# Chapter 11 Exercises

## Self-Check Questions

1. Describe the mechanism by which supply creates its own demand.
2. Describe the mechanism by which demand creates its own supply.
3. The aggregate supply curve is constructed assuming that as the price of outputs increases, the price of inputs stays the same. How would an increase in the prices of important inputs, like energy, affect aggregate supply?
4. In the AD/AS model, what prevents the economy from achieving equilibrium at potential output?
5. Suppose Congress passes significant immigration reform that makes it easier for foreigners to come to the United States to work. Use the AD/AS model to explain how this would affect the equilibrium level of GDP and the price level.
6. Suppose concerns about the size of the federal budget deficit lead Congress to cut all funding for research and development for ten years. Assuming this has an impact on technology growth, what does the AD/AS model predict would be the likely effect on equilibrium GDP and the price level?
7. How would a dramatic increase in the stock market shift the AD curve? What effect would the shift have on the equilibrium level of GDP and the price level?
8. Suppose Mexico, one of the largest of the U.S.'s trading partners and purchaser of a large quantity of U.S. exports, goes into a recession. Use the AD/AS model to determine the likely impact on U.S. equilibrium GDP and price level.
9. A policy maker claims that tax cuts led the economy out of a recession. Can we use the AD/AS diagram to show this?
10. Many financial analysts and economists eagerly await reports on the home price index and consumer confidence index. What would be the effects of a negative report on both of these? What about a positive report?
11. What impact would a decrease in the size of the labor force have on GDP and the price level according to the AD/AS model?
12. Suppose the Federal Reserve begins to increase the supply of money at an increasing rate. What impact would that have on GDP, unemployment, and inflation?
13. If the economy is operating in the neoclassical zone of the *SRAS* curve and aggregate demand falls, what is likely to happen to real GDP?
14. If the economy is operating in the Keynesian zone of the *SRAS* curve and aggregate demand falls, what is likely to happen to real GDP?

## Review Questions

**15.** What is Say's law?

**16.** What is Keynes' law?

**17.** Do neoclassical economists believe in Keynes' law or Say's law?

**18.** Does Say's law apply more accurately to the long run or the short run? What about Keynes' law?

**19.** What is on the horizontal axis of the AD/AS diagram? What is on the vertical axis?

**20.** What is the economic reason why the *SRAS* curve slopes up?

**21.** What are the components of the aggregate demand (*AD*) curve?

**22.** What are the economic reasons why the *AD* curve slopes down?

**23.** Explain the reason for the nearly horizontal slope of the far left portion of the *SRAS* curve and the nearly vertical slope of the far right.

**24.** What is potential GDP?

**25.** Name some factors that could cause the *SRAS* curve to shift, and explain whether they would shift *AS* to the right or to the left.

**26.** Will a shift of *SRAS* to the right tend to make the equilibrium quantity and price level higher or lower? What about a shift of *SRAS* to the left?

**27.** What is stagflation?

**28.** Name some factors that could cause *AD* to shift, and explain whether they would shift *AD* to the right or to the left.

**29.** Would a shift of *AD* to the right tend to make the equilibrium quantity and price level higher or lower? What about a shift of *AD* to the left?

**30.** How would periods of long-term growth and periods of recession be illustrated in the AD/AS model?

**31.** How is cyclical unemployment illustrated in an AD/AS model?

**32.** How is the natural rate of unemployment illustrated in an AD/AS model?

**33.** What are some of the ways exports and imports can affect the AD/AS model?

**34.** What is the Keynesian zone of the *AS* curve? How much is the price level likely to change in the Keynesian zone?

**35.** What is the neoclassical zone of the *AS* curve? How much is the output level likely to change in the neoclassical zone?

**36.** What is the intermediate zone of the *AS* curve? Will a rise in output be accompanied by a rise or a fall in the price level in this zone?

## Critical Thinking Questions

**37.** Why would an economist choose either the neoclassical perspective or the Keynesian perspective but not both?

**38.** In July 2013, the consulting firm Mercer released results from a survey where workers in the U.S. expected a 2.9% increase in pay in 2014. Assuming this occurs and it was the only development in the labor market that year, how would this affect the *AS* curve? What if it was also accompanied by an increase in worker productivity?

**39.** If new government regulations require firms to use cleaner technology that is also less efficient, what would the effect be on output, the price level, and employment, using the AD/AS diagram?

**40.** During the spring of 2014, the midwestern U.S., which has a large agricultural base, experienced above-average rainfall. Using the AD/AS diagram, what is the effect on output, price level, and employment?

**41.** Hydraulic fracturing (fracking) has the potential to significantly increase the amount of natural gas produced in the United States. If a large percentage of factories and utility companies use natural gas, what will happen to output, the price level, and employment?

**42.** Some politicians have suggested tying the minimum wage to the consumer price index (CPI). Using the AD/AS diagram, what effects would this policy most likely have on output, price level, and employment?

**43.** If households decide to save a larger portion of their income, what effect would this have on output, employment, and price level in the short run? What about the long run?

**44.** If firms become more optimistic about the future of the economy and, at the same time, innovation in 3-D printing makes most workers more productive, what is the combined effect on output, employment, and price level?

**45.** If Congress cuts taxes at the same time that businesses become more pessimistic about the economy, what is the combined effect on output, price level, and employment, using the AD/AS diagram?

**46.** The AD/AS model is static, and it shows a snapshot of the economy at a given point in time. Both economic growth and inflation are dynamic phenomena. Suppose economic growth is 3% per year, and aggregate demand is growing at the same rate. What does the AD/AS model say the inflation rate should be?

**47.** Explain why the short-run aggregate supply curve might be fairly flat in the Keynesian zone of the *AS* curve. How might we tell if we are in the Keynesian zone?

**48.** Explain why the short-run aggregate supply curve might be vertical in the neoclassical zone of the *AS* curve. How might we tell if we are in the neoclassical zone?

**49.** In your view, is the economy currently operating in the Keynesian, intermediate, or neoclassical portion of the economy's aggregate supply curve?

## Problems

**50.** Review the problem in the Work It Out in Lesson 11.1. Like the information provided in that feature, the following table shows information on aggregate supply, aggregate demand, and the price level for the imaginary country of Xurbia.

| Price Level | AD | AS |
|---|---|---|
| 110 | 700 | 600 |
| 120 | 690 | 640 |
| 130 | 680 | 680 |
| 140 | 670 | 720 |
| 150 | 660 | 740 |
| 160 | 650 | 760 |
| 170 | 640 | 770 |

**a.** Plot the AD/AS diagram from the data shown. Identify the equilibrium.

**b.** Imagine that as a result of a government tax cut, aggregate demand increases by 50 at every price level. Identify the new equilibrium.

**c.** How will the new equilibrium alter output? How will it alter the price level? What do you think will happen to employment?

**51.** The imaginary country of Harris Island has the aggregate supply and aggregate demand curves as shown in the following table.

| Price Level | AD | AS |
|---|---|---|
| 100 | 700 | 200 |
| 120 | 600 | 325 |
| 140 | 500 | 500 |
| 160 | 400 | 570 |
| 180 | 300 | 620 |

**a.** Plot the AD/AS diagram. Identify the equilibrium.

**b.** Would you expect unemployment in this economy to be relatively high or low?

**c.** Would you expect concern about inflation in this economy to be relatively high or low?

**d.** Imagine that consumers begin to lose confidence in the state of the economy, so AD decreases by 275 at every price level. Identify the new aggregate equilibrium.

**e.** How will the shift in AD affect the original output, price level, and employment?

**52.** Suppose Santher has an economy described by the following table.

| Price Level | AD | AS |
|---|---|---|
| 50 | 1,000 | 250 |
| 60 | 950 | 580 |
| 70 | 900 | 750 |
| 80 | 850 | 850 |
| 90 | 800 | 900 |

**a.** Plot the *AD/AS* curves, and identify the equilibrium.

**b.** Would you expect unemployment in this economy to be relatively high or low?

**c.** Would you expect prices to be a relatively high or a relatively low concern for this economy?

**d.** Imagine that input prices fall, so AS shifts to the right by 150 units. Identify the new equilibrium.

**e.** How will the shift in AS affect the original output, price level, and employment?