

# Unemployment, Immigration, and Inflation



### **NEWS UPDATE**

- The Russian assault on Ukraine could potentially displace five to seven million people or more, creating an enormous immigration problem in Europe (PBS Newshour, February 25, 2022). We know that mass migration can encourage a groundswell of anti-immigrant populist fervor, some of which can easily threaten democracies by those with a more authoritarian intent. Prices of oil and gasoline will only increase far more due to sanctions on Russia's oil exports since their war with Ukraine.
- The inflation rate for January 2022 was an annualized 7.5 percent compared to January 2021. This was the biggest gain since February 1982. On a percentage basis, fuel oil prices rose the fastest, as well as energy prices overall. Prices for cars and trucks, food, and housing also increased (Jeff Cox, CNBC, February 10, 2022). Energy prices will increase much more due to sanctions on Russia's oil exports, and since energy is an input in the production of almost everything, it will cause a generalized inflation as well.

# **PURPOSE**

This second of four chapters focused on efficiency and stability issues will help students understand the topics of unemployment and inflation, their causes, their types, and their effects. This is done in the context of an introduction to the macroeconomy, though we defer the discussion of aggregate demand and aggregate supply until Chapter 15. After carefully explaining our terminology, a demand and supply model is used to describe a labor market, and this is followed by a discussion and graph of 1) the minimum wage, and 2) immigration. Inflation is also discussed, though construction of the consumer price index is placed in Appendix 14–1.

#### WHAT'S NEW?

- The discussion of structural unemployment is particularly important in the context of populist ideology, which
  responds to reasonable needs among the structurally unemployed with inappropriate, harmful, and often racist
  policies. We need to assure our students that our country does benefit from free trade, technological advance,
  and a shift to clean energy and that any structural unemployment resulting from these should be dealt with in
  the ways suggested in the text.
- 2. There is new material on immigration and culture wars, including the immigration policy of both the Trump and Biden administrations. There is also discussion and contrast between the ways each administration has addressed structural unemployment, including in the context of the coronavirus pandemic.
- 3. There is new material on child labor, and students are encouraged to look at sources of information that might encourage their activism.

#### **TEACHING SUGGESTIONS**

#### ➤ Student Interest

• Students may be thinking about whether jobs will be available for them in the future. They may be anxious about inflation and worried about the effects of immigration. I think a lot of material in this chapter will both interest them and reassure them.

## ➤ Controversy

- As you know, the issue of the minimum wage is timely and controversial. Our economic theory tells us it
  will create unemployment, though numerous studies seem to suggest that any unemployment caused by the
  minimum wage is minimal. We do know it creates major benefits for poor people.
- And, as you know, the issue of immigration is also timely and controversial. Our economic theory tells us it will create lower wages and unemployment among U.S. employees, but once again, numerous students seem to suggest that either of these impacts are minimal. Immigrants bring major benefits to our economy.
- As I write this, many people are concerned about relatively high inflation rates. They fail to understand that after a drop in economic activity, as with the coronavirus pandemic, an increase in pent-up demand will tend to raise prices. People also fail to realize their incomes may well keep up with inflation. Of course, inflation caused by the supply side, as with the rise in energy prices, is more problematic.

#### ► Economic Theory and Models

- We use demand and supply models in this chapter to discuss labor markets, the minimum wage (a form of price floor), and the impact of immigration. We hold off on the aggregate demand/aggregate supply model until Chapter 15.
- Students often become confused with graphs of price ceilings and price floors (and in this case, the minimum wage) because they want to shift a curve. Remind them that they *do not* shift a curve, and that *to be effective*, the minimum wage must be *above* the market equilibrium wage. Also remind them to show the quantity of labor demanded and supplied along the quantity axis (and not inside the graph somewhere!).
- The primary purpose of defining the CPI is to calculate the inflation rate. (This is why its construction is in Appendix 14–1.) I do find that some students face difficulty when they try to translate the inflation rate represented by a decimal into one represented as a percent. They simply lack the basic mathematic skills involved in this simple procedure. That's why I like to go through several examples with them. (The same is true when calculating an unemployment rate and a labor force participation rate.)
- The production possibilities model is used to show the impact of unemployment on our economy.

#### *▶ Data and Terminology*

- The terminology in this chapter is especially important. This includes the labor force, labor force participation rate, and unemployment rate, as well as the consumer price index and inflation rate. It is helpful to use numerical examples to calculate them.
- In my experience, students (and random citizens) do not understand the concepts of unemployment and the labor force, and therefore cannot understand the meaning of unemployment rates and labor force participation rates. For example, many students think the unemployment rate refers to the share of the total population without jobs.

- In calculating the unemployment rate and the labor force participation rate, I have deliberately ignored the distinction between the civilian and non-civilian labor force. You can discuss this with your students if you wish.
- There is updated data on labor force participation rates (broken down by gender), U.S. unemployment rates for selected years, the incidence of U.S. unemployment rates, U.S. inflation rates, and global unemployment and inflation rates. Note that U.S. unemployment rates tend to understate the problem of unemployment, whereas inflation rates tend to overstate the problem of inflation. Also, unemployment rates are calculated differently for other countries of the world.
- When analyzing the impact of immigration and the minimum wage on labor markets, emphasize that we are considering specific low-skill labor markets. Any possible effects would be far less significant if we were analyzing the U.S. labor market as a whole. Students should also realize that many immigrants are highly skilled and educated.
- You probably share my experiences with journalists who mix up their terminology when discussing inflation rates. Make the terminology on prices and inflation clear to your students.
- Since the consumer price index overstates the rate of inflation, and because the CPI is used to calculate cost-of-living adjustments for Social Security benefits, the benefit increases will be overly high. Whenever politicians have sought to reduce benefits by adjusting their cost-of-living adjustment, it has met with adamant opposition.
- As in other chapters with numerical data, I usually encourage students to know "ballpark numbers" for
  important statistics (such as the current inflation rate), trends (such as the rise in labor force participation rates),
  and comparisons (such as disparities among racial and ethnic groups). You may wish to encourage the same.
- Labor statistics from developing countries are difficult to rely on, partly because of differing calculation methods. People in poor developing countries have told me that: "Poor people cannot afford to be unemployed. If they are unemployed, they die." (If this is correct, then people find some kind of income source or family to live with.) I have also been told that only the rich can afford to be unemployed. These are people who are looking only for "desirable jobs" and can afford to remain unemployed in the meantime. On the other hand, informal labor (prevalent in developing countries) is not always tabulated. This will distort the employment statistics. Finally, while there is variation, the population of children (outside the formal labor force) is very high compared to the adult population. And, because child labor laws are often nonexistent or unenforced in developing countries, many children work. All these factors make comparisons between countries difficult.
- As new jobs are being created, discouraged workers may see their acquaintances taking new jobs and decide to look for jobs themselves. As these discouraged workers re-enter the labor market and fail to find jobs, they become counted among the unemployed, thereby raising unemployment rates. Hence, we have the ironic outcome that an improving economy is associated with rising unemployment rates. The opposite may be true during a period of job loss.

#### ▶ Fundamentals

As President Biden extended unemployment compensation amid the coronavirus pandemic, several Republican governors rejected it, stating it was encouraging people to avoid work. Keeping in mind that there was a pandemic going on, child and elder care issues were difficult, and parents were supervising children educated virtually — there seems to be some degree of contempt toward the poor in these Republican states. Apparently, there is also contempt, especially for women, both poor and non-poor. Does this provide insight into "women's rage"?

- Given that economists view immigration favorably, and assuming that our people understand this (as well as people in countries around the world), the primary reason for opposition to immigration would seem to be racism.
- Systemic racism is revealed in the unemployment statistics, where racial and ethnic minorities face far higher unemployment rates than the national average.

#### **CLASSROOM EXERCISES**

1. Consider the population of a small country, assuming the number of people in each category is as follows:

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total population = 1,200

children under age 16 = 200

elderly retired people = 300

full-time students = 20

full-time homemakers = 30

people working full time for pay = 420

people working part time for pay = 120

people not working but seeking employment = 60

people not working but have given up seeking employment = 50
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Calculate the labor force participation rate. [60%] Calculate the unemployment rate. [10%] How does the unemployment rate understate the problem of unemployment? [Discouraged workers are ignored, and part-time workers are considered employed.]

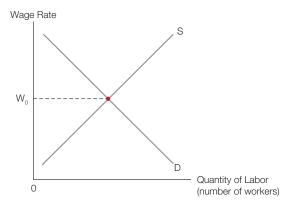
2. Looking into the future, consider a country with the following data:

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Year 2030 CPI = 102
Year 2029 CPI = 100
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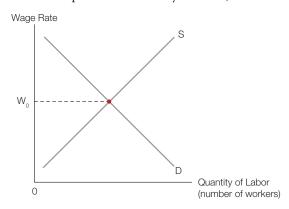
Calculate the inflation rate for the year 2030. [2%]

- 3. Identify the following unemployment situations as frictional, structural, or cyclical unemployment:
  - a. Jobs are available in the sunbelt area of the United States, but an unemployed worker living in Iowa cannot move there because of family responsibilities. [structural]
  - b. Demand for output in the United States has fallen due to falling incomes resulting from job layoffs caused by recession. [cyclical]
  - c. A middle-aged man returns to the labor force after staying home to care for his children when they were young and experiences a short delay in finding a job. [frictional]
  - d. An unemployed mother lives in the central city of Chicago and lacks transportation to take her to the suburbs where jobs are available. [structural]
  - e. A student graduates from college and it takes a few months before finding a job. [frictional]

4. Consider the graph of a low-skill labor market in a particular geographical area, where D is the demand for low-skilled workers and S is the supply of low-skilled workers. Label the initial equilibrium point [E] within the graph and label the equilibrium wage rate ( $W_0$ ) along the vertical axis. Now label an *effective* minimum wage ( $W_M$ ) along the wage axis. Label the new quantity demanded of labor ( $Q^D$ ) and quantity supplied of labor ( $Q^S$ ) along the employment (quantity of labor) axis. What is the economic problem that results? [A surplus of labor, alternatively called unemployment]



5. Again, consider the graph of a low-skill labor market in a particular geographical area, where D is the demand for low-skilled workers and S is the supply of low-skilled workers. Label the initial equilibrium point (E) within the graph and label the equilibrium wage rate ( $W_0$ ) along the vertical axis. Shift the curve to show what occurs with large-scale immigration of low-skilled workers in this geographical area. Label the new equilibrium point (E') within the graph and label the new quantity of labor demanded ( $Q^D_T$ ) along the quantity of labor axis. (T can stand for trade or total, and  $Q^D_T = Q^S_T$ ) Label the quantity supplied of labor ( $Q^S_{USA}$ ) by U.S. workers. What is the effect of immigration on the wage rate? [decrease] On overall employment? [increase] On the employment of native-born U.S. workers? [decrease] (Note that the difference between  $Q^S_T$  and  $Q^S_{USA}$  is the number of immigrant workers.) Students will have difficulty labeling the quantity supplied by U.S. workers, by immigrant workers, and the total, so you need to explain these carefully to them.)



6. Label a point U (representing unemployment) in the production possibilities graph below. What is the problem it creates for the economy as a whole? [foregone output]



# **SAMPLE TEST QUESTIONS**

# Multiple Choice Questions

- 1. Which of the following is a *microeconomic* topic?
  - a. Inflation
  - b. Total GDP
  - c. The overall economy
  - d. An individual market
- 2. The unemployment rate is calculated as:
  - a. the percent of the labor force that is unemployed.
  - b. the percent of the population that is unemployed.
  - c. all people without jobs, as a percent of the labor force.
  - d. all people without jobs, as a percent of the population.
- 3. The labor force participation rate is calculated as the percent of the:
  - a. population age 16 or older that is unemployed.
  - b. population age 16 or older that is in the labor force.
  - c. entire population that is unemployed.
  - d. labor force age 16 or older that is employed.
- 4. The unemployment rate understates the true problem of unemployment because of:
  - a. the limited hours for some part-time workers.
  - b. the plight of discouraged workers.
  - c. the plight of people who have given up looking for a job.
  - d. all of the above
- 5. Unemployment rates are above the national average for:
  - a. Hispanics.
  - b. African Americans.
  - c. teens.
  - d. all of the above

- 6. A young woman experiences a short delay in finding a better job after she quits an unsatisfactory job. This type of unemployment is:
  - a. frictional.
  - b. structural.
  - c. cyclical.
  - d. none of the above
- 7. A middle-aged autoworker is laid off from his job after improved technology (robotics) reduces the need for workers. This type of unemployment is:
  - a. frictional.
  - b. structural.
  - c. cyclical.
  - d. none of the above
- 8. Which of the following would not be used to reduce structural unemployment?
  - a. Retraining assistance
  - b. Relocation assistance
  - c. Policies to expand GDP
  - d. Policies to expand education
- 9. Full employment means:
  - a. no cyclical unemployment.
  - b. no frictional unemployment.
  - c. no structural unemployment.
  - d. no unemployment at all.
- 10. According to the text, which of the following is true about immigration?
  - a. It is controversial.
  - b. We are a nation of immigrants.
  - c. We benefit from cultural diversity.
  - d. All of the above
- 11. Large-scale immigration of low-skill immigrants can result in:
  - a. a lower wage in low-skill labor markets.
  - b. higher levels of employment in low-skill labor markets.
  - c. lower employment of native-born workers in low-skill labor markets.
  - d. all of the above
- 12. What is the theoretical effect of a minimum wage in a low-skill labor market?
  - a. A higher wage
  - b. A higher quantity of labor supplied
  - c. A lower quantity of labor demanded
  - d. All of the above

- 13. The consumer price index (CPI) is generally assumed by economists to:
  - a. overstate the inflation rate.
  - b. understate the inflation rate.
  - c. measure inflation extremely accurately.
  - d. none of the above
- 14. Inflation may cause:
  - a. menu costs.
  - b. uncertainty and inefficiency.
  - c. redistribution of purchasing power.
  - d. all of the above
- 15. Hyperinflation refers to:
  - a. extremely low inflation.
  - b. extremely high inflation.
  - c. mild inflation caused by short-term supply disruptions.
  - d. inflation caused by normal, everyday conditions in the economy.
- 16. The direct exchange of goods and services for other goods and services refers to:
  - a. cost of living adjustment.
  - b. barter.
  - c. hyperinflation.
  - d. purchasing power.
- 17. The 2021 U.S. inflation rate was:
  - a. lower than usual.
  - b. higher than usual
  - c. about the same as usual.
  - d. at a level never seen before.
- 18. Which racial/ethnic group has the highest unemployment rate?
  - a. African Americans
  - b. Hispanics
  - c. Asian Americans
  - d. Whites
- 19. Which of the following is true about the U.S. labor force participation rate since 1964?
  - a. It has increased overall.
  - b. It has increased for women.
  - c. It has decreased for men.
  - d. All of the above
- 20. Which type of inflation can result from rising energy prices that cause increased costs of production?
  - a. Profit-push inflation
  - b. Demand-pull inflation
  - c. Cost-push inflation
  - d. None of the above

# True / False Questions

- 1. The problem of unemployment for the macroeconomy is the reduction in output that results. (T)
- 2. Frictional unemployment is assumed to be fairly normal and temporary. (T)
- 3. Because of its short duration, structural unemployment is assumed not to be very serious. (F)
- 4. Cyclical unemployment results from a drop in economic activity in our economy as a whole. (T)
- 5. Full employment means there is no unemployment. (F)
- 6. Since 1964, the U.S. labor force participation rate has decreased. (F)
- 7. According to the official definition of unemployment, unemployed people include those who have given up seeking employment. (F)
- 8. The labor force is defined to include unemployed people. (T)
- 9. Discouraged workers are defined as people who are easily discouraged and quit their jobs. (F)
- 10. The type of unemployment caused by recession is cyclical unemployment. (T)
- 11. The appropriate policy for structural unemployment is to expand the number of jobs in the economy overall. (F)
- 12. A minimum wage in a low-skill occupation will cause a shortage of labor. (F)
- 13. U.S. labor force participation rates are currently higher for men than for women. (T)
- 14. The 2021 unemployment rate was much lower than the 2020 rate. (T)
- 15. The consumer price index (CPI) overstates the inflation rate due to its failure to fully account for changes in our purchases and changes in quality. (T)
- 16. Inflation may cause inefficiency and redistribution of purchasing power. (T)
- 17. Demand-pull inflation occurs when any sectors of the economy increase their demand for goods and services. (T)
- 18. Cost-push inflation occurs when there are increases in the costs of production, such as rising energy costs. (T)
- 19. The purchasing power of Social Security recipients suffers as a result of inflation. (F)
- 20. Purchasing power depends on both prices and incomes. (T)
- 21. The unemployment rate for teens (ages 16–19) is very high. (T)
- 22. The U.S. labor force participation rate is over 60 percent. (T)
- 23. The Earned Income Tax Credit could be used to supplement the earnings of low-wage workers, but it would greatly discourage people from seeking jobs. (F)
- 24. The quotations that open the chapter show both former Presidents Obama and Trump announcing positive labor market situations. (F)
- 25. When we take into account various economic variables, we conclude that immigration presents very positive effects on our economy and people. (T)
- 26. Since 1960, U.S. unemployment rates have generally ranged above 10 percent. (F)
- 27. In the long run, we can expect immigration to reduce economic growth. (F)
- 28. Inflation in one country has no international effect. (F)
- 29. Unemployment rates for some countries listed in the text can be relatively high but never exceed 20 percent. (F)
- 30. Inflation rates for some countries listed in the text had/have inflation rates in the hundreds and even in the thousands percent. (T)

# **Critical Thinking Questions**

- 1. If you were a policymaker, what types of strategies and policies would you devise to deal with unemployment in the United States? Keep in mind the different types of unemployment and the different unemployment rates for different groups of people.
- 2. What are the effects of unemployment on the individual? On the economy? Which effects are more serious?