

## Chapter 8

# EMPLOYMENT, UNEMPLOYMENT, AND WAGES

*Macroeconomics in Context (Goodwin et al.), 3<sup>rd</sup> edition*

### Chapter Overview

This chapter introduces you to standard macro labor topics such the definition of the unemployment rate, the different types of unemployment, and theories of the causes of unemployment. You will learn about labor market institutions and aggregate demand issues. The final section discusses the future of work based on the changing structure of the labor market due to technological advances, increased flexibility for workers and employers, and the rise of “dual labor markets” wherein the lucky few have well-paying jobs, while the rest are employed in jobs with little security.

After reading and reviewing this chapter, the student should be able to:

1. Explain how employment and unemployment are officially measured.
2. Explain why some analysts prefer measures of labor force utilization that differ from the official unemployment rate.
3. Understand economists’ notions of frictional, structural, and cyclical unemployment.
4. Describe the classical theory of unemployment.
5. Describe alternative theories of labor market including “sticky-wage” theories, efficiency wage theory, and the dual labor market theory.
6. Describe the various policy responses to address unemployment.
7. Describe the role of technological change in determining the current and future employment levels.
8. Discuss the impacts of the changing labor market structures, such as the organization and management of work and increasing flexibility in the labor market, on the future of work.

### Key Terms

Bureau of Labor Statistics (BLS)  
civilian noninstitutional population  
employed person  
unemployed person  
labor force  
“not in the labor force”  
unemployment rate  
marginally attached workers  
discouraged workers  
underemployment  
labor force participation rate  
frictional unemployment  
cyclical unemployment

recession  
structural unemployment  
technological unemployment  
full employment  
“sticky wage” theories  
efficiency wage theory  
dual labor market theory  
aggregate demand

## Active Review

### *Fill in the Blank*

1. The U.S. agency that collects data on employment and unemployment is the \_\_\_\_\_.
2. Joe performed 15 hours of unpaid work on his family farm. He would be considered to be an \_\_\_\_\_ person, according to the BLS.
3. Bill lost his job as an airline mechanic, and has been sending out his resume to other potential employers. He would be willing to start working in a new job immediately. Bill would be counted as an \_\_\_\_\_ person, according to the BLS.
4. Rachael says she wants to work and is available for work. She has recently looked for work but is currently not doing so. The BLS would call Rachael a \_\_\_\_\_ worker. If she gives as her reason that she is no longer looking for work because there are no jobs for her, she would be considered a \_\_\_\_\_ worker.
5. The unemployment that arises due to transitions between jobs is called \_\_\_\_\_ unemployment, whereas the unemployment that arises due to skills mismatches or geographic mismatches is called \_\_\_\_\_ unemployment.
6. The theories developed by Keynesian-oriented economists explaining why wages may remain above equilibrium even when there's a surplus of labor are called \_\_\_\_\_ theories.
7. People working at jobs that underutilize their abilities, as well as those who work fewer hours than they wish to, are said to be \_\_\_\_\_.
8. Paying your workers higher than the market wage rate in order to improve productivity is an example of \_\_\_\_\_ theory.
9. \_\_\_\_\_ is unemployment due to macroeconomic fluctuations.  
\_\_\_\_\_  
sector of good jobs, or a secondary sector where workers are taken on an "as needed" basis.

### *True or False*

11. The unemployment rate is the percentage of the population that does not have paid employment, but is immediately available and actively looking for work.
12. Almost all of the people who are unemployed are so because they have involuntarily lost their jobs.
13. Structural unemployment arises because people's skills, experience, education, or

location do not match what employers need.

14. The peak level of unemployment following the 1981-1982 recession was higher than the peak level of unemployment following the Great Recession of 2007-2009.

15. Jake is applying for jobs in medical research, while also working as a bartender few times a week. The BLS counts him as being underemployed.

*Short Answer*

16. Why is high unemployment considered a bad thing?

17. Describe the two surveys the BLS uses to gather unemployment data.

18. How does the BLS classify people who are “not in the labor force,” and what people are often in this category?

19. Why is it often said that the official unemployment rate tends to underestimate the true extent of unemployment in the economy?

20. What are the three major types of unemployment? Which of these three types of unemployment tends to be spread broadly throughout the entire economy, as occurs as a result of a drop-off in aggregate demand?

21. What is the classical model’s explanation for involuntary unemployment?

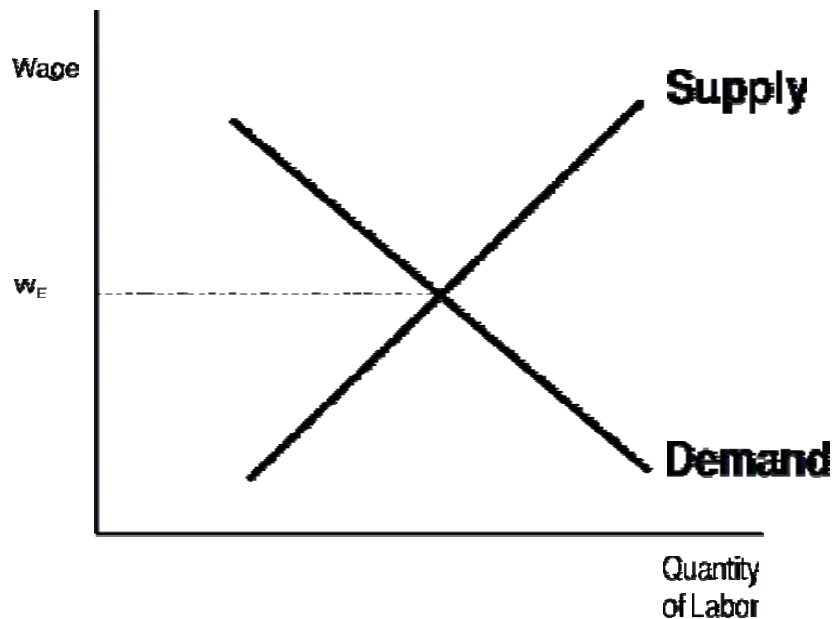
22. Identify two theories that explain why wages might be “sticky” at a higher than market equilibrium level.

23. Describe Keynes’s theory of aggregate demand, as it relates to wage levels and employment. Did Keynes believe that unemployment is caused by “sticky wages”?

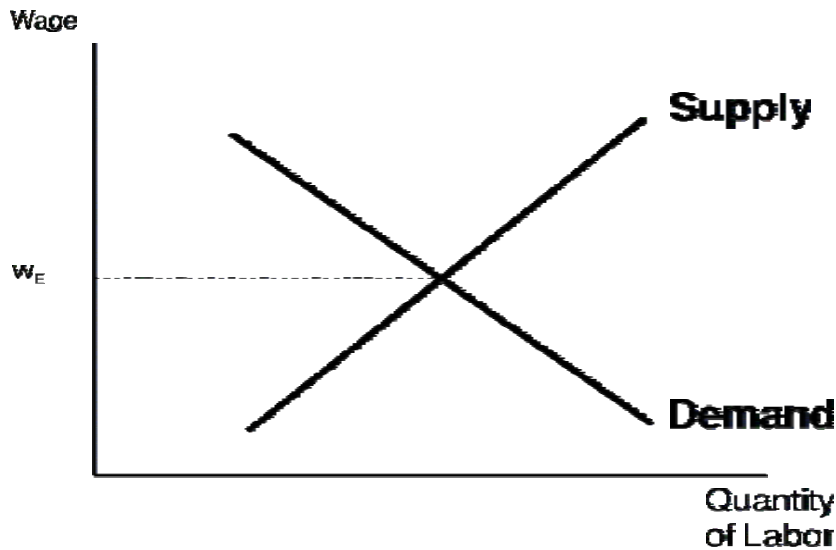
24. The chapter describes flexibility in the labor market for the workers and for the employers. Explain these in detail. What kinds of flexibility might workers benefit from?

## Problems

1. The U.S. labor force as of December 2016 was 159.7 million. There were 152.2 million employed, and 7.5 million unemployed. There were about 1.51 million in prison.
  - a. Calculate the official unemployment rate.
  - b. If those 1.51 million people were not in prison, but were in the labor force and unemployed, calculate what the unemployment rate would be.
  
2. Assume the labor market is represented by the graphs below. Illustrate the following scenarios, showing the shift in supply or demand for labor, ceteris paribus. On your graph, identify the new wage, quantities of labor supplied and demanded, and any unemployment that exists. Note: This question draws on more than the graphs actually shown in Chapter 8. You will need to draw on some concepts from Chapter 4 (Supply and Demand).
  - a. As the economy goes into recession, the demand for labor falls. Illustrate according to the classical model with smoothly functioning labor markets.



b. As the economy goes into recession, the demand for labor falls. Illustrate according to the Classical-Keynesian synthesis with sticky wages.



### Self Test

1. Which of the following is a problem associated with high unemployment?
  - a. underutilization of national resources
  - b. loss of income
  - c. depression, suicide, and domestic violence
  - d. social unrest and loss of social cohesion
  - e. all of the above
  
2. The labor force participation rate is
  - a. the number of people in the labor force divided by the population
  - b. the number of people in the labor force divided by the civilian, noninstitutionalized age 16 and over population
  - c. the number of people in the noninstitutionalized age 16 and over population divided by the labor force.
  - d. the number of unemployed divided by the labor force
  - e. the number of unemployed divided by the civilian, noninstitutionalized age 16 and over population

3. To be considered employed by the BLS, you need to
  - a. have worked for pay or profit at least 10 hours per week.
  - b. have worked for pay or profit at least 10 hours per week, or unpaid in a family-run business for at least 15 hours a week.
  - c. have worked for pay or profit for at least one hour per week.
  - d. have worked for pay or profit for at least one hour per week, or unpaid in a family-run business for at least 15 hours a week.
  - e. be registered at an employment agency.
  
4. Nabiha is currently not employed, but is thinking about getting a job and is browsing through the want ads to see what kinds of jobs are available. The BLS would consider Nabiha to be:
  - a. unemployed
  - b. in the labor force
  - c. not in the labor force
  - d. a discouraged worker
  - e. none of the above
  
5. Rebecca lost her real estate agent job after the housing bubble burst, and after several months of an unsuccessful job search, she has stopped looking and entered a job retraining program to become a nurse. The BLS would currently count Rebecca as:
  - a. employed
  - b. unemployed
  - c. in the labor force
  - d. not in the labor force
  - e. seasonally unemployed
  
6. Assume a very small economy comprised of the following people, all of whom are civilians, 16 years and older. Amir is happily employed. Bert does not have work, but is actively sending out his resume to employers. Miguel has not had work for quite a while, and occasionally flips through job ads to see what kinds of jobs are available. Marlana has just graduated from college and is starting her job search. Marijka has left her job to care for her newborn child. The labor force participation rate in this economy would be:
  - a. 20%
  - b. 40%
  - c. 60%
  - d. 80%
  - e. 100%

7. Suppose the population is 300 million. There are 146 million employed, and 7.2 million unemployed. Then the unemployment rate is:
- 2.4%
  - 4.7%
  - 4.9%
  - 5.3%
  - There's insufficient data to determine the unemployment rate.
8. Suppose the population is 300 million. There are 146 million employed, and 7.2 million unemployed. Suppose that 1 million of the 7.2 million unemployed become so discouraged that they drop out of the labor force. The unemployment rate is:
- 2.1%
  - 2.4%
  - 4.1%
  - 4.7%
  - There's insufficient data to determine the unemployment rate.
9. Which of the following groups has *not* historically and consistently experienced unemployment rates significantly higher than the average worker?
- African Americans
  - Hispanics and Latinos
  - Teenagers
  - People with less than a high school diploma
  - Women
10. Fernando lost his job as a computer programmer during the last recession, and could only find part-time work for a couple hours a week at lower pay as a grocery store cashier. Fernando is:
- unemployed
  - underemployed
  - a discouraged worker
  - not in the labor force
  - a marginally attached worker
11. Khaled used to work as an autoworker, and due to the decline of the U.S. auto industry, is now unemployed and thinking about retraining as a bicycle assembler. What type of unemployment is he experiencing?
- frictional unemployment
  - structural unemployment
  - cyclical unemployment
  - natural unemployment
  - seasonal unemployment

12. Prasad lost his job during the last recession. What type of unemployment is he experiencing?
- a. frictional unemployment
  - b. structural unemployment
  - c. cyclical unemployment
  - d. natural unemployment
  - e. seasonal unemployment
13. After raising two children, Mona has started looking for a job and sent out a few job applications. What type of unemployment is she experiencing?
- a. frictional unemployment
  - b. structural unemployment
  - c. cyclical unemployment
  - d. natural unemployment
  - e. Mona would not be counted as unemployed as she is not in the labor force.
14. Kimberly has finally had enough of her supervisor's incompetence. She just left her job feeling confident that she will have little difficulty finding another paid position using her skills which are in great demand right now. What type of unemployment is she experiencing?
- a. frictional unemployment
  - b. structural unemployment
  - c. cyclical unemployment
  - d. natural unemployment
  - e. seasonal unemployment
15. Jolly works as a department store Santa Claus. As Christmas day comes to a close he finds himself out of work yet again. What type of unemployment is he experiencing?
- a. frictional unemployment
  - b. structural unemployment
  - c. cyclical unemployment
  - d. natural unemployment
  - e. seasonal unemployment



16. According to the classical model of smoothly functioning labor markets, if the demand for labor falls, for instance due to a drop in aggregate demand,
- wages will fall and labor markets will return to full employment equilibrium, eliminating the surplus of labor.
  - wages will remain unchanged, leading to the persistence of unemployment.
  - wages will remain unchanged, and the supply of labor will drop and thereby eliminate the surplus of labor (unemployment).
  - wages and the quantity of labor will remain unchanged.
  - none of the above.
17. Which of the following have been proposed as explanations for sticky wages?
- psychological resistance to wage cuts
  - minimum wages and long term contracts
  - efficiency wages
  - people receiving higher wages holding out for a long time against other forces
  - all of the above
18. Bob the boss is paying his workers a bit higher than the market going wage, because he wants them to put in more effort on the job, and to reduce employee turnover. His actions would be an example of which labor market theory?
- low-turnover theory
  - efficiency wage theory
  - classical theory
  - unemployment theory
  - none of the above
19. The possible benefits of having more democratic work place include ...
- better working conditions and greater bargaining power for workers
  - more equal distribution of work and income levels among the workers
  - increased productivity and motivation for workers
  - All of the above
  - None of the above
20. Which of the following is not an element of the Keynesian critique of the classical model?
- unemployment is NOT due to wages being “too high.”
  - faith in market forces will be rewarded with a tendency towards full employment.
  - an emphasis on aggregate demand is important for macroeconomic analysis.
  - government policies can be an effective response to economic downturns.
  - all of these are elements of the Keynesian critique of the classical model.

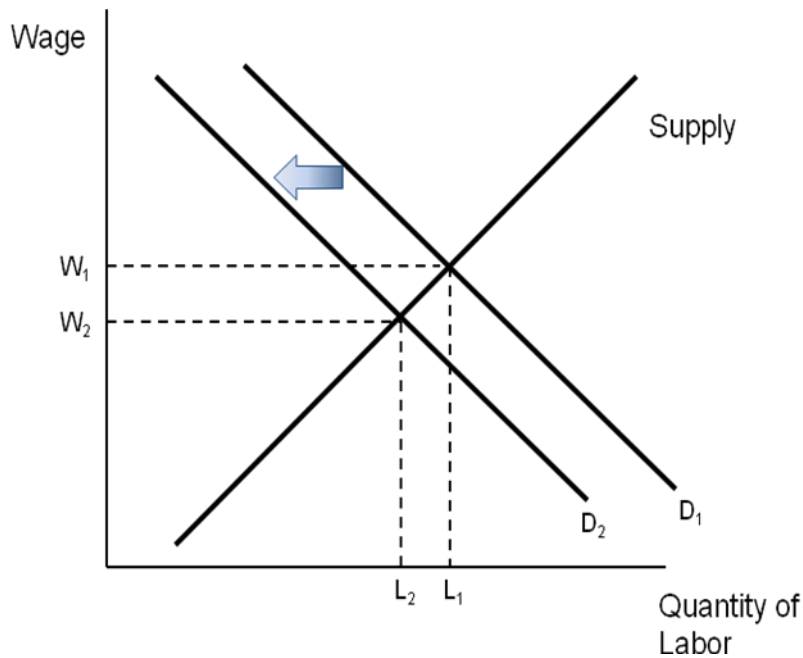
## Answers to Active Review Questions

1. Bureau of Labor Statistics (BLS)
2. employed
3. unemployed
4. marginally attached, discouraged
5. frictional, structural
6. sticky wage
7. underemployed
8. efficiency wage
9. cyclical unemployment
10. dual labor market
11. False. It is not the percentage of the population, but the percentage of the *labor force* who do not have paid jobs but are immediately available and actively looking for work.
12. False. Only on average about half of the unemployed have involuntarily lost their jobs. Others have voluntarily quit, or are just entering the labor force, or re-entering it.
13. True.
14. True.
15. False. While Jake is underemployed because of underutilization of his skills, he is counted as being employed by the BLS.
16. High unemployment means that a nation's resources are being underutilized. It also poses great economic, psychological, and social costs on unemployed individuals, as well as their families and their communities. It is associated with higher rates of depression, suicide, domestic violence, and lack of social cohesion.
17. The household survey questions 60,000 households on a monthly basis, asking whether the individual household members are working or not, and if not, if they are looking for work. The employer survey collects employment data from 400,000 employers.
18. If an individual surveyed (that is, who is age 16 or over and not institutionalized) is neither employed nor unemployed, that individual is considered "not in the labor force" according to the BLS. Often people in this category are in school, retired, disabled, or taking care of people in their households and communities.
19. Because discouraged workers and underemployed workers (involuntary part-time or workers not making use of their skills) are not counted among the unemployed in the official unemployment statistic.
20. Frictional, structural, and cyclical unemployment. Cyclical unemployment is broadly spread through an economy during a downturn.
21. According to the classical model, involuntary unemployment only arises when there is something impeding market forces, like a minimum wage law, public safety net policies, regulations on business, or union activity.

22. Efficiency wage theory and dual labor market theory.
23. For Keynes, the problem with a drop in the demand for labor was not that wages would get stuck at a rate too high and fail to drop to a lower equilibrium rate, but that a drop in the wage would make the unemployment problem even worse. As workers experienced lower wages, they would cut back on spending, which lead to a drop in aggregate demand and output.
24. Flexibility for workers includes job sharing, having more flexible work hours or being able to work remotely. Workers could benefit from such work arrangements. Participating in the gig economy, where workers work under short-term contracts or work when the want to and are needed, also provides some flexibility to the workers—though many workers may be taking up such work only because they cannot find “regular” jobs. Flexibility for employers involves firms having greater power over hiring and firing workers and being able to hire workers on “as needed” basis and with little job protection.

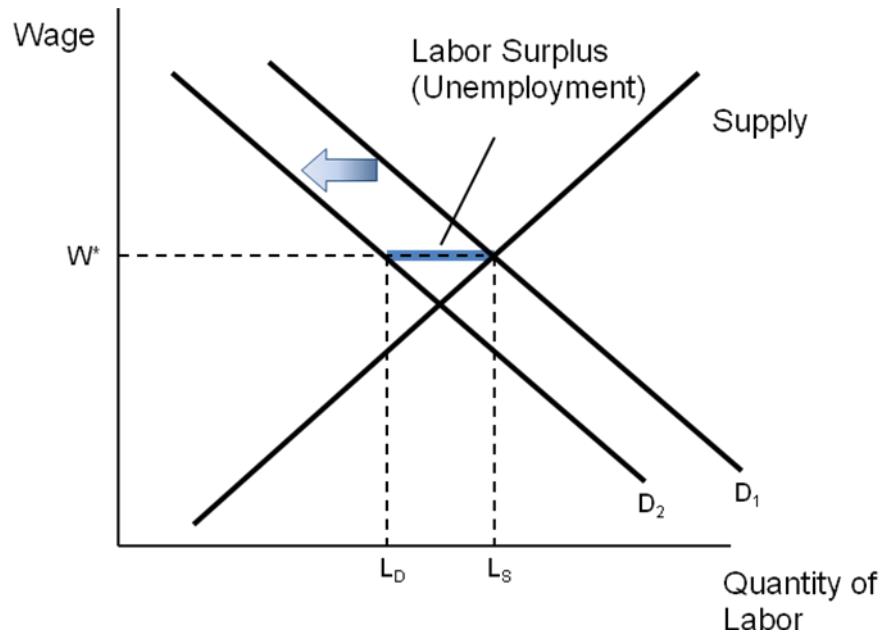
**Answers to Problems**

1. a. 4.7%    b. 5.6%
2. a.



The equilibrium wage drops to  $W_2$ . The new quantity supplied and quantity demanded are equal, at  $L_2$ . There is an equilibrium situation, with no unemployment.

b.



The wage, being “sticky,” stays at  $W^*$ , its original level. The quantity of labor demanded drops to  $L_D$ , while the quantity of labor supplied remains at  $L_S$ . There is unemployment, as shown by the shaded difference between  $L_S$  and  $L_D$  on the graph.

#### Answers to Self Test Questions

- |       |       |
|-------|-------|
| 1. E  | 11. B |
| 2. B  | 12. C |
| 3. D  | 13. A |
| 4. C  | 14. A |
| 5. D  | 15. E |
| 6. C  | 16. A |
| 7. B  | 17. E |
| 8. C  | 18. B |
| 9. E  | 19. D |
| 10. B | 20. B |