In this chapter, look for the answers to these questions:

- How is unemployment measured?
- What is the “natural rate of unemployment”?
- Why are there always some people unemployed?
- How is unemployment affected by unions and minimum wage laws?
- What is the theory of efficiency wages, and how does it help explain unemployment?

**IDENTIFYING UNEMPLOYMENT**

- How Is Unemployment Measured?
  - Categories of Unemployment
    - The problem of unemployment is usually divided into two categories, the long-run problem and the short-run problem.
    - The natural rate of unemployment
    - The cyclical rate of unemployment

**How is Unemployment Measured?**

- Describing Unemployment: Three Basic Questions
  - How does government measure the economy’s rate of unemployment?
  - What problems arise in interpreting the unemployment data?
  - How long are the unemployed typically without work?

- Natural Rate of Unemployment
  - The natural rate of unemployment is unemployment that does not go away on its own even in the long run.
  - It is the amount of unemployment that the economy normally experiences.

- Cyclical Unemployment
  - Cyclical unemployment refers to the year-to-year fluctuations in unemployment around its natural rate.
  - It is associated with short-term ups and downs of the business cycle.

- Unemployment is measured by the Bureau of Labor Statistics (BLS).
  - It surveys 60,000 randomly selected households every month.
  - The survey is called the Current Population Survey.
  - Based on the answers to the survey questions, the BLS places each adult into one of three categories:
    - Employed
    - Unemployed
    - Not in the labor force
How Is Unemployment Measured?

- Employed vs. unemployed
  - The BLS considers a person an adult if he or she is over 16 years old.
  - A person is considered employed if he or she has spent some of the previous week working at a paid job.
  - A person is unemployed if he or she is on temporary layoff, is looking for a job, or is waiting for the start date of a new job.
  - A person who fits neither of these categories, such as a full-time student, homemaker, or retiree, is not in the labor force.

- Labor Force
  - The labor force is the total number of workers, including both the employed and the unemployed.
  - The BLS defines the labor force as the sum of the employed and the unemployed.

- The unemployment rate is calculated as the percentage of the labor force that is unemployed.

Unemployment rate = \( \frac{\text{Number unemployed}}{\text{Labor force}} \times 100 \)

- The labor-force participation rate is the percentage of the adult population that is in the labor force.

Labor force participation rate = \( \frac{\text{Labor force}}{\text{Adult population}} \times 100 \)

Calculate labor force statistics

Compute the labor force, u-rate, adult population, and labor force participation rate using this data:

<table>
<thead>
<tr>
<th>Adult population of the U.S. by group, January 2006</th>
</tr>
</thead>
<tbody>
<tr>
<td># of employed</td>
</tr>
<tr>
<td># of unemployed</td>
</tr>
<tr>
<td>not in labor force</td>
</tr>
</tbody>
</table>
Answers

Labor force = employed + unemployed
= 143.1 + 7.0 = 150.1 million

U-rate = 100 x (unemployed)/(labor force)
= 100 x 7.0/150.1 = 4.7%

Population = labor force + not in labor force
= 150.1 + 77.4 = 227.5

LF partic. rate = 100 x (labor force)/(population)
= 100 x 150.1/227.5 = 66.0%

Table 1 The Labor-Market Experiences of Various Demographic Groups

<table>
<thead>
<tr>
<th>Demographic Group</th>
<th>Unemployment Rate</th>
<th>Labor-Force Participation Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adults (ages 20 and older)</td>
<td>4.4%</td>
<td>76.2%</td>
</tr>
<tr>
<td>White, male</td>
<td>4.2</td>
<td>59.7</td>
</tr>
<tr>
<td>White, female</td>
<td>9.9</td>
<td>72.9</td>
</tr>
<tr>
<td>Black, male</td>
<td>8.9</td>
<td>64.2</td>
</tr>
<tr>
<td>Black, female</td>
<td>16.3</td>
<td>47.4</td>
</tr>
<tr>
<td>Teenagers (ages 16–19)</td>
<td>13.6</td>
<td>46.7</td>
</tr>
<tr>
<td>White, male</td>
<td>25.6</td>
<td>30.0</td>
</tr>
<tr>
<td>White, female</td>
<td>28.2</td>
<td>32.8</td>
</tr>
</tbody>
</table>

Does the Unemployment Rate Measure What We Want It To?

- It is difficult to distinguish between a person who is unemployed and a person who is not in the labor force.
- Discouraged workers, people who would like to work but have given up looking for jobs after an unsuccessful search, don’t show up in unemployment statistics.
- Other people may claim to be unemployed in order to receive financial assistance, even though they aren’t looking for work.

Exercise

In each of the following, what happens to the u-rate? Does the u-rate give an accurate impression of what’s happening in the labor market?

A. Sue lost her job, and begins looking for a new one.

u-rate rises. A rising u-rate gives the impression that the labor market is worsening, and it is.
Exercise

B. Jon has been out of work since last year, becomes discouraged, stops looking for work. Discouraged workers would like to work but have given up looking for jobs classified as “not in the labor force” rather than “unemployed.” u-rate falls, because Jon is no longer counted as unemployed. A falling u-rate gives the impression that the labor market is improving, but it is not.

Exercise

C. Sam lost his $80,000 job, and takes a part-time job at McDonald’s until he finds a better one. u-rate unchanged, because a person is “employed” whether they work full or part time. Things are worse, but the u-rate fails to show it.

Table 2 Alternative Measures of Labor Utilization

<table>
<thead>
<tr>
<th>Measure and Description</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.1 Persons unemployed 15 weeks or longer, as a percent of the civilian labor force (includes long-term unemployed)</td>
<td>1.4%</td>
</tr>
<tr>
<td>0.2 Jobs losses and persons who have completed temporary layoffs, as a percent of the civilian labor force (includes job losers)</td>
<td>2.4</td>
</tr>
<tr>
<td>0.3 Total unemployed, as a percent of the civilian labor force (official unemployment rate)</td>
<td>5.0</td>
</tr>
<tr>
<td>0.5 Relatively long-term unemployed, as a percent of the civilian labor force plus discouraged workers</td>
<td>5.3</td>
</tr>
<tr>
<td>0.6 Total unemployed plus all marginally attached workers, as a percent of the civilian labor force plus all marginally attached workers</td>
<td>6.0</td>
</tr>
<tr>
<td>0.7 Total unemployed plus all marginally attached workers, as a total employed plus all marginally attached workers</td>
<td>6.9</td>
</tr>
</tbody>
</table>

How Long Are the Unemployed without Work?

• Most spells of unemployment are short.
• Most unemployment observed at any given time is long-term.
• Most of the economy’s unemployment problem is attributable to relatively few workers who are jobless for long periods of time.

The Duration of Unemployment

• Most spells of unemployment are short:
  • Typically 1/3 of the unemployed have been unemployed < 5 weeks,
  • 2/3 have been unemployed < 14 weeks.
  • Only 20% have been unemployed > 6 months.
• Yet, most observed unemployment is long-term.
  • The small group of long-term unemployed persons has fairly little turnover, so it accounts for most of the unemployment observed over time.
  • Knowing these facts helps policymakers design better policies to help the unemployed.

Why Are There Always Some People Unemployed?

• In an ideal labor market, wages would adjust to balance the supply and demand for labor, ensuring that all workers would be fully employed.
Cyclical Unemployment vs. the Natural Rate

There's always some unemployment, though the unemployment rate fluctuates from year to year.

The natural rate of unemployment is the normal rate of unemployment around which the actual unemployment rate fluctuates.

Cyclical unemployment is the deviation of unemployment from its natural rate and is associated with business cycles.

Why Are There Always Some People Unemployed?

Frictional unemployment refers to the unemployment that results from the time that it takes to match workers with jobs.

In other words, it takes time for workers to search for the jobs that are best suited to their tastes and skills.

Structural unemployment is the unemployment that results because the number of jobs available in some labor markets is insufficient to provide a job for everyone who wants one.

Why Some Frictional Unemployment Is Inevitable

Search unemployment is inevitable because the economy is always changing.

Changes in the composition of demand among industries or regions are called sectoral shifts.

It takes time for workers to search for and find jobs in new sectors.

Government programs can affect the time it takes unemployed workers to find new jobs.

These programs include the following:

- Government-run employment agencies
- Public training programs
- Unemployment insurance

Public Policy and Job Search

Government-run employment agencies give out information about job vacancies in order to match workers and jobs more quickly.

Public training programs aim to ease the transition of workers from declining to growing industries and to help disadvantaged groups escape poverty.

Public Policy and Job Search

Unemployment insurance is a government program that partially protects workers' incomes when they become unemployed.

It offers workers partial protection against job losses.

It offers partial payment of former wages for a limited time to those who are laid off.

Unemployment insurance may increase the amount of search unemployment.

It reduces the search efforts of the unemployed.

It may improve the chances of workers being matched with the right job.
Public Policy and Job Search

• Structural unemployment occurs when the quantity of labor supplied exceeds the quantity demanded.
• Structural unemployment is often thought to explain longer spells of unemployment.
• Why is there Structural Unemployment?
  • Minimum-wage laws
  • Unions
  • Efficiency wages

MINIMUM-WAGE LAWS

• When the minimum wage is set above the level that balances supply and demand, it creates unemployment.
• The min. wage may exceed the equilibrium wage for the least skilled or experienced workers, causing structural unemployment.
• But this group is a small part of the labor force, so the min. wage can’t explain most unemployment.

Figure 4 Unemployment from a Wage Above the Equilibrium Level

UNIONS AND COLLECTIVE BARGAINING

• A union is a worker association that bargains with employers over wages, benefits and working conditions.
• In the 1940s and 1950s, when unions were at their peak, about a third of the U.S. labor force was unionized.
• A union is a type of cartel attempting to exert its market power.
• The typical union worker earns 20% higher wages and gets more benefits than a nonunion worker for the same type of work.

UNIONS AND COLLECTIVE BARGAINING

• The process by which unions and firms agree on the terms of employment is called collective bargaining.
• When unions raise the wage above equilibrium, quantity of labor demanded falls and unemployment results.
• “Insiders” – workers who remain employed, they are better off
• “Outsiders” – workers who lose their jobs, they are worse off
• Some outsiders go to non-unionized labor markets, which increases labor supply and reduces wages in those markets.

UNIONS AND COLLECTIVE BARGAINING

• A strike will be organized if the union and the firm cannot reach an agreement.
  – A strike occurs when the union organizes a withdrawal of labor from the firm.
  – A strike makes some workers better off and other workers worse off.
  – Workers in unions (insiders) reap the benefits of collective bargaining, while workers not in the union (outsiders) bear some of the costs.
  – By acting as a cartel with ability to strike or otherwise impose high costs on employers, unions usually achieve above-equilibrium wages for their members.
• Union workers earn 10 to 20 percent more than nonunion workers.
Are Unions Good or Bad for the Economy?
• Critics argue that unions cause the allocation of labor to be inefficient and inequitable.
• Wages above the competitive level reduce the quantity of labor demanded and cause unemployment.
• Some workers benefit at the expense of other workers.
• Advocates of unions contend that unions are a necessary antidote to the market power of firms that hire workers.

THE THEORY OF EFFICIENCY WAGES
• Efficiency wages are above-equilibrium wages paid by firms in order to increase worker productivity.
• The theory of efficiency wages states that firms operate more efficiently if wages are above the equilibrium level.

The Theory of Efficiency Wages
• A firm may prefer higher than equilibrium wages for the following reasons:
  – Worker health: Better paid workers eat a better diet and thus are more productive.
  – Worker turnover: A higher paid worker is less likely to look for another job.
  – Worker quality: Higher wages attract a better pool of workers to apply for jobs.
  – Worker effort: Higher wages motivate workers to put forward their best effort.

Exercise
Which of the following would be most likely to reduce frictional unemployment?
A. The govt eliminates the minimum wage.
C. A new law bans labor unions.

These are likely to reduce structural unemployment, not frictional unemployment.

Exercise
Which of the following would be most likely to reduce frictional unemployment?
B. The govt increases unemployment insurance benefits.
E. Sectoral shifts become more frequent.

These are likely to increase frictional unemployment, not reduce it.