## CHAPTER 9: SECTION 1 What Determines Wages?

## Supply and Demand in the Labor Market

- The price of labor is called the wage rate. (See Transparency 9-1.)
- The demand curve for labor slopes downward. As the number of workers increases, the wage rate decreases.
- In contrast, the supply curve for labor slopes upward. As the wage rate increases, more people are willing and able to work.


## TRANSPARENCY 9-1: Supply and Demand Determine Wages

## The supply of labor



The demand for labor


## How the Equilibrium Wage Rate Is Established

- The equilibrium wage rate is the wage at which the quantity demanded of labor equals the quantity supplied of labor. (See Transparency 9-2(a).)
- When the quantity supplied of labor is greater than the quantity demanded, there is a surplus of labor and wage rates fall. (See Transparency 9-2(b).)
- When the quantity demanded of labor is greater than the quantity supplied, there is a shortage of labor and wage rates rise. (See Transparency 9-2(c).)


## TRANSPARENCY 9-2: Finding the Equilibrium Wage Rate



Wages settle at the point where demand and supply meet, or at the equilibrium wage rate.

## Why Do Some People Earn More than Others?

- Wage rates may differ because the supply of different types of labor is not the same. They may also differ because the demand for different types of labor is not the same.
Are Money Benefits the Only Thing That Matters?
- A higher income is not the only thing that matters to people.
- Other influences include coworkers, distance between home and work, hours worked per week, and vacation time.


## The Demand for a Good and Wage Rates

- If demand for a product decreases, then demand for employees to produce that product will also decrease. This is how derived demand works. Derived demand is demand that is the result of some other demand.


## What Will You Earn?

- Wage rates for different occupations vary. (See Transparency 9-3.)
- Your wage rate (and salary) will depend on a number of things. One is the demand for your labor services.
- Two factors will make the demand for your labor services high:
- The demand for the good you produce.


## TRANSPARENCY 9-3: Occupational Outlook

Growth rate (\%)during the period
Occupation ..... 2002-2012
Medical assistants ..... 59
Network systems and data communications analysts ..... 57
Physician assistants ..... 49
Social and human service assistants ..... 49
Home health aides ..... 48
Medical records and health information technicians ..... 47
Physical therapist aides ..... 46
Computer software engineers, applications ..... 46
Computer software engineers, systems software ..... 45
Physical therapist assistants ..... 45

- Your productivity. Your productivity can be influenced by many factors, such as natural ability, education, and training.
- Demand is not the only factor influencing your potential earnings. The supply of qualified people also helps determine wages.


## Government and the Minimum Wage

- The minimum wage law is a federal law that specifies the lowest hourly wage rate that can be paid to workers. This law was originally passed during the Great Depression. At that time, it established a minimum wage of 25 cents an hour. In 2005 , the minimum wage was $\$ 5.15$ an hour.
- The minimum wage rate may be higher or lower than the equilibrium wage rate for a particular area or occupation.


## Two Types of Wages: Money and Real

- Measuring a person's wage rate in terms of money gives us the person's money wage, or nominal wage. We usually refer to this rate as a dollar amount per hour, such as $\$ 9$ per hour.
- Measuring a person's wage rate in terms of what it buys gives us the person's real wages.
- A person's money wage can rise while his or her real wage falls. This happens when the price of goods and services increases more than wages.
- The government measures the "average price" of the variety of goods that people usually buy. This average price is called a price index.
- One well-known index is the Consumer Price Index (CPI). The CPI is computed annually.
- You can find your real wage for a given year by dividing your money wage by the CPI. (See Transparency 9-4.)
- Suppose you made $\$ 7$ per hour last year, and the CPI was 120. Your real wage last year was 5.8 percent of one unit of a composite good.


## TRANSPARENCY 9-4: Two Types of Wages

$$
\text { Real wage }=\frac{\text { Money wage }}{\text { CPI }}
$$

Compare: Last year's money wage was \$7.

$$
\text { CPI was } 120 .
$$

$$
\text { Real wage }=\frac{\$ 7}{120}=0.058, \text { or } 5.8 \% .
$$

Compare: This year's money wage is $\$ 9$.

$$
\begin{aligned}
& \text { CPI is } 170 . \\
& \text { Real wage }=\frac{\$ 9}{170}=0.053 \text {, or } 5.3 \% \text {. }
\end{aligned}
$$

Even though your money wage increased this year, your real wage decreased because the average cost of the CPI basket of goods increased by such a large amount.

- Now suppose you have received a promotion and you are making $\$ 9$ per hour this year. But the CPI has also risen; this year it is 170 . Your real wage this year is 5.3 percent of one unit of a composite good.
- Even though your wages increased from $\$ 7$ to $\$ 9$ per hour, your real wage decreased from 5.8 percent to 5.3 percent.

