standard & Poor's 500 (S&P 500)** measure of stock market performance based on 500 stocks traded on the NYSE, AMEX, and OTC market

**bull market** period during which stock market prices move up for several months or years in a row

**bear market** period during which stock market prices move down for several months or years in a row

to the exchange where the stock is traded—whether it is on the NYSE, AMEX, or NASDAQ—and the purchase is made there.

#### **Measures of Performance**

Because they are concerned about the performance of their stocks, most investors consult one of two popular indicators. When these indicators go up, stocks in general also go up. When they go down, stocks in general go down.

The first of these indicators is the **Dow Jones Industrial Average (DJIA)**, the most popular and widely publicized measure of stock market performance. The DJIA began in 1884, when the Dow Jones Corporation published the average closing price of 11 active stocks. Coverage expanded to 30 stocks in 1928. Since then, some stocks have been added and others deleted, but the sample remains at 30.

Because of these changes, the DJIA is no longer a mathematical average of stock prices. Also, the evolution of the DJIA has obscured the meaning of a “point” change in the index. At one time, a one-point change in the DJIA meant that an average share of stock changed by \$1. Since this is no longer true, it is better to focus on the percentage change of the index rather than the number of points.

Investors also use another popular benchmark of stock performance, the **Standard & Poor's 500 (S&P 500)**. It uses the price changes of 500 representative stocks as an indicator of overall market

performance. Because the sum of 500 stock prices would be very large, it is reduced to an index number. Unlike the Dow Jones, which focuses primarily on the NYSE, the Standard & Poor's 500 reports on stocks listed on the NYSE, AMEX, and OTC markets.

The NASDAQ also computes several measures of market performance for investors. The most popular is the NASDAQ composite. In addition, there are more than 20 sub-indices that focus on everything from the size of the firms traded on the NASDAQ to the performance of individual industries.

#### **Bull vs. Bear Markets**

Investors often use colorful terms to describe which way the market is moving. For example, a **bull market** is a “strong” market with the prices moving up for several months or years in a row. One of the strongest bull markets in history began in 1995, when the DJIA broke 4,000—and then reached 12,000 five years later.

A **bear market** is a “mean” or “nasty” market, with the prices of equities falling sharply for several months or years in a row. The most spectacular bear market since the 1930s was in 2001–2003, when the DJIA lost more than one-third of its value. These two terms take their names from the characteristics people associate with the animals for which they are named.

**Reading Check** **Contrasting** What is the difference between an over-the-counter market and the NYSE?



# Trading in the Future

**MAIN Idea** Financial assets can be bought and sold in the future as well as the present.

**Economics and You** Have you ever bought something that later went on sale? Read on to learn how an investor can protect against future price changes.

Most buying and selling takes place in the present, or in a **spot market**. In this market, a transaction is made immediately at the prevailing price. The spot price of gold in London, for example, is the price as it exists in that city at that moment.

Sometimes the exchange takes place later, rather than right away. This occurs with a **futures contract**—an agreement to buy or sell at a specific future date at a predetermined price. For example, you may agree to buy gold at \$580 an ounce in six months, hoping that the actual price will be higher when the date arrives.

A futures contract can be written on almost anything, including the size of the

S&P 500 or the level of future interest rates. In most cases, the profit or loss on the contract is settled with a cash payment rather than the buyer taking delivery.

An **option** is a special type of futures contract that gives the buyer the right to cancel the contract. For example, you may pay \$5 today for a **call option**—the right to *buy* something at a specific future price. If the call option gives you the right to purchase 100 shares of stock at \$70 a share, and if the price drops to \$30, you tear up the option and buy the stock elsewhere for \$30. If the price rises to \$100, you execute the option, buy the stock for \$70, and resell it for \$100—or take a cash settlement.

You could also buy a **put option**—the right to *sell* something at a specific future price. The put option, like the call option, gives the buyer the right to tear up the contract if the actual future price is not advantageous to the buyer.

✓ **Reading Check Explaining** Why might a contract that takes place in the future be an advantage to the buyer or seller?

**spot market**  
market in which a transaction is made immediately at the prevailing price

**futures contract**  
an agreement to buy or sell at a specific date in the future at a predetermined price

**option** futures contract giving a buyer the right to cancel the contract

**call option**  
futures contract giving a buyer the right to cancel a contract to buy something

**put option**  
futures contract giving a buyer the right to cancel a contract to sell something

## SECTION

## 3

## Review

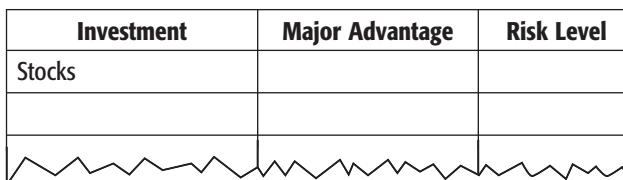
### Vocabulary

- Explain** the significance of equities, stockbroker, Efficient Market Hypothesis, portfolio diversification, mutual fund, net asset value, 401(k) plan, stock or securities exchange, over-the-counter market, Dow Jones Industrial Average, Standard & Poor's 500, bull market, bear market, spot market, futures contract, option, call option, and put option.

### Main Ideas

- Describing** What are the stock performance measures?
- Evaluating** Use a graphic organizer like the one below to evaluate the risks and rewards of investments.

Investment	Major Advantage	Risk Level
Stocks		



- Defining** What is a futures contract?

### Critical Thinking

- The BIG Idea** What options are available to individuals who wish to invest in stocks?
- Analyzing** Would you ever invest in a futures contract? Why or why not?
- Determining Cause and Effect** If the price of a share of stock goes up, what does this suggest about the quantity demanded and quantity supplied for that stock?
- Analyzing Visuals** Look at Figure 11.6 on page 306. If you wanted to buy stock that paid large dividends, which stock would you choose?

### Applying Economics

- Market Efficiency** What does the Efficient Market Hypothesis mean to you as a potential investor as you investigate your future stock portfolio?



# BusinessWeek NEWSCLIP

Wall Street in New York City has long been synonymous with wealth and corporate power. This is no longer true. Home to the New York Stock Exchange, Wall Street is losing some of its prestige to Paternoster Square in London, site of the London Stock Exchange.

## Taking Their Business Elsewhere

If the state-owned Russian giant OAO Rosneft Oil Co. had been going public a decade ago, it would have jumped through hoops to list its shares on a U.S. stock exchange. Back then a U.S. listing was viewed as a rite of passage for up-and-coming global companies, offering not only direct access to the world's largest capital market but also a certain cachet.

This is 2006, though, and Rosneft plans to list its shares on the London Stock Exchange. . . . Rosneft isn't alone. Companies are increasingly forsaking the U.S. for friendlier overseas environs.

The New York Stock Exchange and NASDAQ pin much of the blame on the Sarbanes-Oxley Act (SarbOx), the controversial 2002 corporate governance rules, for their recent woes in attracting new listings. . . .

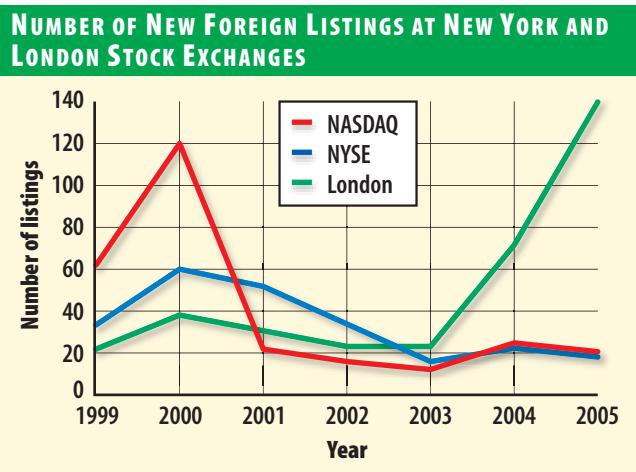
The exchanges say the expense and difficulty of dealing with SarbOx could transform the U.S. from one of the most attractive markets in the world to one of the least. But beyond SarbOx lies a troubling trend that's far less easily remedied—companies



simply don't need to list in New York anymore. Globalization and electronic trading have made U.S. investors mobile as never before. While some argue that the higher governance standards in the U.S. boost investor confidence, lead to higher valuations, and could prevent fraud, many companies no longer want to put up with the regulatory nuisances given the availability of money abroad. . . .

Europe's three main exchanges—the London Stock Exchange, the Deutsche Börse, and Euronext, which runs the Paris, Amsterdam, and Brussels exchanges—are ready for the business. . . .

—Reprinted from *BusinessWeek*



### Examining the Newsclip

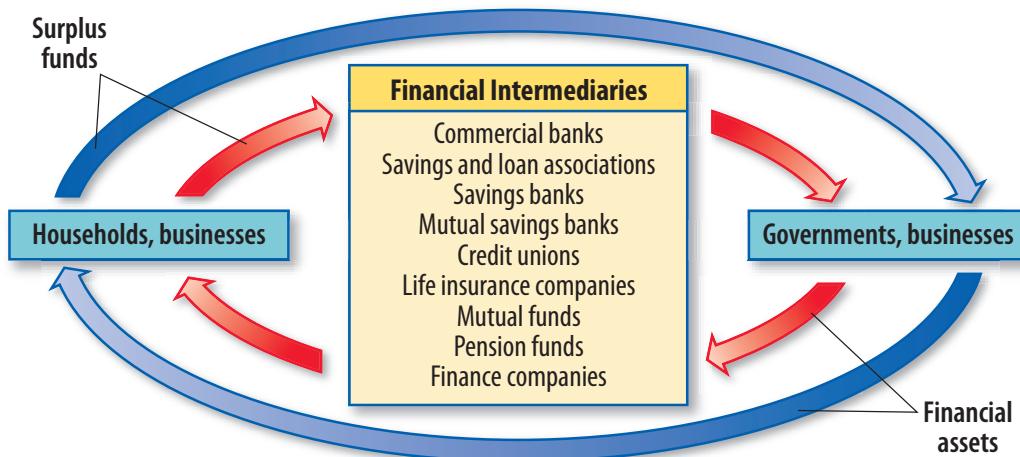
- Determining Cause and Effect** What has enabled investors to buy shares on overseas exchanges?
- Drawing Conclusions** Why did SarbOx have a negative impact on American stock exchanges?



Study anywhere, anytime!

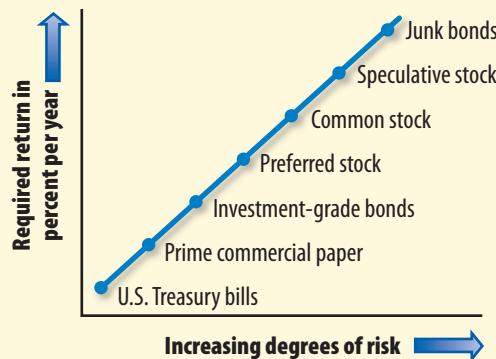
Download quizzes and flash cards to your PDA from [glencoe.com](http://glencoe.com).

- **Financial System** Households and businesses invest their surplus funds to earn interest. Governments and businesses invest this money for economic growth.

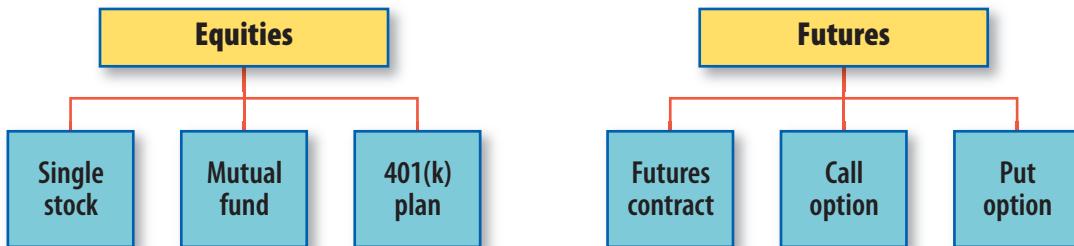


- **Investment Risk and Return** Investors must weigh the risks of their investments against the returns they expect. Generally, the higher the risk of an investment, the higher the return investors require.

#### THE RELATIONSHIP BETWEEN RISK AND RETURN



- **Equities and Futures** The riskiest investments consist of equities and futures. Equities can be purchased as individual stocks, or as part of a mutual fund or 401(k) plan. Futures allow investors to speculate on future prices of commodities.



## Review Content Vocabulary

Assume that you are an investment adviser who has to advise a 30-year-old, single client who earns \$35,000 a year and has saved \$10,000 to invest for retirement. Use the terms below to prepare a report advising your client of the best investment course.

1. financial asset
2. financial system
3. risk
4. capital market
5. money market
6. bond
7. Treasury note
8. IRA
9. 401(k) plan
10. mutual fund
11. pension fund
12. certificate of deposit
13. portfolio diversification
14. stock exchange
15. over-the-counter market

## Review Academic Vocabulary

Match each term with its synonyms in the list below.

- |                 |                |
|-----------------|----------------|
| a. sector       | d. presumed    |
| b. compensation | e. prospects   |
| c. offset       | f. implication |
- 
16. payment, reparation, payback
  17. supposed, expected, believed
  18. likelihood, possibilities, expectations
  19. counterbalance, neutralize, cancel out
  20. section, part, segment
  21. association, meaning, consequence

## Review the Main Ideas

### Section 1 (pages 289–294)

22. **Describe** how financial assets are created in a free enterprise system.
23. **Explain** the role of the major nondepository financial institutions in the financial system.
24. **Identify** the factors one should consider when investing by completing a graphic organizer like the one below.

Basic Investment Considerations
1.
2.
3.
4.

### Section 2 (pages 296–303)

25. **Explain** what determines a bond's current yield.
26. **Explain** how CDs can appear in multiple markets.
27. **Identify** the characteristics of Treasury notes, bonds, and bills.

### Section 3 (pages 305–311)

28. **Describe** how options contracts are different from futures contracts.
29. **Explain** why equity markets are reasonably competitive.
30. **Explain** how the NASDAQ differs from the NYSE.

## Critical Thinking

31. **The BIG Idea** How might the four basic investment considerations vary for people in different age groups? Write a paragraph explaining your answer.
32. **Making Generalizations** Why might an individual choose to borrow money from a finance company that charges higher interest rates rather than from a commercial bank with lower interest rates?

**33. Determining Cause and Effect** How does each of the following affect saving?

- A decrease in the federal personal income tax is implemented.
- The United States undergoes a prolonged period of inflation.

**34. Drawing Conclusions** Interest rates on CDs usually vary only slightly from one institution to another. What do you think causes these similarities?

**35. Drawing Conclusions** Which investments are the safest and which are the riskiest? Why would investors choose either of those investments? Explain.

## Math Practice

**36.** Determine income, consumption, and saving in each row by completing the following table.

Total Income	Consumption	Saving
a. \$2,000	\$1,800	
b.	\$2,500	\$1,000
c. \$7,000		-\$500
d. \$10,000	\$10,000	
e. \$12,500		\$400

## Applying Economic Concepts

**37. Investing in Stocks** Assume that you have saved \$10,000 and have decided to invest in stocks. Research the performance of 2 to 3 stocks listed on the NYSE, AMEX, or NASDAQ. Then write a short paper that includes the following:

- Reasons you chose the stocks
- Stock performance
- Factors influencing the gain/loss in value
- Analysis of why you would hold your stocks for either the short term or the long term

## Analyzing Visuals

**38.** Look at Figure 11.1 on page 291. In a brief paragraph, describe the financial assets savers would receive from financial intermediaries. Then describe those that savers would receive directly from governments and businesses.

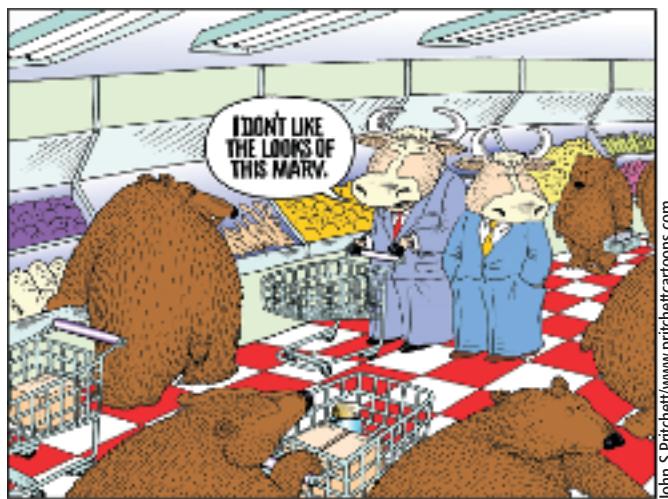
**39.** Look at Figure 11.7 on page 308 and compare the returns for investments in traditional IRAs and 401(k) plans. If the annual investment amounts and interest rates are the same, what accounts for the large difference in returns for these investment options?

## Writing About Economics

**40. Expository Writing** Return to the activity in the chapter opener on page 288. Based on what you have learned in the chapter, devise a general investment plan for Miguel. In your planning, keep in mind the mid-term goals of college cost and long-term goals of retirement.

## Interpreting Cartoons

**41. Critical Thinking** What do the figures of bulls and bears in the cartoons depict? What point is the cartoonist trying to make about the stock market?



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