

Chapter 9 Labor

Why do some people earn a lot of money while others work hard and earn little? With a little information, and a little theory, you can begin answering this and other puzzling questions. In the process, you will learn how the government measures the unemployment rate, how workers' wages are determined, and how labor unions influence workers' earnings, job security, and benefits in today's economy.

Economics Journal

Interview a parent, grandparent, or other older adult, and ask that person to describe his or her first job. Ask about hours, pay, working conditions, and co-workers. Take detailed notes of the responses to your questions.

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Section 1

Labor Market Trends

Preview

Objectives

After studying this section you will be able to:

1. **Describe** how trends in the labor force are tracked.
2. **Analyze** past and present occupational trends.
3. **Summarize** how the U.S. labor force is changing.
4. **Identify and explain** trends in the wages and benefits paid to U.S. workers.

Section Focus

The Bureau of Labor Statistics (BLS) tracks trends in the labor market. These trends include the movement toward a service economy, the hiring of more college graduates, women, and temporary employees, an overall decline in real wages, and rising costs for employee benefits.

Key Terms

labor force
learning effect
screening effect
contingent employment

What are the hottest jobs for the new millennium? If you guessed computer-related occupations, you are right. The number of computer engineers and computer support specialists is expected to nearly double between 2000 and 2010 despite an economic slowdown. (See “Fastest-Growing Occupations” in the Economic Atlas and Databank on page 537 for more information on the ten fastest-growing occupations.)

The labor force is transforming before our eyes. Soaring growth in computer-related jobs is just one of the ways in which the job market is changing.

Tracking the Labor Force

How do we know the direction of changes in the job market? Each month, the Bureau of Labor Statistics (BLS) of the United States Department of Labor surveys households to assemble information on the labor force. Economists define the **labor force** as all nonmilitary people who are employed or unemployed.

Employment

Economists consider people to be employed if they are 16 years or older and meet at least one of the following requirements:

- they worked at least one hour for pay within the past week;
- they worked 15 or more hours without pay in a family business, such as a farm;
- they held jobs but did not work due to illnesses, vacations, labor disputes, or bad weather.

Unemployment

People who do not meet these criteria are counted as unemployed if they are either temporarily without work or are not working but have looked for jobs within the last 4 weeks. So to be counted as unemployed, a person either must have work lined up for the future, or must be actively searching for a new job.

The labor force is made up of people with jobs and those who are looking for jobs or are waiting to report to work. Some examples of people outside the labor force are full-time students, parents who stay at home to raise children, and retirees. These people are not considered unemployed, and thus are not counted in employment statistics.

labor force *all nonmilitary people who are employed or unemployed*

▼ **The labor force includes many small business owners.**



FAST FACT

Technological innovations have resulted in new ways to compile and understand economic information. For example, working on the 1880 Census, Herman Hollerith was dismayed by the slowness of the process. So Hollerith designed a mechanical tabulator using punched cards to record information. This developed into a system of punchcard devices with a variety of applications. His Tabulating Machine Co. later became part of International Business Machines (IBM).

“Discouraged workers,” people who once sought work but have given up looking for a job, are not counted in employment statistics either.

The Bureau of Labor Statistics

The Bureau of Labor Statistics (BLS) provides answers to two important economic questions: How many people are in the labor force? How many are employed and unemployed at any given

time? You can find BLS data in the Census Bureau’s *Statistical Abstract of the United States*, available in print or on the Internet.

The BLS provides information about historical trends. For example, the percentage of the U.S. population in the labor force has increased from 59.2 percent in 1950 to 66.6 percent in 2003. In June 2003, the national unemployment rate of 6.4 percent was higher than average by

recent standards. The number of employed civilians in the U.S. in 2003 was about 137,738,000.

The BLS also reports the unemployment rate each month. Economists studying the health of the macroeconomy monitor these monthly unemployment figures, which indicate the health of the labor market.

Occupational Trends

Shifts in the job market reflect major shifts in what our economy produces. To understand these changes, let’s look at them in a historical context.

A Changing Economy

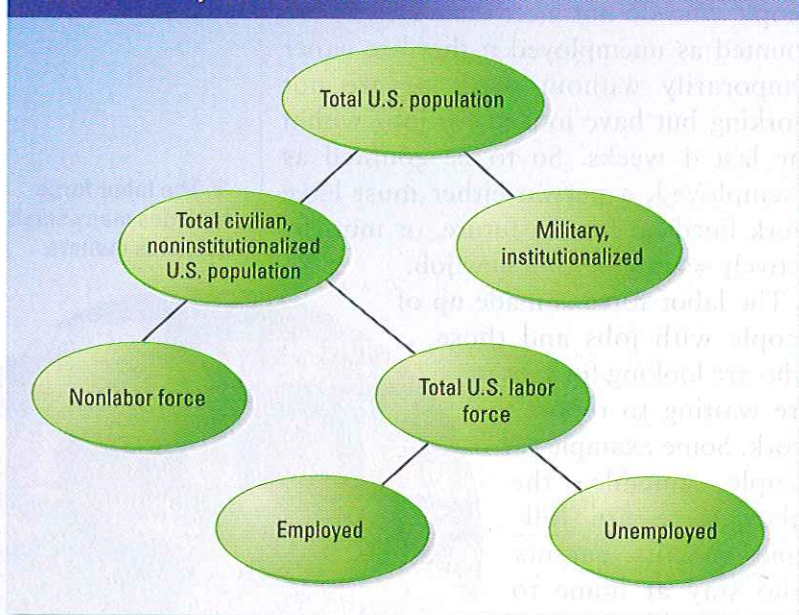
At its founding, the United States was a nation of farmers. Most people had few job opportunities beyond the corn, wheat, cotton, and tobacco fields. In the 1800s in the North, however, this agricultural tradition gradually yielded to the Industrial Revolution. The coming of the machine age energized the economy and created new jobs in textile mills, shoe factories, and other new manufacturing enterprises.

By the early decades of the 1900s, heavy manufacturing had become the powerhouse of the U.S. economy. New corporate empires were born, employing thousands of workers: John D. Rockefeller’s Standard Oil in 1863; Andrew Carnegie’s steelworks in the 1870s; Henry Ford’s automobile company in 1903.

The mid-twentieth-century boom in electronics—led by radio and television—produced a new surge of factory jobs. Employment growth centered in the Northeast and Midwest, in companies such as General Electric, Westinghouse, Carrier, and Goodyear.

In the 1970s, the revolution in personal computers opened another new horizon for employment. As computer use continues to rise, computer-related occupations are booming. Many of the new jobs involve the storage, use, and transfer of information. In this “Information Age,” even some traditional jobs, from trucking to farming

Figure 9.1 Composition of the U.S. Labor Force



This flowchart shows how the Bureau of Labor Statistics defines who is in the U.S. labor force and who in the labor force is employed and unemployed.

Economic Systems How does being unemployed differ from not being part of the labor force?

to car sales, now require some computer skills. By the late 1990s, over half of American workers reported some use of computers on the job.

Fewer Goods, More Services

The increase in information management jobs is part of an overall shift in the United States from a manufacturing economy to a service economy. Our production of services is increasing faster than our production of goods. Jobs in the service sector include financial services (banking, insurance, investment), online services (Web design, online advertising), health care, and desktop publishing.

Effects of International Competition

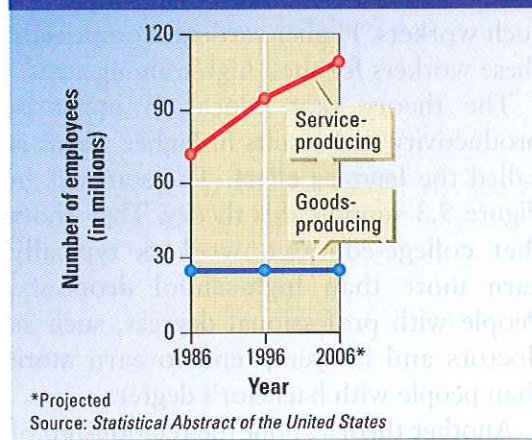
As service jobs increase, the United States is losing manufacturing jobs. Many workers have been laid off due to plant closings or moves, too little work, or the elimination of their positions.

In the past, limits on the mobility of capital and labor meant that most goods sold in the United States were made by American workers in American factories. Today, capital and labor are highly mobile. Investment in capital and labor—if not individual workers—crosses international borders easily. American firms can build factories and hire workers in countries where costs are lower. American stores can buy a wide range of goods made in foreign countries to sell in the United States.

As less-skilled manufacturing jobs move overseas, there is less and less demand for the services of unskilled American workers. These employees may receive lower pay or may lose their jobs entirely. This decrease in demand for less-skilled workers pushes these workers to go back to school or to enter job-training programs to gain new skills.

Notice that these shifts in demand for workers are another example of supply and demand in operation. Demand for skilled labor is rising, so wages for skilled workers go up, and the supply of skilled workers increases to meet the demand. Meanwhile, as demand for low-skilled

Figure 9.2 Changes in Employment, by Industry



This chart shows the shift from a goods-producing, or manufacturing, economy to a service economy in the United States. **Supply and Demand Describe the changes in the U.S. economy during the period shown.**

labor drops off, there is a surplus of less-skilled workers who find that they must become more skilled in order to compete in the job market.

The Changing Labor Force

In the 1950s, a typical American worker was a white man who had graduated from high school and had found a secure 40-hour-a-week job where he would hope to stay until retiring at age 65. Not anymore. Today, someone entering the work force can expect to have four or five different jobs during his or her working life and retire at around age 62, or even earlier. The face of the U.S. labor force has changed.

College Graduates

To get jobs, people must have human capital—the education, training, and experience that make them useful in the workplace. More and more, a high-school diploma alone won't prepare a person for financial success. Getting a good education, however, is costly. It requires money, time, and effort. (See "Paying for Education" in

learning effect *the theory that education increases productivity and results in higher wages*

screening effect *the theory that the completion of college indicates to employers that a job applicant is intelligent and hard-working*

the Personal Finance Handbook on page 516.) Relatively few people become highly educated; thus, there is a smaller supply of such workers. Higher earnings compensate these workers for their high training costs.

The theory that education increases productivity and results in higher wages is called the **learning effect**. The statistics in Figure 9.3 support this theory. They show that college-educated workers typically earn more than high-school dropouts. People with professional degrees, such as doctors and lawyers, tend to earn more than people with bachelor's degrees.

Another theory about the relationship of education to wages is called the **screening effect**. This theory suggests that the completion of college indicates to employers that a job applicant is intelligent and hard-working. The skills and determination necessary to complete college may also be useful qualities for employees. According to the screening theory, a college degree does not increase productivity, but

simply identifies people who may be good employees because of their innate skills.

Women at Work

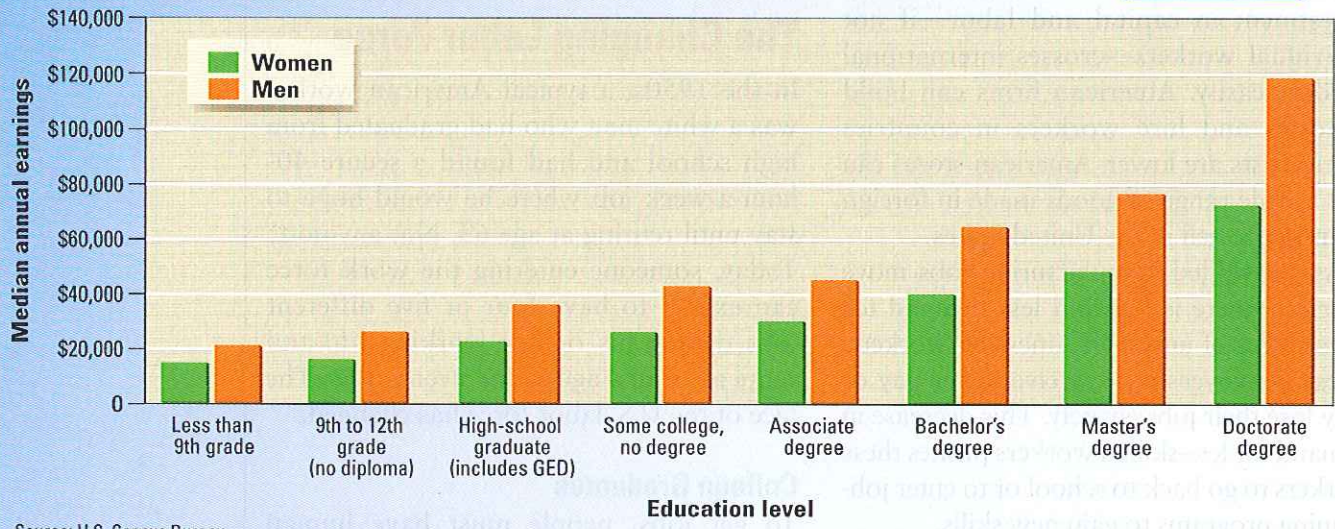
The changing face of the labor force can be seen right at your local bank. A few decades ago, men greeted customers at the tellers' windows and served as loan officers. Today, most bank tellers and many loan officers are women.

Figure 9.4 shows that in 1960, almost 38 percent of women belonged to the labor force. By 2000, that rate had jumped to over 60 percent.

The increase may be due to several factors. One is that women were encouraged to get a higher education and add to their human capital. By increasing their human capital, they increased their productivity and thus increased their earnings. In addition, as more and more jobs become available in the service sector of the economy, fewer jobs call for physical strength. Instead, jobs require brainpower

Figure 9.3 Education and Income, 2003

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Source: U.S. Census Bureau



As you make your career plans, one factor to consider is the statistic shown here: Education has a big effect on earnings.

Incentives (a) As a man moves up one educational level at a time, when is he likely to see the greatest potential increase in earnings? (b) When is a woman likely to see the greatest potential increase in earnings? (c) What can you conclude about the opportunity costs for men and women of moving up to that higher-paying level?

and personal skills, placing men and women on equal footing.

The presence of women in the labor market is expected to continue rising. The BLS projects that the rate of participation of women in the labor force will inch even higher, to more than 61 percent by 2006.

Temporary Workers

In another important trend both in the United States and abroad, more and more businesses are replacing permanent, full-time workers with part-time and temporary workers. Some temporary workers come from “temp” agencies. Others are hired directly by firms as contract workers, people hired for a specified time period or to complete a certain task. These temporary and part-time jobs are known as **contingent employment**.

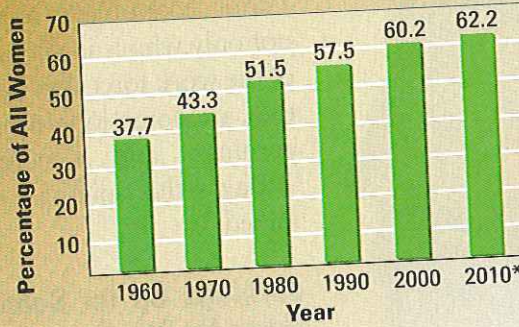
Contingent employment is becoming more common even in white-collar, professional occupations that have traditionally offered some of the most secure jobs in the economy. For example, some software engineers and attorneys are now hired as contract workers, paid a certain amount of money to complete a certain project, and then released. Such highly skilled workers, when hired directly by employers, are well paid. Some earn as much as permanent workers. On the other hand, workers who get their jobs through temp agencies tend to earn less compared to both permanent employees and directly hired temporary workers.

Why are some companies relying more on temporary employees? Several reasons have been suggested.

1. Flexible work arrangements allow a firm to easily adjust its work force to changing demands for its output. During off-peak seasons or times of reduced demand for their products, companies can easily lay off temporary workers or reduce workers' hours instead of keeping permanent employees on the payroll. When demand picks up, companies can rehire temporary workers they need.

Contingent employment of temporary workers is much

Figure 9.4 Women in the U.S. Labor Force, 1960–2010



* Projected
Source: U.S. Department of Labor



Participation by women in the labor force has climbed steadily in recent decades.

Income By what percent will the number of women in the work force have changed between 1960 and 2010?

easier than discharging regular, permanent employees, since temporary workers do not receive severance pay (money that companies give to employees who are laid off), and temporary workers have fewer legal rights in the workplace.

3. Temporary workers in many industries are paid less and given fewer benefits (if any) than their permanent, full-time counterparts. This advantage has become more important as the cost of medical insurance has risen.
4. Some workers actually prefer these flexible arrangements to traditional, permanent jobs; thus, the market reflects their preferences.

Some people enter and exit the labor force regularly, or prefer the freedom to move from one job to another. However, BLS studies show that a majority of temporary workers would prefer permanent jobs.

contingent employment
a temporary or part-time job

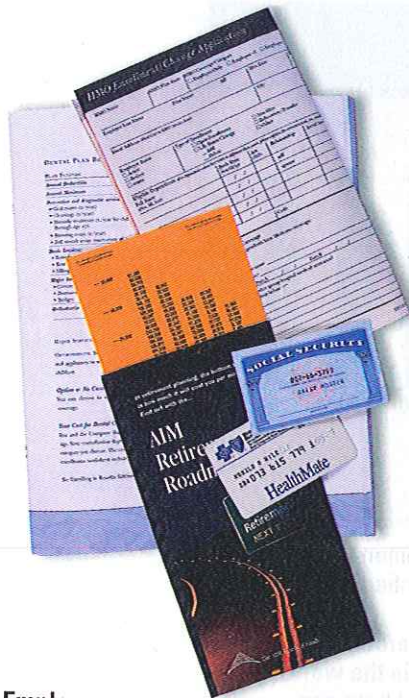
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In the News Read more about the changing labor force in “Temps Can Become Permanent Workers,” an article in The Wall Street Journal Classroom Edition.

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▲ Employers may offer a wide range of benefits, including medical insurance, life insurance, and retirement savings plans.

Trends in Wages and Benefits

Labor economists study not only who is in and out of the work force, but how they are doing in terms of earnings and benefits. Today, the picture is mixed.

Earnings Up for Some, Down for Others

While American workers are well paid compared to their counterparts in some other countries, the trend over the last 20 years has been toward slightly lower earnings. The Bureau of Labor Statistics

reports that average weekly earnings in the United States increased from \$275 in 1980 to \$278 in 2003, as measured in inflation-adjusted dollars, or \$523 in current dollars.

The slightly higher *average* earnings don't tell the whole story, however. In the past, most employees were paid in wages. Today, added benefits such as health insurance, retirement funds, employee stock options, and year-end bonuses mean that

average weekly earnings are much higher than BLS statistics suggest. Many employees today also enjoy the intangible benefits of telecommunicating from their homes and "flex-time," or flexible working hours. Overall, the earnings of college graduates actually increased, while the earnings of workers without college degrees decreased.

Why have average wages not increased more in the last couple of decades? One reason, as you have read, is that greater competition from foreign companies has decreased the demand for low-skilled workers. For example, the last 30 years have brought foreign competition in such industries as steel, textiles, and auto production. Deregulation of many domestic industries, such as trucking, air travel, and telecommunications, may have forced firms to cut employees' wages as competition has intensified.

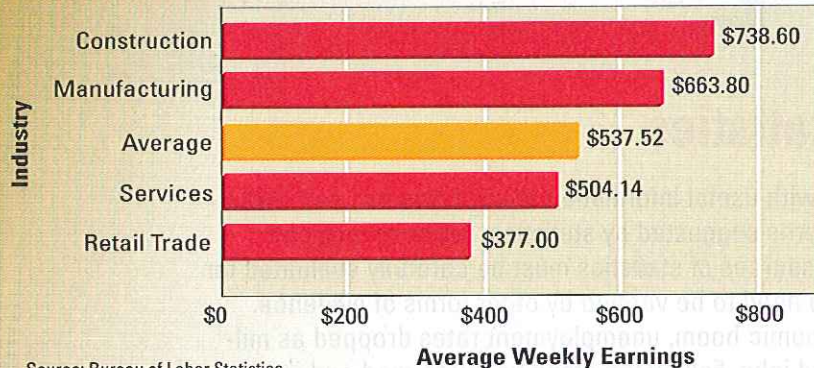
Cost of Benefits

For many workers, benefits such as pensions and health insurance are a significant share of total compensation. This share rose fairly steadily during the 1900s and early 2000s. Benefits now make up about 28 percent of total compensation in the United States economy today. This adds



▲ The downsizing trend in the 1990s and 2000s was caused in part by employers wanting to hire temporary workers instead of permanent full-time employees.

Figure 9.11 Earnings for U.S. Workers, 2005



Source: Bureau of Labor Statistics



This graph shows the differences in average weekly earnings among workers who are paid hourly or weekly wages.

Markets and Prices Why might wages for workers in retail be much lower than those for workers in construction?

up to a large cost for employers—especially since benefits are becoming more expensive.

Company payments into the Social Security system may also be regarded as benefits, since they will be used to pay benefits to retired and disabled workers. Most employees know that Social Security taxes are deducted from their paychecks each month, but may not realize that their employers are also paying a matching amount. Thus, workers and employers share this cost. In addition, Social Security tax rates have risen substantially since the program was

created during the 1930s, causing further increases in employers' benefits costs.

Employers are finding that these rising benefits costs increase the cost of doing business and thus cut into their profits. The use of contingent employment is one way some firms are cutting their benefits expenses. Other responses include moving production facilities overseas, where wages are lower and benefits often are nonexistent.

If benefits costs continue to rise, companies will be pressured to respond even further. These responses are likely to be unpopular with workers.

Section 1 Assessment

Key Terms and Main Ideas

1. What groups of people does the government consider to be (a) in the **labor force**; (b) employed; (c) unemployed?
2. What were the major steps in the United States' progression from an agricultural economy to a service economy?
3. How does the **screening effect** differ from the **learning effect**?

Applying Economic Concepts

4. **Critical Thinking** Are you part of the labor force? If so, would the government consider you employed during the past week, or unemployed? If not, explain why.
5. **Problem Solving** Would you hire permanent workers or contingent workers if you owned (a) a pool and garden shop in Minnesota; (b) an architectural firm (c) a laundromat (d) a tax preparation service? Explain your reasoning.

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6. **Decision Making** You are the manager of a medium-sized publishing company with 90 permanent employees, all of whom receive competitive wages, health insurance, and retirement benefits. The health insurance provider announces a 20 percent increase. Describe at least two possible ways you could respond.

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Skills for LIFE

Analyzing Statistics

Statistics provide us with useful information about economic and historical trends. The patterns suggested by statistics, however, must be carefully analyzed, and sources of statistics must be carefully evaluated for reliability. Statistics also need to be verified by other forms of evidence.

During a recent economic boom, unemployment rates dropped as millions of Americans found jobs. Follow the steps below to read and interpret the statistical data found in the table.

- Determine the source of the statistics and decide whether the source is reliable.** (a) What is the source of the statistics below? (b) In your opinion, is the source reliable?
- Study the statistics to determine what information they provide.** Read the row and column titles carefully, and answer the following questions.
(a) What do the data describe?
(b) What groups of people are described by the data?
- Analyze the data to determine social trends or patterns.** You may be able to use statistical data to draw conclusions about trends or patterns. Answer the following questions:
(a) How did the unemployment rate for all workers change between 2000 and 2005? (b) Was the change even

across all groups in the work force?
(c) Which group suffered from the highest unemployment in 2005?
(d) Why do you think this group had the most difficulty finding work?
(e) Women who maintain families have a higher rate of unemployment than married women who live with their husbands. Why might this be? (Note: Remember that the unemployment rate only includes people looking for work, not all Americans.)

Additional Practice

Use the Internet to find the most recent government statistics on unemployment, and compare them to the data shown here. What changes do you find? What do these changes indicate about the economy?

Unemployment Rates for U.S. Workers

| | Spring 2000 | Spring 2005 |
|-------------------------------|-------------|-------------|
| All workers | 4.0% | 5.2% |
| Men, age 20 and up | 3.3% | 4.4% |
| Woman, age 20 and up | 3.6% | 4.6% |
| Both sexes, 16 to 19 years | 12.8% | 17.7% |
| Married women, spouse present | 2.7% | 3.3% |
| Woman who maintain families | 6.2% | 7.7% |

Source: Bureau of Labor Statistics

Section 2

Labor and Wages

Objectives

After studying this section you will be able to:

1. **Analyze** the relationship between supply and demand in the labor market.
2. **Understand** the connection between wages and skill levels.
3. **Explain** how laws against wage discrimination affect wage levels.
4. **Describe** other factors affecting wages, such as minimum wage and workplace safety laws.

Section Focus

In a competitive labor market, laws of supply and demand are the main factors responsible for determining wages. Wages are also affected by skill levels and legislation prohibiting wage discrimination. Other factors, such as minimum wage laws, workplace safety laws, and labor unions also affect wages.

derived demand
productivity
equilibrium wage
unskilled labor
semi-skilled labor
skilled labor
professional labor
glass ceiling
labor union
featherbedding

If you are considering what career to pursue, you've probably thought about how much money you can earn in various professions. Most surgeons, for example, earn a lot of money. Social workers generally do not. Why? What determines the size of our paychecks?

It's a matter of supply and demand. Like eggs or airplanes or pet iguanas, labor is a commodity that is bought and sold. Wages are high in professions where supply is low and demand is high. Doctors, for example, are in relatively short supply but in high demand. Relatively large numbers of people become social workers compared to the number of social work jobs available. Hardly anyone needs a widget maker, so widget makers earn very little if anything at all. Thus workers' earnings—the price of labor—depend on conditions in the labor market.

Supply and Demand for Labor

Employment or unemployment in a labor market depends on how closely the demand for workers—the number of available jobs—meets the supply of workers seeking jobs. Let's examine how supply and demand operate in labor markets.

Labor Demand

The demand for labor comes from private firms and government agencies that hire workers to produce goods and services. In most labor markets dozens, or sometimes hundreds, of firms compete with one another to hire workers.

Demand for labor is a **derived demand** because it is derived, or set, by the demand for what a worker produces. For example, the demand for cooks in a market depends on the demand for restaurant meals.

In a competitive labor market, workers are usually paid according to the value of what they produce. For example, competition among restaurants results in a wage for cooks that reflects the cook's productivity. **Productivity** is the value of output, which in this example is the cost of a meal. Suppose that most of the restaurants in your city pay \$12 an hour for cooks who generate \$20 an hour in revenue for the restaurants. The possibility of profit will attract other restaurant entrepreneurs. Competition will push up the wage for cooks to nearly \$20. As a result, cooks will be paid close to the value of their productivity. The flow-

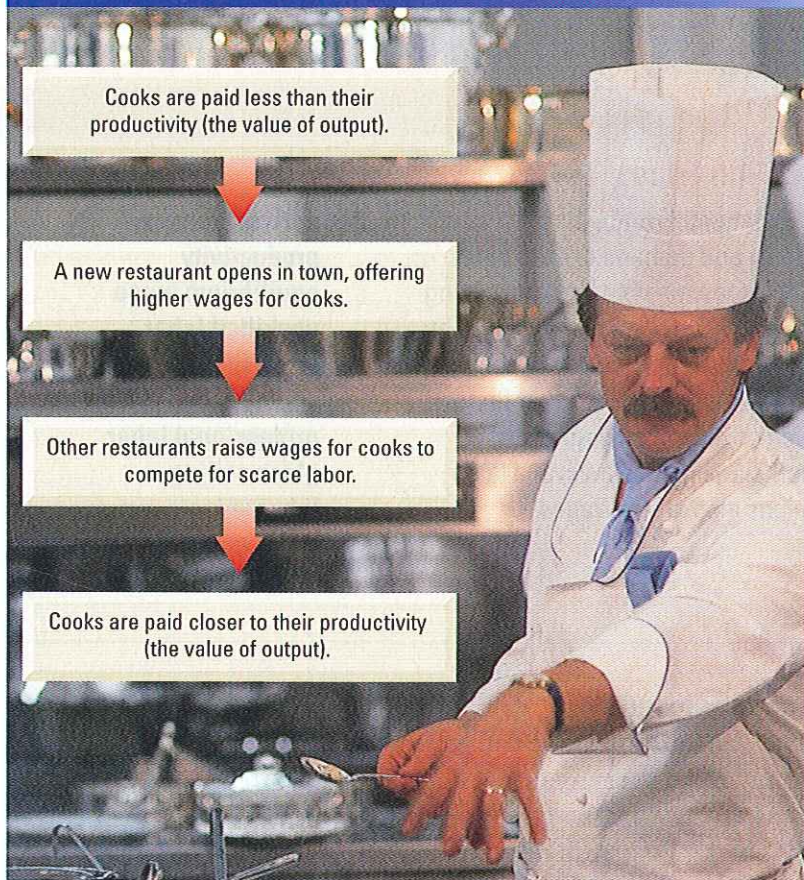
derived demand
demand that is determined by demand for another good or service

productivity value of output

FAST FACT

The top three employers in the United States are Wal-Mart, General Motors, and McDonald's, respectively. Wal-Mart employs about four times as many workers (1.2 million) as General Motors (324,000), its closest competitor in the labor market.

Figure 9.6 Effects of Competition



This flowchart shows how competition causes workers to be paid a wage close to their productivity.

Markets and Prices Explain how the outcome of this scenario affects (a) the cooks, (b) the restaurants.

equilibrium wage *the wage rate that produces neither an excess supply of workers nor an excess demand for workers in the labor market*

chart in Figure 9.6 (above) shows the ripple effect that occurs when the new restaurant hires cooks at a higher wage.

Now look at the demand curve for labor, shown in the right-hand graph of Figure 9.7 on page 221. Notice that it is negatively sloped, reflecting the law of demand. The higher the price of labor, the smaller the quantity of labor demanded by firms and government.

Labor Supply

The supply of labor comes from people who provide labor in exchange for wages. As the left-hand graph in Figure 9.7 shows, the supply curve is positively sloped, reflecting the law of supply. In other words, the higher the wage, the larger the quantity of labor supplied.

This is sensible because the higher the wage for a job, the greater the number of people attracted to the job. A higher wage for cooks encourages people who would choose other occupations to acquire the training—that is, the human capital—required to become a cook. For example, if the wage for chefs were high enough, some servers and other staff would be willing to invest the time and money required to complete cooking school.

Equilibrium Wage

We know that at the market equilibrium, the quantity of a good supplied will equal the quantity demanded. Because the equilibrium price makes the quantity that suppliers want to sell equal to the quantity that demanders want to buy, there is no tendency for the price or quantity to change. Economic factors—the supply of labor and the demand for it—combine to determine an equilibrium price. These factors may be different in different parts of the country, or at different times.

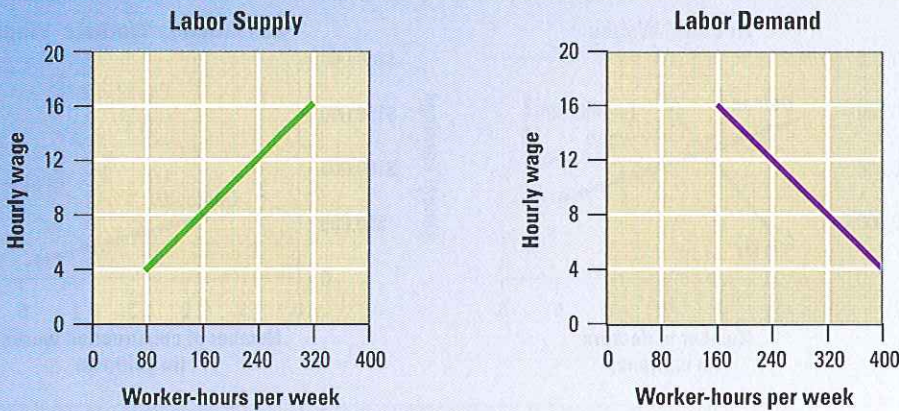
The **equilibrium wage** is the wage rate that produces neither an excess supply of workers nor an excess demand for workers in the labor market. On a graph, the equilibrium wage is shown by the intersection of the supply and demand curves. (See Figure 9.8.) At equilibrium, there is no pressure to raise or lower the price.

How do these theories affect how much you should expect to earn working in a pet store or a grocery store next summer? It depends on the supply and demand conditions in your area. If your local pet stores and grocery stores won't hire many additional workers during the summer and a lot of teenagers will be looking for work, the wage will be relatively low. On the other hand, if stores want to hire a lot of teenagers and not many teens want to work, the wage will be higher.

Wages and Skill Levels

Why do lawyers earn more money than carpenters, and carpenters more than cashiers? Wages vary according to workers'

Figure 9.7 Labor Supply and Demand



The graph on the right shows how the quantity of labor demanded varies depending on the price of labor. The graph on the left shows how the labor supply varies depending on the wage rate. **Supply and Demand** (a) According to the demand curve, if each cook works a 40-hour week, how many cooks will be hired at \$12 an hour and at \$20 an hour? (b) Why is the supply curve positively sloped?

skill levels and education, as well as according to supply and demand. Jobs are often categorized into four skill levels:

1. **Unskilled labor** requires no specialized skills, education, or training. Workers in these jobs usually earn an hourly wage. They include dishwashers, messengers, janitors, and many factory and farm workers.
2. **Semi-skilled labor** requires minimal specialized skills and education, such as operation of certain types of equipment. Semi-skilled workers usually earn an hourly wage. They include lifeguards, word processors, short-order cooks, and some construction workers.
3. **Skilled labor** requires specialized abilities and training to do tasks such as operating complicated equipment. Skilled workers need little supervision, yet usually earn an hourly wage rather than a salary. They include auto mechanics, bank tellers, plumbers, firefighters, chefs, and carpenters.
4. **Professional labor** demands advanced skills and education. Professionals are usually white-collar workers who receive a salary. Professionals include managers, teachers, bankers, doctors,

actors, professional athletes, and computer programmers.

We can graph the difference in pay scales for workers with various skills. The left-hand graph in Figure 9.9 shows the labor

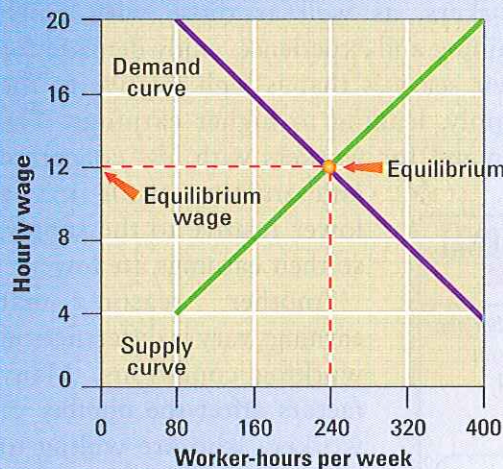
unskilled labor labor that requires no specialized skills, education, or training

semi-skilled labor labor that requires minimal specialized skills and education

skilled labor labor that requires specialized skills and training

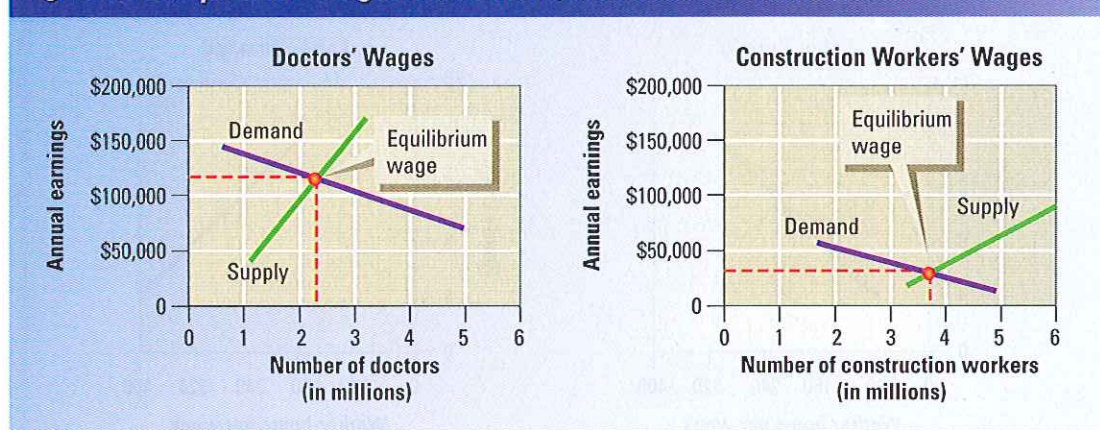
professional labor labor that requires advanced skills and education

Figure 9.8 Equilibrium Wage



This graph shows the wage at which the quantity demanded equals the quantity supplied. **Supply and Demand** Explain why a stable wage means stable restaurant prices.

Figure 9.9 Comparison: Wages for Doctors, Construction Workers



Anyone who pays doctors' bills already knows what the graph on the left shows: Wages for doctors are high. By comparison, construction workers' wages are lower, as shown in the graph on the right. **Supply and Demand** Give reasons to explain why the supply of doctors is low and the supply of construction workers is high.

market for medical doctors. Note that the supply of doctors is relatively low and the demand is relatively high. This produces a high equilibrium wage.

By comparison, the right-hand graph in Figure 9.9 shows that the supply of construction workers is high relative to the demand for them. Hence, the equilibrium wage for construction workers is lower than that for doctors.

Doctors and other highly educated workers, as well as those with much training and experience, enjoy demand for their services that is high relative to the supply, leading to higher earnings. The demand for workers with less education and training tends to be lower relative to the supply, so their earnings are lower.

Another reason that earnings vary is differences in working conditions. Many factors affect the number of workers who are willing to do a certain job: the level of danger, the physical or emotional stress involved, the location, and weather conditions in the area.

Economic studies have shown that jobs with high

accident and fatality rates pay relatively high wages. Workers who do dangerous jobs require compensation for the risks they take. Thus, there is a higher equilibrium wage rate for dangerous jobs, as shown in Figure 9.10.

Wage Discrimination

By seeing labor as something that is bought and sold, we have seen that wages for a particular job should end up at the equilibrium price of labor for that job, depending on the supply and demand for workers in that field. In some situations, however, national or state legislators have decided that there are policy reasons for interfering with the "invisible hand" that sets the wage level. One example is legislation prohibiting wage discrimination.

Wage discrimination occurs when people with the same job, same skills and education, same job performance, and same seniority receive unequal pay. Some companies, for example, have paid lower wages to women and minority employees.

Some employers defended wage discrimination against women by claiming that men needed the money to support families, while women were simply working to earn some extra cash. Job discrimination was also based on the assumption that women

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In the News Read more about labor and wages in "Worse for the Wear," an article in The Wall Street Journal Classroom Edition.

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would leave their jobs at some point to have children. Discrimination against African Americans and other minority workers reflected racial and ethnic prejudice in society.

Laws Against Wage Discrimination

In the 1960s, the United States Congress passed several anti-discrimination laws that prevent companies from paying lower wages to some employees based on factors like gender or race that are not related to skill or productivity. The Equal Pay Act of 1963 required that male and female employees in the same workplace performing the same job receive the same pay. Title VII of the Civil Rights Act of 1964 prohibited job discrimination on the basis of race, sex, color, religion, or nationality. (Religious institutions and small businesses are exempt from the law.) The Civil Rights Act also created the Equal Employment Opportunity Commission (EEOC) to enforce the law's provisions. The EEOC handles complaints of job discrimination. If necessary, it takes companies to court to force them to comply with the law.

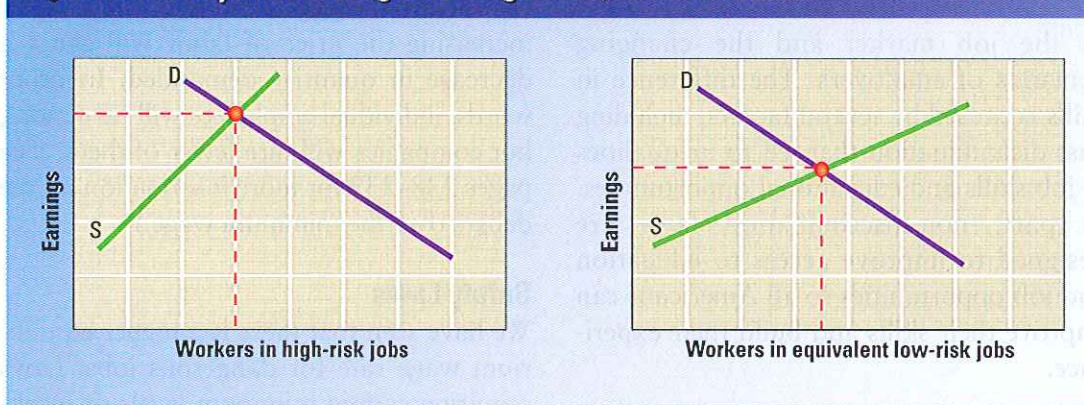
Pay Levels for Women

Despite these protections, the earnings gap that many people see between the wages of men and women is only gradu-

ally being closed. Historically, this gap has been the result of social conditions for women.

1. *“Women’s work.”* Women have historically been denied entrance to certain high-paying occupations, such as doctors, lawyers, and corporate managers. Instead, they have been encouraged to pursue careers in lower-paying fields such as teaching, nursing, and clerical work. With so many women seeking work in these occupations, the labor supply has been generally high. A large supply of labor tends to produce a relatively low equilibrium wage.
2. *Human capital.* Overall, women have had less education, training, and experience in certain occupations than men. This lack of human capital makes women’s labor, in economic terms, less productive. As a result, fewer women are eligible for the higher-paying, traditionally male-dominated jobs in fields such as engineering.
3. *Women’s career paths.* Even today, some employers assume that female employees are not interested in career advancement. This perception can be a roadblock for women in the workplace. The difficulty many women face in trying to balance child rearing and a career adds to this perception.

Figure 9.10 Comparison: Wages for High-Risk, Low-Risk Jobs



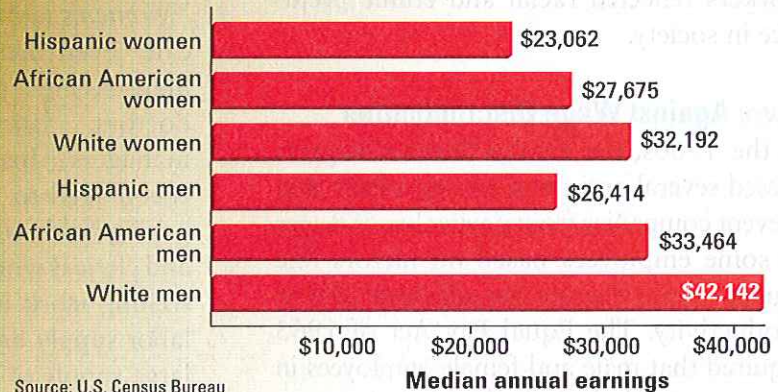
These graphs show how wages compare for similar jobs with different degrees of risk. **Supply and Demand** Write one sentence that compares the demand curves on the two graphs and one sentence that compares the two supply curves.



Despite much progress made toward eliminating wage discrimination, significant wage differences exist between men and women and among workers of various ethnic groups. **Markets and Prices** According to the graph, which group has the lowest earnings?



Figure 9.11 Median Income for Full-time Workers, by Gender and Ethnicity, 2003



Source: U.S. Census Bureau

glass ceiling an unofficial, invisible barrier that prevents women and minorities from advancing in businesses dominated by white men

Much progress has been made in creating job opportunities for women. Yet some qualified women still find that they cannot advance beyond a certain level in the companies they work for. In some companies, men dominate the high managerial positions, and women find it difficult to receive top-level promotions. This unofficial, invisible barrier that sometimes prevents some women and minorities from advancing to the top ranks of business is called a **glass ceiling**.

Pay Levels Across Society

On average, members of minority groups tend to earn lower pay than whites do. Part of the wage gap is caused by racial discrimination, past and present. Another factor is the relationship between the skills brought to the job market and the changing demands of employers. The difference in skills is caused by several factors, including past discrimination that led to inequalities in job skills and educational opportunities. In part, non-discrimination laws are designed to improve access to education and job opportunities so all Americans can improve their skills and build their experience.

Other Factors Affecting Wages

In addition to laws forbidding discrimination, several other factors can affect wages.

These include minimum wage laws, workplace safety laws, employer decisions, and labor unions.

Minimum Wage Laws

In 1938, Congress passed the Fair Labor Standards Act. This law created a minimum wage—the lowest amount employers could lawfully pay for most types of work—and required employers to pay overtime for work beyond 40 hours a week. Many states also have their own minimum wage laws. Because of these laws, employers may be forced to pay more than the equilibrium wage for unskilled labor.

Supporters of the minimum wage argue that it helps the poorest American workers earn enough to support themselves. Opponents point out that artificially increasing the price of labor will cause a decrease in quantity demanded. In other words, individual employees will earn more, but companies will hire fewer of them. (See pages 238–239 for more information on the debate over the minimum wage.)

Safety Laws

We have seen that there is a higher equilibrium wage rate for dangerous jobs. Laws requiring certain minimum levels of workplace safety may also have an effect on wages. If a law or policy increases safety at work, it may also decrease wages because workers are willing to work for lower

wages when jobs are safer. It thus would lower the employer's costs. Of course, the employer will usually have to spend money to comply with safety regulations, which may more than offset the employer's savings from any wage reduction.

Employers Respond to Wage Levels

Employers may also take actions to try to affect wage levels. For example, a company might try to cut labor costs by substituting machines for people. In other words, employers can replace human capital with physical capital.

Take furniture, for example. In countries where labor is relatively cheap, furniture may be hand-made by workers. In the United States, where labor is relatively expensive, manufacturers have substituted sophisticated machinery for more expensive human labor. Other examples of substituting physical for human capital include automated teller machines (ATMs) and mechanized assembly lines (such as in automobile manufacturing plants). These technological advances have greatly reduced the number of employees that banks and manufacturing companies hire.

Even if firms cannot use technology to replace labor, they may be able to reduce their labor costs in other ways. Companies may build production plants in other parts of the world where labor is more plentiful, and therefore cheaper. Check the labels on your jeans and shirts to see where they come from!

Similarly, employees who are unhappy with their wages have several choices. In a competitive labor market, they might get higher-paying jobs elsewhere. Other people may change careers entirely, either by choice or out of necessity. Although labor unions are becoming less of a force in the American economy, workers might decide to join a union and press for higher pay.

Unions

An organization of workers that tries to improve working conditions, wages, and benefits for its members is called a **labor union**. Although labor unions today have

fewer members than in the past, they are another force that may affect the level of wages for certain jobs. One of the key goals of unions is to get wage increases for their members. As you will see in Section 3, unions allow workers to negotiate wage levels as a group rather than having to deal individually with employers.

Nationally, union members do tend to earn higher wages than nonunion workers in similar jobs. In 2003, the average weekly union wage was \$792, compared with \$600 a week for nonunion wage earners.

Some evidence suggests that unions depress the wages of nonunion workers. Consider this reasoning:

1. Unions press employers to raise their members' wages.
2. When wages go up, the quantity of labor demanded goes down. Thus, the number of union jobs decreases.
3. As union jobs are cut, more workers are forced to seek nonunion jobs.
4. An increase in the supply of available nonunion workers causes the wage rate for nonunion jobs to fall.

In addition, some unions have engaged in **featherbedding**, negotiating labor contracts that keep unnecessary workers on the company payroll. A notable example of featherbedding occurred in the railroad industry.

In the early days of railroads, a "cabooseman" had to ride at the back of the train to operate a rear brake that stopped the train. Yet even after design

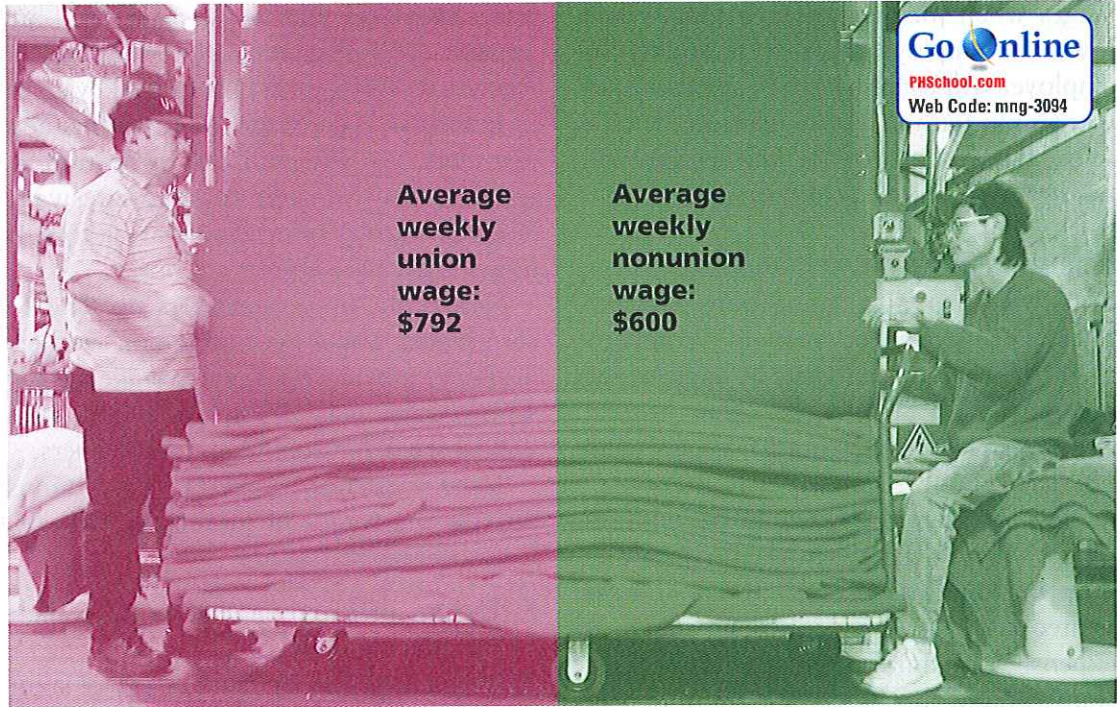
labor union an organization of workers that tries to improve working conditions, wages, and benefits for its members

featherbedding the practice of negotiating labor contracts that keep unnecessary workers on a company's payroll



Global Connections

Wages Worldwide An average production worker in the United States makes \$31,300 a year, according to the U.S. Census Bureau. If you were a worker in a country other than the United States, what would you earn? An average production worker in Germany makes the equivalent of \$35,863 a year, while the average worker in Hungary makes \$9,916 a year. Wages in Western Europe range from \$40,995 in Belgium to \$28,198 in France. A worker in Japan makes \$27,664, in Turkey \$15,825, and in Mexico, just \$8,662. These figures are adjusted according to the relative purchasing power in the various countries.



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Average weekly union wage: \$792

Average weekly nonunion wage: \$600

▲ In 2003, union workers earned higher wages than nonunion workers.

changes allowed the engineer at the front of the train to operate rear brakes, unions managed to keep caboosemen on the payroll, receiving full wages and benefits for doing nothing.

Unions have been criticized not only for featherbedding, but also because the

above-market union wages they negotiate can curtail capital formation. In addition, higher prices for union-made goods can cut sales and consumer purchasing power. The next section will trace the history of unions in the United States and further describe their advantages and disadvantages.

Section 2 Assessment

Key Terms and Main Ideas

1. How do the laws of supply and demand affect the labor market?
2. What generally happens to the **equilibrium wage** when (a) demand for workers is low and supply is high; (b) demand for workers is high and supply is low?
3. How does **skilled labor** differ from **professional labor**? Give an example of each.
4. How do minimum wage and safety laws affect wages?

Applying Economic Concepts

5. **Critical Thinking** Choose two occupations, one that pays high wages and one that pays low wages. Explain

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the reasons for the difference in wages in terms of supply and demand. Are there any additional factors that could also help explain the difference?

6. **Using the Databank** Turn to the chart of "Fastest-Growing Occupations" on page 537. (a) What types of jobs are being created at the fastest pace? (b) Are the fastest-growing occupations in traditionally unionized industries?

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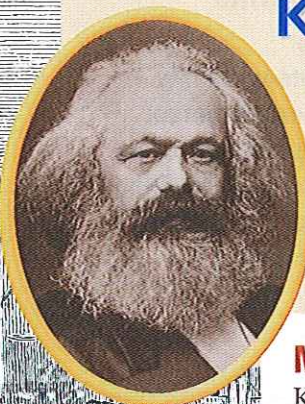
Profile

Economist

Entrepreneur

Karl Marx (1818–1883)

While Adam Smith described the orderliness and benefits of a free market economy, Karl Marx focused on its disorders. Marx looked at the factories and slums of nineteenth-century Europe and created a controversial new way to look at economics. Marx's radical ideas eventually led to his exile from his homeland and the eruption of violent revolutions in Russia and China.



Marx the Revolutionary

Karl Marx studied philosophy in his native Germany and earned a doctorate at the age of 23. However, because his radical writings criticized the government, he could find no work as a teacher and was soon forced to flee to Paris. There, in 1848, he and Friedrich Engels published the pamphlet for which Marx is best known: the *Communist Manifesto*.

In the *Communist Manifesto*, Marx argued that history is a struggle between the owners of capital, or “capitalists,” and the workers, or “proletariat.” He believed that as wealth became concentrated in the hands of the capitalists, the proletariat would become more and more dissatisfied. The result, he predicted, would be revolution and a classless society.

Marx returned to Germany after the publication of his pamphlet, but was soon expelled. In 1849, he settled permanently in London.

Das Kapital

Although Marx is known more for his social and political theories than for his economic ideas, much of his work

concerned economics. In 1867, Marx completed the first volume of *Das Kapital*, a three-volume study of the economics of capitalism. Drawing heavily on the writings of Adam Smith and David Ricardo, Marx explored the relationship between labor, profit, and the distribution of wealth. By the time the final volume appeared in 1894, *Das Kapital* had established Marx as one of the most prominent economists of the nineteenth century.

The Theory of Surplus Value

In *Das Kapital*, Marx claimed that human labor is the source of all added value. Marx used the textile industry as an example. The capitalist buys cotton thread and pays workers in his factory to weave it into fabric. The capitalist then sells the fabric for more than the combined value of the thread and the workers' wages. The workers' labor has therefore added value to the capitalist's goods. However, the capitalist does not return this “surplus value” to the workers, but keeps it as profit, thereby “exploiting” the workers. This conclusion was the basis for Marx's radical social and political views.

CHECK FOR UNDERSTANDING

1. Source Reading Explain the following passage from *Das Kapital* in your own words: “Capital buys the labour power and pays the wages for it. By means of his work the labourer creates new value which does not

belong to him, but to the capitalist.”

2. Critical Thinking If, as Marx advocated, “surplus value” were returned to the workers, how might this retard economic growth and development?

3. Problem Solving Research “profit sharing” and explain how you think Marx would have viewed this method of compensation.

Section 3

Organized Labor

Preview

Objectives

After studying this section you will be able to:

1. **Describe** why historically some American workers have joined labor unions.
2. **Trace** the history of the labor movement in the United States.
3. **Analyze** reasons for the decline of the labor movement.
4. **Explain** how labor and management negotiate contracts.

Section Focus

Historically, American workers have tried to gain some control over their working conditions by joining together in labor unions. Labor unions rose to great power and economic influence in the mid-1900s, but have declined since then.

Key Terms

strike
right-to-work law
blue-collar worker
white-collar worker
collective bargaining
mediation
arbitration

▼ In 1998, United Auto Workers in Flint, Michigan, went on strike against General Motors to force the company to address “unresolved health and safety, subcontracting and production standards issues.”

Today we think of Labor Day as the traditional end of the summer, a time for picnicking and perhaps shopping for school supplies. You might not know that the holiday has its roots in 1882, when labor leader Peter J. McGuire suggested a day celebrating the American worker. On September 5, 1882, some 10,000 workers took to the streets of New York City in a parade sponsored by a labor group called the Knights of Labor. The Knights later proposed making the first Monday in September a Labor Day holiday. The idea caught on quickly. In 1894, Congress made Labor Day a federal holiday.

Labor and Labor Unions

As you read in Section 2, wages are determined by the forces of supply and demand.

Competition among firms keeps a worker's wages close to his or her level of productivity. In general, workers who command the highest wages are workers with specialized skills and who are in short supply—brain surgeons, for example.

What if, however, an individual employee feels that he or she is being paid too little, working too many hours, or working under unsafe conditions? One option is for the worker to quit his or her current job and find an employer who offers better wages and working conditions. Many economists, in fact, argue that it is a competitive labor market that helps prevent low pay and dangerous working conditions because workers will leave such firms to work elsewhere.

Historically, American workers have also tried to gain some control over their working conditions by joining together to bring their concerns to the attention of company management. Today, only about one out of seven workers in the United States belongs to a labor union. However, this number does not accurately reflect the strong influence that unions have had on the nation's economy in the past. In order to understand the role of labor unions today, we will look at how labor unions rose to power in the United States.



The Labor Movement

The union movement took shape over the course of more than a century. It faced many obstacles along the way, including violence and legal opposition from companies. Figure 9.12 highlights some of the major events in the history of organized labor.

Workers in the 1800s

Labor unions arose largely in response to changes brought by the Industrial Revolution in the early and mid-1800s. Manufacturing brought a new type of occupation to America: the factory job.

By today's standards, it was not an enviable job. In garment factories, iron plants, and gunpowder mills, laborers worked 12 to 16-hour days, 7 days a week, for meager wages. The long workday was not new to those who had worked on farms, but the working conditions were. Men, women, and children as young as age 5 operated clattering machines so dangerous that many people lost their sight, their hearing, even fingers and limbs. Injured workers often lost their jobs.

Today, many firms emphasize that one of their major goals is to attract, hire, and retain the most highly skilled workers. This means treating workers well. In 1855, however, a factory boss bluntly summarized his attitude toward workers:

“I regard people just as I regard my machinery. So long as they can do my work for what I choose to pay them, I keep them, getting out of them all I can.”

—Manager of a textile mill in Fall River, Massachusetts, 1855

Unions Take Hold

As early as the 1790s, whispers of worker discontent grew into organized protests. Skilled workers such as shoemakers and carpenters began to form unions in order to protect their interests. The tool of unions was the **strike**, an organized work stoppage intended to force an employer to address union demands. Initially, the courts

regarded unions as illegal. Employers simply fired and replaced workers who caused trouble by trying to organize.

The man who truly started the United States labor movement was Samuel Gompers. The young cigarmaker in New York City rose within union ranks, focusing on three workplace reforms: higher wages, shorter hours, and safer work environments. In 1886, he founded the American Federation of Labor (AFL).

strike an organized work stoppage intended to force an employer to address union demands

Figure 9.12 Key Events in the U.S. Labor Movement

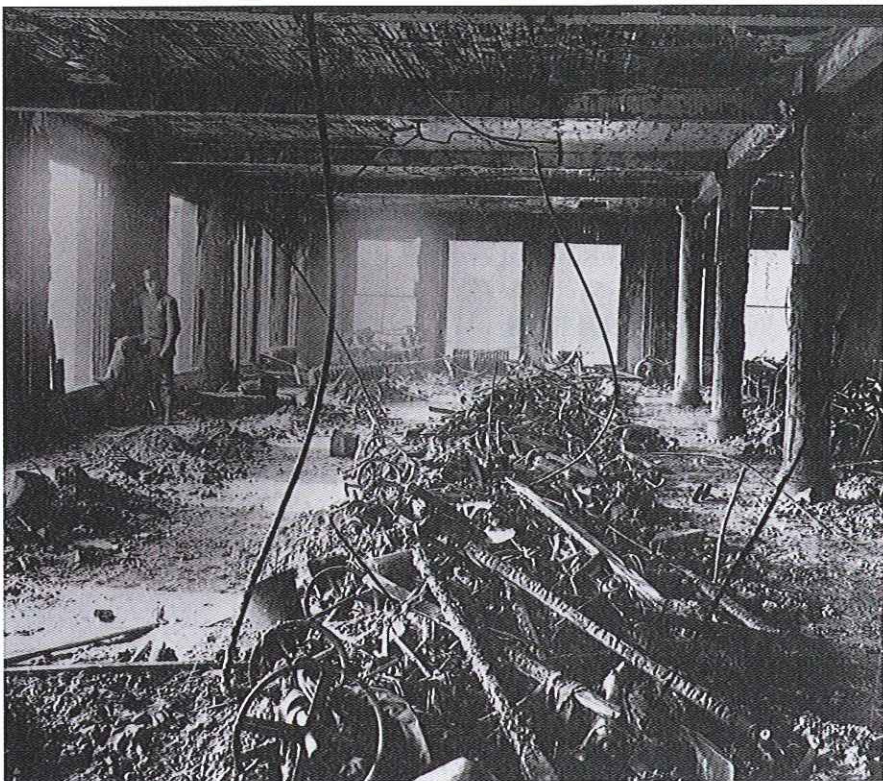
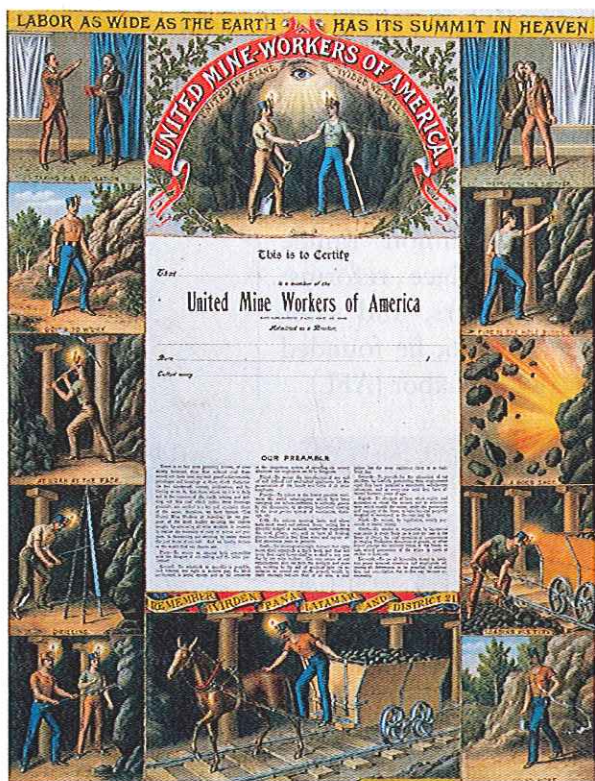
| Year | Event |
|-------|--|
| 1869 | Knights of Labor founded |
| 1886 | 11 dead, 50 injured in Haymarket Riot, fueling anti-union sentiment |
| 1886 | Samuel Gompers founds the American Federation of Labor (AFL) |
| 1894 | Strike by Pullman railroad workers halted by courts |
| 1900 | International Ladies' Garment Workers Union (ILGWU) founded |
| 1910 | Strike by ILGWU wins pay gains, shorter workdays |
| 1911 | Fire in the Triangle Shirtwaist Company factory in New York kills 146, spurring action on workplace safety |
| 1919 | Hundreds of strikes sweep the nation, raising fears of revolution |
| 1919 | John L. Lewis becomes president of United Mine Workers by leading a successful strike |
| 1932 | Norris-La Guardia Act outlaws "yellow-dog" contracts, gives other protection to unions |
| 1935 | Wagner Act gives workers right to organize |
| 1938 | AFL splinter group becomes the independent Congress of Industrial Organizations (CIO), headed by John L. Lewis |
| 1938 | Fair Labor Standards Act creates minimum wage, bans child labor, requires overtime pay |
| 1940s | Union membership peaks at 35 percent |
| 1947 | Taft-Hartley Act allows states to pass right-to-work laws |
| 1955 | AFL and CIO merge to create AFL-CIO |
| 1960s | Government employees begin to organize |
| 1962 | Cesar Chavez begins organizing the first farmworkers' union, which eventually establishes the first labor agreement with growers |
| 1970s | Rise in anti-union measures by employers |
| 2000s | Increase in public-sector unions; decline in overall union membership |

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The American labor movement had its roots in the 1800s, when the rise of factories led to difficult and dangerous working conditions. **Economic Institutions** Describe the relationship shown here between labor laws and union membership in the 1900s.



▲ At left, this poster of the United Mine Workers union, founded in 1890, celebrates its efforts to secure fair pay, safe working conditions, and other benefits for mine workers. The photograph at right shows the aftermath of the Triangle Shirtwaist Factory fire of 1911 in which 146 workers died. The tragedy brought national attention to the issues of workplace safety and workers' rights.

Employer Resistance

Attempts to unionize brought swift responses from employers. Viewing strikers as threats to free enterprise and social order, companies identified and fired union organizers. They forced workers to sign so-called yellow-dog contracts, agreements in which workers promised not to join a union. (*Yellow* was slang for “coward.”) Companies also used court orders called *injunctions* to order striking employees back to work. Some companies hired their own private militias to harass union organizers.

Congressional Protections

As the nation struggled through the effects of the Great Depression in the 1930s, Congress took up the labor cause, passing a number of pro-union measures. The expansion of workers' rights in the 1930s contributed to a new rise in union strength. Membership peaked in the 1940s at about 35 percent of the nation's non-farm work force.

Unions became a dominant force in many industries. They controlled the day-to-day operations of businesses from shipyards to garbage collection to steel production. Unions amassed billions of dollars in union dues to cover the costs of union activities including organizing, making political donations, and providing aid to striking workers.

Decline of the Labor Movement

As they grew, some unions began to abuse their new power. Some sought to preserve outdated and inefficient production methods in order to protect jobs and benefits. As you read in Section 2, sometimes unions even negotiated to preserve job positions that were really unnecessary—called “featherbedding”—in order to keep more union members employed.

As a result, companies that badly needed to improve efficiency to stay competitive found that unions could be an obstacle.

The reputation of unions suffered further because of their links to organized crime. Corrupt crime bosses gained a foothold in many local unions and used union funds to finance illegal operations. In time, corruption reached the very top of major unions, including the Teamsters, the nation's largest union by 1940.

"Right to Work" Laws

In an effort to curb union power, Congress passed the Taft-Hartley Act in 1947. This act allowed states to pass **right-to-work laws**, measures that ban mandatory union membership. Today, most right-to-work states are in the South, which has a lower level of unionism than other regions.

Right-to-work laws may be one of several reasons for a decline in union

membership in recent decades. By 2002, union membership had dropped to just 13.2 percent of the labor force.

Today, unionism in the United States is far more limited than in many other countries. For example, organized labor does not have its own political party, such as Great Britain's Labour Party, which holds top positions in government.

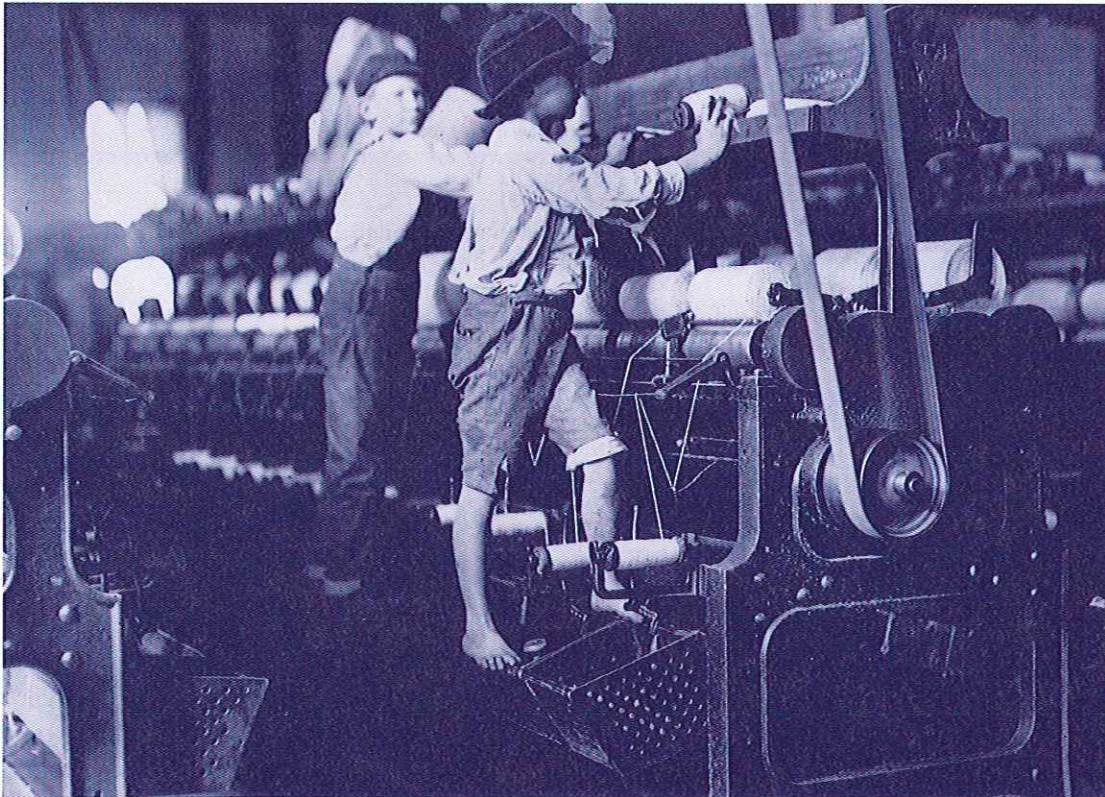
Loss of Traditional Strongholds

One theory for the decline of unions suggests that structural changes in the U.S. economy have reduced union membership. The charts in Figure 9.13 illustrate these influential economic trends. For example:

1. Unions have traditionally been strongest in the manufacturing sector. This sector has a high proportion of **blue-collar workers**, those who work in industrial jobs, often in manufacturing, and who

right-to-work law a measure that bans mandatory union membership

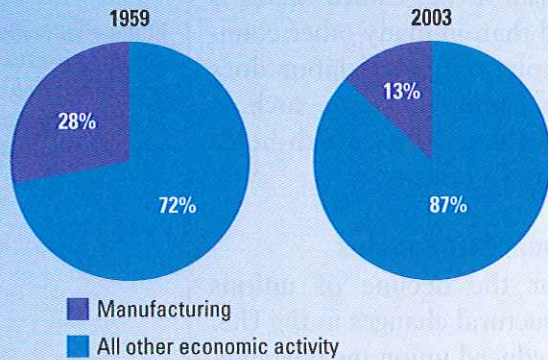
blue-collar worker someone who works in an industrial job, often in manufacturing, and who receives wages



▲ In loud, dirty factories, young children were once forced to work long hours in hazardous conditions. The boys in this photo of a Georgia cotton mill, taken between 1908 and 1912, were so small they had to climb onto the machinery. Pressure from unions helped win passage of the 1938 Fair Labor Standards Act, which made most forms of child labor illegal.

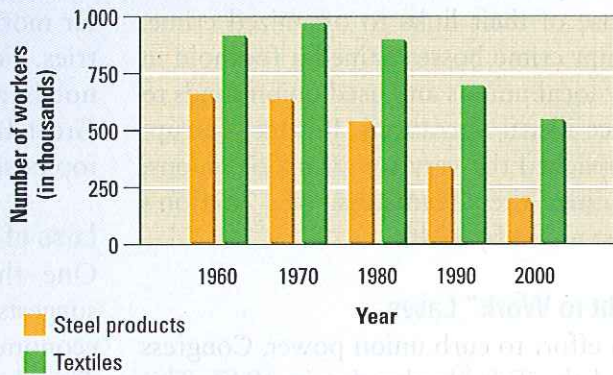
Figure 9.13 U.S. Economic Changes That Have Affected Unions

A U.S. Economic Activity as Percent of GDP, 1959 and 2003



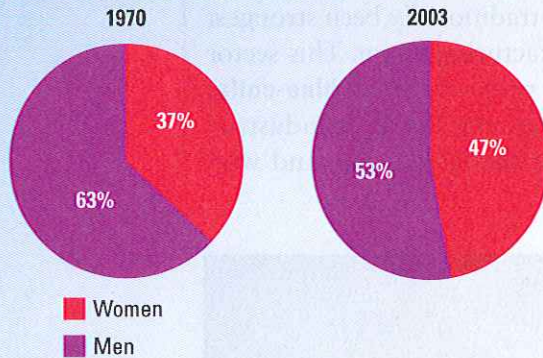
Source: *Economic Report of the President* 2004 and 2005

B Employment in Key Union Industries, 1960–2000



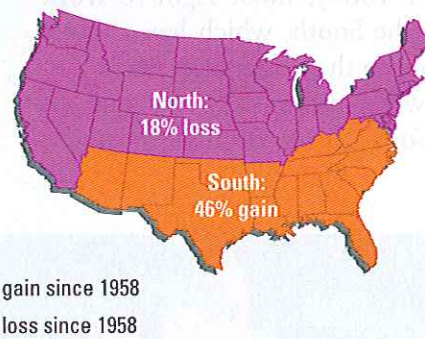
Source: U.S. Department of Labor

C Gender Makeup of the U.S. Labor Force, 1970 and 2003



Source: *Statistical Abstract of the United States*

D Manufacturing Job Migration, 1958 to 1998



Source: U.S. Department of Labor



These charts show changes in industry and in the labor force that have lessened the strength of unions. **Incentives** Identify the change indicated in each chart and explain how it affected union membership.

white-collar worker
someone in a professional or clerical job who usually earns a salary

receive wages. Blue-collar manufacturing jobs have been declining, as shown in Chart A in Figure 9.13, causing union jobs to disappear.

Unions are weakest in white-collar professions. A **white-collar worker** is someone in a professional or clerical job who usually earns a salary. White-collar employment—traditionally nonunion—is on the rise partly because of jobs in high technology companies.

- Certain manufacturing industries, such as automobiles, steel, and textiles, have traditionally employed large numbers of union workers. (See Chart B in Figure

9.13.) These industries have been hurt by foreign competition in recent years. As a result, many industries have laid off union workers. Some have shifted operations to countries where labor is cheaper.

- The rising proportion of women in the labor force (see Chart C in Figure 9.13) has affected union membership, since women are less likely to join unions. Fewer women work in blue-collar, unionized industries than in white-collar jobs.
- Seeking to reduce their production costs, some industries have relocated from the

Figure 9.14 Union Membership, 1930–2003



Source: Bureau of Labor Statistics

Northeast and Midwest to the South, which has historically been less friendly to unions. (See Chart D in Figure 9.13.) In fact, some firms may have moved to the South in part because of the decreased union activity there.

Another theory for union decline is that other organizations now provide many of the services that had been won in the past through union activity. Thus, the need for unions has decreased. For example, the government has passed laws setting workplace safety standards and a shorter workweek. It provides unemployment insurance and Social Security. More corporations now offer benefits such as medical insurance and pension plans.

While overall union membership is on the decline, public sector unionization has increased, due to new laws and changing attitudes in the 1960s and 1970s. Thus, over the last few decades, growth of unions among governmental employees has partially made up for losses in the private sector.

Labor and Management

A union gains the right to represent workers at a company when a majority of workers in a particular work unit vote to accept the union. After that, the company is required by law to bargain with the union in good faith to negotiate an employment contract.

Collective Bargaining

Picture a room, a table, and, on each side, a team of lawyers and trained negotiators determined to get what they want—or at least part of it. This is **collective bargaining**, the process in which union and company representatives meet periodically to negotiate a new labor contract.

Union contracts generally last two to five years and can cover hundreds of issues. The resulting contract spells out each side's rights and responsibilities for the length of the agreement.



Union membership reached its peak in the 1940s.
Competition What is the trend in union membership today?

Generally the union comes to the bargaining table with certain goals that set the agenda for collective bargaining talks. Let's examine those goals.

- **Wages and Benefits.** The union negotiates on behalf of all members for wage rates, overtime rates, planned raises, and benefits. In seeking higher wages, the union is aware that if wages go too high, the company may lay off workers to reduce costs.
- **Working Conditions.** Safety, comfort, worker responsibilities, and many other workplace issues are negotiated and written into the final contract.
- **Job Security.** One of the union's primary goals is to secure its members' jobs, so the contract spells out the conditions under which a worker may be fired.

If a union member is discharged for reasons that the union believes to be in violation of the contract, the union might file a grievance, or formal complaint. The union contract specifies how grievances will be handled. The procedure usually involves hearings by a committee of union and company representatives.

collective bargaining
the process in which union and company representatives meet to negotiate a new labor contract

mediation a settlement technique in which a neutral mediator meets with each side to try to find a solution that both sides will accept

arbitration a settlement technique in which a third party reviews the case and imposes a decision that is legally binding for both sides

Strikes and Settlements

When a contract is about to expire, or when the union is negotiating its first agreement with a company, the negotiators can wind up in tough late-night bargaining sessions. Most of the time, the parties manage to reach an agreement. But when a deadlock occurs, tensions escalate.

The union may ask its members to vote on whether to strike. A strike is the union's ultimate weapon. A strike, particularly a lengthy one, can cripple a company. Some firms can continue to function by using managers to perform key tasks, or by hiring nonunion "strikebreakers." If a company can withstand a strike, it is in a good bargaining position. Most firms, however, cannot produce goods and services without their union workers.

A long strike can also be devastating to workers, since they do not get paid while they are not working. Many unions provide some financial aid to their members during lengthy strikes, but the payments are generally much smaller than what the members would have earned while working.

To avoid the economic losses of a strike both to workers and management, a third party is sometimes called in to settle a dispute. The two sides might agree to **mediation**, a settlement technique in which a neutral mediator meets with each side to try to find a solution that both sides will accept. A mediator often can help each side understand the other's concerns, leading to an agreement. However, the decision reached by the mediator is nonbinding—that is, neither side is required to accept it. If mediation fails, the talks may go into **arbitration**, a settlement technique in which a neutral third party reviews the case and imposes a decision that is legally binding for both sides.

The collective bargaining process usually goes smoothly, with few strikes. It may seem as though workers strike frequently since strikes are often front-page news when they do occur.

In 2004, there were 17 major strikes, involving about 171,000 workers. Keep in mind that this number involved only a small fraction of the nation's work force, however.

Section 3 Assessment

Key Terms and Main Ideas

1. What are some of the key goals of labor unions?
2. How are **strikes** damaging to workers and companies?
3. What is a **right-to-work law**?
4. How do **mediation** and **arbitration** differ?
5. How do **blue-collar workers** and **white-collar workers** differ in the types of work they perform? Give examples of each.

Applying Economic Concepts

6. **Critical Thinking** Create a time line in which you trace the history of labor unions in the United States from the 1800s to the present.
7. **Decision Making** In recent years, some manufacturing firms have moved their factories to countries where nonunion labor is cheap. The companies say they need to make such moves to reduce costs and compete with

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foreign companies. American unions have fiercely opposed the cuts in American jobs, saying companies must care for their workers. Which side would you support if you were (a) a U.S. worker; (b) a consumer; (c) an investor in the company? Explain your reasoning for each response.

8. **Critical Thinking** Turn to the graph on page 233 showing Union Membership, 1930–2004. Give reasons to explain the rise and fall of union membership shown on the graph.

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The Paterson Silk Strike of 1913

In the early years of the twentieth century, the city of Paterson, New Jersey, was a major industrial center best known for the production of silk cloth. Thousands of people worked in the Paterson silk mills, many of them recent immigrants from countries such as Italy, Germany, and Poland.

Innovation The workers in the silk mills had a variety of different tasks with different machines. Much of this was work that in the past had been done by hand. However, increasing technological progress made it possible for the mills to produce more cloth with fewer workers. In 1912, the mill owners began using a new loom that needed less attention from operators. They required each loom operator to run four looms instead of two. The workers recognized that this innovation would lead to lower wages and fewer jobs.

Organized Labor In response, 800 employees at the Doherty Silk Mill went on strike in January of 1913. The workers at the other silk mills in Paterson joined them. By the end of the week, over 25,000 employees from 300 different factories were on strike.

A labor strike depends on union solidarity from all workers. A strike succeeds as a negotiating tool when it forces the company to stop producing altogether. Guided by a union representative, the Paterson union leaders held mass rallies daily and provided social and financial support to the strikers and their families in order to keep everyone involved in the strike.

The End of the Strike While the strike effectively shut down silk production in Paterson for several months, workers failed to get mill owners to listen to their demands. The Paterson police were more aggressive about arresting protesters than police in other cities had been, so labor unions spent more than they had expected on bail and legal costs. Some union representatives staged a massive fundraiser in June at Madison Square Garden in New York City. More than 1,000 striking workers participated in a dramatic re-enactment of key events in the strike. The Paterson Strike Pageant, as the fundraiser was called, drew a lot of attention but did not raise the money the unions needed.

In July, just as the unions were running out of money, mill owners broke the strike by offering settlements to workers at some of the plants. Their tactic turned the striking workers against each other at a difficult time. The strike officially ended in late July, and the workers all returned to the silk mills without having received any of their demands.

Applying Economic Ideas

1. Why was it so difficult for the mill owners to reach an agreement with the mill workers?
2. Did the union leaders make any mistakes that caused their strike to be less successful than other strikes?

▼ Pageant poster



Chapter 9 Assessment

Chapter Summary

A summary of major ideas in Chapter 9 appears below. See also the Guide to the Essentials of Economics, which provides additional review and test practice of key concepts in Chapter 9.

Section 1 Labor Market Trends (pp. 211–217)

The **labor force** is all nonmilitary people who are employed or unemployed. As America becomes more of a service economy, employers are hiring more college graduates and women. **Contingent employment** is on the rise. The **learning effect** and the **screening effect** help to raise wages for college graduates. Other labor trends include decreasing wages in some jobs and rising costs of employee benefits.

Section 2 Labor and Wages (pp. 219–226)

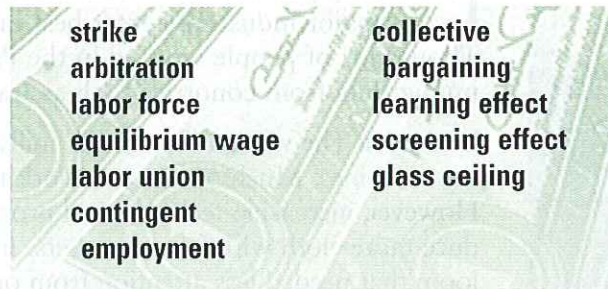
In a competitive labor market, laws of supply and demand determine wages based on how much a worker produces. At **equilibrium wage** there is neither an excess demand for labor nor an excess supply of labor. Historically, wage rates have been affected by workplace conditions, discrimination, and union **featherbedding**.

Section 3 Organized Labor (pp. 228–234)

Labor unions began in the mid-1800s. Using **strikes** to gain better wages and working conditions, unions made great gains in the mid-1900s. **Right-to-work laws** and other anti-union measures have curbed union influence. Unions and management engage in **collective bargaining**. Some disputes are resolved through **mediation** or **arbitration**.

Key Terms

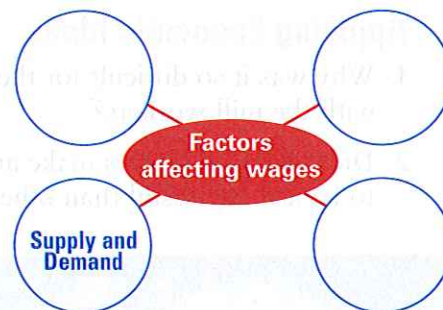
Complete each sentence by choosing the correct answer from the list of terms below. You will not use all of the terms.



1. In the _____ process, a third party reviews a case and renders a legally binding decision.
2. The _____ is the theory that the completion of college tells employers that a job applicant is reasonably intelligent and hard-working.
3. An organized work stoppage intended to force an employer to address union demands is called a(n) _____.
4. The _____ consists of all nonmilitary people that are employed or unemployed.
5. The _____ is an unofficial, invisible barrier that prevents some women and minorities from advancing to top-level corporate positions in businesses dominated by white men.
6. The wage rate that produces neither a surplus nor a shortage of workers in the labor market is called the _____.
7. The use of temporary and/or part-time workers instead of permanent, full-time employees is known as _____.

Using Graphic Organizers

8. On a separate sheet of paper, copy the web map below. Then fill in the ovals with examples of factors that affect wage rates.



Reviewing Main Ideas

- Who does the government include in its definition of the labor force?
- What is a labor union?
- Describe how collective bargaining works.
- Why is the equilibrium wage high for some workers and low for others?
- Why is the United States producing fewer goods and more services?
- How do wage increases affect the demand for and supply of labor?
- How does discrimination affect wages?
- How does education affect wages?

Critical Thinking

- Predicting Consequences** How might technological changes affect labor demand in the future? Give specific examples.
- Drawing Conclusions** Reread the Fast Fact on page 212 describing how the invention of a punch card tabulator sped up data analysis after the 1880 Census. (a) What types of information related to labor might the new tabulator have helped to analyze? (b) Give other examples of types of economic information available as a result of technological innovations.
- Analyzing Information** Describe the reasons why companies are turning to contingent labor. How might this trend affect the work force in the future?

Problem-Solving Activity

- Suppose you are a business owner competing for employees in a tight labor market. How might you attract employees without raising wages?

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Essay Writing Review your interview of an older adult. Interview a young adult about his or her job, or compare your own job experience to that of your interview subject. Write an essay describing your impressions of how the workplace has changed over the years.

Skills for Life

Analyzing Statistics Review the steps shown on page 218; then answer the following questions using the statistics in the table below.

- What is the source of these statistics?
- What is being shown by these data?
- According to the table, who has the lower earnings, a man without a college education or a woman without a college education?
- Which category of worker shown has the lowest percentage of low-wage employment?
- Which category of worker shown has the highest percentage of low-wage employment?

| Education and Employment | | |
|--------------------------|------------------------|----------------------|
| Adult men, ages 25 – 54 | | |
| | No low-wage employment | Low-wage* employment |
| College or more | 90.6% | 9.4% |
| High school or less | 70% | 30% |

| Adult women, ages 25 – 54 | | |
|---------------------------|------------------------|----------------------|
| | No low-wage employment | Low-wage* employment |
| College or more | 83.1% | 16.9% |
| High school or less | 57.9% | 42.1% |

*average hourly earnings below \$5.70
Source: U.S. Census Bureau

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As a final review, take the Economics Chapter 9 Self-Test and receive immediate feedback on your answers. The test consists of 20 multiple-choice questions designed to test your understanding of the chapter content.

THE WALL STREET JOURNAL.

CLASSROOM EDITION

DEBATING CURRENT ISSUES: *Minimum Wage*

In the U.S., the federal minimum wage is \$5.15 an hour. In this debate from *The Wall Street Journal Classroom Edition*, Kevin A. Hassett, director of economic policy studies at the American Enterprise Institute for Public Policy Research, and Jeff Chapman, a policy analyst with the Economic Policy Institute, argue whether the minimum wage should be raised—or abolished.

YES *Should the Minimum Wage Be Raised?*

BY JEFF CHAPMAN

The minimum wage is a simple, fair policy with broad public support that protects workers from exploitation and increases the ability of working families to make ends meet. Despite the effectiveness of the minimum wage, the federal government has failed to raise the minimum wage regularly to account for the rising cost of living.

A strong minimum wage provides income to families who need it the most. More than one-third of families with workers who would benefit from an increase in the minimum wage rely solely on the earnings of those workers. The result of the declining value of the minimum wage has been stagnating or even falling wages.

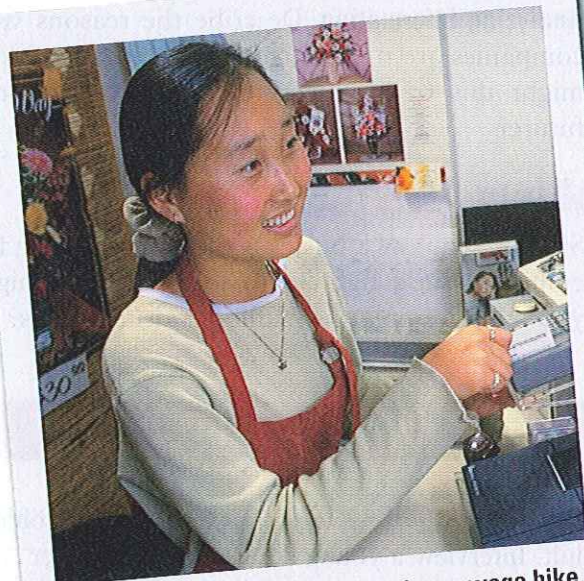
A class in beginning economics teaches that market forces set wages and prices very efficiently. But low-wage workers don't have the option of not working if employers aren't willing to pay enough to match the market equilibrium. They have to work to survive, while employers have considerable leeway in setting wages, especially for low-wage workers. Thus, without a high enough minimum, employers will often set wages below the actual value of the work and in violation of basic fairness.

Some have claimed that the minimum wage is unfair because it prevents some willing laborers from working for less than the minimum wage. In fact, the minimum wage only prevents low-wage employers from exploiting the fact that many workers do not have

the market power required to negotiate a fair wage.

Another frequent claim by opponents of the minimum wage is that it will cause workers to lose their jobs, because it increases the employer's costs. But since employers are often paying a wage that is less than the labor is worth to them, the minimum wage does not cause employers to lay off workers. For instance, if an hour's labor is worth \$8 to the employer, but he can get a worker to work for \$3, that worker will still be employed if the minimum wage was set at \$6.

Years of research has shown that the minimum wage does exactly what it is intended to do. It corrects an imbalance of power and raises the living standards of working families.



According to proponents of a minimum wage hike, people with few job skills would benefit most from an increase.

NO *Should the Minimum Wage Be Raised?*

By KEVIN A. HASSETT

The minimum wage is a terrible and counterproductive policy. While it may appear that the minimum wage helps the poor, it does not.

The case against the minimum wage is based on simple economics and mounds of scientific evidence. Suppose that you run a small factory that makes hammers. You employ a large number of minimum-wage workers, and sell your product around the world. If the minimum wage is increased, then your costs increase. In response to this increase, you will have to raise the price that you charge for your product. Since your price for hammers is now higher, other manufacturers in states or countries that have not raised their minimum wages find that their hammers are suddenly cheaper than yours. Their sales go up, and yours go down. With sales down, you are forced to lay off workers.

This scenario describes the cycle that has been observed by economists who study minimum wages. While some minimum-wage workers receive higher pay, others lose their jobs entirely, and the number of people living in poverty likely increases.

The minimum wage denies individuals opportunities they may desire. Think of it this way: If you asked your parents to allow you to take a summer job and they replied that you could, but only if you found a job that paid you at least \$15 an hour, you might think that their requirement is unfair. They are not allowing you to decide to work for someone unless you find

an employer willing to pay you a salary that they think is fair. Shouldn't you get to make up your own mind about that? The same is true when the government sets high minimum wages. By doing so, government takes away opportunity, especially for disabled individuals and first-time workers.

Some people have expressed concern that employers may set wages unfairly low. But in a competitive marketplace, employers must compete to attract workers. Those who pay wages that are too low will lose workers and business to employers that pay wages based on the productivity of the individuals they hire.

Value of the Minimum Wage, 1980–2004

| Year | Nominal Dollars* | 1996 Dollars** |
|------|------------------|----------------|
| 1980 | 3.10 | 5.90 |
| 1982 | 3.35 | 5.45 |
| 1984 | 3.35 | 5.06 |
| 1986 | 3.35 | 4.80 |
| 1988 | 3.35 | 4.44 |
| 1990 | 3.80 | 4.56 |
| 1992 | 4.25 | 4.75 |
| 1994 | 4.25 | 4.50 |
| 1996 | 4.75 | 4.75 |
| 1998 | 5.15 | 4.96 |
| 2000 | 5.15 | 4.69 |
| 2002 | 5.15 | 4.49 |
| 2004 | 5.15 | 4.28 |

* Face-value dollars ** Dollars adjusted for inflation

Source: Bureau of Labor Statistics

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Even though the minimum wage has risen, its value has not increased because of inflation.

DEBATING THE ISSUE

1. Why does Jeff Chapman think market forces alone can't set the price for labor effectively?
2. What evidence does Kevin Hassett offer to prove that minimum wage increases affect unemployment? Would you agree that the minimum wage denies workers the opportunity to earn a living?
3. **Critical Thinking** Based on this debate, what role do you think government should have in ensuring that workers earn a "living wage"?
4. **Drawing Conclusions** Explain why you agree or disagree with Hassett: "While it may appear that the minimum wage helps the poor, it does not."
5. **Reading Graphs** Between 1980 and 2004, how much has the minimum wage increased in nominal dollars? What is the percentage increase between 1980 and 2004 in nominal dollars?

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