

Chapter 33

1. For the following four cases, trace the impact of each shock in the aggregate demand and aggregate supply model by answering the following three questions for each: What happens to prices and output in the short run? What happens to prices and output in the long run if the economy is allowed to adjust to long-run equilibrium on its own? If policy makers had intervened to move output back to the natural rate instead of allowing the economy to self-correct, in which direction should they have moved aggregate demand?

- a. aggregate demand shifts left

Answer:

Prices fall, output falls. Prices rise, output returns to the natural rate. Shift aggregate demand to the right.

- b. aggregate demand shifts right

Answer:

Prices rise, output rises. Prices fall, output returns to the natural rate. Shift aggregate demand to the left.

- c. short-run aggregate supply shifts left

Answer:

Prices rise, output falls. Price level returns to original value, output returns to the natural rate. Shift aggregate demand to the right.

- d. short-run aggregate supply shifts right

Answer:

Prices fall, output rises. Price level returns to original value, output returns to the natural rate. Shift aggregate demand to the left.

2. The following events have their *initial* impact on which of the following: aggregate demand, short-run aggregate supply, long-run aggregate supply, or both short-run and long-run aggregate supply? Do the curves shift to the right or left?

- a. The government repairs aging roads and bridges.

Answer:

aggregate demand, right

- b. OPEC raises oil prices.

Answer:

short-run aggregate supply, left

- c. The government raises unemployment benefits, which raises the natural rate of unemployment.

Answer:

both short-run and long-run aggregate supply, left

- d. People feel more secure in their jobs and become more optimistic.

Answer:

aggregate demand, right

- e. A technological advance takes place in the application of computers to the manufacture of steel.

Answer:

both short-run and long-run aggregate supply, right

- f. The government increases the minimum wage.

Answer:

both short-run and long-run aggregate supply, left

- g. Because price expectations are reduced, wage demands of new university graduates fall.

Answer:

short-run aggregate supply, right

- h. The central bank decreases the money supply.

Answer:

aggregate demand, left

- i. A drought dramatically reduces the country's agricultural output.

Answer:

both short-run and long-run aggregate supply, left

3. Suppose the economy is in long-run equilibrium. Then, suppose the central bank suddenly increases the money supply.

- a. Describe the initial impact of this event in the model of aggregate demand and aggregate supply by explaining which curve shifts which way.

Answer:

Aggregate demand shifts to the right.

- b. What happens to the price level and real output in the short run?

Answer:

Price level rises and real output rises.

- c. If the economy is allowed to adjust to the increase in the money supply, what happens to the price level and real output in the long run? (compared to their original levels)

Answer:

Price level rises and real output stays the same.

- d. Does an increase in the money supply move output above the natural rate indefinitely? Why?

Answer:

No. Over time, people and firms adjust to the new higher amount of spending by raising their prices and wages.

4. Suppose the economy is in long-run equilibrium. Then, suppose workers and firms suddenly come to expect higher prices in the future and agree to an increase in wages.

- a. Describe the initial impact of this event in the model of aggregate demand and aggregate supply by explaining which curve shifts which way.

Answer:

Short-run aggregate supply shifts left.

- b. What happens to the price level and real output in the short run?

Answer:

Prices rise and output falls.

- c. What name do we have for this combination of movements in output and prices?

Answer:

Stagflation.

- d. If policy makers wanted to move output back to the natural rate of output, what should they do?

Answer:

Shift aggregate demand to the right.

- e. If policy makers were able to move output back to the natural rate of output, what would the policy do to prices?

Answer:

Prices would rise more and remain there.

- f. If policy makers had done nothing at all, what would have happened to the wage rate as the economy self-corrected or adjusted back to the natural rate of output on its own?

Answer:

The high unemployment at the low level of output would put pressure on the wage to fall back to its original value shifting short-run aggregate supply back to its original position.

- g. Is it likely that an increase in price expectations and wages alone can cause a permanent increase in the price level? Why?

Answer:

No. Increases in the cost of production need to be "accommodated" by government policy to permanently raise prices.

5. Suppose the economy is at a point such as point B in Exhibit 2. That is, aggregate demand has decreased and the economy is in a recession. Describe the adjustment process necessary for the economy to adjust on its own to point C for each of the three theoretical short-run aggregate-supply curves.

- a. the sticky wage theory:

Answer:

At point B, nominal wage contracts are based on the expectation of a higher price level so the real wage has risen and workers were laid off. As workers and firms recognize the fall in the price level (learn to expect P_3), new contracts will have a lower nominal wage, the real wage falls, and firms increase production at each price level shifting the short-run aggregate supply to the right.

- b. the sticky price theory:

Answer:

At point B, some firms have not reduced their prices because of menu costs. Their products are relatively more expensive and sales fall. When they realize the lower price level is permanent (learn to expect P_3), they lower their prices and output rises at each price level, shifting the short-run aggregate supply to the right.

- c. the misperceptions theory:

Answer:

At point B, some firms mistakenly believe that only the price of their product has fallen and they have cut back on production. As they realize that all prices are falling (learn to expect P_3), they will increase production at each price, which will shift short-run aggregate supply to the right.

- d. Do you think the type of adjustments described above would take place more quickly from a recession or from a period when output was above the long-run natural rate? Why?

Answer:

More slowly from a recession because it requires prices to be reduced, and prices are usually more sticky downward. The adjustment when output is above normal requires prices and wages to rise.