LABOR, EMPLOYMENT AND WAGES

Chapter 9
SECTION 1

What Determines Wages?

Supply and Demand in the Labor Market

- Supply and demand can be used to analyze how we determine the price of a resource (factor of production), such as labor.
- In this market, the people who “demand” labor are employers and the people who “supply” labor are employees.
- The price of labor is called the wage rate.
  - The demand curve for labor slopes downward. Employers will be willing and able to hire more people at lower wage rates than at higher wage rates.
  - In contrast, the supply curve for labor slopes upward. More people will be willing and able to work at higher wage rates than at lower wage rates.
Supply and Demand Determine Wages

The demand for labor

The supply of labor

Number of workers

Number of workers employers are willing and able to hire at $10 per hour

Number of workers employers are willing and able to hire at $7 per hour

Number of workers

Number of workers willing and able to work at $7 per hour

Number of workers willing and able to work at $10 per hour
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.

- When the quantity supplied of labor is greater than the quantity demanded, there is a surplus of labor and wage rates fall.
  - Quantity supplied of labor > Quantity demanded of labor = a surplus of labor
  - A surplus of labor = wage rates fall

- When the quantity demanded of labor is greater than the quantity supplied, there is a shortage of labor and wage rates rise.
  - Quantity demanded of labor > Quantity supplied of labor = a surplus of labor
  - A shortage of labor = wage rates rise
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 rate = how much a person earns on an **hourly** basis
- Wage rates may differ because...
  - The **supply** of different types of labor is not the same.
  - The **demand** for different types of labor is not the same.

- Average hourly earning of workers in different industries...
  - Construction = $18.95
  - Manufacturing = $15.74
  - Financial activities = $17.13
  - Leisure and hospitality = $8.76
  - Business and professional services = $17.20
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.
- Benefits in a job =
  - Monetary benefits (income) + Nonmoney benefits
- Each of us needs to make a **decision** as to what is important to us when choosing a job
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.

- **Derived demand** is demand that is the result of some other demand.
What Will You Earn?

- Wage rates for different occupations vary.
- 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.
  - Your productivity. Your productivity can be influenced by many factors, such as natural ability, effort, quality and length of education and training.
- Demand is not the only factor influencing your potential earnings. The supply of qualified people also helps determine wages. High wages are the result of high demand combined with low supply.
## Occupational Outlook

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Growth rate (%) during the period 2002–2012</th>
</tr>
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<tbody>
<tr>
<td>Medical assistants</td>
<td>59</td>
</tr>
<tr>
<td>Network systems and data communications analysts</td>
<td>57</td>
</tr>
<tr>
<td>Physician assistants</td>
<td>49</td>
</tr>
<tr>
<td>Social and human service assistants</td>
<td>49</td>
</tr>
<tr>
<td>Home health aides</td>
<td>48</td>
</tr>
<tr>
<td>Medical records and health information technicians</td>
<td>47</td>
</tr>
<tr>
<td>Physical therapist aides</td>
<td>46</td>
</tr>
<tr>
<td>Computer software engineers, applications</td>
<td>46</td>
</tr>
<tr>
<td>Computer software engineers, systems software</td>
<td>45</td>
</tr>
<tr>
<td>Physical therapist assistants</td>
<td>45</td>
</tr>
</tbody>
</table>
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. As of 2009, the minimum wage is $7.25 an hour.

- Individual **states** can set their minimum wage higher than the federal rate.

- The minimum wage rate may be higher or lower than the **equilibrium** wage rate for a particular area or occupation.

- When Congress changes the minimum wage, it may have the **unintended** effect of increasing **unemployment** because employers will be willing and able to hire fewer workers.
Minimum Wage in the United States, 1960-2014
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.

- Real wage is more important than money wage because it measures what we can do with the money wage we receive.
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.

- 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.

- 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.
Two Types of Wages

Real wage = \( \frac{\text{Money wage}}{\text{CPI}} \)

**Compare:** Last year’s money wage was $7.  
CPI was 120.  
Real wage = \( \frac{7}{120} = 0.058 \), or 5.8%.

**Compare:** This year’s money wage is $9.  
CPI is 170.  
Real wage = \( \frac{9}{170} = 0.053 \), or 5.3%.

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.