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UNEMPLOYMENT AND ITS NATURAL RATE

LEARNING OBJECTIVES:

By the end of this chapter, students should understand:

- the data used to measure the amount of unemployment.
- how unemployment can result from minimum-wage laws.
- how unemployment can arise from bargaining between firms and unions.
- how unemployment results when firms choose to pay efficiency wages.

KEY POINTS:

1. The unemployment rate is the percentage of those who would like to work but do not have jobs. The Bureau of Labor Statistics calculates this statistic monthly based on a survey of thousands of households.
2. The unemployment rate is an imperfect measure of joblessness. Some people who call themselves unemployed may actually not want to work, and some people who would like to work have left the labor force after an unsuccessful search.
3. In the U.S. economy, most people who become unemployed find work within a short period of time. Nonetheless, most unemployment observed at any given time is attributable to the few people who are unemployed for long periods of time.
4. One reason for unemployment is the time it takes for workers to search for jobs that best suit their skills and tastes. Unemployment insurance is a government policy that, while protecting workers' incomes, increases the amount of frictional unemployment.
5. A second reason why our economy always has some unemployment is minimum-wage laws. By raising the wage of unskilled and inexperienced workers above the equilibrium level, minimum-wage laws raise the quantity of labor supplied and reduce the quantity demanded. The resulting excess supply of labor represents unemployment.
6. A third reason for unemployment is the market power of unions. When unions push the wages in unionized industries above the equilibrium level, they create an excess supply of labor.

7. A fourth reason for unemployment is suggested by the theory of efficiency wages. According to this theory, firms find it profitable to pay wages above the equilibrium level. High wages can improve worker health, lower worker turnover, increase worker effort, and raise worker quality.

CHAPTER OUTLINE:

- I. Unemployment can be divided into two categories.
 - A. The economy's natural rate of unemployment refers to the amount of unemployment that the economy normally experiences.
 - B. Cyclical unemployment refers to the year-to-year fluctuations in unemployment around its natural rate.
- II. Identifying Unemployment
 - A. How Is Unemployment Measured?
 1. The Bureau of Labor Statistics (BLS) surveys 60,000 households every month.
 2. The BLS places each adult into one of three categories: employed, unemployed, or not in the labor force.

Figure 26-1

3. Definition of **Labor Force**: the total number of workers, including both the employed and the unemployed.

$$\text{Labor force} = \text{Number of employed} + \text{Number of unemployed}$$

4. Definition of **Unemployment Rate**: the percentage of the labor force that is unemployed.

$$\text{Unemployment rate} = \left(\frac{\text{Number of unemployed}}{\text{Labor force}} \right) \times 100\%$$

5. Definition of **Labor-Force Participation Rate**: the percentage of the adult population that is in the labor force.

$$\text{Labor - force participation rate} = \left(\frac{\text{Labor force}}{\text{Adult population}} \right) \times 100\%$$

6. Example: data from 1998. In that year, there were 131.5 million employed people and 6.2 million unemployed people.
 - a. Labor Force = $131.5 + 6.2 = 137.7$ million.
 - b. Unemployment Rate = $(6.2/137.7) \times 100\% = 4.5\%$.
 - c. If the adult population was 205.2 million, the labor-force participation rate was:

$$\text{Labor-Force Participation Rate} = (137.7/205.2) \times 100\% = 67.1\%.$$

Table 26-1

Table 26-1 shows unemployment and labor-force participation rates for various sub-groups of the U.S. population.

Figure 26-2

8. Figure 26-2 shows the unemployment rate in the United States since 1960.
 - a. Women have lower labor-force participation rates than men, but have similar rates of unemployment.
 - b. Blacks have similar labor-force participation rates to whites, but have higher rates of unemployment.
 - c. Teenagers have lower labor-force participation rates than adults, but have higher unemployment rates.
- B. Definition of the **Natural Rate of Unemployment**: the normal rate of unemployment around which the unemployment rate fluctuates.
- C. Definition of **Cyclical Unemployment**: the deviation of unemployment from its natural rate.
- D. *Case Study: Labor-Force Participation of Men and Women in the U.S. Economy*
 1. There has been a dramatic rise in the labor-force participation rates of women over the past fifty years.

Figure 26-3

2. Figure 26-3 shows this rise in the labor-force participation rate of women and also reveals that the labor-force participation rates for men have actually fallen by a small amount over the same time period.
- E. Does the Unemployment Rate Measure What We Want It To?
 1. Measuring the unemployment rate is not as straightforward as it may seem.

2. There is a tremendous amount of movement into and out of the labor force.
 - a. Many of the unemployed are new entrants or reentrants looking for work.
 - b. Many unemployment spells end with a person leaving the labor force as opposed to actually finding a job.
 3. There may be individuals who are calling themselves unemployed to receive government assistance, yet they are not trying hard to find work. These individuals are more likely not a part of the true labor force, but they will be counted as unemployed.
 4. Definition of **Discouraged Workers: individuals who would like to work but have given up looking for a job.**
 - a. These individuals will not be counted as part of the labor force.
 - b. Thus, while they are likely a part of the unemployed, they will not show up in the unemployment statistics.
- F. How Long Are the Unemployed Without Work?
1. Another important variable that policymakers may be concerned with is the duration of unemployment.
 2. Most spells of unemployment are short, and most unemployment observed at any given time is long term.
- G. Why Are There Always People Unemployed?
1. In an ideal labor market, wages would adjust so that the quantity of labor supplied and the quantity of labor demanded would be equal.
 2. However, there is always unemployment even when the economy is doing well. The unemployment rate is never zero; it fluctuates around the natural rate.
 - a. Definition of **Frictional Unemployment: unemployment that results because it takes time for workers to search for the jobs that best suit their tastes and skills.**
 - b. Definition of **Structural Unemployment: unemployment that results because the number of jobs available in some labor markets is insufficient for everyone who wants a job to get one.**
 - c. Three possible reasons for structural unemployment are minimum-wage laws, unions, and efficiency wages.

III. Job Search

- A. Definition of **Job Search**: the process by which workers find appropriate jobs given their tastes and skills.
- B. Because workers differ from one another in terms of their skills and tastes and jobs differ in their attributes, it is often difficult for workers to match with the appropriate job.
- C. Why Some Frictional Unemployment Is Inevitable
 - 1. Frictional unemployment often occurs because of a change in the demand for labor among different firms.
 - a. When workers decide to stop buying a good produced by Firm A and instead start buying a good produced by Firm B, some workers at Firm A will likely lose their jobs.
 - b. New jobs will be created at Firm B, but it will take some time to move the displaced workers from Firm A to these openings.
 - c. The result of this transition is temporary unemployment.
 - d. The same type of situation can occur across industries as well.
 - 2. This implies that, because the economy is always changing, search unemployment is inevitable. Workers in declining industries will find themselves looking for new jobs, and firms in growing industries will be seeking new workers.
- D. Public Policy and Job Search
 - 1. Government programs can help to reduce the amount of search unemployment.
 - 2. These programs include:
 - a. Government-run employment agencies.
 - b. Public training programs.
 - 3. Critics of these programs argue that the private labor market will do a better job of matching workers with employers and therefore the government should not be involved in the process of job search.
- F. Unemployment Insurance
 - 1. Definition of **Unemployment Insurance**: a government program that partially protects workers' incomes when they become unemployed.
 - 2. Because unemployment insurance reduces the hardship of unemployment, it actually increases the amount of unemployment that exists.

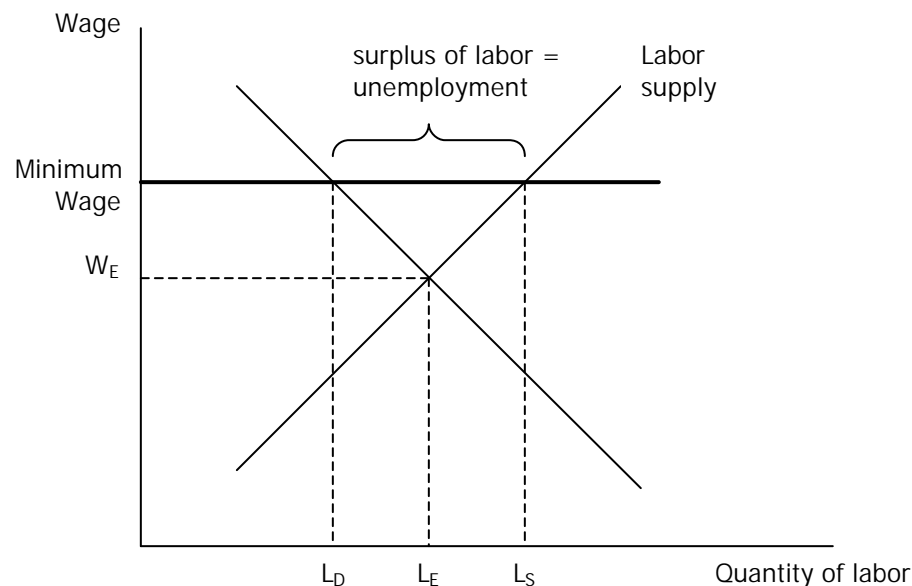
3. Several studies have shown that more generous unemployment insurance benefits lead to reduced job search effort and, as a result, more unemployment.
4. *In the News: German Unemployment*
 - a. Unemployment benefits are much more generous in Germany than they are in the United States.
 - b. This is an article from *The Boston Globe* discussing the effects of this generosity.

IV. Minimum-Wage Laws

- A. Unemployment can occur because of minimum-wage laws.

Figure 26-4

- B. The minimum wage is a price floor.
 1. If the minimum wage is set above the equilibrium wage in the labor market, a surplus of labor will occur.
 2. However, this is a binding constraint only when the minimum wage is set above the equilibrium wage.
 - a. Most workers in the economy earn a wage above the minimum wage.
 - b. Minimum-wage laws therefore have the largest effect on workers with low skill and little experience (such as teenagers).



- C. Anytime a wage is kept above the equilibrium level for any reason, the result is unemployment.
 - 1. Other causes of this situation include unions and efficiency wages.
 - 2. This situation is different from frictional unemployment where the process for the “right” job is the cause for unemployment.
- V. Unions and Collective Bargaining
 - A. Definition of **Union**: **a worker association that bargains with employers over wages and working conditions.**
 - B. Unions play a smaller role in the U.S. economy today than they did in the past. However, unions continue to be prevalent in many European countries.
 - C. The Economics of Unions
 - 1. Definition of **Collective Bargaining**: **the process by which unions and firms agree on the terms of employment.**
 - 2. Unions try to negotiate for better wages, better benefits, and better working conditions than the firm would offer if there was no union.
 - 3. Definition of **Strike**: **the organized withdrawal of labor from a firm by a union.**
 - 4. Economists have found that union workers typically earn 10 to 20 percent more than similar workers who do not belong to unions.
 - 5. This implies that unions raise the wage above the equilibrium wage, resulting in unemployment.
 - D. Are Unions Good or Bad for the Economy?
 - 1. Critics of unions argue that unions are a cartel, which causes inefficiency because fewer workers end up being hired at the higher union wage.
 - 2. Advocates of unions argue that unions are an answer to the problems that occur when a firm has too much power in the labor market (for example, if it was the only major employer in town).
 - E. *In the News: Should You Join a Union?*
 - 1. Individuals looking for jobs may have to consider whether or not they should join a union.
 - 2. This is an article from *The New York Times* discussing the benefits of union membership.
- VI. The Theory of Efficiency Wages

- A. Definition of **Efficiency Wages**: **above-equilibrium wages paid by firms in order to increase worker productivity.**
- B. Efficiency wages raise the wage above the market equilibrium wage, resulting in unemployment.
- C. There are several reasons why a firm may pay efficiency wages.
 - 1. Worker Health
 - a. Better-paid workers can afford to eat better and can afford good medical care.
 - b. This is not applicable in rich countries such as the United States, but can raise the productivity of workers in less-developed countries.
 - 2. Worker Turnover
 - a. A firm can reduce turnover by paying a wage greater than its workers could receive elsewhere.
 - b. This is especially helpful for firms that have high hiring and training costs.
 - 3. Worker Effort
 - a. Again, if a firm pays a worker more than he or she can receive elsewhere, the worker will be more likely to try to protect his or her job by working harder.
 - b. This is especially helpful for firms who have difficulty monitoring their workers.
 - 4. Worker Quality
 - a. Offering higher wages attracts a better pool of applicants.
 - b. *Case Study: Henry Ford and the Very Generous \$5-A-Day Wage?* discusses how Ford used a high wage (about twice the going rate) to attract better employees. After instituting this higher wage policy, the company's production costs actually fell due to reduced turnover, absenteeism, and shirking.
 - 5. *FYI: The Economics of Asymmetric Information*
 - a. In many transactions, one individual has better information than the other.
 - b. Adverse selection occurs when one person knows more about the attributes of a good than another and, as a result, the uninformed person runs the risk of being sold a good of low quality.

- c. Moral hazard occurs when one person (the agent) is performing some task for another person (the principal). Because the principal cannot perfectly monitor the agent's behavior, the agent tends to undertake less effort than the principle considers desirable.