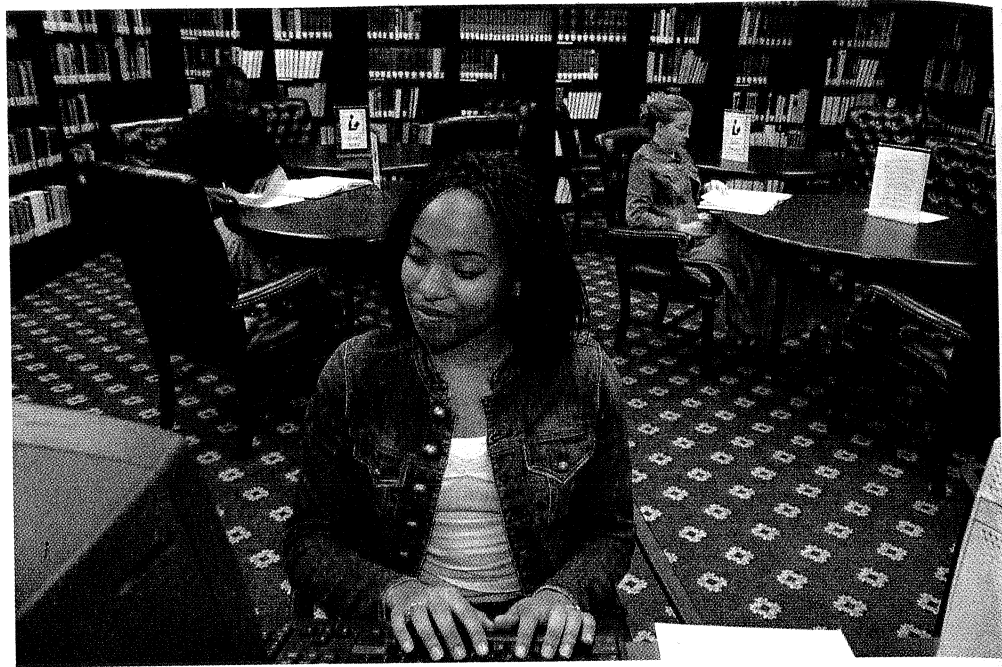


Studies show a strong link between GDP and literacy rates. High-GDP countries have high levels of education and literacy. This makes sense, since people who have more education, like the students shown here, generally get better jobs and make more money than people with less education.



But per capita GDP is an average. It tells us nothing about how income is distributed in a society. Saudi Arabia, for example, has a high per capita GDP but huge income gaps between its richest and poorest citizens.

As this list of limitations suggests, there is much that GDP does not tell us about a society's economic welfare. As Robert Kennedy once observed,

[GDP] is indifferent to the decency of our factories and the safety of our streets alike. It does not include the beauty of our poetry or the strength of our marriages, or the intelligence of our public debate or the integrity of our public officials . . . It measures everything, in short, except that which makes life worthwhile.

—Senator Robert Kennedy, 1968

How GDP Growth Makes People Better Off

For all its limitations, GDP still matters. As a country's per capita GDP increases, so too do other indicators of well-being, such as those listed below.

Literacy and education. Studies show that countries with a high per capita GDP have high levels of education. The **literacy rate**—the percentage of people in these countries who can read and write—is at or near 100 percent. Literacy rates are much lower in countries with low per capita GDP. People with more education generally have better jobs and higher incomes than people with less education.

Health and life expectancy. GDP is related to the health of a population. One measure of health is **life expectancy**—the number of years, on average, that a person is expected to live. People live longer in countries with high per capita GDP than in countries with low per capita GDP. Another measure of health is **infant mortality**—the rate at which babies die during their first year of life. Because people in wealthier countries have better medical care and nutrition, infant mortality rates are lower in countries with high per capita GDPs.

Standard of living. Not surprisingly, people in countries with high per capita GDP tend to be more prosperous than people in low-GDP countries. Their houses are bigger and more comfortable. They have more food and clothing and better access to services. While such material prosperity is surely no guarantee of individual happiness, overall, people are better off living in a society with a high standard of living.

■ 13.3 What Does the Unemployment Rate Tell Us About an Economy's Health?

At any one time, millions of Americans may be out of work. For many of them, the experience is devastating. They struggle to pay bills and to put food on the table. In hard economic times, the number of people who are unemployed rises. When business is booming, the number falls.

Bureau of Labor Statistics. The BLS is a government agency that collects and analyzes economic data. This agency determines the **unemployment rate**—the percentage of the labor force that is seeking work. Like the GDP, the unemployment rate is a useful indicator of the health of an economy. In general, a high unemployment rate means the overall health of the economy is poor.

How the Government Measures Unemployment

Every month, the BLS reports the total number of people who were unemployed for the previous month. To arrive at this figure, the BLS does not attempt to count every job seeker in the country. Instead, it conducts a sample survey each month. By examining a small but representative sample of the population, the BLS can gauge how many people in the entire population are unemployed.

The BLS surveys about 60,000 households each month. Household members who are eligible to be in the labor force are interviewed about their activities during a specific one-week period. The survey excludes those who are under 16 years of age, on active duty in the military, or in an institution such as a prison or nursing home. Based on the interview data, the BLS classifies those who are eligible as employed, unemployed, or not in the labor force.

Employed. Members of the labor force who have jobs are classified as employed. This category includes people who worked for at least one hour for pay or profit during the survey week. It also includes those who worked 15 hours or more without pay in a family-operated business. And it includes workers who were sick, on vacation, or otherwise excused from their jobs during the survey week.

Unemployed. Members of the labor force who are jobless, but are looking for work, are classified as unemployed. To be counted as unemployed, individuals must have actively looked for work in the four weeks preceding the survey week. They had to have inquired about jobs, sent out resumes, filled out job applications, or otherwise sought work. There is an exception: people who have been laid off and are waiting to be called back to their jobs need not actively seek work to be counted as unemployed.

Not in the labor force. Everyone who is eligible to be in the labor force but is neither working nor

force. This category includes full-time students as well as people who are retired, disabled, or prevented by family responsibilities from taking a paying job.

The BLS adds together the number of employed and unemployed people to determine the size of the labor force. To calculate the unemployment rate, it then divides the number of unemployed people by the number in the labor force. The result is multiplied by 100 to express this ratio as a percent, as shown in the formula below.

$$\text{unemployment rate} = \frac{\text{number unemployed}}{\text{number in labor force}} \times 100$$

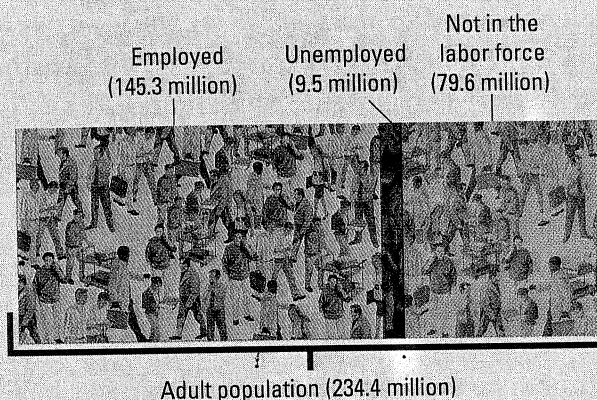
Figure 13.3A shows how this formula applies to a specific example, drawn from the results of one BLS survey conducted in 2008.

Figure 13.3A

Calculating the Unemployment Rate

The Bureau of Labor Statistics classifies people who are eligible to participate in the labor force as employed, unemployed, or not in the labor force.

U.S. Unemployment, September 2008



Source: Bureau of Labor Statistics.

It then uses these figures to determine the unemployment rate.

- To calculate the size of the labor force, add the number of employed workers to the number of unemployed workers.
- To calculate the unemployment rate, divide the number of unemployed workers by the number of people in the labor force.

$$\text{unemployment rate} = \frac{9.5 \text{ million}}{154.8 \text{ million}} \times 100 = 6.1\%$$

Key Concept

Unemployment

Unemployment means having no paying job. Economists identify four types of unemployment. The first three—frictional, structural, and seasonal unemployment—can exist even in a growing economy. The fourth, cyclical unemployment, emerges during an economic downturn.



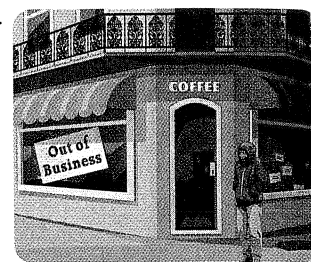
Frictional unemployment happens when a person seeks to enter the workforce or quits one job to seek another.



Structural unemployment happens when advances in technology eliminate jobs.



Seasonal unemployment happens when businesses shut down or slow down for part of the year.



Cyclical unemployment happens when there is a decline in business activity during an economic downturn.

Four Types of Unemployment

In its interviews, the BLS gathers detailed information about people who are unemployed. Based on those data and further research, economists identify four types of unemployment: frictional, structural, seasonal, and cyclical.

Frictional unemployment. Have you ever heard someone talk about being “between jobs”? This situation, which exists when a person has left one job and is looking for another, is what economists call **frictional unemployment**. It applies to people who change jobs as well as to people seeking their first jobs. Frictional unemployment is usually short term, lasting only as long as is needed to find the right job.

Consider Devin, who worked for a year in the electronics department of a retail store at the mall. Though he excelled at his job, he was unable to get a promotion. So he quit, confident he would be able to find a better position at a big electronics store.

Frictional unemployment like Devin’s can create temporary hardship for the jobless person. It also represents lost production for an employer trying to fill a position. However, a certain amount of frictional unemployment is unavoidable when people are free to change jobs at will. Changing jobs, as Devin did, is usually good for the economy because it can reallocate labor resources to their best use.

Structural unemployment. People who choose to change jobs are in transition. Their skills are still in demand and the time they spend without a job is usually short. The same cannot be said of those who experience structural unemployment. **Structural unemployment** comes about mainly when advances in technology reduce the demand for certain skills.

Megan, for example, worked as a travel agent for 20 years. People told her where they wanted to go, and she made all the arrangements. She loved her job—until the Internet came along. Online travel services made it easy for people to plan their trips themselves. The demand for Megan’s skills dried up. Her job was eliminated, and she became unemployed.

What can people like Megan do to become employable again? They might consider returning to school to develop new skills that employers want. Or they might be able to adapt existing skills to qualify for new job opportunities. Even though structural unemployment is hard on those who experience it, the economy as a whole clearly benefits from the technological progress that creates it.

Seasonal unemployment. In some markets, demand for labor depends on the season. For example, Taylor works for a small construction company in Montana. Winters in Montana are so cold that her company almost always closes during January and February.

For two months, Taylor experiences seasonal unemployment. **Seasonal unemployment** occurs when businesses shut down or slow down for part of the year, often because of weather. Tourism, construction, and agriculture are among the industries that typically lay people off for part of the year.

Cyclical unemployment. Every economy goes through prosperous times and hard times. Such cycles of growth and decline are the cause of **cyclical unemployment**. This type of unemployment occurs during periods of decline. At such times, economic activity slows, GDP drops, and people lose their jobs.

Consider Kai, who in the late 1990s worked as a Web designer for a start-up company that sold pet supplies over the Internet. Like many other Internet-based start-ups—or dot-coms—the company had no trouble attracting investors who were convinced that doing business over the Internet was the wave of the future. The company's stock soared in value, even though the business itself wasn't making a profit. During this period, the price of dot-com stocks rose to dizzying heights.

Then, in 2000, the dot-com bubble burst. Investors rushed to sell off their dot-com shares, and the value of those stocks dropped dramatically. The company that employed Kai went out of business, leaving him and his co-workers unemployed.

People like Kai who experience cyclical unemployment often have trouble finding new jobs that use their skills. Few businesses hire new workers during an economic decline. Moreover, the labor market may be glutted with equally qualified workers who are in the same situation. Many people are forced to take jobs outside their chosen fields or live on unemployment benefits while they wait for the economy to improve.

Full Employment and the Natural Rate of Unemployment

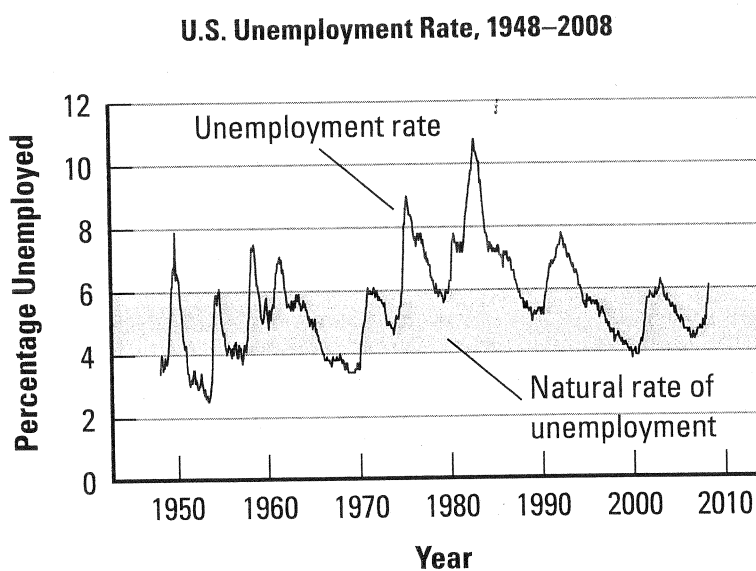
When an economy is healthy and growing, it experiences little cyclical unemployment. But there will always be some frictional, seasonal, and structural unemployment. Some people will always be out of work, even in an economy with full employment. At that point, all of the economy's available labor resources are being used efficiently.

When an economy reaches full employment, jobs exist for everyone who wants to work, even though a certain percentage of those jobs and workers will not yet have been matched together. Economists call this percentage the **natural rate of unemployment**. This rate has varied historically, but has generally ranged between 4 and 6 percent. Figure 13.3B shows unemployment rates over time.

Figure 13.3B

Tracking Unemployment over Time

This graph shows the ups and downs in the unemployment rate over several decades. The horizontal band shows the natural rate of unemployment during the same time period.



Source: Bureau of Labor Statistics.

Problems with the Unemployment Rate as an Indicator of Economic Health

In determining how many of the country's more than 300 million people are unemployed, the BLS makes every effort to be accurate. Still, critics point to several problems that may make the results less than exact.

The first problem is that at any one time, a number of unemployed people have given up looking for work. Though willing and able to work, they no longer expect to find jobs. These **discouraged workers** do not fit the BLS's definition of unemployed, which counts only those people who are making an effort to find work. Because discouraged workers are left out of BLS calculations, the official unemployment rate, some critics argue, is too low.

The second problem is that the official unemployment rate does not recognize **involuntary part-time workers**. These are people who, unable to find full-time jobs, settle for part-time employment. They work less than 35 hours per week. Others who once worked full time may have had their hours cut back. The BLS counts such part-time workers as employed. However, some economists think these workers should be counted as partially unemployed. For example, someone who works 20 hours a week but wants full-time work might be counted as "half unemployed."

A third problem with the unemployment rate involves people working in informal or underground economies. The **underground economy** is made up of

people who earn income from gambling, drug dealing, and other illegal activities. When surveyed by the BLS, they would be unlikely to admit to anything illegal. Instead, their answers would suggest they are unemployed. The same might be true for people in the informal economy who pay no taxes on their earnings. As a result, the actual rate of unemployment might be lower than the official rate indicates.

The Economic Costs of High Unemployment

Despite its flaws, the official unemployment rate serves as a fairly good indicator of conditions in the labor market. And in general, when the rate is high, the overall health of the economy is poor.

The main economic cost of high unemployment is lost potential output. The smaller the number of people who are working, the fewer goods and services the economy can generate. Potential output is lost because labor resources are not being fully utilized. An increasing unemployment rate, then, means a decreasing real GDP.

Unemployed workers also pay a serious economic cost. They and their families lose income and the goods and services that income would have purchased. They may become unable to pay their monthly mortgage, leading to the loss of a home. Unemployment can also mean the loss of medical benefits, which then become an added expense.

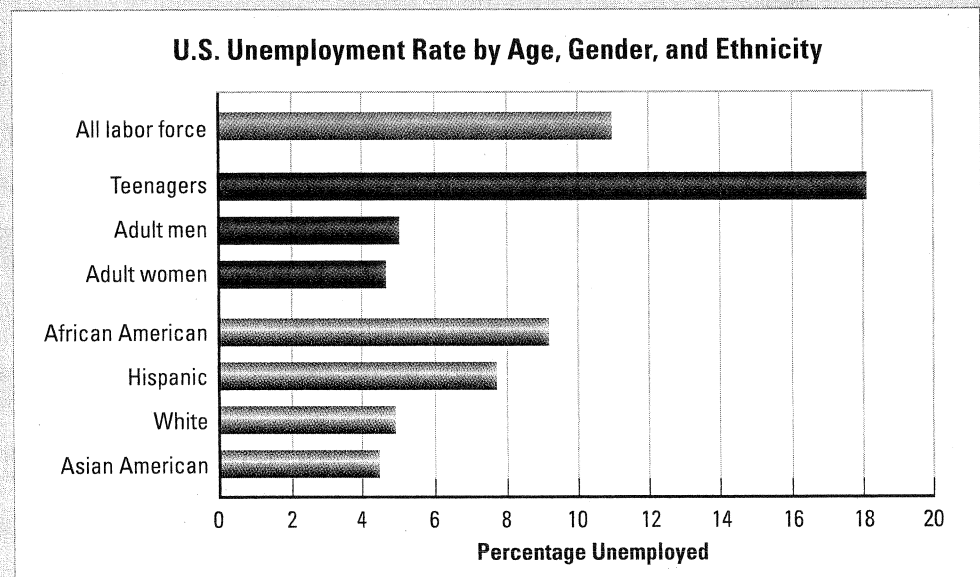
High unemployment is also costly for society at

Figure 13.3C

Analyzing the Unemployment Rate

Some groups of Americans have higher unemployment rates than others. Workers who are less skilled or less educated are more vulnerable to job loss than those with more skills and experience. Teenagers have the highest unemployment rate, in part because they have fewer skills and less experience than adults. This graph shows a teenage unemployment rate of 18.1 percent in June 2008.

Source: Bureau of Labor Statistics.



large. Unemployed workers no longer contribute income taxes to the government. In fact, many begin taking money from the government in the form of unemployment insurance and other benefits. This may call for shifting money from other programs to pay the additional benefits, or it may mean raising taxes on those workers who remain employed.

■ 13.4 What Does the Inflation Rate Reveal About an Economy's Health?

A second cup of coffee that costs more than the first. A pile of money that is more valuable as fuel than as currency. These were some of the bizarre realities of hyperinflation in post-World War I Germany.

The German experience was proof, if any was needed, that runaway inflation can send an economy into a tailspin. That is why economists keep a close eye on a third economic indicator: the inflation rate. The **inflation rate** is the percentage increase in the average price level of goods and services from one month or year to the next. It is tracked by the same government agency that tracks the unemployment rate, the Bureau of Labor Statistics.

Tracking Inflation with the Consumer Price Index

The BLS tracks inflation by gathering information on Americans' cost of living. That is, it studies the cost of buying the goods and services that households like yours purchase every day. As you would expect, the cost of living changes all the time because prices do not stay the same.

Economists at the BLS track changes in the cost of living using what is known as the consumer price index. A **price index** measures the average change in price of a type of good over time. The **consumer price index (CPI)** is a price index for a "market basket" of consumer goods and services. Changes in the average prices of these items approximate the change in the overall cost of living. For that reason, the CPI is sometimes called the **cost-of-living index**. As such, it serves as the primary measure of inflation in the United States.

The CPI market basket is based on surveys of thousands of households about their spending habits. This information is used to develop a detailed list of items to track. Each month, BLS data collectors visit

some 25,000 retail stores and record the prices of these items.

The BLS determines the CPI by comparing each month's price information to the prices paid for the same goods and services during a base period. As of 2008, the base period was 1982–1984. The BLS set the cost of goods and services in its market basket during that period at 100.

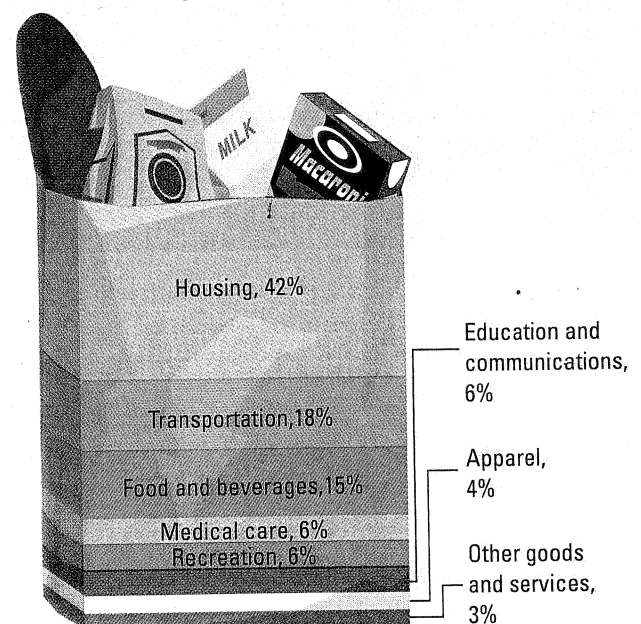
Using its monthly price data, the BLS can track the change in the CPI between any two periods. For example, the CPI for March 2007 was 205.352. By March 2008, the CPI had increased to 213.528. Based on those numbers, the BLS calculates that the CPI rose 4.0 percent during that 12-month period. In other words, the inflation rate for that one-year period was 4 percent.

Key Concept

The Consumer Price Index

The consumer price index is an indicator used to track changes in the prices of basic household goods and services. Each group of items in the CPI's market basket is given a "weight," or percentage, that reflects how much consumers spend on it. Average consumers spend the largest part of their income on housing, which includes rent or mortgage payments, property taxes, heat, electricity, and furniture.

CPI Market Basket, 2007



Source: Bureau of Labor Statistics.