



## Chapter 22 Exercises

### Self-Check Questions

1. Suppose the adult population over the age of 16 is 237.8 million, and the labor force is 153.9 million (of whom 139.1 million are employed).
  - a. How many people are not in the labor force?
  - b. What percentage of the population is employed?
  - c. What percentage of the population is unemployed?
  - d. What percentage of the population is not in the labor force?
2. Using the data from Question 1, what is the unemployment rate? (These data are U.S. statistics from 2010.) How does it compare to the 2021 unemployment rate computed in the Work It Out in Lesson 22.1?
3. Over the long term, has the U.S. unemployment rate generally trended up, trended down, or remained at basically the same level?
4. Whose unemployment rates are commonly higher in the U.S. economy:
  - a. Blacks, Whites, or Hispanics?
  - b. The young or the middle-aged?
  - c. College graduates or high school graduates?
5. Beginning in the 1970s and continuing for three decades, women entered the U.S. labor force in a big way. If we assume that wages are sticky in a downward direction, but that around 1970 the demand for labor equaled the supply of labor at the current wage rate, what do you imagine happened to the wage rate, employment, and unemployment as a result of increased labor force participation? Draw a graph to accompany your answer.
6. Is the increase in labor force participation among women better thought of as causing an increase in cyclical unemployment or an increase in the natural rate of unemployment? Why?
7. Many college students graduate from college before they have found a job. When graduates begin to look for a job, are they counted as frictionally unemployed or structurally unemployed?

### Review Questions

8. What is the difference between being unemployed and being out of the labor force?
9. How is the unemployment rate calculated? How is the labor force participation rate calculated?
10. Are all adults who do not hold jobs counted as unemployed?
11. If you are out of school but working part-time, are you considered employed or unemployed in U.S. labor statistics? If you are a full-time student and working twelve hours a week at the college cafeteria, are you considered employed or not in the labor force? If you are a senior citizen who is collecting Social Security and a pension and working as a greeter at Walmart, are you considered employed or not in the labor force?
12. What happens to the unemployment rate when unemployed workers are reclassified as discouraged workers?
13. What happens to the labor force participation rate when employed individuals are reclassified as unemployed? What happens when they are reclassified as discouraged workers?

14. What are some of the problems with using the unemployment rate as an accurate measure of overall joblessness?
15. What criteria are used by the BLS to count someone as employed? As unemployed?
16. Assess whether the following would be counted as unemployed in the Current Employment Statistics survey.
  - a. A person who willingly stays home with children while their spouse works
  - b. A manufacturing worker whose factory just closed down
  - c. A college student doing an unpaid summer internship
  - d. A retiree
  - e. Someone who has been out of work for two years but keeps looking for a job
  - f. Someone who has been out of work for two months but is not looking for a job
  - g. Someone who hates their present job and is actively looking for another one
  - h. Someone who decides to take a part-time job because they could not find a full-time position
17. Are U.S. unemployment rates typically higher, lower, or about the same as unemployment rates in other high-income countries?
18. Are U.S. unemployment rates distributed evenly across the population?
19. When would you expect cyclical unemployment to be rising? Falling?
20. Why is there unemployment in a labor market with flexible wages?
21. Name and explain some of the reasons why wages are likely to be sticky, especially in downward adjustments.
22. What term describes the remaining level of unemployment that occurs even when the economy is healthy?
23. What forces create the natural rate of unemployment for an economy?
24. Would you expect the natural rate of unemployment to be roughly the same in different countries? Why?
25. Would you expect the natural rate of unemployment to remain the same within one country over the long run of several decades?
26. What is frictional unemployment? Give examples.
27. What is structural unemployment? Give examples.
28. After several years of economic growth, would you expect the unemployment in an economy to be mainly cyclical or mainly due to the natural rate of unemployment? Why?
29. What type of unemployment (cyclical, frictional, or structural) applies to each of the following?
  - a. Landscapers laid off in response to declines in new housing construction during a recession
  - b. Coal miners laid off due to EPA regulations that shut down coal-fired power
  - c. A financial analyst who quits their job in Chicago and is pursuing similar work in Arizona
  - d. Printers laid off due to declines in demand for printed catalogues and flyers as firms go the internet to promote and advertise their products
  - e. Factory workers in the U.S. laid off as the plants shut down and move to Mexico and Ireland

## Critical Thinking Questions

30. Using the definition of the unemployment rate, is an increase in the unemployment rate necessarily a bad thing for a nation? Explain.
31. Is a decrease in the unemployment rate necessarily a good thing for a nation? Explain.
32. If many workers become discouraged from looking for jobs, explain how the number of jobs could decline but the unemployment rate could fall at the same time.
33. Would you expect hidden unemployment to be higher, lower, or about the same when the unemployment rate is high, say 10%, versus low, say 4%? Explain.
34. Is the higher unemployment rate for minority workers necessarily an indication of discrimination? What could be some other reasons for the higher unemployment rate?
35. While unemployment is highly negatively correlated with the level of economic activity, in the real world it responds with a lag. In other words, firms do not immediately lay off workers in response to a sales decline. They wait a while before responding. Similarly, firms do not immediately hire workers when sales pick up. What do you think accounts for the lag in response time?
36. Why do you think unemployment rates are lower for individuals with more education?
37. Do you think it is rational for workers to prefer sticky wages to wage cuts when the consequence of sticky wages is unemployment for some workers? Why or why not? How do the reasons for sticky wages explained in this section apply to your argument?
38. As baby boomers retire, the ratio of retirees to workers will increase noticeably. How will this affect the Social Security program? How will this affect the standard of living for the average American?
39. Unemployment rates have been higher in many European countries in recent decades than in the United States. Is the main reason for this long-term difference in unemployment rates more likely to be cyclical unemployment or the natural rate of unemployment? Explain.
40. Is it desirable to pursue a goal of zero unemployment? Why or why not?
41. Is it desirable to eliminate natural unemployment? Why or why not? (*Hint: think about what our economy would look like today and what assumptions would have to be met to have a natural unemployment rate of zero.*)
42. The U.S. unemployment rate increased from 4.6% in July 2001 to 5.8% by June 2002. Without studying the subject in any detail, would you expect that a change of this kind is more likely to be due to cyclical unemployment or a change in the natural rate of unemployment? Why?

## Problems

43. In a country with a population of 8 million adults, 5 million are employed, 500,000 are unemployed, and the rest are out of the labor force. What's the unemployment rate? What is the labor force participation rate?
44. A government passes a law that no companies can have evening, nighttime, or weekend hours, so that everyone can be home with their families during these times. Analyze the effect of this law using a demand and supply diagram for the labor market. First assume that wages are flexible, and then assume that wages are sticky downward.
45. As baby boomers retire, what should happen to wages and employment? Can you show this graphically?