## CHAPTER

Econom


## Economics \& You

(aD
Do you worry about the future? If you are concerned about getting a job, earning a decent income, or keeping up with inflation, the concept of economic stability is important to you. To learn more about the effects of unemployment and inflation, view the Chapter 21 video lesson:

Fighting Unemployment, Inflation, and Poverty


Chapter Overview Visit the Economics: Principles



Downturns in the economy result in some businesses failing. and Practices Web site at epp.glencoe.com and click on Chapter 14-Chapter Overviews to preview chapter information.


United States District Court



# Business Cycles and Fluctuations 

## Study Guide

## Main Idea

The term "business cycle" refers to alternating increases and decreases in the level of economic activity.

## Reading Strategy

Graphic Organizer As you read the section, complete a graphic organizer similar to the one below by listing factors that can cause changes in the business cycle.

Changes in the business cycle


## Key Terms

business cycle, business fluctuation, recession, peak, trough, expansion, trend line, depression, depression scrip, econometric model, index of leading indicators

## Objectives

After studying this section, you will be able to:

1. Explain the phases of the business cycle.
2. Identify five causes of business cycles.

## Applying Economic Concepts

Economic Security Do you have a job and a paycheck on which you depend? Read to find out how economic instability can threaten your income.

## Cover Story

## Leading Indicators Up Again

A leading indicator of future economic activity slowed somewhat during March but still maintained its forward momentum for the sixth consecutive month, boosting optimism that the nation's economic expansion will continue into the summer months.

Michael Boldin, director of business


Growing construction signals robust economy cycle research at the d the March gain typical of a single month and noted the indexs 1.6 percent increase since September generated "a lot of confidence this expansion will continue at a robust pace."

Economic growth is something that is beneficial to almost everyone. However, we cannot take economic growth for granted. Sometimes economic growth is interrupted by business cycleslargely systematic ups and downs of real GDP. At other times economic growth is interrupted by business fluctuations-the rise and fall of real GDP over time in a nonsystematic manner.

Either way, economic growth-even the recordsetting expansion that took place during the 1990salways comes to a halt before it begins to take off again. The inevitable ups and downs of the economy is one of many reasons why economists have developed tools like the monthly index of leading indicators featured in the cover story.

## Business Cycles in the United States

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

## Phases of the Business Cycle



Using Graphs The business cycle is marked by alternating phases of recession and expansion. What does a trough indicate?

## Phases of the Business Cycle

The two phases of the business cycle are illustrated in Figure 14.1. The first phase is recession, a period during which real GDP declines for 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 of the cycle, expansion-a period of recovery from a recession. Expansion continues until the economy reaches a new peak. If periods of recession and expansion did not occur, the economy would follow a steady growth path called a trend line. As Figure 14.1 shows, the economy departs from, and then returns to, its trend line as it passes through phases of recession and 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 has had in the twentieth century.

## The Great Depression

The stock market crash on October 29, 1929, or "Black Tuesday," marks the beginning of the Great Depression. Between 1929 and 1933, GDP fell from approximately $\$ 103$ to $\$ 55$ billion-a decline of nearly 50 percent. At the same time, the number of people out of work rose nearly 800 percentfrom 1.6 to 12.8 million. During the worst years of the Depression, one out of every four workers was jobless. Even workers who had jobs suffered. The average manufacturing wage, which had reached fifty-five cents an hour by 1929, plunged to five cents an hour by 1933.

Many banks across the country failed. The FDIC did not exist at the time, so depositors were not protected. To prevent panic withdrawals, the federal government declared a "bank holiday" in March of 1933. Every bank in the country closed for several days, and many banks never reopened.

The money supply fell by one-third. Currency was in such short supply that towns, counties, chambers of commerce, and other civic bodies resorted to printing their own money, known as depression scrip. Several billion dollars of scrip was used to pay teachers, firefighters, police officers, and other municipal employees.

## Causes of the Great Depression

Several factors contributed to the Great Depression. One was the disparity in the distribution of income. A great number of very poor and very rich people lived in America. The poor could not stimulate the economy with consumer spending because they had little or no income. The rich had the income, but often used it for such nonproductive activities as stock market speculation.

Easy and plentiful credit also appears to have played a role. Many people borrowed heavily in the late 1920 s, which made them vulnerable to credit contractions, high interest rates, and even minor business fluctuations. When the crunch came, heavily indebted people had nothing to fall back on.

Global economic conditions also played a part. During the 1920s, public and private institutions in the United States made many foreign loans to help support a high level of international trade. Shortly before the Depression began in the United States, the private institutions withdrew many of these loans. Without the loans, some foreign nations could no longer buy American goods, so American exports fell sharply.

At the same time, high American tariffs on imports kept many countries from selling goods to the United States. Many countries that depended


## Rubles? Who Needs Rubles?

During difficult economic times, barter can serve as a medium of exchange. Many economies also revert to barter when people lose faith in the money supply-and that's exactly what happened in Russia.

The chart shows how Yuri Neyolov, governor of Russia's Yamal-Nenets Autonomous Region, "bought" an airplane for his government. This story—and thousands like it-are commonplace throughout Russia.

## Critical Thinking

1. Analyzing Information Which functions of money did the gas owned by Gazprom perform?
2. Drawing Conclusions Are there any barter transactions that take place in the American economy? Why would anyone prefer barter to money transactions?
heavily on sales to the United States were soon faced with economic crises. As the Depression spread from country to country, world trade declined, and American exports dropped even further.

## Business Cycles Since World War II

Massive government spending during World War II added a huge stimulant to the economy for most of the early 1940s. Recession returned in 1945, but it did not last. As soon as the war was over, consumers went on a buying binge that stimulated expansion again. The economy experienced several more recessions after that, but each downturn was short compared with the length of the recovery that followed. The average recession lasted about 11 months, while the average expansion lasted 43 months.

Figure 14.2 shows the recurring pattern of recessions and expansions since 1965. With few exceptions, most of the earlier recessions occurred on a fairly regular basis. After 1980, however, recessions occurred less frequently. The expansion that began in 1991 is the longest expansion in United States history.

## Causes of the Business Cycle

No one theory seems to explain past business cycles, or serves as a way to predict future ones. In many cases, several factors are working together to create a cycle.

## Capital Expenditures

Changes in capital expenditures are one cause of business cycles. When the economy is expanding,

## STANDARD <br> \&POOR'S INFOBYTE

The Business Cycle The term "business cycle" describes economy-wide fluctuations in output, incomes, and employment. Generally, periods of expansion follow periods of low output.
businesses expect future sales to be high, so they invest heavily in capital goods. Companies may build new plants or buy new equipment to replace older equipment in their plants. After a while, businesses may decide they have expanded enough. They begin to pull back on their capital investments, causing layoffs in the capital goods industries and, eventually, recession results.

## Inventory Adjustments

Inventory adjustments, or changes in the level of business inventories, are a second possible cause of business cycles. Some businesses cut back on inventories at the first sign of an economic slowdown and then build them back up again at the first sign of an upturn. Either action causes investment expenditures-and therefore real GDP-to fluctuate.

The influence of inventory adjustments showed up clearly in the business cycle of the late 1940s. Right after World War II, businesses in the United States invested heavily in inventories to fill shelves depleted during the war years. By 1948 consumer demand caught up with the backlog and people stopped buying. Inventories built up on store shelves, so businesses stopped buying inventory. The resulting recession of 1949 lasted for about a year.

## Innovation and Imitation

A third possible cause of business cycles is innovation. An innovation 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 its costs go down or its sales go up. In either case, profits increase, and the business grows. If other businesses in the same industry want to keep up, they must copy what the innovator has done or come up with 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, however, the situation changes. Further investments are unnecessary, and economic activity may slow. Meanwhile, the fluctuation of investments has produced a business cycle.


Using Graphs The index of leading indicators is one of the tools used to predict future economic activity. How do economists use this index to predict recessions?


Visit epp.glencoe.com and click on Textbook Updates-Chapter 14 for an update of the data.

## Monetary Factors

A fourth possible cause of business cycles is the credit and loan policies of the Federal Reserve System. When "easy money" policies are in effect, interest rates are low and loans are 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 declines. Lenders think twice about making new loans or renewing old ones, and the business cycle begins again.

## External Shocks

A final 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 the early 1970s.

## Predicting Business Cycles

W WEconomists use a number of methods to predict business cycles. One popular technique involves macroeconomic modeling. Another makes use of statistical predictors.

An econometric model is a macroeconomic model that uses algebraic equations to describe how the economy behaves. Most models used today are based on some adaptation of the output-expenditure model we examined earlier:

$$
\text { GDP }=\mathrm{C}+\mathrm{I}+\mathrm{G}+\mathrm{F}
$$

For example, an economist might use X to stand for exports, and $M$ for imports (instead of $F$ for the foreign sector) to get:

$$
\text { GDP }=\mathrm{C}+\mathrm{I}+\mathrm{G}+(\mathrm{X}-\mathrm{M})
$$

Other equations in the model also may be substituted for some of the variables. Suppose that households annually spend a fixed amount of money, designated as a, along with 95 percent of their disposable personal income. In this case, $\mathbf{C}=\mathbf{a}+.95$ (DI). If this were substituted for the C in the outputexpenditure model, the equation would read:

$$
\text { GDP }=a+.95(\mathrm{DI})+\mathrm{I}+\mathrm{G}+(\mathrm{X}-\mathrm{M})
$$

The equation is then broken down into smaller and smaller components to the point where it may have as many as 1,000 variables.

To predict GDP, forecasters put in the latest figures for the variables on the right side of the equation. Because most econometric models are solved using a computer, little time is needed to obtain a solution.

As the quarter unfolds, actual changes in the economy are compared to the model's predictions. The model is then updated. Some models give reasonably good forecasts for up to nine months. Overall, short-term econometric models have proven their value and are used extensively.

Another tool used to predict the turning points of business cycles is the index of leading indicators, a monthly statistical series that usually turns down before real GDP turns down, and turns up before real GDP turns up. As we saw in the cover story, the index is widely used to predict the direction of future economic activity.

Some statistical indicators, such as the length of the average workweek-which tends to shrink just before a recession begins-are fairly good predictors of real GDP changes. Still, no single series has proven completely reliable. To resolve this problem, 10 individual series are combined into an overall index that closely patterns the behavior of real GDP, making the index of leading indicators a useful tool.

The behavior of the composite index can be seen in Figure 14.2, where the shaded areas represent recessions. As you can see, the average time between a dip in the index and the onset of recession is about 13 months. The average time between a rise in the index and an expansion is about four months. The information it supplies is used along with results from other econometric models. Together, the results generally let the forecaster predict how real GDP will behave in the short run.

## Section 1 Assessment

## Checking for Understanding

1. Main Idea Explain the difference between a business cycle and a business fluctuation.
2. Key Terms Define business cycle, business fluctuation, recession, peak, trough, expansion, trend line, depression, depression scrip, econometric model, index of leading indicators.
3. Identify the two main phases of a business cycle.
4. Explain how the Great Depression compared to other recessionary periods.
5. List five causes of business cycles.

Applying Economic Concepts
6. Economic Security Suppose you were the head of a household. How would you plan
your spending for your family's needs if you had an accurate prediction of future business cycles? Include examples in your response to the question.

## Critical Thinking

7. Understanding Cause and Effect If business inventories are falling, the average hours worked per week is going up, and there is an increase in the number of new building permits, we would expect the economy to be in an expansion phase of the business cycle. Explain why each of these indicators would show that the economy would grow in the near future.
[^0]
## Profiles <br> IN Economics <br> s

## Championing

 Economic Freedom: Walter E. Williams(1936-)
Walter E. Williams is an economist, author, and professor of economics at George Mason University. Williams's views are decidedly free market-and often controversial.

## FREEDOM IS KEY

"Economic freedom" is the cornerstone of Williams's beliefs. He argues that economic freedom is the key to both economic growth and the fair distribution of wealth. Williams often points to Hong Kong, Korea, Taiwan, and Singapore as evidence of the spectacular economic growth that can be achieved when there is little government intervention. This has led him to become an outspoken critic of many popular government programs.

Many Americans, for example, support the minimum wage. To Williams, however, it is a cause of economic problems.

One example he cites involves a comparison between unemployment

## Unemployment

## Study Guide

## Main Idea

Frictional, structural, cyclical, seasonal, and technological are the general types of unemployment.

## Reading Strategy

Graphic Organizer As you read the section, complete a graphic organizer similar to the one below by listing two ways that structural unemployment takes place.


## Key Terms

unemployed, unemployment rate, frictional unemployment, structural unemployment,
cyclical unemployment, seasonal unemployment, technological unemployment, automation

## Objectives

After studying this section, you will be able to:

1. Explain how the Bureau of Labor Statistics determines if a person is employed.
2. Describe five kinds of unemployment.

## Applying Economic Concepts

Employment Did you work for at least one hour per week for pay or profit last month? Read to find out how your answer to this question determines your employment status.

## Cover Story

## Joblessness Dips to 4.2\%

The nation's unemployment rate plunged to a 29 -year low in March, while the number of jobs created fell to the lowest level in three years, the Labor Department said Friday.

The monthly employment report, among the most closely watched economic indicators, surprised
The last time joblessness hit 4.2 percent was February, 1970. Richard Nixon led the country, a war raged in Vietnam, and the first man had recently walked on the moon.

-CNNfn, April 2, 1999

The unemployment rate is the percentage of the labor force that is out of work.

Nearly one-half of the population of the United States belongs to the civilian labor force, and at any given time millions of these people are without jobs. This issue is so important that full employment is one of the seven economic and social goals of the American economy.

## Measuring Unemployment

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

## The Unemployment Rate

In the middle of any given month, thousands of specialists from the Bureau of the Census begin their monthly survey of about 50,000 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 published on a monthly basis.

Unemployment also is expressed in terms of the unemployment rate, the number of unemployed individuals divided by the total number of persons in the civilian labor force. As Figure 14.3 shows, the unemployment rate tends to rise dramatically during recessions and then come down slowly afterward. With a civilian labor force of approximately 139 million people, a one-tenth of one percent rise
in the unemployment rate would mean that nearly 139,000 people had lost their jobs. This number is more than the population of cities such as Laredo, Texas; Tallahassee, Florida; Boise, Idaho; or Evansville, Indiana.

## Limitations of the Unemployment Rate

It might seem that a measure as comprehensive as the unemployment rate would summarize the problem. If anything, however, the unemployment rate understates employment conditions for two reasons.

First, the unemployment rate does not count those who have become too frustrated or discouraged to look for work. These labor force "dropouts" may include nearly a million people

## STANDARD 8POOR'S

## The Unemployment Rate



Using Graphs The unemployment rate goes up sharply during a recession and then comes down slowly thereafter. When the rate moves as little as 0.1 percent, approximately 139,000 workers are affected. How would you characterize the unemployment rate during the period from 1990 to 2000?
during recessionary periods. Although they are not working, these people are not classified as unemployed because they did not try to find a job within the previous four-week period.

Second, people are considered employed even when they hold part-time jobs. Someone who has lost a high-paying job, but is working just one hour a week at a minimum-wage job, would still be considered employed. As a result, being employed is not the same as being fully employed.

## Kinds of Unemployment

观Economists have identified several different kinds of unemployment. The nature and cause of each affect how much unemployment can be reduced in the economy.

## Frictional Unemployment

One kind of unemployment is frictional unemployment-unemployment caused by workers who are between jobs for one reason or another. These workers are short-term unemployed and will suffer little economic hardship from their lack of employment. With freedom to choose occupations, many choose to leave their old jobs to look for better work. Others have lost their jobs, but will quickly find others.

Some frictional unemployment is the result of new people moving into the labor force, particularly young workers searching for their first jobs. Unemployment of this nature is a minor problem that cannot be completely eliminated. It is necessary for workers to be able to move to the jobs where they are most needed. Because there are

# Working in the New Economy 

For generations, the economy was organized around mass production. Today, the new economy is fast becoming a high-technology, service, and office economy. This does not mean that mass production is no longer important. Higher rates of productivity in manufacturing and farming have resulted in fewer people producing more goods than ever before.

As the shift from a manufacturing to a service and knowledge-based economy continues, the rise of new industries is creating new jobs. In addition, modern technology is changing the nature of many existing jobs, requiring new knowledge and a new set of skills. Now, more than 100 million Americans (nearly 80 percent of the total workforce) work in occupations that are service-related or information-related.

The Virtual Workplace As electronic commerce and Internet business grows, fewer people will work in central offices, retail stores and other facilities. Analysts believe that the virtual workplace, allowing employees to
work from any location with a computer and Internet connection, will become more prevalent. Ideally, the virtual workplace makes use of technology and other work innovations to enable employees to work together across space and time. Workers in a virtual workplace require a highly cus-


More and more people are working at home. tomized set of skills, ranging from highly technical specialties to working independently in a network or on a string of virtual teams.

Job Trends Jobs requiring postsecondary, vocational, or higher education are expected to grow as a share of total employment. Positions calling for individuals with at least an associate's degree are expected to increase from 31 percent of all jobs in 1996 to 32.4 percent in 2006. Along with an increase in the number of highskilled jobs, the number of low-skilled jobs is expected to grow. Occupations predicted to show the largest
always some workers who are in the process of changing jobs, there will always be some frictional unemployment in the economy.

## Structural Unemployment

Structural unemployment-unemployment that occurs when a fundamental change in the operations of the economy reduces the demand for workers and their skills-is a more serious type of unemployment.

Changes in technology and changes in consumer tastes often cause structural unemployment. Workers are structurally unemployed because their skills and the skills required by employers who are hiring workers do not match. In the early 1900s, for example, people reduced their demand for
horses, buggies, and buggy whips in favor of domestic automobiles. Later, tastes changed in favor of foreign-made automobiles, causing considerable unemployment in Michigan, Ohio, and the industrial Northeast.

Industries may also change the way they operate. During the 1990-1991 recession, a series of mergers and cost reductions trimmed the whitecollar labor force in the banking and computer industries. This change was sudden and left millions of highly skilled people out of work. Many of these workers had to develop new skills before they could find employment in other industries.

Sometimes the government contributes to structural unemployment when
it changes the way it does business.
increases include cashiers, janitors, retail salespersons, and restaurant workers. Low-skilled occupations are expected to account for 13 percent of all new job growth.

Job Skills in the Information Age A survey of more than 400 of the fastest-growing U.S. firms over a fiveyear period points to the importance of education and training. Over onehalf of the entry-level positions offered by the firms require a high school diploma and often at least two years of post-high school studies. Nearly 40 percent of the firms require a four-year college degree, and an additional 7 percent require completion of postgraduate studies. The companies' CEOs place great importance on math skills. "Mastering challenging mathematics is more important than ever before for our students," noted U.S. Secretary of Education Richard W. Riley. "Algebra is considered a new basic."


## Did You Know?

Job Trends for the next few years, most of the new jobs will be in the services and retail trade industries. By 2005 these industries are expected to account for 16.2 million out of a total projected growth of 16.8 million wage and salary jobs.

## Unemployment



Technological Unemployment When technological unemployment occurs, many workers find they have to learn new skills. What causes technological 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 select regions and communities. Some areas were able to attract new industry that hired many of the unemployed workers, but most workers either developed new skills or moved to other regions.

## Cyclical Unemployment

A third 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, refrigerators, washers, dryers, and new homes. As a result, some industries must lay off workers until the economy recovers.

Laid-off workers generally get their jobs back eventually when the economy improves. Accordingly, many try to wait out the recession by living on savings or by taking temporary jobs.

## Seasonal Unemployment

A fourth kind of unemployment is seasonal unemployment-unemployment resulting from changes in the weather or changes in the demand for certain products. Many carpenters and builders, for example, have less work in the winter than during the spring and summer because some tasks, such as replacing a roof or digging a foundation, are harder to do when the weather is cold.

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.

## Technological Unemployment

A fifth kind of unemployment is technological unemployment-unemployment caused when workers with less skills, talent, or education are replaced by machines and other equipment that do their jobs. Technological unemployment happens when workers face the threat of automation-production with mechanical or other processes that reduce the need for workers.

In some cases, automation results in a drastic reduction in the number of workers needed for production. Japan, for example, pioneered the use of large mechanized factories. Entire assembly lines in industries such as automobiles and steel are staffed by one-fifth of the workers needed in similar U.S. plants. In the United States, the use of automated teller machines by banks has reduced the need for bank tellers.

## Did you know?

Employment Trends Every spring, the unemployment rate slightly rises as college graduates enter the labor force. The high unemployment rates in the mid-1980s were caused in part by the baby boomers who had graduated from college and were entering the work force.

## The Concept of Full Employment

则Economists have long wrestled with the concept of full employment. Full employment does not mean zero unemployment. Instead, full employment is the lowest possible unemployment rate, with the economy growing and all factors of production being used as efficiently as possible.

While opinions may vary, it appears as if full employment is reached when the unemployment rate drops below 4.5 percent. The 4.2 percent unemployment rate discussed in the cover story, the lowest rate in 29 years, certainly indicates a period of full employment.

Consistently low unemployment is difficult to maintain because of the business cycle. Figure $\mathbf{1 4 . 3}$ shows that the 1969-1970 recession drove the unemployment rate to 6.1 percent. The 1974 recession drove the rate to 9.0 percent in 1975, and the 1981-1982 recession drove the rate to 10.8 percent. The rate declined thereafter, but the 1991 recession drove it back up to 7.8 percent.

## The Fastest-Growing Occupations, 1998-2008

|  | Employment |  | \% Increase |
| :--- | ---: | ---: | :---: |
| Occupation | 1998 | 2008 | 1998-2008 |
| Computer engineers <br> Computer support <br> specialists | 299 | 622 | 108 |
| Systems analysts | 429 | 869 | 102 |
| Database administrators <br> Desktop publishing <br> specialists | 617 | 1,194 | 94 |
| Paralegals and legal <br> assistants | 26 | 455 | 77 |
| Personal care and home <br> health aides | 136 | 220 | 73 |
| Medical assistants <br> Social and human <br> service assistants | 256 | 1,179 | 58 |
| Physician assistants |  |  |  |

Source: Bureau of Labor Statistics (Number in thousands of jobs)

> Using Tables These occupations are projected to be the 10 fastest-growing occupations from 1998 to 2008. Other than technology, in what fields are many of the fastest-growing jobs concentrated?

## Section 2 Assessment

## Checking for Understanding

1. Main Idea Why is structural unemployment a more difficult problem for the economy and for individual workers than other types of unemployment?
2. Key Terms Define unemployed, unemployment rate, frictional unemployment, structural unemployment, cyclical unemployment, seasonal unemployment, technological unemployment, automation.
3. Describe how the government collects monthly data on employment.
4. Differentiate between the five major kinds of unemployment.

## Applying Economic Concepts

5. Employment Examine the similarities and differences between structural and technological unemployment. Give an example of each. Why are these kinds of unemployment serious problems for an economy?

## Critical Thinking

6. Drawing Inferences What factors make it difficult to determine the unemployment rate?
7. Categorizing Information Make a list of three reasons that could cause a person to become a discouraged worker.

Practice and assess key social studies skills with the Glencoe Skillbuilder Interactive Workbook, Level 2.

# BusinessWeek 

What do laid-off workers have to fear in today's labor market? For those severed after only a year or two on the jobespecially younger workers-the issue may not be a burning one. But for many of those severed from more permanent jobs, it's compelling.

## What Is the Impact of Lay-Offs?

Looking at the 3.1 million workers who were laid off from full-time permanent jobs (held at least three years) from 1995 through 1997, the survey found that in many respects their fates were comparable to those found in [a] 1996 survey for workers laid off in 1993 and 1994. Specifically, in each case about $67 \%$ of workers were reemployed at full-time jobs, $14 \%$ to $16 \%$ were working part-time or at home, and $12 \%$ to $14 \%$ had dropped out of the labor force.

The main difference was that recent earnings declines were far less pronounced. Whereas $55 \%$ of reemployed full-timers in the earlier survey experienced pay drops, and $34 \%$ of them suffered cuts of more than $20 \%$, the figures in the 1998 survey were $38 \%$ and $21 \%$, respectively. And the median period between jobs fell from 8.3 to 5 weeks.

In addition, the reemployed full-time contingent's median weekly earnings were up about $2 \%$ in the 1998 survey, compared with a $14 \%$ decline in the prior survey.


## Examining the Newsclip

1. Analyzing Information What percentage of workers who were laid off during the period from 1995 through 1997 found new, full-time jobs?
2. Analyzing Information What percentage either left the labor force or remained unemployed?
3. Drawing Conclusions What age group faced the most difficulty in obtaining employment? Why do you think this is so?

## Inflation

## Study Guide

## Main Idea

"Inflation" is a rise in the general level of prices.

## Reading Strategy

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

Step $2 \longrightarrow$ Higher prices
Step 1

## Key Terms

price level, deflation, creeping inflation, galloping inflation, hyperinflation

## Objectives

After studying this section, you will be able to:

1. Explain how inflation is measured.
2. Discuss five causes of inflation.
3. Analyze the destabilizing consequences of inflation.

## Applying Economic Concepts

Inflation Have you ever wondered if you should buy something before the price of the item goes up? Read to find out how inflation changes our spending habits.

## Cover Story

## Shrinking Labor Pool Raises

 Fear of Wage Pressures and Higher PricesIs the number of available but jobless workers in the United States shrinking to the point that employers may be forced to grant inflationary wage increases to attract new


Are fewer workers available? employees or keep the ones they have?
"Should labor markets continue to tighten, significant increases in wages, in excess of productivity growth, will inevitably emerge, absent the unlikely repeal of the law of supply and demand," [Federal Reserve Chairman Alan] Greenspan told Congress.

[^1]Inflation is a special kind of economic instability, one that deals with changes in the level of prices rather than the level of employment and output. Even so, as we saw in the cover story, changes in prices, employment, and output are all linked.

## Inflation in the United States

NTo better understand inflation, we must first examine how it is measured. Then we can examine the causes of inflation and its consequences. In order to find inflation, we start with the price level, the relative magnitude of prices at one point in time.

## Measuring Inflation

To measure the price level, economists select a market basket of goods. They then construct a price index such as the consumer price index (CPI), the producer price index, or the implicit GDP price deflator.

Inflation is reported in terms of annual rates of change of the price level. For example, if the CPI at the beginning of one year is 111 , and if it reaches 115 by the beginning of the next, inflation would be computed as follows (with

## The Rate of Inflation



Using Graphs Inflation tends to increase at the end of expansions, and tends to decrease during periods of recession. How would you characterize the inflation rate during the period from 1990 to 2000?

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everything multiplied by 100 to convert the decimal to a percent):

$$
\text { inflation rate }=\frac{\text { change in price level }}{\text { beginning price level }} \times 100
$$

or,

$$
\text { inflation rate }=\frac{(115-111)}{111} \times 100=3.6 \%
$$

Figure 14.5 shows the rate of inflation from 1965 to the present. As you can see, prices tend to rise faster during expansions and then slow down during recessions.

On rare occasions, unusual circumstances may cause deflation, or a decrease in the general price level. Only two significant deflations have taken place in the 1900s. One was during the post-World War I recession of the early 1920s. The other was during the Great Depression of the 1930s.

## Degrees of Inflation

Several terms describe the severity of inflation. One is creeping inflation-inflation in the range of 1 to 3 percent per year. Another is galloping inflation, a more intense form of inflation that can go as high as 100 to 300 percent. Many Latin American countries and many countries in the former communist bloc have experienced rates in this range in recent years. When inflation gets totally out of control, hyperinflation-inflation in the range of 500 percent a year and above-occurs. Hyperinflation, however, does not happen very often and generally is the last stage before a total monetary collapse.

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

## Causes of Inflation

ySeveral explanations have been offered for the causes of inflation. Nearly every period of inflation is due to one of the following causes.

According to demand-pull theory, 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, shortages occur and prices go up. Thus prices are "pulled up" by excessive demand.

Another explanation involves the federal government's deficit. Basically, this explanation is a variant of the demand-pull theory. While demand-pull blames excess demand on all sectors of the economy, this explanation blames inflation only on the federal government's deficit spending.

The final and 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 that is created by the Federal Reserve System will increase some group's purchasing power. When this money is spent, it causes a demand-pull effect that drives up prices.

Advocates of this explanation point out that inflation cannot be maintained without a growing money supply to fuel it. For example, if the price of gas goes up sharply, and if the amount of money people have does not change, then they will simply have to buy less of something else. So, while the price of gas may rise, the prices of other things will fall, leaving the price level unchanged.

A third explanation claims that rising input costs-especially labordrive up the cost of products for manufacturers and cause inflation. This situation might take place, for example, when a strong national union wins a large wage contract, forcing producers to raise prices to recover the labor costs. Or, as noted in the cover story, labor costs could go up when labor markets are tight and the unemployment rate is exceptionally low.

An unexpected increase in the cost of nonlabor inputs also could cause the price level to rise. Such a price rise occurred during the 1970s when oil prices went from $\$ 5$ to $\$ 35$ a barrel.

Still another explanation says that no single group is to blame for inflation. According to this view, a self-perpetuating spiral of wages and prices begins that is difficult to stop.

Higher prices force workers to ask for higher wages. If they get the higher wages, producers try to recover that cost with higher prices. As each side tries to increase its relative position with a larger price hike than before, the rate of inflation keeps rising.


Student Web Activity Visit the Economics: Principles and Practices Web site at epp.glencoe.com and click on Chapter 14-Student Web Activities for an activity on working wth economic statistics.

## Consequences of Inflation

财Inflation involves more than rapidly rising prices. When inflation is present, it can have a disruptive effect on an economy for several reasons.

The most obvious effect of inflation is that the dollar buys less. Because the purchasing power of the dollar falls as prices rise, a dollar loses value over time. Figure 14.6 shows how the dollar lost its value as inflation eroded its purchasing power.

Decreased purchasing power is especially hard on retired people 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 to secure additional income.

A second destabilizing effect is that inflation can cause people to change their spending habits, which disrupts the economy. For example, when prices went up in the early 1980s, interest rates-
the price of borrowed money-also went up. This caused spending on durable goods, especially housing and automobiles, to fall dramatically.

To illustrate, suppose that a young couple wanted to borrow $\$ 60,000$ over 20 years to buy a house. At an 8 percent interest rate, their monthly mortgage payment would be $\$ 501.86$. At 14 percent, the payment would be $\$ 746.11$. In 1981 some mortgage rates reached 18 percent, which meant a monthly payment of about $\$ 926$ for the same loan! As a result, the housing industry almost collapsed.

A third destabilizing effect of inflation is that it tempts some people to speculate heavily in an attempt to take advantage of a higher price level. People who ordinarily put their money in reasonably safe investments begin buying luxury condominiums, diamonds and gemstones, and other exotic items that might be expected to increase in price.

Finally, inflation alters the distribution of income. During long inflationary periods, lenders are generally hurt more than borrowers. Loans made earlier are repaid later in inflated dollars.

Suppose, for example, that a person borrows money to buy bread that costs fifty cents a loaf. If the amount borrowed was $\$ 100$, the person could buy 200 loaves of bread. If inflation set in, and if the price doubled by the time the loan was paid back, the lender would only be able to buy 100 loaves of bread. Inflation in the long run, then, favors debtors over creditors.

## Section 3 Assessment

## Checking for Understanding

1. Main Idea What is the difference between the price level and the rate of inflation?
2. Key Terms Define price level, deflation, creeping inflation, galloping inflation, hyperinflation.
3. Describe how the CPI is used to compute the inflation rate.
4. List five explanations for the causes of inflation.
5. Identify four ways inflation destabilizes the economy.

## Applying Economic Concepts

## -Critical Thinking

7. Categorizing Information What kind of

Categorizing Information What kind of
inflation might be described as "too many dollars chasing too few goods"?
8. Understanding Cause and Effect In 1974

Understanding Cause and Effect In 1974
the price of crude oil increased greatly. What type of inflation did this cause?

[^2]
## 6. Inflation What does an inflation rate of 4 percent mean?

## Using the Internet

To learn more about almost any topic imaginable, use the Internet-a global network of computers. Many features, such as E-mail, interactive educational classes, and shopping services are offered on the Net. To get on the Internet, you need three things: (a) a personal computer, (b) a modem (a device that connects your computer to a telephone line), and (c) an account with an Internet Service Provider (ISP). An ISP, such as America Online, is a company that enables you to $\log$ on to the Internet, usually for a fee.

## Learning the Skill

After you are connected, the easiest way to access Internet sites is to use a "Web browser," a program that lets you view and explore information on the World Wide Web. The Web consists of many documents called "Web sites," each of which has its own address, or Uniform Resource Locator (URL). Many URLs start with the keystrokes $b t t p: / /$

If you don't know the exact URL of a site, commercial "search engines" such as Yahoo! or AltaVista, can help you find information. Type a subject or name into the "search" box, then press Enter. The search engine lists available sites that may have the information you are looking for.

## Practicing the Skill

Follow these steps to learn more about the inflation rate.

1. Log on to the Internet and choose a search engine to use.
2. Search by selecting one of the listed categories or by typing in the subject you want to find, such as "inflation" or "the inflation rate."
3. Continue your search by scrolling down the list that appears on your screen. When you select an entry, click on it to access the information. Sometimes the information you first access will not be exactly what you need. If so, continue
searching until you find the information that you want.
4. If you get "lost" on the Internet, click on the backarrow key at the top of the screen until you find a site that looks familiar.
5. Continue selecting sites until you have enough information to write a short report on inflation trends over the past three months.


A search engine can help you quickly locate information on the World Wide Web.

## Application Activity

Follow the above procedures to locate information about the population of your state. Use the information you gather to create a chart or graph depicting changes in population from 1960 to the present.

## Poverty and the Distribution of Income

## Study Guide

## Main Idea

Reasons for income inequality include ability differences, education and training, and discrimination.

## Reading Strategy

Graphic Organizer As you read the section, complete a graphic organizer similar to the one below by listing three explanations for a growing income gap.


## Key Terms

Lorenz curve, poverty guidelines, welfare, food stamps, Earned Income Tax Credits (EITC), enterprise zone, workfare, negative income tax

## Objectives

After studying this section, you will be able to:

1. Explain how economists measure the distribution of income.
2. Discuss the reasons for the inequality of income.
3. Discuss antipoverty programs.

## Applying Economic Concepts

Distribution of Income Do you compare what you make to the earnings of others? Read to find out more about how income is distributed in the United States.

## Cover Story

## From Welfare to Work

When United Parcel Service of America started hiring welfare recipients to sort packages 25 years ago, the company had no idea of what it was getting itself into.

What UPS got was a pool of adept employees in it for the long haul.

In fact, of the 10,000 welfare recipients the company has hired since January 1996, the shipping giant estimates about


Work-hire program a plus for UPS 70 percent stay.
"Our experience has proven that welfare-to-work hires are excellent hires," said . . a spokeswoman for UPS.

In the United States, as in other parts of the world, people do not all have the same income. A large number of people live in poverty despite the efforts of programs such as the one featured in the cover story.

## The Distribution of Income

MTo evaluate the distribution of income, the incomes of all families are ranked from highest to lowest. The ranking is then divided into quintiles, or fifths, for examination. The table in Panel A of Figure 14.7 shows family income quintile data for two different years. Only money income is counted; other aid such as food stamps, medicaid, or subsidized housing is excluded. Using a recent year as our example, the percent of income earned by each quintile is added to the lower quintiles and plotted as a Lorenz curve. The Lorenz curve-a curve that shows how much the actual distribution of income varies from an equal distribu-tion-appears in Panel B.

To illustrate, the 3.6 percent of total income received by the lowest quintile is plotted in Panel B as point a. This amount is combined with the income the next quintile earns and then plotted as point $\mathbf{b}$. This process continues until the cumulative values of all quintiles are plotted.

If all families received exactly the same income-so that 40 percent of the families would earn 40 percent of the total income and so on-the Lorenz curve would appear as a diagonal line running from one corner of the graph to the other. Because all families do not receive the same income, however, the Lorenz curve is not a diagonal. As you can see in the figure, the distribution of income recently has become more unequal than it was in 1980.

## Reasons for Income Inequality

WA number of reasons explain why the incomes of various groups may be different. They include education, wealth, discrimination, ability, and monopoly power.

## Education

Some people have higher incomes than others because they have more education. Although exceptions exist, there is generally a strong relationship between median income and level of education. Education puts people in a better position to get the higherpaying jobs that require a higher level of skills.

## Wealth

Income also varies because some people hold more wealth than others-and the distribution of wealth is even more unequal than the distribution of income. When wealth holders are ranked from

# The Distributions of Income by Families 

(A) Family Income Ranked by Quintiles

|  | 1980 | 1998 |  |
| :--- | :---: | :---: | :---: |
|  | Quintiles | Quintiles | Cumulative |
| Lowest Fifth | $5.3 \%$ | $3.6 \%$ | $3.6 \%$ |
| Second Fifth | $11.6 \%$ | $9.0 \%$ | $12.6 \%$ |
| Third Fifth | $17.6 \%$ | $15.0 \%$ | $27.6 \%$ |
| Fourth Fifth | $24.4 \%$ | $23.2 \%$ | $50.8 \%$ |
| Highest Fifth | $41.1 \%$ | $49.2 \%$ | $100 \%$ |
| Top 5 Percent | $14.6 \%$ | $21.4 \%$ |  |

## (B) The Lorenz Curve



Source: U.S. Bureau of the Census
Categorizing Information Economists use the Lorenz curve to contrast the distribution of income at different points in time. What percentage of income is received by the richest quintile in 1980? In 1998?

## CLICK HERE

highest to lowest, the top fifth has 75 percent of all the wealth in the country. The bottom two-fifths, which is 40 percent of the people in the country, have less than 2 percent of the total wealth.

This inequality has an impact on people's ability to earn income. Wealthy families can send their children to expensive colleges and universities. The wealthy can also afford to set their children up in businesses where they can earn a better income. Even if the wealthy choose not to work, they can make investments that will bring them income.

## Discrimination

Discrimination is another factor influencing income. Women may not be promoted to executive positions in some companies because male executives simply are not accustomed to women in roles of power. Some unions may deny immigrants or ethnic minorities membership on the grounds that they "don't belong" in the professions.

Although discrimination is illegal, it still takes place. When it does occur, discrimination causes women and minority groups to be crowded into other labor markets where oversupply drives down wages.

## Ability

Some people earn more income because they have certain natural abilities, such as professional athletes who sometimes earn millions of dollars every year. Such athletes as Shaquille O'Neal and Anna Kournikova earn high incomes because they have unique abilities or talents. The same is true of popular performers such as Oprah Winfrey, Jim Carrey, and Harrison Ford.

## Monopoly Power

Another factor is the degree of monopoly power that some groups hold. Recall from Chapter 8 that unions have been able to obtain higher wages for their members. Some white-collar workers-clerical, business, or professional workers who generally are salaried-also hold a degree of monopoly power. The American Medical Association, for example, has been successful in limiting the number of people in its profession by limiting enrollments in medical schools. More recently, the AMA voted to unionize in order to be in a better position to deal with the health maintenance organizations that employ them.

## Poverty

NPoverty is a relative measure that depends on prices, the standard of living, and the incomes that others earn. Poverty is a major problem in America-and one that is extremely difficult to resolve. Families and individuals are defined as
living in poverty if their incomes fall below certain levels. Poverty guidelines are annual dollar amounts used to evaluate the money income that families and unrelated individuals receive. In 1999, poverty was defined as having an income of less than $\$ 16,700$ for a family of four.

## People in Poverty

Poverty in the United States is more extensive than most people realize. According to recent figures, there are 34.5 million Americans in povertyor approximately 12.7 percent of the total population.

As Figure 14.8 shows, even the record economic expansions of the 1980 s and 1990s failed to make a significant dent in the percent of Americans living in poverty. In fact, the proportion of the population living in poverty was smaller in the late 1960s and 1970s than it is today.

Of those in poverty, slightly more than twothirds are white and approximately one-quarter are African American. Finally, children of all races make up approximately 40 percent of the people in poverty even though they account for only 26 percent of the total population.

## The Growing Income Gap

One reason for the continued high poverty numbers is the growing gap in the distribution of income. According to the Census Bureau, the growing spread that has taken place since 1980 has several causes.

The first involves a structural change in the economy as industry changes from goods production to service production. Because wages are typically lower in the service industries such as fast-food chains, movie theaters, and entertainment parks, weekly paychecks tend to be lower.

The second reason for the spread in income distribution is the growing gap between well-educated and poorly educated workers. During the 1990s, wages for the highly skilled soared, while wages for the less skilled tended to remain about the same.

A third reason-declining unionism (especially among low-skilled workers)-is adding to the growing differential. The decline of unions means that many low-skilled workers have to work elsewhere for less pay.

The fourth reason for the income gap concerns the changing structure of the American family. The shift from two-parent families to single-parent families and other nonfamily household living arrangements tends to lower average family income. All of these factors contribute to the trend of the rich getting richer and the poor getting poorer.

## Antipoverty Programs

NOver the years, the federal government has instituted a number of programs to help the needy. Most come under the general heading of welfare-economic and social programs that provide regular assistance from the government or private agencies because of need.

## Income Assistance

Programs that provide direct cash assistance to those in need fall into the category of income assistance. One such program is the Temporary Aid to Needy Families (TANF), which replaced the Aid to Families with Dependent Children (AFDC) in 1996. Although provisions and benefits vary from state to state, many families are able to receive cash payments because of the death, continuous absence, or permanent disability of a parent.

Another income assistance program is the Supplemental Security Income (SSI), which makes cash payments to blind or disabled persons age 65 and older. Originally, the states administered the program because benefits varied so much from state to state. The federal government took it over in 1979 to assure more uniform coverage.

## General Assistance

Programs that assist poor people but do not provide direct cash assistance fall into the category of general assistance. One example is the food stamp program that serves millions of Americans. Food stamps are government-issued coupons that can be redeemed for food. They may be given or sold to eligible low-income persons. If, for example, a person pays 40 cents for a

## Poverty in the United States: Total Number and Rate



Source: U.S. Bureau of the Census
Using Graphs The dividing line between those officially considered poor and those not officially considered poor is the poverty line. Was the percentage of the population below the poverty line greater in the 1990s than in the 1980s?


Visit epp.glencoe.com and click on Textbook Updates-Chapter 14 for an update of the data.

## CLICK HIERE

$\$ 1$ food stamp, that person is getting a dollar's worth of food for a fraction of its cost. The program, which began in 1961 and became law in 1964, is different from other programs because eligibility is based solely on income.

Another general assistance program is medicaida joint federal-state medical insurance program for low-income people. Under the program, the federal government pays a majority of health-care
costs, and the state governments pay the rest of the cost. Medicaid serves millions of Americans, including children, the visually impaired, and the disabled.

## Social Service Programs

Over the years, the individual states have developed a variety of social service programs to help the needy. These include such areas as child abuse prevention, foster care, family planning, job training, child welfare, and day care.

Although the states control the kinds of services the programs provide, the federal government matches part of the cost. To be eligible for matching funds, a state must file an annual service plan. If the plan is approved, the state is free to select social issues it wishes to address, set the eligibility requirements for the programs, and decide how the programs are to be carried out.

## Careers



Urban Planners
Most urban and regional planners work for community, county, and city governments.

## The Work

Planners develop comprehensive plans for the development and rebuilding of communities. Planners recommend strategies on how to effectively utilize land and resources to meet the needs of the community. They also take part in decisions about transportation systems, resource development, and protection of the environment. Planners often specialize in a single area such as transportation, demography, housing, or urban design.

## Qualifications

Most jobs in government agencies require a master's degree in urban or regional planning or urban design.

## Tax Credits

Many working low-income Americans qualify for special tax credits. The most popular is the Earned Income Tax Credit (EITC) which provides federal tax credits and sometimes cash to low-income workers. The credit was created in 1975 to partially offset the payroll tax burden on working families. The credit is applied first to federal income taxes, but low-income workers can take the remainder of the credit in cash if the credit is larger than the taxes owed. The credit has proved to be popular, with approximately 20 million working families receiving nearly $\$ 30$ billion annually.

## Enterprise Zones

Special enterprise zones are areas where companies can locate free of some local, state, and federal tax laws and other operating restrictions. Many enterprise zones are established in run-down or depressed areas. This benefits area residents because they can find work without worrying about transportation, thereby helping depressed areas to grow again.

Nearly everyone agrees that a healthy and growing economy helps alleviate poverty. The enterprise zone concept is an attempt to focus some of that growth directly in the areas that need it most, making more employment opportunities available.

## Workfare Programs

Because of rising welfare costs, many state and local governments require those individuals who receive welfare to provide labor in exchange for benefits. Workfare is a program that requires welfare recipients to exchange some of their labor for benefits. People on workfare often assist law enforcement officials or sanitation and highway crews, or perform other types of community service work.

Most states that have workfare programs require almost everyone except for the disabled, the elderly, and those with very young children to work. If the workfare assignments are well designed, then recipients have a valuable opportunity to learn new skills that will eventually help them get other jobs.

## Per Capita Personal Income by State

A.

B. Per Capita Personal Income, 1998

C. Average Annual Percentage Growth of Real Per Capita Personal Income, 1994-98


Source: Survey of Current Business, various issues
Using Graphs and Maps Average per capita personal income varies considerably from state to state, ranging from a low of $\$ 18,998$ to a high of $\$ 37,700$. The average rate of growth, after adjusting for inflation, amounted to 1.48 percent. One state-Alaska-had a negative annual rate of growth from 1990 to 1998. In what range was the per capita personal income in your state?

Many welfare-to-work programs, like the UPS program discussed in the cover story, have had promising results. In many cases, companies can even earn federal tax credits when they hire workers directly from the welfare rolls, making the employment a win-win situation for both employer and employee.

## Negative Income Tax

The negative income tax is a proposed type of tax that would make cash payments to certain groups below the poverty line. These cash payments would take the place of existing welfare programs rather than supplement them. Also, everyone would qualify for the program, not just working people as with the EITC.

Under the negative income tax, the federal government would set an income level below which people would not have to pay taxes. Then, the government would pay a certain amount of money to anyone who earned less than that amount.

For example, suppose that an individual's tax liability was computed using the following formula:

$$
\text { taxes }=(25 \% \text { of income })-\$ 8,000
$$

Under this formula a person with no income would have a tax of minus $\$ 8,000$-which is
another way of saying that the person will receive $\$ 8,000$ from the government. Or, if the person earned exactly $\$ 12,000$, then the person would receive an additional $\$ 5,000$ under the formula for a total of $\$ 17,000$. Under this formula, a person would have to make $\$ 32,000$ before any taxes were actually paid.

The negative income tax is different from other antipoverty programs in two respects. First, it is a market-based program designed to encourage people to work. The object of the negative income tax is to make the minimum payment large enough to be of some assistance, yet small enough to encourage people to work. Then, when people do go to work, the taxes they actually pay need to be small enough so as not to discourage them from working.

Second, the negative income tax would be costeffective because it would take the place of other costly welfare programs. In the end, individuals would have money to spend as they saw fit. Government would also save because it would have fewer welfare programs and administrative costs than it does currently. Although the negative income tax is currently not used, many economists believe it would be a reasonable alternative to the existing welfare structure.

## Section 4 Assessment

## Checking for Understanding

1. Main Idea Using your notes from the graphic organizer activity on page 394, list the reasons for the growing income gap.
2. Key Terms Define Lorenz curve, poverty guidelines, welfare, food stamps, Earned Income Tax Credit (EITC), enterprise zone, workfare, negative income tax.
3. Describe how the distribution of income is measured.
4. List the five main reasons for inequality of income.
5. Identify the major programs and proposals designed to alleviate the problem of poverty.

## Applying Economic Concepts

6. Distribution of Income What would happen to the Lorenz curve if nonfinancial aid such as food stamps and medicaid were treated as income? Explain why this would occur.

## -Critical Thinking

7. Analyzing Information Some people have said that "the rich got richer" in the 1990s. What factors can you cite to explain that what actually happened was more complex than this simple statement?Practice and assess key social studies skills with the Glencoe Skillbuilder Interactive Workbook, Level 2.
}

## Chapter 14 Summary

## Section 1

## Business Cycles and Fluctuations

(pages 375-380)

- Business cycles are systematic increases and decreases in real GDP; unsystematic changes are business fluctuations.
- The two phases of the cycle are recession and expansion; a
 peak is when the expansion ends, while a trough is when the recession ends.
- The Great Depression of the 1930s was the worst economic decline in U.S. history; income distribution inequalities, risky credit practices, weak international economic conditions, and tariff wars all contributed to the Depression.
- Several short, mild recessions have occurred since WWII.
- Business cycles are caused by changes in capital and inventory spending by businesses, stimuli supplied by innovations and imitations, monetary factors, and external shocks.
- Econometric models and the index of leading indicators are used to predict changes in future economic activity.


## Section 2

Unemployment (pages 382-387)

- Unemployed persons are identified monthly by the Census Bureau. The number of unemployed is divided by the civilian labor force to arrive at the unemployment rate.
- The unemployment rate does not count dropouts, nor does it distinguish between full- and part-time employment.
- Frictional, structural, cyclical, seasonal, and technological are different forms of unemployment.


## Section 3

## Inflation (pages 389-392)

- Inflation is the rate of change in the price level as measured by the CPI.
- Terms used to describe the severity of inflation are creeping inflation, galloping inflation, and hyperinflation.
- Generous credit conditions and excessive growth of the money supply allow demand-pull, deficit spending, cost-push, and wage-price spiral inflation to take place.
- Inflation erodes the value of the dollar, makes life difficult for people on fixed incomes, changes the spending habits of consumers and businesses, and alters the distribution of income in favor of debtors.


## Section 4

## Poverty and the Distribution of Income (papes $394-400)$

- The distribution of income is measured by ranking family incomes from lowest to highest and then dividing the ranking into quintiles. The income earned by each quintile is then compared to other quintiles.
- The Lorenz curve shows that incomes are not evenly distributed, and that they are becoming less equal.
- Factors accounting for the unequal distribution of income include educational levels, wealth, discrimination, ability, and monopoly power.
- Poverty is determined by comparing the amount of income earned by families to measures called the poverty guidelines.
- The growing income gap is due to the increased importance of the service industry, the widening workers' skills gap, the decline of union influence, and the changing composition of the American family.


## Chapter 14 Assessment and Activities

## ECONOMICS <br> Self-Check Quiz Visit the Economics: Principles and Practices Web site at epp.glencoe.com and click on Chapter 14-Self-Check Quizzes to prepare for the chapter test. <br> CLICK HISRE <br> Identifying Key Terms

Write the letter of the key term that best matches each definition below.
a. trend line
b. cyclical unemployment
c. unemployed
d. food stamps
e. frictional unemployment
f. peak
g. trough
h. inflation
i. Lorenz curve
j. poverty guidelines
k. price level

1. seasonal unemployment
m. structural unemployment
n. technological unemployment
o. recession
p. workfare
2. marks the end of a recession
3. an example of a welfare program
4. annual benchmark used to evaluate the money income that families receive
5. caused by a shift in demand or a change in the way the economy operates
6. caused by annual changes in weather and holiday seasons
7. caused by periodic swings in business activity
8. caused by workers who are "between jobs" for short periods
9. describes the requirement that welfare recipients exchange labor for benefits
10. happens when workers face the threat of automation
11. growth path in absence of recession or expansion
12. measured by changes in the CPI
13. lowest point of the business cycle
14. measured by the CPI
15. shows how much the actual distribution of income differs from an equal distribution
16. real GDP declines two consecutive quarters
17. works less than one hour per week for pay or profit

## Reviewing the Facts

Section 1 (pages 375-380)

1. Describe the Great Depression.
2. Distinguish between depressions and recessions.
3. Identify two methods economists use to predict business cycles.

Section 2 (pages 382-387)
4. Describe how the unemployment rate is computed.
5. Identify the major types of unemployment.
6. Explain what is meant by full employment.

Section 3 (pages 389-392)
7. Compare the difference between the price level and inflation.
8. Identify the five causes of inflation.
9. List four destabilizing effects of inflation.

## Chapter 14 Assessment and Activities

## Section 4 (pages 394-400)

10. Explain what is meant by the distribution of income.
11. Identify five major reasons for inequality in the distribution of income.
12. Explain how the Lorenz curve is used to show the inequality of income distribution.
13. Name seven antipoverty programs.

## Thinking Critically

1. Drawing Conclusions Why is it important to understand the causes of business cycles?
2. Analyzing Information Why might a government statistic about the number of employed people be misleading?
3. Understanding Cause and Effect Explain the effect that inflation has on the financial positions of borrowers and lenders. Use a chart similar to the one below to help you organize your answer. If you managed a bank, what interest rate would you charge to overcome the disadvantage of longterm inflation?


## Applying Economic Concepts

1. Unemployment rate If we were to enter a period of recession, what would likely happen to the unemployment rate? The inflation rate? The poverty rate?
2. Inflation Explain why inflation cannot take place without an expansion of the money supply.
3. Lorenz curve Suppose that a new government program reduced the level of poverty in the country. How would this affect the Lorenz curve?

## Math Practice

Use the following information to determine real GDP per capita for each of the following years.

| Year | Population | Real GDP in $\$$ billion |
| :---: | :---: | :---: |
| 1960 | $179,323,000$ | $\$ 2,263$ |
| 1970 | $203,302,000$ | $\$ 3,398$ |
| 1980 | $226,542,000$ | $\$ 4,615$ |
| 1990 | $248,710,000$ | $\$ 6,136$ |

## Thinking Like an Economist

Why is an economist likely to prefer a program like negative income tax over other welfare programs?

## Technology Skill

Sending E-Mail Write a topic sentence about income to research. Examples include: "Is income rising above or below the rate of inflation?" "Is there an income gap between men's and women's wages? And if so, "Is the income gap widening?" Then browse the Internet or call the government to obtain the E-mail address of a federal agency concerned with this issue. E-mail the federal agency, sharing your topic and requesting information.

## Building Skills

Using the Internet Search for information on trends in inflation and unemployment rates from the following sites on the Internet: the Census Bureau, the Bureau of Labor Statistics, and the Economic Statistics Briefing Room.
Search for recent articles discussing unemployment, inflation, or poverty. Download at least two recent press releases from each of the above sites. Summarize the articles and share your findings with other members of the class.

Practice and assess key social studies skills with the Glencoe Skillbuilder Interactive Workbook, Level 2.

## ISSUES IN FREE

## A Case Study:

## IS INCOME INEQUALITY REALLY A PROBLEM?

Not everyone in the United States makes the same amount of money. Some people make a great deal, some make very little, and most make something in between. Economists call this situation, quite simply, income or wage inequality. Others call it the income gap.

An income gap is inevitable in a free market economy. First, the market gives different values to different activities, and second, some people work more than others. So the existence of some income inequality, in and of itself, doesn't generally cause concern.

But some analysts express concern that, if the gap widens, it will be more and more difficult to close. In other words, the rich will get richer and the poor will get poorer.

As you read the selections, ask yourself: Is the income gap a serious economic problem, or are fears about it overblown?

## The Gap is Widening

Income inequality has been worsening in the United States since the early 1970s. Before 1973, all groups enjoyed healthy income gains, particularly the middle class. However, since 1979, the rich have gained far more than the middle class, while the income of the poor has fallen in absolute terms. A recent study found that the richest one percent of families (average annual income: $\$ 800,000$ for a family of four) captured 70 percent of the total rise in family income in the United States between 1977 and 1989.

America has always been considered a land of opportunity, where parents believe in the possibility of a "better life" for their children. Does upward mobility mean growing inequality is
unimportant, since, with effort and a bit of luck, those at the bottom can still move toward the top?

Not exactly. First of all, we know that historically high rates of mobility in the United States resulted from fast economic growth that was shared across the board. Today, growth benefits the wealthy far more than the middle class, let alone the poor.

## ENTERPRISE

Second, although many families do move from one income category to another over time, individuals have suffered larger downward, and smaller upward, income changes since the 1970s-with the exception of the rich, whose earnings have jumped dramatically.

Third, though education has always been seen as the great leveler, it now reinforces initial advantages instead of compensating for initial handicaps. [Schools] no longer effectively make up for deep inequalities among children. . . .

So, if America is to remain the land of opportunity, elementary and secondary education must work for the poor. Otherwise, inequality of income will come to reflect not just differences in motivation, work effort, and sheer luck among players in a fair game, but different rules for rich and poor.
-Nancy Birdsall, Executive Vice-President,
Inter-American Development Bank

## CON The Problem is Exaggerated

That we are rapidly becoming richer is clear. People who deny that equality is increasing are fixated on the recent small increase in income inequality. That increase, the subject of an unceasing journalistic drumbeat, is, [Chris DeMuth, president of American Enterprise Institute] argues, a small incongruity in the longterm "leveling of material circumstances" that has been underway for three centuries and is accelerating.

Since 1700, the average life span in Western societies has doubled. Today material necessitiesfood, shelter-are so universally available that the problem of poverty, understood as material scarcity, has been solved. Poverty, DeMuth notes,
now is a problem of individual behavior, social organization and policy, not of society's material scarcities.

Two centuries ago land was the essential source of wealth. One century ago, physical capital was. Today, human capital-knowledge, cognitive skill-is, and such capital is widely distributed by nature and is augmented by universal education. Furthermore, sexual equality has advanced so far that young men and women of comparable education and training now earn essentially equal incomes.

As societies become more wealthy, DeMuth argues, money income becomes a less informative measure of individual welfare, as is demonstrated by this fact: Western democracies have become so wealthy that, for the first time in history, "voluntary reduction in time spent at paid employment has become a major social and economic phenomenon." This reduction appears in expanded education of the young and, even more, in longer retirement of the elderly. . . .

The modern age's expansion of individual autonomy . . . frees individuals for admirable and improving pursuits-and for unworthy and selfdestructive behavior. With the growth of wealth, freedom and equality has come an equally astounding explosion of social pathologies, from family disintegration and illegitimacy to drug abuse and vulgar popular entertainment. . . .

Citizens are turning their attention, as individuals and as members of civic and religious groups, to the question: What is freedom for? The question is itself among the luxuries of a wealthy, free and equal society.

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## Analyzing the Issue

1. Summarize Birdsall's argument.
2. What does Will mean by calling income inequality (quoting DeMuth) "a small incongruity"?
3. Will calls America "a wealthy, free and equal society." Considering Birdsall's argument, do you agree? Explain.

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    Practice and assess key social studies skills with the Glencoe Skillbuilder Interactive Workbook, Level 2.

[^1]:    -The Washington Post, June 25, 1999

[^2]:    (0)

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    Level 2.

[^3]:    -George F. Will, Washington Post Writers Group

