



CHAPTER 13

Economic Instability

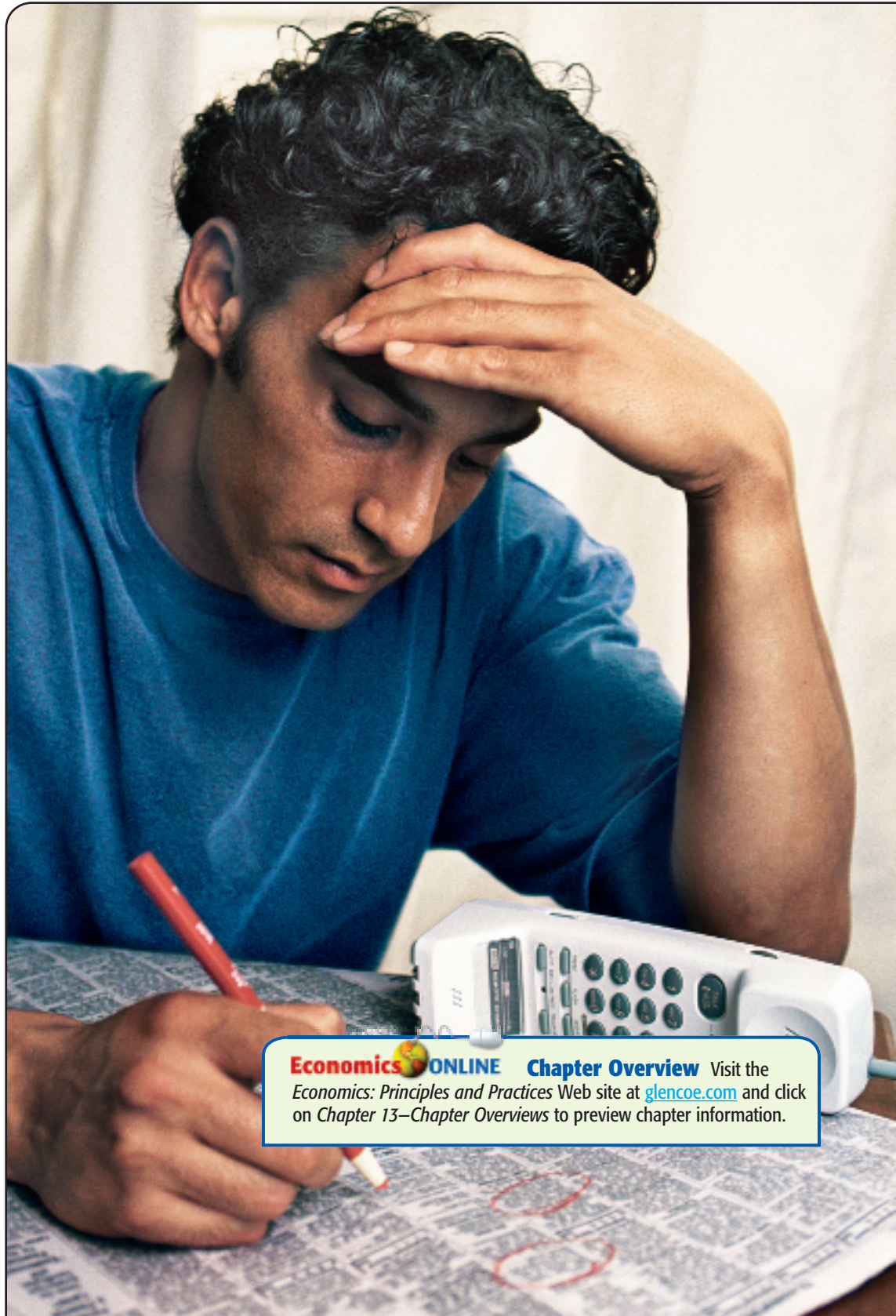
Why It Matters

Do your grandparents talk about the “good old days” when gas was 25 cents per gallon and a loaf of bread cost 10 cents? Compile a list of things that you have been purchasing for several years. Note the prices you paid in the past and those you are currently paying. What do you think accounts for the price differences? Read Chapter 13 to find out what factors can lead to economic instability.

The BIG Ideas

1. Economists look at a variety of factors to assess the growth and performance of a nation's economy.
2. The labor market, like other markets, is determined by supply and demand.

During times of economic instability, people may lose their jobs and have problems finding new ones.



Economics ONLINE Chapter Overview Visit the *Economics: Principles and Practices* Web site at glencoe.com and click on Chapter 13—Chapter Overviews to preview chapter information.



SECTION

1

Business Cycles and Fluctuations

GUIDE TO READING

Section Preview

In this section, you will learn that business cycles are the alternating increases and decreases in the level of economic activity.

Content Vocabulary

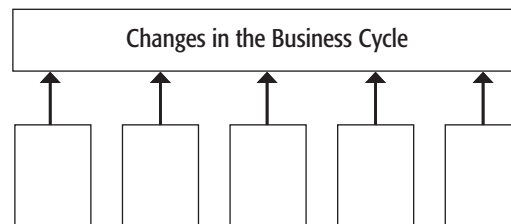
- business cycles (p. 353)
- business fluctuation (p. 353)
- recession (p. 354)
- peak (p. 354)
- trough (p. 354)
- expansion (p. 354)
- trend line (p. 354)
- depression (p. 354)
- depression scrip (p. 356)
- leading economic indicator (p. 358)
- composite index of leading economic indicators (p. 359)
- econometric model (p. 359)

Academic Vocabulary

- innovation (p. 355)
- series (p. 358)

Reading Strategy

Identifying As you read the section, complete a graphic organizer like the one below by identifying factors that can cause changes in the business cycle.



ISSUES IN THE NEWS

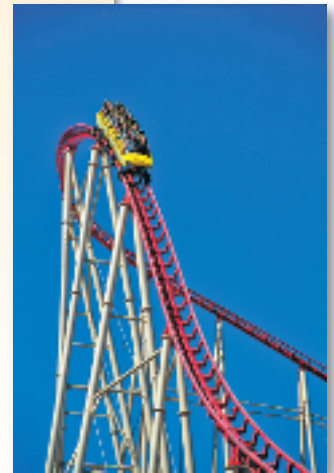
—Associated Press

Economic Growth Totters

The economy has slowed to a snail's pace, growing . . . at the slowest rate in more than three years and stirring fresh debate about the country's financial health heading into the elections. The Commerce Department reported Friday that economic growth during the July-to-September period [of 2006] clocked in at an annual rate of just 1.6 percent, a subpar performance. . . .

The fresh reading. . . disappointed economists, rattled investors and gave Republicans and Democrats plenty to argue about. Economic matters are expected to influence voters' choices when they go to the polls Nov. 7.

On Wall Street, stocks sagged. The Dow Jones industrials, which had hit new highs in recent sessions, lost 73.40 points. . . . The third quarter's performance was the weakest since a 1.2 percent growth rate eked out in the first quarter of 2003, when a nervous nation hunkered down for the start of the Iraq war. ■



Economic growth is something that is beneficial to almost everyone. However, we cannot take economic growth for granted. Sometimes **business cycles**—regular ups and downs of real GDP—interrupt economic growth. **Business fluctuations**—the rise and fall of real GDP over time in an irregular manner—interrupt growth at other times.

Slower economic growth, as you read in the news story, is always a matter of concern. Businesses lose sales, voters become unhappy, investors get nervous—and even the stock market shows its disapproval. Because of this, economists have developed elaborate forecasting models and statistical tools. After all, we all want to know where we are headed.

business cycles
regular increases and decreases in real GDP

business fluctuations
irregular increases and decreases in real GDP



recession decline in real GDP lasting at least two quarters

peak point in time when real GDP stops expanding and begins to decline

trough point in time when real GDP stops declining and begins to expand

expansion period of uninterrupted growth of real GDP

trend line growth path the economy would follow if it were not interrupted by alternating periods of recession and recovery

depression state of the economy with large numbers of unemployed people, declining real incomes, overcapacity in manufacturing plants, and general economic hardship

Business Cycles: Characteristics and Causes

MAIN Idea Business cycles are marked by alternating periods of expansion and recession.

Economics and You Has a slow economy ever shut down a factory in your community? Read on to learn about some possible causes.

We can describe the basic features of an expansion or a recession, or the *phases* of the business cycle as they are sometimes called. When it comes to identifying the actual causes, though, no one theory seems to explain all past events or predict future ones because each seems to be a little different from the last.

Phases of the Business Cycle

The two phases of the business cycle are illustrated in **Figure 13.1**. The first phase is **recession**, a period during which real GDP—GDP measured in constant prices—declines for at least two quarters in a row, or six consecutive months. The recession begins when the economy reaches a **peak**—the point where real GDP stops going up. It ends when the economy reaches a **trough**—the turnaround point where real GDP stops going down.

As soon as the declining real GDP bottoms out, the economy moves into the second phase, **expansion**—a period of recovery from a recession. Expansion continues until the economy reaches a new peak. When it does, the current business cycle ends and a new one begins.

If periods of recession and expansion did not occur, the economy would follow a steady growth path called a **trend line**. As Figure 13.1 shows, the economy departs from, and then returns to, its trend line as it passes through phases of recession and expansion. To make it easier to read, recessions in figures such as this are usually shaded to separate them from periods of expansion.

If a recession becomes very severe, it may turn into a **depression**—a state of the economy with large numbers of people out of work, acute shortages, and excess capacity in manufacturing plants. Most experts agree that the Great Depression of the 1930s was the only depression the United States experienced during the twentieth century.

Changes in Investment Spending

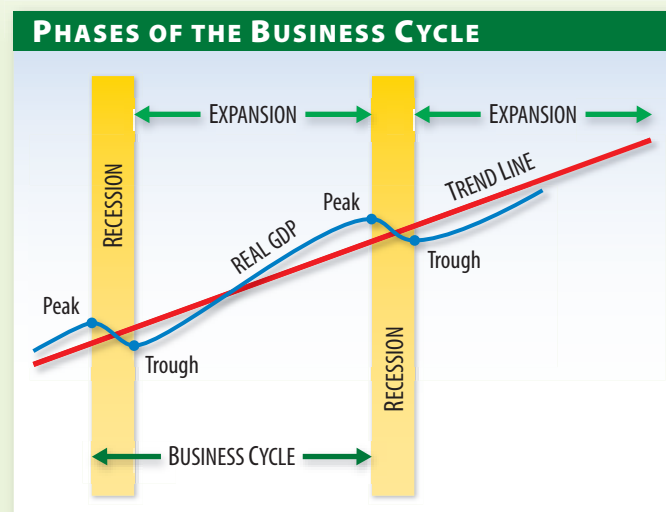
Changes in capital expenditures are thought to be one cause of business cycles. When the economy is expanding, businesses expect future sales to be high, so

Figure 13.1 ▶ **Business Cycles**

Graphs In Motion
See StudentWorks™ Plus
or glencoe.com.

▶ A business cycle is normally measured from peak to peak so that it includes one recession and one expansion.

Economic Analysis *What does a trough indicate?*





they invest heavily in capital goods. Companies may build new plants or buy new equipment to replace older equipment. At first this generates jobs and income, but after a while businesses may decide they have expanded enough. If they then cut back on their capital investments, layoffs and eventually recession may result.

Innovation and Imitation

Another possible cause of business cycles is an **innovation** that may be a new product or a new way of performing a task. When a business innovates, it often gains an edge on its competitors because costs go down or sales go up. In either case, profits increase and the business grows.

If other businesses in the same industry want to remain competitive, they must copy what the innovator has done or develop something even better. The imitating companies must invest heavily to do this, and an investment boom follows. After the innovation takes hold in the industry, further investments are unnecessary, and economic activity may slow down.

Monetary Policy Decisions

Another possible cause of business cycles is the Federal Reserve System's policy on interest rates. When "easy money" policies are in effect, interest rates are low and loans easy to get. Easy money encourages the private sector to borrow and invest, which stimulates the economy for a short time.

Eventually the increased demand for loans causes interest rates to rise, which in turn discourages new borrowers. As borrowing and spending slow down, the level of economic activity may decline.

External Shocks

Another potential cause of business cycles is external shocks, such as increases in oil prices, wars, and international conflict. Some shocks drive the economy up, as when Great Britain discovered North Sea oil in the 1970s. Other shocks can be

negative, as when high oil prices hit the United States in mid-2005.

Finally, in many cases, several factors seem to work together to create a cycle. In these situations, a disturbance in one part of the economy seems to have an impact somewhere else, causing an expansion to begin or a recession to end.

✓ Reading Check **Summarizing** What are thought to be the causes of business cycles?

CAREERS

Statistician

The Work

- * Scientifically apply mathematical principles to the collection, analysis, and presentation of numerical data
- * Gather and interpret data pertaining to a variety of fields, including biology, finance, economics, engineering, insurance, medicine, public health, psychology, marketing, education, scientific research, and sports
- * Gauge the public's feelings on certain topics by taking samples of opinions

Qualifications

- * Aptitude for and an interest in mathematics and computers
- * Knowledge in subject matter of chosen field
- * Strong communication skills
- * Bachelor's degree in mathematics or statistics, with many private sector jobs requiring a master's degree

Earnings

- * Median annual earnings: \$58,620 (private sector), \$81,262 (government sector)

Job Growth Outlook

- * Average

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





depression scrip
currency issued by towns, chambers of commerce, and other civic bodies during the Great Depression of the 1930s

Business Cycles in the United States

MAIN Idea Business cycles have become much more moderate since the Great Depression of the 1930s.

Economics and You Do you have a savings account at a bank? Read on to learn why the money in your account is insured.

Economic activity in the United States followed an irregular course throughout the twentieth century. The worst downturn was the Great Depression of the 1930s. The years since World War II have taken on a special pattern of their own.

The Great Depression

The stock market crash on October 29, 1929, known as “Black Tuesday,” marked the beginning of the Great Depression, one of the darkest periods in American history. Between 1929 and 1933, real GDP declined nearly 50 percent, from approximately \$103 billion to \$55 billion. At the same time, the number of people out of work rose nearly 800 percent—from 1.6 million to 12.8 million. During the worst years of the

Great Depression

During the height of the depression, the unemployed lined up in employment offices. **How many people were unemployed during the Great Depression?**

Depression, one out of every four workers was unemployed. Even workers who had jobs suffered. The average manufacturing wage, which was 55 cents an hour in 1929, plunged to 5 cents an hour by 1933.

Many banks across the country failed. Federal bank deposit insurance did not exist at the time, so depositors were not protected. To prevent panic withdrawals, the federal government declared a “bank holiday” in March 1933 and closed every bank in the country. The closure lasted for only a few days, but about one-quarter of the banks never reopened.

The size of the money supply fell by one-third. Official paper currency was in such short supply that people began using **depression scrip**—unofficial currency that towns, counties, chambers of commerce, and other civic bodies issued. Billions of dollars of scrip were used to pay salaries for teachers, firefighters, police officers, and other municipal employees.

Causes of the Great Depression

An enormous gap in the distribution of income was one important cause. Poverty prevented workers from stimulating the economy by spending. The rich had the income but often used it for such nonproductive activities as stock market speculation.

Easy credit also played a role. Many people borrowed heavily in the late 1920s to buy stocks. Then, as interest rates rose, it was difficult for them to repay their loans. When the crunch came, heavily indebted people had nothing to fall back on.

Global economic conditions also played a part. During the 1920s, the United States had made many loans to foreign countries to help support international trade. When these loans suddenly





Recovery Wartime production during the 1940s provided an additional stimulus in the post-Depression era. ***What other efforts led to economic recovery?***

were harder to get, foreign buyers purchased fewer American goods, and U.S. exports fell sharply.

At the same time, high U.S. tariffs kept many countries from selling goods to the United States, leading to economic crises abroad. As world trade declined, American exports dropped even further.

Recovery and Legislation

The Great Depression finally ended ten years after it started, when real GDP returned to its 1929 high. The economy recovered partly because of increased government spending and partly on its own. The massive spending during World War II added another huge stimulant that further propelled the economy.

The country was so shaken by the Great Depression that a number of laws were passed and agencies established from 1933 to 1940 both to protect people and to prevent another such disaster. The Social Security Act of 1935 was one of the most important and significant pieces of legislation passed during this time. To protect people during their working years, the minimum wage was established at about

the same time. New unemployment programs gave some relief to people who were temporarily out of work.

Because so many public stock companies went out of business, the Securities and Exchange Commission (SEC) was created to put requirements on the disclosure of financial statements by public corporations. The resulting federal regulation made stock ownership by the public much safer.

Finally, the newly established Federal Deposit Insurance Corporation (FDIC) provided modest bank insurance for depositors. Such safeguards were not available earlier, when nearly one-third of the banks had failed. In all, the period from 1933 to 1940 saw the establishment of many federal institutions to make working, banking, investing, and retirement safer.

The reforms of the 1930s seemed to help, and most economists today think that it would be unlikely, if not impossible, for another Great Depression to occur.

Cycles After World War II

Business cycles became much more moderate after World War II, with shorter recessions and longer periods of expansion.



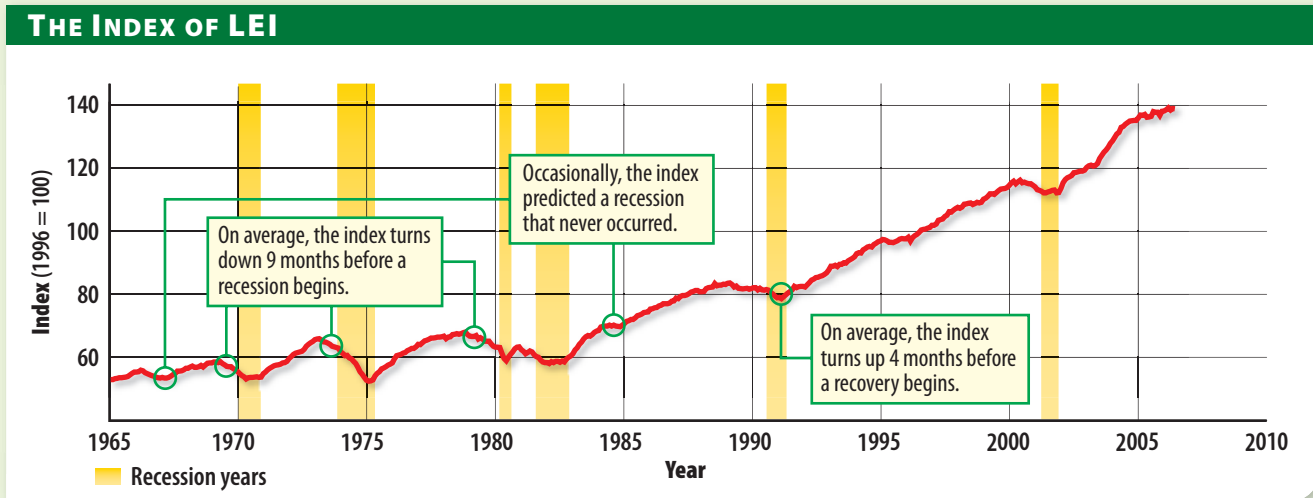
Figure 13.2 ▶ The Index of Leading Economic Indicators

Graphs In Motion

See StudentWorks™ Plus
or glencoe.com.

- ▶ The index of leading economic indicators is one of the tools used to predict future economic activity.

Economic Analysis *How do economists use this index to predict recession?*



Source: The Conference Board

leading economic indicator

statistical series that turns down before the economy turns down, or up before the economy turns up

During this time, the average length of recessions was about 10 months, while expansions averaged about 54 months. With the possible exception of the Vietnam War period, most recessions from 1965 to 1980 occurred on a fairly regular basis.

After the early 1980s, recessions occurred less frequently. A record-setting peacetime expansion during the Reagan administration began in November 1982 and lasted for almost eight years. This was followed by a longer, and even more prosperous, expansion during the Clinton years from 1991 to 2001. In fact, this 10-year period of uninterrupted economic growth is the longest peacetime expansion in U.S. history.

Although the Clinton expansion ended in March 2001, a new one began again in November of that year, shortly after the 9/11 terrorist attacks. Whether the latest expansion can set another record is yet to be seen, but it has already exceeded the historical 54-month average.

✓Reading Check **Inferring** What impact did the Great Depression have on the United States?

Forecasting Business Cycles

MAIN Idea Economists use statistics and models to predict business cycles.

Economics and You Would you change your post-graduation plans if you knew a recession was coming? Read on to find out how economists try to predict future recessions and expansions.

Economists use several methods to predict business cycles. One uses the statistical series shown in **Figure 13.2**. Another makes use of macroeconomic modeling.

Using Everyday Economic Statistics

A change in a single statistic often indicates a change in future GDP. For example, the length of the average workweek may change just before a recession begins if people work fewer hours. This makes the measure a **leading economic indicator**—a statistical series that normally turns down



before the economy turns down or turns up before the economy turns up.

However, no single series has proven completely reliable, so several individual series are combined into an overall index. This is the approach used by the **composite index of leading economic indicators (LEI)**, a monthly statistical series that uses a combination of 10 individual indicators to forecast changes in real GDP.

The composite index is shown in Figure 13.2, where the shaded areas represent recessions. The average time between a dip in the index and the onset of a recession is about nine months. The average time between a rise in the index and the start of an expansion is about four months.

Using Econometric Models

An **econometric model** is a mathematical model that uses algebraic equations to describe how the economy behaves. Most models start with the output-expenditure model we examined on page 327:

$$GDP = C + I + G + (X - M)$$

To see how we use it, suppose that a survey of consumers revealed that households annually spend a fixed amount of money called 'a', along with 95 percent of their disposable personal income, or DPI. We could express this as $C = a + .95(DPI)$ and then substitute this equation into the output-expenditure model to get:

$$GDP = a + .95(DPI) + I + G + (X - M)$$

This process is repeated until each of the terms in the model is expanded and the equation is broken down into smaller and smaller components. To find GDP, forecasters put in the latest values for the variables on the right side of the equation and solve for GDP.

Over time, actual changes in the economy are compared to the model's predictions. The model is then updated by changing some of the equations. In the end, some models give reasonably good forecasts for up to nine months into the future.

✓Reading Check Analyzing Why are short-term econometric models more accurate than long-term models?

composite index of leading economic indicators (LEI) composite index of 10 economic series that move up and down in advance of changes in the overall economy; statistical series used to predict turning points in the business cycle

econometric model mathematical expression used to describe how the economy is expected to perform in the future

SECTION

1

Review

Vocabulary

- 1. Explain** the significance of business cycles, business fluctuation, recession, peak, trough, expansion, trend line, depression, depression scrip, leading economic indicator, composite index of leading economic indicators, and econometric model.

Main Ideas

- 2. Explaining** How are business cycles forecast?
- 3. Describing** What are the two main phases of a business cycle?
- 4. Identifying** Use a graphic organizer like the one below to identify the causes and effects of the Great Depression.



Critical Thinking

- 5. The BIG Idea** Why is it difficult to explain the causes of business cycles?
- 6. Analyzing Visuals** Use Figure 13.1 on page 354 to explain how a business cycle can be compared to a roller coaster.
- 7. Determining Cause and Effect** Assume that business inventories are falling, the average number of hours worked per week is going up, and there is an increase in the number of new building permits. What would these indicators say about the economy, and why?

Applying Economics

- 8. Economic Security** Suppose you were the head of a household. How would you plan spending for your family if you had an accurate prediction of future business cycles? Include examples in your response.



Economists have developed a variety of tools and indicators to spot the beginnings of a recession or expansion. They also might want to take a look at one restaurant in New York that has an indicator all its own.

Dog Days: A Frank Look at the Economy

Corporate chiefs and economists don't toss around the word "recession" lightly—bad for morale. But New York hot dog chain Gray's Papaya, the 24-hour eatery frequented by bag ladies and bankers alike, isn't bashful.

Word is that the highly visible outpost on New York's Upper West Side is about to plaster a sign for its "recession special" in its huge front windows. The last time it did that was March 2001, just as the economy was dipping into recession. The National Bureau of Economic Research, which officially calls business cycle turns, reported that March onset eight months later.

Already, perhaps seeing economic clouds (and an interior "recession special" sign left over from past downturns), more Gray's customers are asking for the dog deal (\$2.75 for two franks and a drink, including tax).

"People are getting more realistic and adjusting their expectations and budgets," says Jackie Schwimmer, a senior vice-president at one of the city's largest real estate brokers, in between chomps. She doesn't see an imminent full-blown



recession but concedes a pinch in the housing market.

Then there's the Wall Street guy who'd ventured uptown for his frank fix. Times are good in his neck of the woods, he admits, but he's feeling less inclined to drop \$11 on a Financial District designer salad more than twice a week. And he'd gladly trade the savory bliss of Gray's recession special for added job security. "I love the dogs, and I love the deal," he says, "but I hope [Gray's Papaya is] wrong."

—Reprinted from *BusinessWeek*

Anxious Times for Americans

Americans are growing increasingly uneasy about the economy

THE NATIONAL ECONOMY A YEAR FROM TODAY WILL BE:

BETTER:	6%
THE SAME:	25%
WORSE:	67%

Source: American Research Group, Inc.

Examining the Newsclip

- Identifying** Which organization is responsible for calling turns in the business cycle?
- Determining Cause and Effect** According to the article, what do people do when they expect a recession?



SECTION

2

Inflation

GUIDE TO READING

Section Preview

In this section, you will find out that inflation is a rise in the general level of prices that disrupts the economy.

Content Vocabulary

- inflation (p. 361)
- deflation (p. 361)
- price index (p. 362)
- consumer price index (CPI) (p. 362)
- market basket (p. 362)
- base year (p. 362)
- creeping inflation (p. 364)
- hyperinflation (p. 364)
- stagflation (p. 364)
- producer price index (PPI) (p. 364)
- implicit GDP price deflator (p. 364)

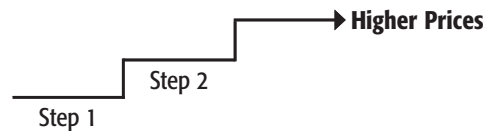
- demand-pull inflation (p. 365)
- cost-push inflation (p. 365)
- creditor (p. 367)
- debtor (p. 367)

Academic Vocabulary

- construction (p. 362)
- recover (p. 365)

Reading Strategy

Illustrating As you read the section, complete a graphic organizer similar to the one below by illustrating the steps in a wage-price spiral.



ISSUES IN THE NEWS

—The New York Times

Hyperinflation in Zimbabwe

How bad is inflation in Zimbabwe? Well, consider this: at a supermarket near the center of the capital, Harare, toilet paper costs \$417. No, not per roll. Four hundred seventeen Zimbabwean dollars is the value of a single two-ply sheet. A roll costs \$145,750—in American currency, about 69 cents.

For untold numbers of Zimbabweans, toilet paper—and bread, margarine, meat, even the once ubiquitous morning cup of tea—have become unimaginable luxuries. All are casualties of the hyperinflation that is roaring toward 1,000 percent a year, a rate usually seen only in war zones. ■



Macroeconomic instability is not limited to fluctuations in the level of national output (GDP) or national income (GNP). Changes in prices can be equally disruptive to the economy. When the general level of prices rises, the economy is experiencing **inflation**. A decline in the general level of prices is called **deflation**. Both situations

are harmful to the economy and should be avoided whenever possible.

Inflation in the United States has varied over the years. We may grumble when the price of gas goes up by a few cents. As you can see in the news story, though, price increases can go to extremes and turn everyday products into luxury items.

inflation increase in the general level of prices of goods and services

deflation decrease in the general level of prices for goods and services



price index

statistical series used to measure changes in the price level over time

consumer price index (CPI)

series used to measure price changes for a representative sample of frequently used consumer items

market basket

representative selection of goods and services used to compile a price index

base year

year serving as point of comparison for other years in a price index or other statistical measure (also see page 221)

Measuring Prices and Inflation

MAIN Idea Several price indexes are used to measure inflation.

Economics and You Have you noticed that prices for some items go up while others go down? Read on to learn how this affects the rate of inflation.

To understand inflation, we must first examine how it is measured. This involves the **construction** of a **price index**—a statistical series used to measure changes in the level of prices over time. A price index can be compiled for a range of items. We will focus on the **consumer price index (CPI)**, a statistical series that tracks monthly changes in the prices paid by urban consumers for a representative “basket” of goods and services.

The Market Basket

The first step we have to take is to select a **market basket**—a representative selection of commonly purchased goods

and services. The CPI uses the prices of approximately 364 goods and services, such as those shown in **Figure 13.3**. While this may seem like a small number, these items are scientifically selected to represent the types of purchases that most consumers make.

The next step is to find the average price of each item in the market basket. To do so, every month employees of the U.S. Census Bureau sample prices on nearly 80,000 items in stores across the country. They then add up the prices to find the total cost of the market basket. The hypothetical results of such a monthly activity are shown in Figure 13.3 for three separate periods.

A **base year**—a year that serves as the basis of comparison for all other years, is then selected. While almost any year will do, the Bureau of Labor Statistics (BLS) in the U.S. Department of Commerce currently uses average prices as they existed from 1982 to 1984. While this is likely to be updated in the future, it is still the most popular base year used for prices today.

Figure 13.3 ▶ **Constructing the Consumer Price Index**

Item	Description	Price Base Period (1982–1984)	Price Second Period (1998)	Price Third Period (January 2006)
1	Toothpaste (7 oz.)	\$1.40	\$1.49	\$2.25
2	Milk (1 gal.)	1.29	1.29	1.79
3	Peanut butter (2-lb. jar)	2.50	2.65	3.73
4	Lightbulb (60 watt)	.45	.48	.65
.....
364	Automobile engine tune-up	40.00	42.00	84.75
Total cost of market basket		\$1,792.00	\$2,925.00	\$3,582.00
Current market basket cost Base market basket cost		$\frac{\$1,792}{\$1,792} = 1.000$	$\frac{\$2,925}{\$1,792} = 1.632$	$\frac{\$3,582}{\$1,792} = 1.999$
Index Number (%):		100 (%)	163.2 (%)	199.9 (%)

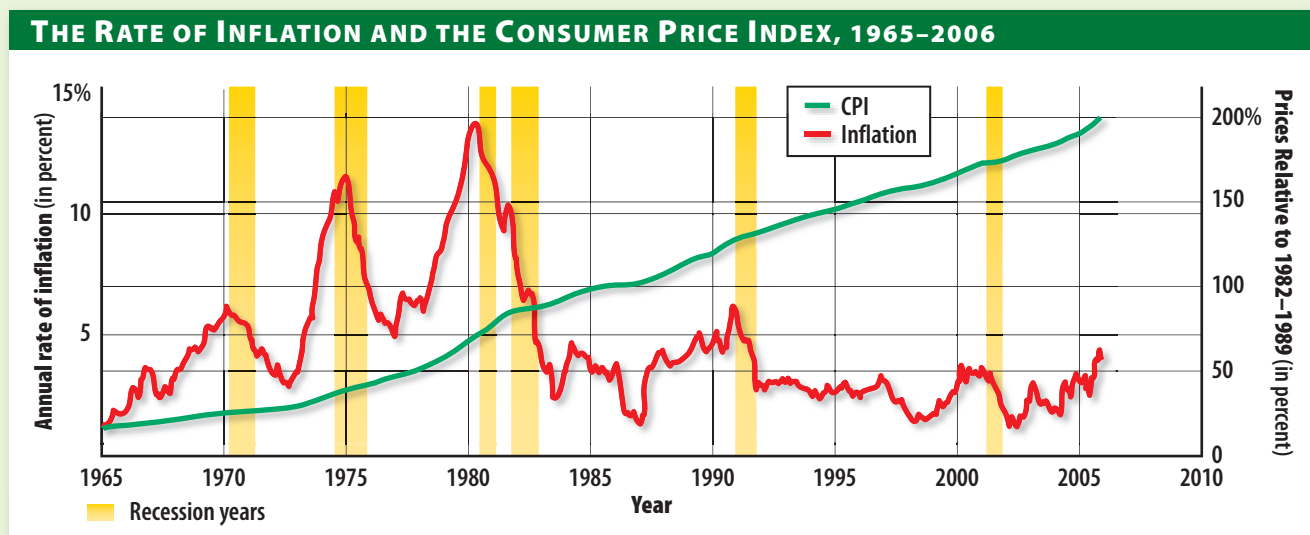
▶ Every month the Bureau of Labor Statistics reprices its market basket of commonly used consumer items and reports the results as a percentage of the cost for the base period.

Economic Analysis *How do we interpret a CPI of 163.2?*

Figure 13.4 ► Measuring Prices and Inflation

- Consumer prices have risen steadily since the mid-1960s. Inflation peaked in the early 1980s and then declined.

Economic Analysis *How is the CPI used to compute inflation?*



Source: Bureau of Labor Statistics

The Price Index

The last step in the process is to make the numbers in the table easier to interpret by converting the dollar cost of a market basket to an index value. This is done by dividing the cost of every market basket by the base-year market basket cost. For example, the \$3,582 cost for January 2006 is divided by the \$1,792 base-period cost to get 1.999, or 199.9 percent. The index number for January—199.9—represents the level of prices in comparison to the base-period prices.

In practice, all of the conversions are understood to be a percentage of the base-period cost even though the % sign or the word *percent* is not used. For example, prices in January 2006 are 199.9 percent of those in the base period, which is another way of saying that prices have nearly doubled. A different base year would give a different index number. However, to avoid confusion, the base year is changed only infrequently.

Because so many prices are sampled all over the country, the BLS publishes specific consumer price indexes for selected cities and large urban areas, as well as one for the economy as a whole.

Skills Handbook

See page R54 to learn about **Understanding Percentages.**

Measuring Inflation

Now that we have the price index, we can find the percentage change in the monthly price level, which is how inflation is measured. To illustrate, suppose that the CPI in January of one year is 199.9, and it was 190.4 exactly one year earlier. To find the *percentage* change, we would divide the change in the CPI by the beginning value of the CPI in the following manner:

$$\frac{(199.9 - 190.4)}{190.4} = \frac{9.5}{190.4} = 0.05 = 5\%$$

In other words, the rate of inflation was 5 percent for the 12-month period.

Figure 13.4 shows what the level of prices and the resulting inflation look like over a much longer period. The two lines are



Hyperinflation

During the 1920s, inflation in Germany reached such levels that banknotes in denominations of “100 Billionen Reichsmark” (the equivalent of 100 trillion) circulated.

How is hyperinflation defined?



creeping inflation relatively low rate of inflation, usually 1 to 3 percent annually

hyperinflation inflation in excess of 500 percent per year

stagflation period of slow economic growth coupled with inflation

producer price index (PPI) index used to measure prices received by domestic producers

implicit GDP price deflator index used to measure price changes in GDP

shown together because the level of prices is sometimes confused with the rate of inflation, when in fact the level of prices is used to compute the inflation rate.

The rate of inflation tends to change over long periods of time. In the last 20 years, the United States could be described as having **creeping inflation**—inflation in the range of 1 to 3 percent per year. When inflation is this low, it is generally not seen as much of a problem. However, inflation can rise to the point where it gets out of control. **Hyperinflation**—inflation in the range of 500 percent a year and above—does not happen very often. When it does, it is generally the last stage before a total monetary collapse.

The record for hyperinflation was set in Hungary during World War II. At that time, huge amounts of currency were printed to pay the government's bills. By the end of the war, it was claimed that 828 *octillion* (828,000,000,000,000,000,000,000,000) pengös equaled 1 prewar pengö.

An economy also may experience **stagflation**, a period of stagnant economic growth coupled with inflation. Stagflation was a concern in the 1970s, a time of rising prices coupled with high unemployment. Even today, some people worry that the high price of oil could cause prices to go up and economic growth to slow down.

Other Price Indexes

A price index can be constructed for any segment of the economy in exactly the same way. The agricultural sector, for example, constructs a separate price index for the products it buys (diesel fuel, fertilizer, and herbicides), and then compares it to the prices it gets for its products.

The **producer price index (PPI)** is a monthly series that reports prices received by domestic producers. Prices in this series are recorded when a producer sells its output to the very first buyer. This sample consists of about 100,000 commodities, using 1982 as the base year. Although it is compiled for all commodities, it is broken down into various subcategories, including farm products, fuels, chemicals, rubber, pulp and paper, and processed foods.

The **implicit GDP price deflator**, used to measure changes in GDP, is another series. This series is used less frequently because the figures for real GDP, or GDP already adjusted for price increases, are provided when GDP is announced.

Finally, these are just a few of the many price indexes that the government maintains. Even so, the CPI is by far the most popular and the one we watch most often.

✓ Reading Check **Analyzing** How is a market basket used to measure the price level?



Causes of Inflation

MAIN Idea Causes of inflation include strong demand, rising costs, and wage-price spirals, along with a growing supply of money.

Economics and You Have you ever wanted something so much you did not care about the price? Read on to learn how such behavior can fuel inflation.

Economists have offered several explanations for the causes of inflation. Nearly every period of inflation is due to one or more of the following causes: demand-pull inflation, cost-push inflation, wage-price spiral, or excessive monetary growth.

Demand-Pull

According to the explanation called **demand-pull inflation**, all sectors in the economy try to buy more goods and services than the economy can produce. As consumers, businesses, and governments converge on stores, they cause shortages, which drives up prices. Thus prices are “pulled” up by excessive demand. This could happen, for example, if consumers decided to use their credit cards and go into debt to buy things they otherwise could not afford.

A similar explanation blames inflation on excessive spending by the federal government. After all, the government borrows and then spends billions of dollars, thus putting upward pressure on prices. Unlike the demand-pull explanation, however, which cites the excess demand on all sectors of the economy, this explanation holds only the federal government’s deficit spending responsible for inflation.

Cost-Push

The **cost-push inflation** explanation claims that rising input costs, especially energy and organized labor, drive up the cost of

products for manufacturers and thus cause inflation. This situation might occur, for example, when a strong national union wins a large wage contract, forcing manufacturers to raise prices to **recover** the increase in labor costs.

Another cause of cost-push inflation could be a sudden rise in the international price of oil, which can raise the price of everything from plastics and gasoline to shipping costs and airline fares. Such an increase in prices occurred during the 1970s, when prices for crude oil went from \$5 to \$35 a barrel. It happened again in 2006, when the price of oil surged to over \$75 a barrel.

Wage-Price Spiral

A more neutral explanation does not blame any particular group or event for rising prices. According to this view, a self-perpetuating spiral of wages and prices becomes difficult to stop.

The spiral might begin when higher prices force workers to ask for higher wages. If they get the higher wages, producers try to recover that cost with higher

demand-pull inflation

explanation that prices rise because all sectors of the economy try to buy more goods and services than the economy can produce

cost-push inflation

explanation that rising input costs, especially energy and organized labor, drive up the prices of products



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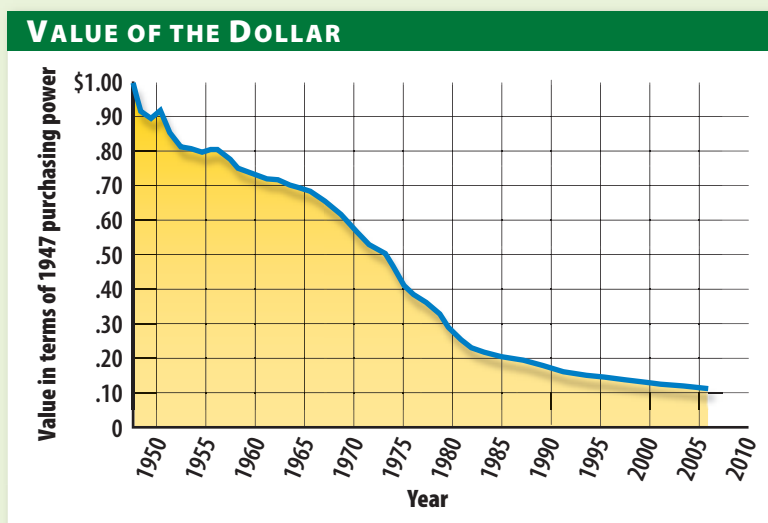
“... but if daddy raised your allowance he’d be hurting the economy by stimulating inflation. You wouldn’t want him to do that would you?”

Inflation Several causes of inflation exist, but an increase in allowance would probably not have a large impact. **Which explanation does the father in the cartoon use?**

Figure 13.5 ► The Purchasing Power of the Dollar

- When the price level goes up, the purchasing power of the dollar goes down. When the price level rises more slowly, as it did after 1980, the value of the dollar does not decline as fast.

Economic Analysis *What happens to the purchasing power of the dollar during a period of inflation?*



Source: Bureau of Labor Statistics, 2006

Economics ONLINE

Student Web Activity

Visit the *Economics: Principles and Practices* Web site at glencoe.com and click on Chapter 13—Student Web Activities for an activity on working with economic statistics.

prices. As each side tries to improve its relative position with a larger increase than before, the rate of inflation keeps rising.

Excessive Monetary Growth

The most popular explanation for inflation is excessive monetary growth. This occurs when the money supply grows faster than real GDP. According to this view, any extra money or additional credit created by the Federal Reserve System will increase someone's purchasing power. When people spend this additional money, they cause a demand-pull effect that drives up prices.

Advocates of this explanation point out that inflation cannot be maintained without a growing money supply. For example, if the price of gas goes up sharply, but the amount of money people have remains the same, then consumers will simply have to buy less of something else. While the price of gas may rise, the prices of other things will fall, leaving the overall price level unchanged.

✓Reading Check Explaining Which explanation do you think gives the most reasonable cause of inflation? Why?

Consequences of Inflation

MAIN Idea Inflation can reduce purchasing power, distort spending, and affect the distribution of income.

Economics and You What would you do if the price of your favorite food became too high? Read on to learn how inflation changes people's buying habits.

While low levels of inflation may not be a problem, inflation can have a disruptive effect on an economy if it gets too high.

Reduced Purchasing Power

The most obvious effect of inflation is that the dollar buys less as prices rise, and thus it loses value over time. **Figure 13.5** shows the declining value of the dollar since 1947 as inflation has eroded its purchasing power.

This may not be a problem for everyone, but decreasing purchasing power can be especially hard on retired people or those with fixed incomes because their money buys a little less each month. Those not on fixed incomes are better able to cope. They can increase their fees or wages to keep up with inflation.



Distorted Spending Patterns

Inflation has a tendency to make people change their spending habits. For example, when prices went up in the early 1980s, interest rates—the cost of borrowed money—also went up. This caused spending on durable goods, especially housing and automobiles, to fall dramatically.

To illustrate, suppose that a couple wanted to borrow \$100,000 over 20 years to buy a house. At a 7 percent interest rate, their monthly mortgage payments would be \$660.12. At 14 percent, their payments would be \$1,197.41. In 1981 some mortgage rates reached 18 percent, which meant a monthly payment of \$1,517.32 for the same size loan! As a result of the high interest rates in that period, the homebuilding industry almost collapsed.

Encouraged Speculation

Inflation tempts some people to speculate heavily in an attempt to take advantage of rising prices. People who ordinarily put their money in reasonably safe investments begin buying luxury condominiums,

diamonds, and other exotic items that might be expected to increase in price.

Some people actually make money on speculative ventures like this, but even speculators lose money on deals from time to time. For the average consumer, a large loss could have devastating consequences.

Distorted Distribution of Income

Inflation can alter the distribution of income. During long inflationary periods, **creditors**, or people who lend money, are generally hurt more than **debtors**, or borrowers, because earlier loans are repaid later with dollars that buy less.

Suppose, for example, that you borrow \$100 to buy bread that costs \$1 a loaf. You could buy 100 loaves of bread today. If inflation set in, and if the price level doubled by the time you paid back the loan, the lender would be able to buy only 50 loaves of bread because each loaf now would cost \$2.

 **Reading Check** **Identifying** Why is inflation especially hard on people with fixed incomes?

creditor person or institution to whom money is owed

debtor person who borrows and therefore owes money

SECTION

2

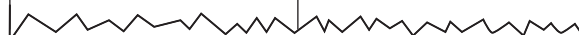
Review

Vocabulary

1. **Explain** the significance of inflation, deflation, price index, consumer price index, market basket, base year, creeping inflation, hyperinflation, producer price index, stagflation, implicit GDP price deflator, demand-pull inflation, cost-push inflation, creditor, and debtor.

Main Ideas

2. **Listing** What are the main causes and consequences of inflation?
3. **Identifying** Use a graphic organizer like the one below to identify the steps in measuring inflation.

Steps	Details
1.	
2.	
	

Critical Thinking

4. **The BIG Idea** How can inflation destabilize a nation's economy?
5. **Understanding Cause and Effect** In 2005 and 2006, the price of crude oil suddenly increased. What type of inflation might this development cause? Why?
6. **Categorizing Information** What kind of inflation might be described as "too many dollars chasing too few goods"? Why?
7. **Analyzing Visuals** Look at Figure 13.4 on page 363. How does the rate of inflation change during times of recessions? What might explain these changes?

Applying Economics

8. **Market Basket** Construct a market basket of goods and services that high school students typically consume. Would it be a useful economic indicator? Explain.



Profiles **in** Economics



Milton Friedman (1912–2006)

- received the Nobel Prize for economics for his theories on economic stabilization policy
- strong proponent of monetary policy

It's About the Money Supply

As a founder of the Chicago school of economic thought, Milton Friedman has largely defined modern monetary policy. In an era when most economists believed in fiscal policy, or government spending on public projects, Friedman disagreed. He argued that monetary policy, or controlling the supply of money in circulation, was the key to economic health and stability.

Friedman's research fundamentally changed U.S. economic policy on inflation, unemployment, and business cycles. His findings, for example, rejected the idea that high inflation helped to limit unemployment. His influential books and articles in *Newsweek* promoted the steadying role of the Federal Reserve in monitoring the amount of money available to individuals, households, and businesses in order to maintain the value of the dollar.

Stay Off Our Backs

A fervent believer in individual freedom, Friedman advocated free markets with minimal government involvement. In his book *Capitalism and Freedom*, he argued for a flat tax rate and the elimination of deductions, such as those for mortgage interest. Friedman also voiced opposition to such popular policies as agricultural subsidies, price controls, and the minimum wage.

Friedman also wanted parents to be free to choose their children's schools. Together with his wife Rose Director Friedman, he established the Friedman Foundation to promote the use of school vouchers in the United States. Vouchers, he thought, would improve education by forcing schools, through free market competition, to either excel or shut down. While many of Friedman's ideas were once considered radical, some have become widely accepted.

A popular column in Newsweek helped Milton Friedman become one of the best-known economists. His views appealed to people: "I am in favor of cutting taxes under any circumstances and for any excuse, for any reason, whenever it's possible."

Examining the Profile

1. **Contrasting** How did Friedman disagree with other economists about achieving economic stability?
2. **Predicting Consequences** How do you think the quality of education would be affected if free market principles were applied to schools?



SECTION

3

Unemployment

GUIDE TO READING

Section Preview

In this section, you will find out how unemployment is measured as well as what causes it.

Content Vocabulary

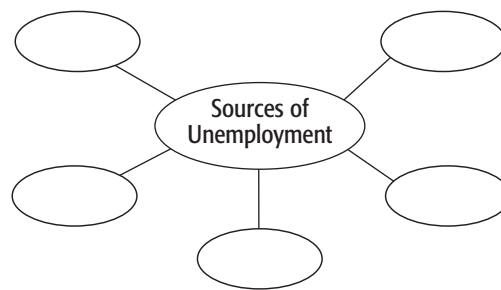
- civilian labor force (p. 370)
- labor force (p. 370)
- unemployed (p. 370)
- unemployment rate (p. 370)
- frictional unemployment (p. 372)
- structural unemployment (p. 372)
- outsourcing (p. 372)
- technological unemployment (p. 372)
- cyclical unemployment (p. 373)
- seasonal unemployment (p. 373)
- GDP gap (p. 374)
- misery index (p. 374)
- discomfort index (p. 374)

Academic Vocabulary

- confined (p. 370)
- fundamental (p. 372)
- unfounded (p. 374)

Reading Strategy

Describing As you read the section, complete a graphic organizer similar to the one below by describing the different sources of unemployment.



PEOPLE IN THE NEWS

—The Atlanta Journal-Constitution

Opting Out

Louis Myer is one of the uncoun­ted. . . . [He volunteers at] a Stone Mountain-based nonprofit that refurbishes donated medical equipment and gives it to those who need it.

Laid off in 2001 from a job as an engineer, the Atlanta native struggled in vain to catch another employer's interest.

He volunteered for a while at Habitat for Humanity. In October, he started helping out at the Stone Mountain nonprofit. It is good work, but it is not paid work. Even so, he is not counted as unemployed. . . . [T]he unemployment rate . . . does not include people who have abandoned the job search, for whatever reason. ■



Approximately half of the people in the United States belong to the labor force, and at any given time millions are without jobs. Sometimes this is because they choose not to work, as when they have quit one job to look for another. In most cases, however, people are out of work for reasons largely out of their control.

Most Americans identify strongly with their work. If you were to ask someone to describe themselves, most likely they would tell you their occupation, such as a cook, a teacher, or a sales associate. Some people, such as Louis Myer in the news article, work for no pay when they cannot find another job.



civilian labor force or labor force

non-institutionalized part of the population, aged 16 and over, either working or looking for a job (also see page 204)

unemployed

working for less than one hour per week for pay or profit in a non-family-owned business, while being available and having made an effort to find a job during the past month

unemployment rate

percentage of people in the civilian labor force who are classified as unemployed

Measuring Unemployment

People are considered unemployed if they are out of work and actively seeking a job. *What other factors are considered?*

Measuring Unemployment

MAIN Idea The government takes monthly surveys to measure the unemployment rate.

Economics and You Have you ever wanted a job but couldn't find one? Read on to learn how the government measures such unemployment.

To understand the severity of joblessness, we need to know how it is measured and what is overlooked. The measure of joblessness is the unemployment rate, one of the most closely watched and politically charged statistics in the economy.

Civilian Labor Force

The Bureau of Labor Statistics defines the **civilian labor force**, more commonly called the **labor force**, as the sum of all persons age 16 and above who are either employed or actively seeking employment. This measure excludes members of the military. Since only people able to work are included in the labor force, those persons who are **confined** in jail or reside in mental health facilities are also excluded.

Unemployed Persons

The process of deciding if someone is able to work, willing to work, or even at work is more complicated than most people

realize. In the middle of any given month, about 1,500 specialists from the Bureau of the Census begin their monthly survey of about 60,000 households in nearly 2,000 counties, covering all 50 states. Census workers are looking for the **unemployed**—people available for work who made a specific effort to find a job during the past month and who, during the most recent survey week, worked less than one hour for pay or profit. People are also classified as unemployed if they worked in a family business without pay for less than 15 hours a week.

After the census workers collect their data, they turn it over to the Bureau of Labor Statistics for analysis and publication. This data is then released to the American public on a monthly basis.

Unemployment Rate

Unemployment is normally expressed in terms of the **unemployment rate**, or the number of unemployed individuals divided by the total number of persons in the civilian labor force.

For example, in May 2006 the unemployment rate was calculated as follows:

$$\frac{\text{Number of unemployed persons}}{\text{Civilian Labor Force}} = \frac{7,015,000}{150,991,000} = 0.046 = 4.6\%$$

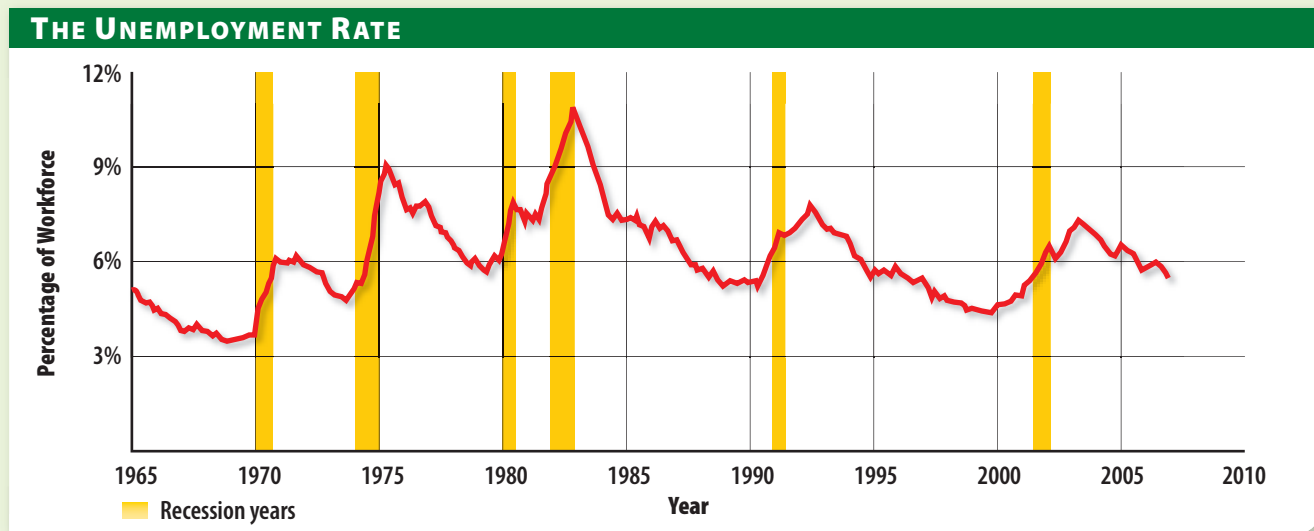
The monthly unemployment rate is expressed as a percentage of the entire labor force. Monthly changes in the unemployment rate, often as small as one-tenth of 1 percent, may seem minor even though they have a huge impact on the economy. With a civilian labor force of approximately 151 million people, a one-tenth of 1 percent rise in unemployment would mean that nearly 150,000 people had lost their jobs. This number is more than



Figure 13.6 ▶ The Unemployment Rate

- ▶ The unemployment rate goes up sharply during a recession and then comes down slowly afterward. When the rate moves as little as 0.1 percent, approximately 151,000 workers are affected.

Economic Analysis *How would you characterize the unemployment rate during the period from 1990 to 2007?*



Source: Bureau of Labor Statistics, 2006

the current population of cities such as Kansas City, Kansas; Syracuse, New York; Bridgeport, Connecticut; or Savannah, Georgia.

Figure 13.6 shows how much the unemployment rate can vary over time. In general, it tends to rise just before a recession begins and then continues to rise sharply during the recession. Sometimes the unemployment rate continues to rise well after the recession ends, as it did in 2003. When the rate finally starts to go back down, it may take from five to seven years for it to reach its previous low.

Underemployment

It might seem that a measure as comprehensive as the unemployment rate would include all of the people who are without a job. If anything, however, the unemployment rate understates employment conditions for two reasons.

First, the unemployment rate does not count those too frustrated or discouraged to look for work. During recessionary periods, these labor force “dropouts” may include nearly a million people. Although they are not working and probably would like to find work, these people are not classified as unemployed because they did not actively seek a job within the previous four-week period.

Second, people are considered employed even when they only hold part-time jobs. For example, suppose a worker lost a high-paying job requiring 40 hours a week and replaced it with a minimum-wage job requiring one hour a week. Although that worker would work and earn less, he or she would still be considered employed. In other words, being employed is not the same as being fully employed.

✓ Reading Check **Summarizing** How do we calculate the monthly unemployment rate?

Personal Finance Handbook

See pages **R20–R23** for more information on getting a job.



frictional unemployment

unemployment involving workers changing jobs or waiting to go to new ones

structural unemployment

unemployment caused by a fundamental change in the economy that reduces the demand for some workers

outsourcing

hiring outside firms to perform non-core operations to lower operating costs

technological unemployment

unemployment caused by technological developments or automation that makes some workers' skills obsolete

Sources of Unemployment

MAIN Idea Unemployment is often caused by circumstances outside an individual's control and is therefore very difficult to remedy.

Economics and You Did you ever have a job and then lose it for no fault of your own? Read on to learn about the different causes of unemployment.

Economists have identified several kinds of unemployment. The nature and cause of each kind affects how much the unemployment rate can be reduced.

Frictional Unemployment

A common type of unemployment is **frictional unemployment**—the situation where workers are between jobs for one reason or another. This is usually a short-term condition, and workers suffer little economic hardship.

As long as workers have the freedom to choose or change occupations, some people will always be leaving their old jobs to look for better ones. Because there are always some workers doing this, the economy will always have some frictional unemployment.

Structural Unemployment

A more serious type of unemployment is **structural unemployment**—when economic progress, a change in consumer tastes and preferences, or a **fundamental** change in the operations of the economy reduces the demand for workers and their skills. In the early 1900s, for example, technological and economic progress resulted in the

development of the automobile, which soon replaced horses and buggies and left highly skilled buggy whip makers out of work. Later, consumer tastes changed away from American-made automobiles in favor of foreign-made cars, causing considerable unemployment in Michigan, Ohio, and the industrial Northeast.

More recently, **outsourcing**—the hiring of outside firms to perform non-core operations to lower operating costs—has become popular. Outsourcing was first used when firms found that they could have other companies perform some routine internal operations, such as the preparation of weekly paychecks. Later, improvements in technology and communications made it possible for companies to move some of their customer service operations abroad where wages are much lower. For example, if you call your telephone company or a computer software maker for customer assistance, your call is likely to be routed to an English-speaking worker in China or India rather than a U.S. office.

Sometimes the government contributes to structural unemployment. Congress's decision to close military bases in the 1990s is a prime example. Military bases are much larger than most private companies, and the impact of the base closings was concentrated in selected regions and communities. A few areas were able to attract new industry that hired some of the unemployed workers, but most workers either developed new skills or moved to other locations to find jobs.

Technological Unemployment

A third kind of unemployment is **technological unemployment**—unemployment that occurs when workers are replaced by machines or automated systems that make their skills obsolete. Technological unemployment is closely related to structural unemployment, although the technological changes are not always as broad in scale or as influential on society as cars replacing buggies.

Did You Know?

➔ **Measuring Unemployment** Some countries measure unemployment by counting the number of persons filing unemployment claims. Others count only those receiving unemployment insurance payments. This makes for relatively low unemployment rates, because some people may not be eligible for unemployment insurance.



Finding Work Overseas

Unemployment can be the first step toward expanding your horizons. Can't find a job in your area? Then look abroad. U.S. businesses are becoming increasingly global, and companies are scrambling to expand overseas. As many as 400,000 Americans relocate internationally each year.

Some human resource specialists encourage people to travel and work abroad. This will increase the chances of being hired for management positions in the future.

Many books and Web sites offer advice to Americans who want to work in other countries. Here are some tips:

- Find the nearest consulate of the country in which you wish to work. The consulate is your ticket to learning about all the entry or residency

requirements you'll need to work in another country.

- A nation's main presence in a foreign country is the embassy. Embassy workers can provide information and help you find a nearby consulate office.
- Different countries require different documentation for a visa or work permit. These often include a valid passport, a statewide criminal history record check, and a medical certificate.



One example is the reduced need for bank tellers by commercial banks because of the increased use of automated teller machines. Another example would be the introduction of word processing programs whose spell-checking, formatting, and text manipulation functions have greatly reduced the demand for typists.

Cyclical Unemployment

A fourth kind of unemployment is **cyclical unemployment**—unemployment directly related to swings in the business cycle. During a recession, for example, many people put off buying durable goods such as automobiles and refrigerators. As a result, some industries must lay off workers until the economy recovers.

If we look at Figure 13.6 on page 371, we can see that the unemployment rate rose dramatically whenever the economy was in recession. During the 2001 recession, more than 2 million jobs were lost. Laid-off workers may eventually get their jobs back when the economy improves, but it usually takes several years of economic growth before the unemployment rate returns to

where it was before the recession. In the meantime, the pain of unemployment is a fact of life for those who are out of work.

Seasonal Unemployment

Finally, a fifth kind of unemployment is **seasonal unemployment**—unemployment resulting from seasonal changes in the weather or in the demand for certain products or jobs. Many carpenters and builders, for example, have less work in the winter because some tasks, such as replacing a roof or digging a foundation, are harder to do during cold weather. Department store sales clerks often lose their jobs after the December holiday season is over.

The difference between seasonal and cyclical unemployment relates to the period of measurement. Cyclical unemployment takes place over the course of the business cycle, which may last three to five years. Seasonal unemployment takes place every year, regardless of the general health of the economy.

✓Reading Check Interpreting Which categories of unemployment do you think are the most troublesome for the U.S. economy? Why?

cyclical unemployment
unemployment directly related to swings in the business cycle

seasonal unemployment
unemployment caused by annual changes in the weather or other conditions that reduce the demand for jobs



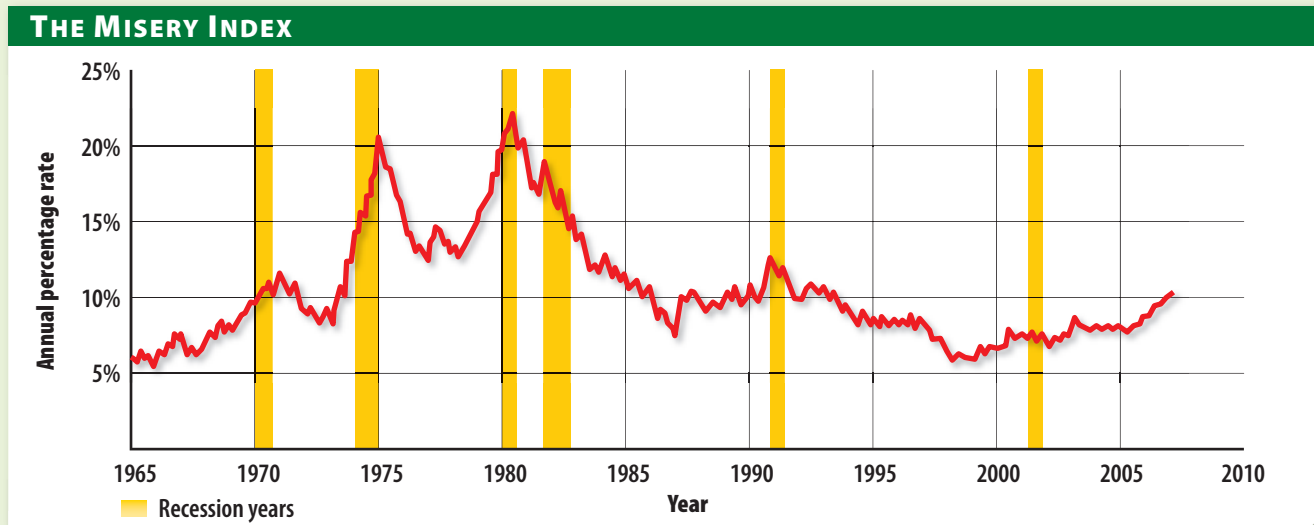
Figure 13.7 ▶ Measuring Consumer Discomfort

Graphs In Motion

See StudentWorks™ Plus
or glencoe.com.

- ▶ The misery index is an unofficial measure of consumer discomfort that is compiled by adding the monthly inflation and unemployment rates.

Economic Analysis *When did the misery index reach its highest point?*



Source: Bureau of Labor Statistics, 2006

GDP gap

difference between what the economy can and does produce

misery index or discomfort index

unofficial statistic that is the sum of the monthly inflation and unemployment rates

Costs of Instability

MAIN Idea Unemployment can cause uncertainty, political instability, and social problems.

Economics and You What would you do if you wanted a job but could not find one? Read on to learn about the costs of unemployment.

Recession, inflation, and unemployment are all forms of instability that hinder economic growth. These problems can occur separately or at the same time. Fears about these conditions are not **unfounded**, because economic instability carries enormous costs that can be measured in economic as well as human terms.

GDP Gap

One measure of the economic cost of unemployment is the **GDP gap**—the difference between the actual GDP and the potential GDP that could be produced if all resources were fully employed. In other words, the gap is a type of opportunity

cost—a measure of output not produced because of unemployed resources.

If we were to illustrate the gap with a production possibilities curve, the amount that could be produced would be any point on the frontier. The amount actually produced would be represented by a point inside the frontier. The distance between the two would be the GDP gap.

In a more dynamic sense, the business cycle may cause the size of this gap to vary over time. The scale of GDP is such that if GDP declines even a fraction of a percentage point, the amount of lost production and income could be enormous. For example, suppose that an economy with a \$13.5-trillion-dollar GDP declines by just one-tenth of one percent. This translates into \$13.5 billion in lost output.

Misery Index

Figure 13.7 shows the **misery index**, sometimes called the **discomfort index**—the sum of the monthly inflation and



unemployment rates. As the figure shows, the index usually reaches a peak either during or immediately following a recession.

Although it is not an official government statistic, the misery index provides a reasonable measurement of consumer suffering during periods of high inflation and high unemployment.

Uncertainty

When the economy is unstable, a great deal of uncertainty exists. Workers may not buy something because of concern over their jobs. This uncertainty translates into many consumer purchases that are not made, causing unemployment to rise as jobs are lost.

Workers are not the only ones affected by uncertainty. The owner of a business that is producing at capacity may decide against an expansion even though new orders are arriving daily. Instead, the producer may try to raise prices, which increases inflation. Even the government may decide to spend less on schools and roads if it is not sure of its revenues.

Political Instability

Politicians also suffer the consequences of economic instability. When times are hard, voters are dissatisfied and incumbents often voted out of office. For example, many experts agree that Bill Clinton's victory over President George Bush in 1992 was due in part to the 1991 recession.

If too much economic instability exists, as during the Great Depression of the 1930s, some voters are willing to vote for radical change. As a result, economic stability adds to the political stability of our nation.

Crime, Poverty, and Family Instability

Recession, inflation, and unemployment can also lead to higher rates of crime and poverty. They can contribute to problems such as fights and divorce when individuals and families face uncertainty because lost jobs and income make it difficult to pay the bills. Thus all of us have a stake in reducing economic instability.

 **Reading Check** **Identifying** What makes the GDP gap a type of opportunity cost?

SECTION

3

Review

Vocabulary

- 1. Explain** the significance of civilian labor force, unemployed, unemployment rate, frictional unemployment, structural unemployment, outsourcing, technological unemployment, cyclical unemployment, seasonal unemployment, GDP gap, misery index, and discomfort index.

Main Ideas

- 2. Explaining** How do economists measure the economic cost of instability?
- 3. Defining** What is frictional unemployment?
- 4. Identifying** Use a graphic organizer like the one below to identify the people who are considered unemployed and those excluded from the civilian labor force.

Unemployed:

Excluded from the labor force:

Critical Thinking

- 5. The BIG Idea** Why is structural unemployment a more difficult problem for the economy and for individual workers than other types of unemployment?
- 6. Drawing Inferences** What factors make it difficult to determine the unemployment rate?
- 7. Categorizing Information** List three reasons why a person may become discouraged from finding a job.
- 8. Analyzing Visuals** Look at Figure 13.6 on page 371 and Figure 13.7 on page 374. How do the line graphs compare?

Applying Economics

- 9. Employment** Give examples of individuals caught in each of the five types of unemployment. Find new examples.



CASE STUDY

Resale Universe

Winmark Wins Customers

Everyone loves a bargain, especially during times of economic instability. That's what Winmark counted on when it incorporated its business model in 1988. Winmark Corp. is the parent company of four buy-sell-trade franchises: Play It Again Sports, Plato's Closet, Music Go Round, and Once Upon A Child. In 2006 these franchises numbered more than 800.

Bargain Hunter's Paradise

If purchased new at a mall, clothing from such top brands as Abercrombie & Fitch, Juicy Couture, Seven for All Mankind, and Baby Phat come with hefty price tags. But astute customers who comb the racks and shelves of Winmark's resale universe find the same high-end brands at nearly 70 percent off retail price. The average clothing price at Plato's Closet, for example, is about \$10.

The resale concept has turned many teens into consignment gurus. They sell their old threads, buy new ones at the lower prices, and count their savings, because they beat even mall sales by a wide margin. Plato's Closet buys and sells only "gently used" merchandise, meaning it must be in style and in great condition. The same holds true for Play It Again Sports and Music Go Round,



where customers can find new and almost-new sports and music equipment, from hockey skates and treadmills to amplifiers and saxophones.

Footing the Bill

Winmark receives a percentage of the profits from its franchises, but the corporation makes most of its money by providing services to the entrepreneurs who run the individual resale stores. It helps owners set up shop, advertise, and gather inventory. Winmark also leases technology to small businesses. On top of that, in 2005 the company launched a new division called Wirth Business Credit, which provides financing to small businesses. With just over 100 employees, the parent company posted profits of roughly \$2.5 million in 2005.

WINMARK CORP* 2005

Total Revenues:	\$26.42 million
Profits:	2.51 million
Employees:	102

Source: finapps.forbes.com

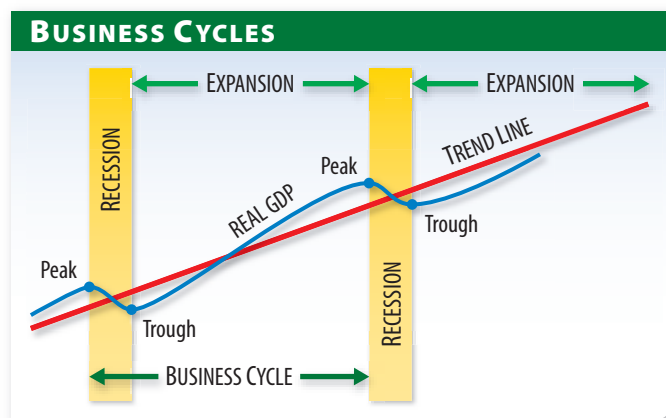
* Figures for Winmark corporate headquarters

Analyzing the Impact

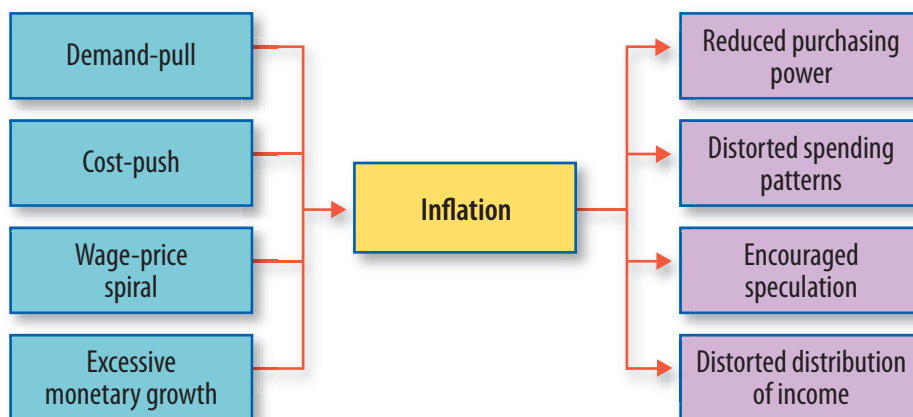
- 1. Summarizing** How does Winmark Corporation's business model enable it to profit from its franchises?
- 2. Drawing Conclusions** How do you think economic instability impacts resale shops?



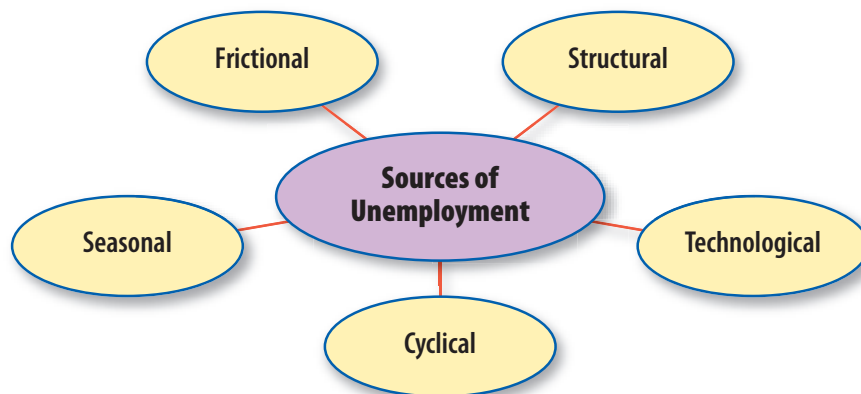
- ▶ **Business Cycles** Economic growth is typically marked by periods of recession followed by periods of expansion. A business cycle is the period from the beginning of one recession to the beginning of the next.



- ▶ **Inflation** The economy faces inflation when the general level of prices increases. If excessive, inflation can have a disruptive effect on the economy.



- ▶ **Unemployment** The unemployment rate includes those individuals who are actively looking for a job but work less than one hour a week for pay or profit. It does not include people who are underemployed, working part-time, or have given up the job search.



Assessment & Activities

Review Content Vocabulary

Write the letter of the key term that best matches each definition below.

- | | |
|--------------------------|----------------------------|
| a. trend line | g. trough |
| b. cyclical unemployment | h. inflation |
| c. unemployed | i. market basket |
| d. base year | j. consumer price index |
| e. civilian labor force | k. structural unemployment |
| f. peak | l. recession |

- marks the beginning of a recession
- representative selection of commonly purchased goods
- point of comparison for other years in statistical measures
- caused by a shift in demand or a change in the way the economy operates
- caused by periodic swings in business activity
- used to measure price changes for a market basket of consumer items
- growth path in absence of recession or expansion
- measured by changes in the CPI
- lowest point of the business cycle
- works less than one hour per week for pay or profit
- real GDP declines for two consecutive quarters
- all persons aged 16 or older who are working or actively seeking a job

Review Academic Vocabulary

Use each of the following terms in a sentence that relates to either inflation or unemployment.

- | | |
|------------------|-----------------|
| 13. innovation | 17. confined |
| 14. series | 18. fundamental |
| 15. construction | 19. unfounded |
| 16. recover | |

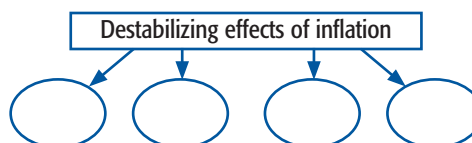
Review the Main Ideas

Section 1 (pages 353–359)

- Explain** the difference between a depression and a recession.
- Describe** the effects of the Great Depression.
- Discuss** how econometric models describe the behavior of the economy.

Section 2 (pages 361–367)

- Explain** the difference between the price level and the rate of inflation.
- Identify** three major price indexes.
- Identify** four ways inflation destabilizes the economy using a graphic organizer like the one below.



Section 3 (pages 369–375)

- Describe** the five major kinds of unemployment by using a graphic organizer like the one below.

UNEMPLOYMENT		
Type	Description	Example
Frictional		
Structural		
Cyclical		
Technological		
Seasonal		

- Describe** the costs and benefits of outsourcing.
- Identify** the political costs of economic instability.

Critical Thinking

- The BIG Idea** Why do leading economic indicators and econometric models not provide long-term predictions of economic behavior?

- 30. Determining Cause and Effect** How would a 10 percent inflation rate affect both lenders and borrowers? Why?
- 31. Drawing Conclusions** Which type of unemployment do you think is the most troublesome for the U.S. economy? Why?
- 32. Comparing and Contrasting** What are the similarities and differences between the CPI and the PPI?
- 33. Synthesizing Information** Describe structural and technological unemployment and give an example of each. Why are these kinds of unemployment serious problems for an economy?

Applying Economic Concepts

- 34. Inflation** Go to the Minneapolis Fed's site at <http://www.minneapolisfed.org/> and click on "Inflation Calculator." Follow the directions to find the adjusted prices for the items listed in the chart below. Then use the Internet or other sources to find the current price for each item. Write a paragraph on the topic: "Were the 'good old days' really all that good?"

Item	Year and Price	Price Adjusted for Inflation	Today's Price
Teacher's starting salary (Richmond, VA)	1969 \$6,500		
2-bdrm apartment with den; gas for heating/cooking included (Richmond, VA)	1969 \$147.50		
Gallon of gas	1969 \$0.25		
Minimum wage	1978 \$2.65		
Tuition/room and board at Longwood Univ. (VA)	1968 \$550 per semester		

- 35. Recession** If we were to enter a period of recession, what would likely happen to the unemployment rate? The inflation rate? The poverty rate? Explain your answers.

- 36. Inflation** Explain why inflation cannot take place without an expansion of the money supply.
- 37. Misery Index** How might the psychological strains that many people feel during difficult economic times help prolong an economic downturn? Provide at least one example with your answer.

Math Practice

- 38.** Look at Figure 13.3 on page 362. Then find current prices for the first four items on the list. Use the equation on page 363 to determine the percentage change in prices since 1998.

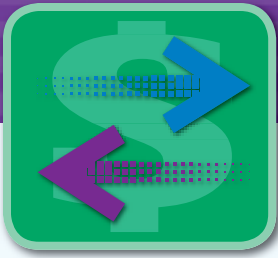
Analyzing Visuals

- 39.** Look at Figure 13.6 on page 371. What was the lowest unemployment rate immediately before the 1991 recession, and when was it recorded? How long did it take for the unemployment rate to reach this previous low?

Interpreting Cartoons

- 40. Critical Thinking** How does the cartoon below relate to what you have learned in this chapter?





DEBATES IN ECONOMICS

Should the Trade Embargo on Cuba Be Lifted?

Three years after Fidel Castro took power in Cuba and installed a Communist regime, the U.S. government initiated a trade embargo against the nation. The embargo was intended to put economic pressure on the Cuban government. Today the embargo is still in effect—one of the longest trade embargos in modern history. Opponents on each side of the issue debate its effectiveness.

Who is right? As you read the selections, ask yourself: Should the trade embargo on Cuba be lifted or remain in place?

PRO A HALF-CENTURY OF FAILURE

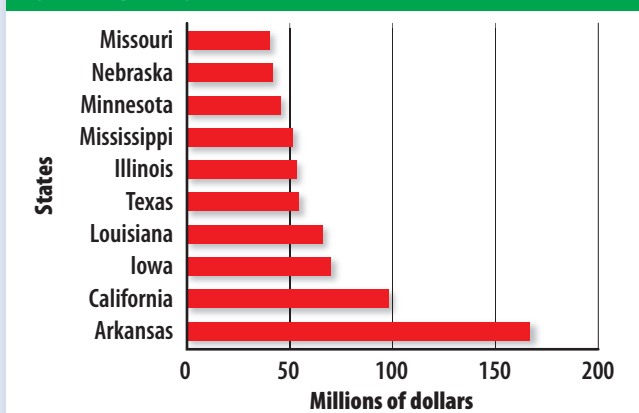
For almost half a century, the U.S. government has tried to isolate Cuba economically in an effort to undermine the [Communist] regime [of Fidel Castro] and deprive it of resources. Since 1960, Americans have been barred from trading with, investing in, or traveling to Cuba. . . .

As a foreign policy tool, the embargo actually enhances Castro's standing by giving him a handy excuse for the failures of his homegrown Caribbean socialism. . . . If the embargo were lifted, the Cuban people would be a bit less deprived and Castro would have no one else to blame for the shortages and stagnation that will persist without real market reforms. . . .

Many of the dollars Cubans could earn from U.S. tourists would come back to the United States to buy American products, especially farm goods. In 2000, Congress approved a modest opening of the embargo. The Trade Sanctions Reform and Export Enhancement Act of 2000 allows cash-only sales to Cuba of U.S. farm products and medical supplies. The results of this opening have been quite amazing. Since 2000, total sales of farm products to Cuba have increased from virtually zero to \$380 million. . . .

—Daniel Griswold, Professor
of Law and Economics,
Columbia University

POTENTIAL AGRICULTURAL EXPORTS TO CUBA, TOP TEN STATES



Source: Cuba Policy Foundation



CON SUBSIDIZE COMMUNIST CUBA?

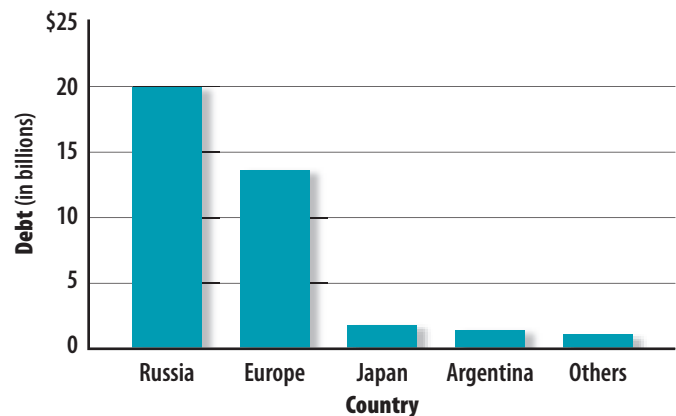
At the end of July [2002], the U.S. House of Representatives voted on two amendments, each approved by 95 vote margins, to end restrictions on travel and lift restrictions on financing exports to Cuba. . . . While the White House has threatened to veto any legislation that would “bolster the Cuban dictatorship,” the anti-Embargo lobby argues that U.S. tourism will benefit Cubans without strengthening Castro, and that trade with Havana will mean substantial American profits. These arguments are misguided at best and disingenuous at worst.

Fidel Castro is broke, and at issue is not trade, but extending American export credit and export insurance to his regime, both of which are funded by American taxpayers. Since [2006], American companies are allowed to ‘trade’ with Castro’s government on a cash and carry basis. But when Castro defaults on his purchases, under the proposed policy American taxpayers will have the burden of picking up his tab. . . .

France, Spain, Italy and Venezuela have suspended official credits to Castro’s Cuba—not because of the Cuban communities in those nations—but because Cuba has failed to make payments on its debt, including debt incurred on agricultural purchases. . . . Havana owes billions of dollars to western banks and former socialist countries.

—Frank Calzon, executive director
of Center for a Free Cuba

CUBA’S INTERNATIONAL DEBT



Source: U.S. Department of State

Analyzing the Issue

- 1. Summarizing** What argument does Griswold use to support his argument that the embargo should be lifted?
- 2. Analyzing** Review Calzon’s argument. Do you agree with him that trade with Cuba would be a misguided policy?
- 3. Deciding** With which opinion do you agree? Explain your reasoning.

