

CHAPTER 9

Macroeconomic Equilibrium: Aggregate Demand and Supply

PLEASE DEFINE THESE TERMS.

demand-pull inflation

cost-push inflation

wealth effect

interest rate effect

international trade effect

aggregate demand curve

aggregate supply curve

long-run aggregate supply curve (LRAS)

Read chapter 9 and answer the following questions.

1. What factors affect aggregate demand?
2. What causes the aggregate demand curve to shift?
3. What factors affect aggregate supply?

4. Why does the short-run aggregate supply curve become steeper as real GDP increases?

5. Why is the long-run aggregate supply curve vertical?

6. What causes the aggregate supply curve to shift?

7. What determines the equilibrium price level and real GDP?

- 8.. Explain how business cycles result from changes in aggregate demand and aggregate supply.

9. List factors that affect consumption, investment, government spending, and net exports.

10. Explain the wealth effect, the interest rate effect, and the international trade effect as reasons for a downward-sloping aggregate demand curve.

11. Explain differences in the short-run and long-run aggregate supply curves.

- 12.. Show how aggregate demand and aggregate supply equilibrium is determined.

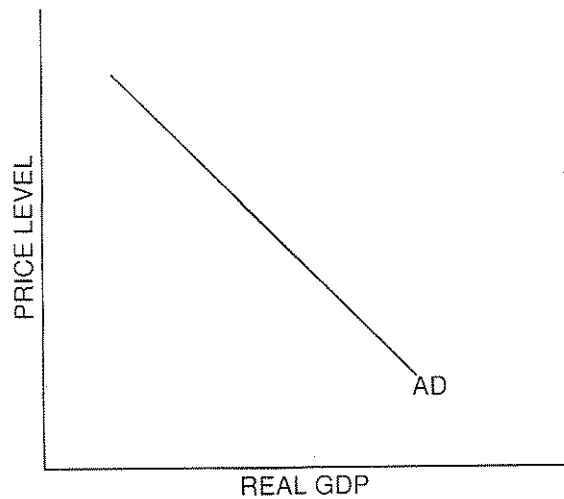
An Introduction to Aggregate Demand

Part A

Why Is the Aggregate Demand Curve Downward Sloping?



Figure 23.1
Aggregate Demand Curve



1. According to the AD curve, what is the relationship between the price level and real GDP?

2. Explain how each of the following effects helps explain why the AD curve is downward sloping.
 - (A) Interest rate effect

 - (B) Wealth effect or real-balance effect

 - (C) Net export effect

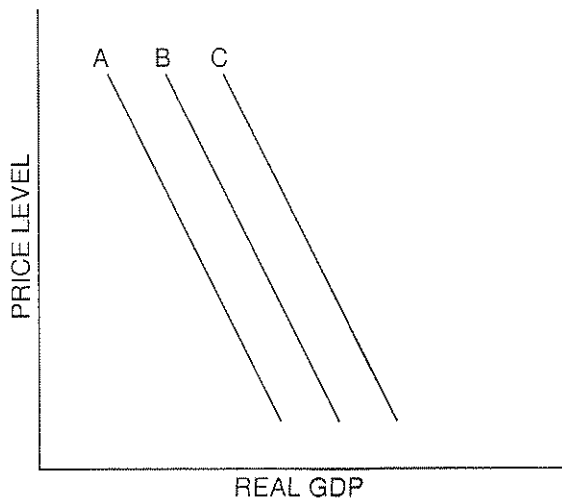
Activity written by John Morton, National Council on Economic Education, New York, N.Y.

3. In what ways do the reasons that explain the downward slope of the AD curve differ from the reasons that explain the downward slope of the demand curve for a single product?

Part B
What Shifts the Aggregate Demand Curve?



Figure 23.2
Shifts in Aggregate Demand



4. Using Figure 23.2, determine whether each situation below will cause an increase, decrease or no change in AD. Always start at curve B. If the situation would cause an increase in AD, draw an up arrow in column 1. If it causes a decrease, draw a down arrow. If there is no change, write NC. For each situation that causes a change in aggregate demand, write the letter of the new demand curve in column 2. Move only one curve.

Situation	1. Change in AD	2. New AD Curve
(A) Congress cuts taxes.		
(B) Autonomous investment spending decreased.		
(C) Government spending to increase next fiscal year; president promises no increase in taxes.		
(D) Survey shows consumer confidence jumps.		
(E) Stock market collapses; investors lose billions.		
(F) Productivity rises for fourth straight year.		
(G) President cuts defense spending by 20 percent; no increase in domestic spending.		

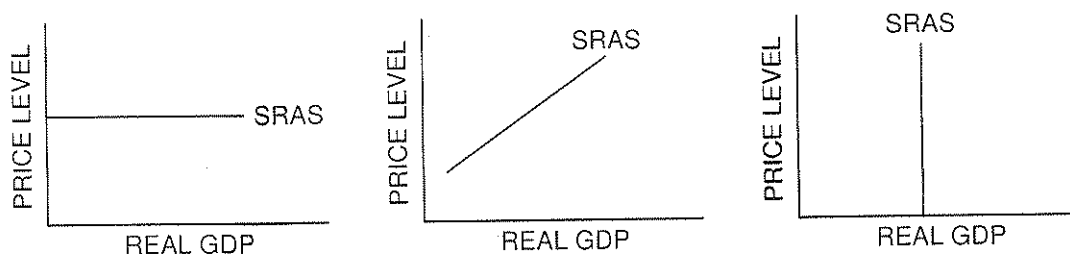
An Introduction to Short-Run Aggregate Supply

Part A

Why Can the Aggregate Supply Curve Have Three Different Shapes?



Figure 24.1
Possible Shapes of Aggregate Supply Curve



1. Under what conditions would an economy have a horizontal SRAS curve?

2. Under what conditions would an economy have a vertical SRAS curve?

3. Under what conditions would an economy have a positively sloped SRAS curve?

Activity written by John Morton, National Council on Economic Education, New York, N.Y.

4. Assume AD increased. What would be the effect on real GDP and the price level if the economy had a horizontal SRAS curve? A positively sloped SRAS curve? A vertical SRAS curve?

5. What range of the SRAS curve do you think the economy is in today? Explain.

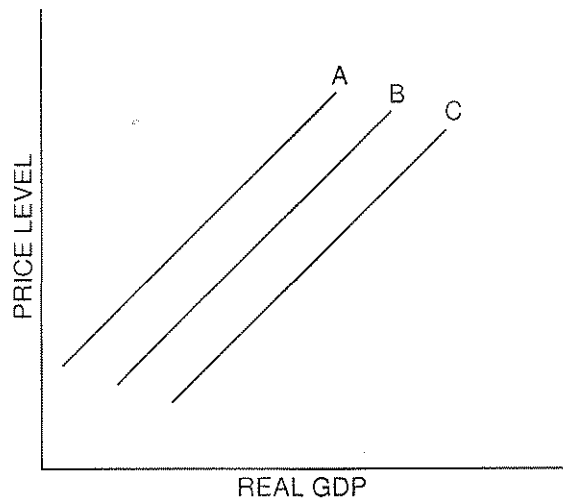
Part B

What Shifts the Short-Run Aggregate Supply Curve?



Figure 24.2

Shifts in Short-Run Aggregate Supply



6. Using Figure 24.2, determine whether each situation below will cause an increase, decrease or no change in short-run aggregate supply (SRAS). Always start at curve B. If the situation would cause an increase in SRAS, draw an up arrow in column 1. If it causes a decrease, draw a down arrow. If there is no change, write NC. For each situation that causes a change in SRAS, write the letter of the new curve in column 2. Move only one curve.

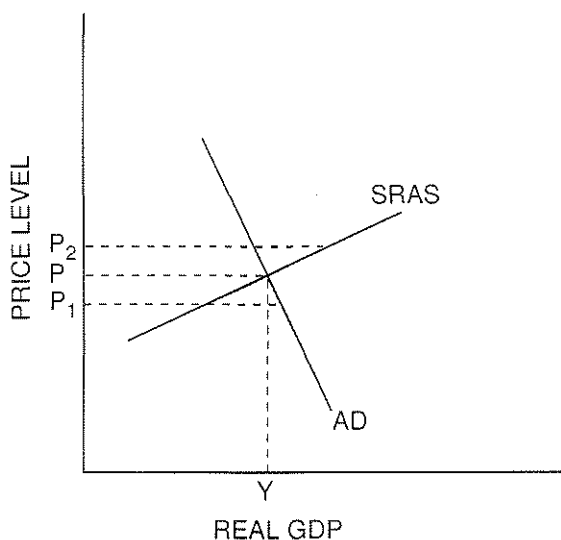
Situation	1. Change in SRAS	2. New SRAS Curve
(A) Unions grow more aggressive; wage rates increase.		
(B) OPEC successfully increases oil prices.		
(C) Labor productivity increases dramatically.		
(D) Giant natural gas discovery decreases energy prices.		
(E) Computer technology brings new efficiency to industry.		
(F) Government spending increases.		
(G) Cuts in tax rates increase incentives to save.		
(H) Low birth rate will decrease the labor force in future.		
(I) Research shows that improved schools have increased the skills of American workers and managers.		

Short-Run Equilibrium Price Level and Output

Part A Equilibrium



Figure 25.1
Equilibrium Price and Output Levels



1. What are the equilibrium price level and output? _____
2. What would eventually happen to the price level and output if the initial price level were P_2 rather than P ? Why would this happen?
3. What would eventually happen to the price level and output if the initial price level were P_1 rather than P ? Why would this happen?

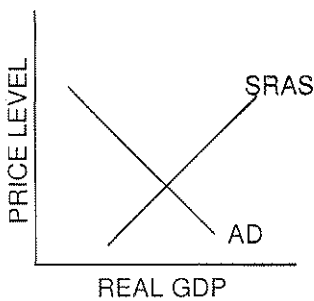
Activity written by John Morton, National Council on Economic Education, New York, N.Y., and James Stanley, Choate Rosemary Hall, Wallingford, Conn.

Part B
Changes in the Equilibrium Price Level and Output

For each situation described below, illustrate the change on the AD and AS graph and describe the effect on the equilibrium price level and real GDP by circling the correct symbol: ↑ for increase, ↓ for decrease, or — for unchanged.

4. Congress passes a tax cut for the middle class, and the president signs it.

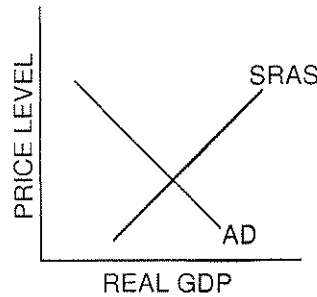
Middle Class Tax Cut



Price level: ↑ ↓ —
Real GDP: ↑ ↓ —

5. During a recession, the government increases spending on schools, highways and other public works.

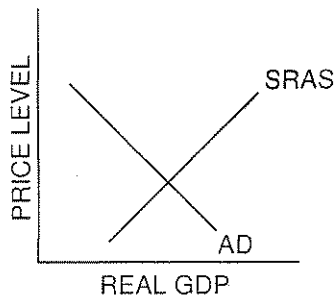
Increased Government Spending



Price level: ↑ ↓ —
Real GDP: ↑ ↓ —

6. New oil discoveries cause large decreases in energy prices.

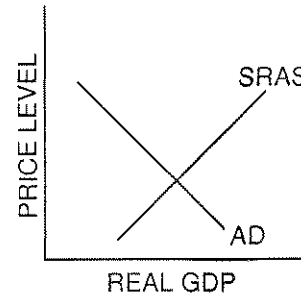
New Oil Discoveries



Price level ↑ ↓ —
Real GDP ↑ ↓ —

7. Illustrate the effects of an increase in aggregate demand.

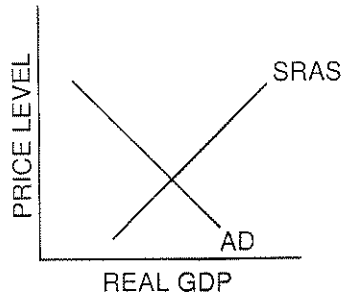
Effects of an Increase in AD



Price level ↑ ↓ —
Real GDP ↑ ↓ —

8. Illustrate the effects of increases in production costs.

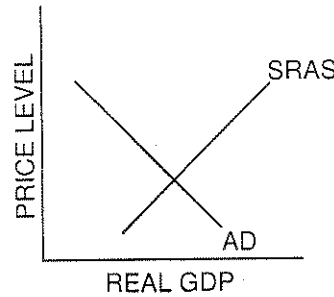
Effects of Increases in Production Costs



Price level	↑	↓	—
Real GDP	↑	↓	—

9. New technology and better education increase productivity.

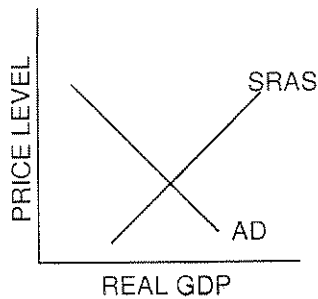
Effects of New Technology and Better Education



Price level	↑	↓	—
Real GDP	↑	↓	—

10. A new president makes consumers and businesses more confident about the future economy. **Note:** Show the change in AD only.

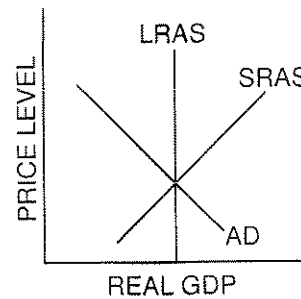
Increased Confidence for Future Economy



Price level	↑	↓	—
Real GDP	↑	↓	—

11. With the unemployment rate at five percent, the federal government reduces personal taxes and increases spending. **Note:** Show the change in AD only.

Reduced Taxes and Increased Government Spending



Price level	↑	↓	—
Real GDP	↑	↓	—

Part C

Summarizing Aggregate Demand and Aggregate Supply Shifts

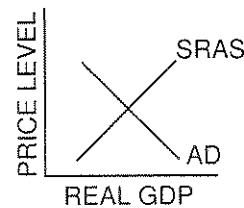
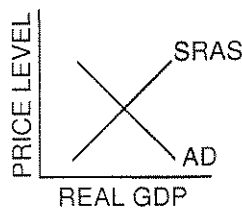
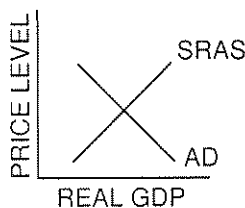
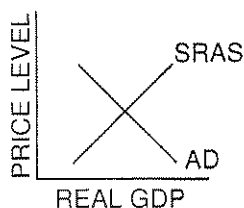
For each of the events below, make additions to the graph to illustrate the change. Then indicate the response in terms of shifts in or movements along the aggregate demand or aggregate supply curve and the short-run effect on real GDP and the price level. Indicate *shifts* in the curve by S and movements *along* the curve by A. Indicate the changes in price level, unemployment and real GDP with an up arrow for an increase and a down arrow for a decrease.

1. Increase in labor productivity due to technological change

2. Increase in the price of inputs used by many firms

3. Boom in investment assuming some unemployed resources are available

4. A major reduction in investment spending



AD Curve	_____	_____	_____	_____
AS Curve	_____	_____	_____	_____
Real GDP	_____	_____	_____	_____
Price Level	_____	_____	_____	_____
Unemployment	_____	_____	_____	_____