

## Figure 11-4 Shifts in the Aggregate Demand Curve

Aggregate demand increases and the AD curve shifts to the right, with the following:

- (1) An increase in consumption due to
  - (a) a rise in disposable income
  - (b) a rise in wealth unrelated to a change in price level
  - (c) an expected rise in prices or incomes
  - (d) a fall in interest rates
- (2) An increase in investment due to
  - (a) a fall in interest rates
  - (b) an expected rise in profits
- (3) An increase in government purchases
- (4) An increase in net exports due to
  - (a) a rise in foreign income
  - (b) a fall in value of the Canadian dollar

Aggregate demand decreases and the AD curve shifts to the left, with the following:

- (1) A decrease in consumption due to
  - (a) a fall in disposable incomes
  - (b) a fall in wealth unrelated to a change in the price level
  - (c) an expected fall in prices or incomes
  - (d) a rise in interest rates
- (2) A decrease in investment due to
  - (a) a rise in interest rates
  - (b) an expected fall in profits
- (3) A decrease in government purchases
- (4) A decrease in net exports due to
  - (a) a fall in foreign income
  - (b) a rise in the value of the Canadian dollar

### THINKING ABOUT ECONOMICS

Which of the components of aggregate demand is most likely to vary?

While consumption, government purchases, and net exports all vary substantially, investment is the most unstable element in aggregate demand. This is because investment depends so heavily on business expectations, which can be subject to volatile swings as perceptions of the future change.

#### Question

Which of the components of aggregate demand is the most stable?

### Brief Review

1. Aggregate demand is the relationship between the price level and total spending in the economy. This relationship can be expressed in an aggregate demand schedule or on an aggregate demand curve (AD).
2. Total spending in the economy, adjusted for inflation, is known as real expenditures, and includes the spending of households, businesses, governments, and foreigners.
3. The general price level and total spending in the economy have an inverse relationship, thereby giving the aggregate demand curve a negative slope.
4. Both the wealth effect and the foreign trade effect, which arise from price level changes, cause movements *along* the aggregate demand curve.
5. In contrast, aggregate demand factors cause a change in total spending at all price levels, thereby *shifting* the aggregate demand curve. Anything other than the price level that changes consumption spending, investment, government purchases, or net exports shifts the aggregate demand curve.

## Figure 11.8 Shifts in the Aggregate Supply Curve

Aggregate supply increases, with the AS curve shifting to the right, and potential output staying the same with the following:

- (1) A decrease in input prices due to
  - (a) a fall in wages
  - (b) a fall in raw material prices

Aggregate supply decreases, with the AS curve shifting to the left, and potential output staying the same with the following:

- (1) An increase in input prices due to
  - (a) a rise in wages
  - (b) a rise in raw material prices

Aggregate supply increases, with the AS curve shifting to the right, and potential output increasing with the following:

- (2) An increase in supplies of economic resources due to
  - (a) more labour supply
  - (b) more capital stock
  - (c) more land
  - (d) more entrepreneurship
- (3) An increase in productivity due to technological progress
- (4) A change in government policies:
  - (a) lower taxes
  - (b) less government regulation

Aggregate supply decreases, with the AS curve shifting to the left, and potential output decreasing with the following:

- (2) A decrease in supplies of economic resources due to
  - (a) less labour supply
  - (b) less capital stock
  - (c) less land
  - (d) less entrepreneurship
- (3) A decrease in productivity due to technological decline
- (4) A change in government policies:
  - (a) higher taxes
  - (b) more government regulation

## Brief Review

1. Aggregate supply is the relationship between the price level and real output produced in the economy. This relationship can be expressed in an aggregate supply schedule or on an aggregate supply curve.
2. Because higher prices encourage increased real output and vice versa, the price level and real output have a direct relationship, thereby giving the aggregate supply curve a positive slope.
3. Since real output may not reflect the full use of all resources—for example, labour—an economy may not reach its potential output.
4. While changes in the price level cause movement *along* the aggregate supply curve, aggregate supply factors—changes in input prices, supplies of economic resources, productivity, and government policies—*shift* the curve and so change real output of an economy and aggregate supply.
5. Short-run changes in aggregate supply, caused by varying input prices, do not change an economy's potential output. However, long-run changes in aggregate supply do change an economy's potential output in the same direction.

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## Questions

2. Identify the impact of each of the following trends on aggregate demand. In each case, draw a graph to show the effect on the aggregate demand curve as well as on the equilibrium price level and real output.
- Consumers become more confident about the prospects for output growth in the Canadian economy.
  - Canadian interest rates rise.
  - Political pressure causes an increase in tax rates on households earning high incomes.
  - A newly elected federal government increases its purchases of goods and services.
  - The American economy experiences a boom.
  - The Canadian dollar falls in value against the American dollar.

3. Identify the impact of each of the following trends on aggregate supply. In each case, draw a graph to show the effect on the aggregate supply curve as well as on the equilibrium price level and real output.
- Canadian workers receive higher wages.
  - A cheap new source of energy raises labour productivity in the Canadian economy.
  - The federal government reduces corporate income tax rates.
  - Due to a global environmental crisis, there is a reduction in the amount of available land.
  - The price of oil decreases.
  - The Canadian dollar rises in value against the American dollar.

5. Outline how a fall in injections will affect the income-spending stream and equilibrium real output. Discuss how the same result can be found using aggregate demand and aggregate supply.

11. (Advanced Question)

Discuss how changes in the following variables could affect aggregate demand in order to reduce (i) an inflationary gap, or (ii) a recessionary gap:

- Government purchases
- Personal and corporate tax rates
- Interest rates
- The Canadian dollar's value in American dollars

