

TABLE 10-3

National Income (billions of dollars)	Consumption Spending (billions of dollars)	Investment Spending (billions of dollars)	Total Spending $C + I$ (billions of dollars)
		500	
2800	2375	500	
2900	2450	500	
3000	2525	500	
3100	2600	500	
3200	2675	500	

SELF-TESTS FOR
UNDERSTANDING

Test A

Circle the correct answer.

- The multiplier is defined as the ratio of the change in
 - autonomous spending divided by the change in consumption expenditures.
 - the equilibrium level of income divided by the increase in consumption spending.
 - the equilibrium level of income divided by the change in autonomous spending that produced the change in income.
 - consumption spending divided by the change in autonomous spending.
- If the marginal propensity to consume were 0.6 and prices did not change, the multiplier would be
 - $\frac{1}{0.6} = 1.67$.
 - 0.6.
 - $\frac{1}{1 - 0.6} = 2.5$.
 - $\frac{1}{1 + 0.6} = 0.63$.
- Effects of price changes associated with the multiplier process mean that the actual multiplier is likely to be
 - greater than in Question 2.
 - less than in Question 2.
 - the same as in Question 2.
- If the marginal propensity to consume were 0.7 instead of 0.6, the textbook multiplier would be
 - higher than in Question 2.
 - lower than in Question 2.
 - the same as in Question 2.
- Real-world multipliers will be less than textbook multipliers because of effects related to all but which one of the following?
 - Income taxation
 - Accounting practices
 - Inflation
 - The financial system
- When compared with changes in investment spending, the multiplier associated with autonomous changes in consumption spending will be
 - larger.
 - smaller.
 - about the same.
- An autonomous increase in savings
 - is necessarily accompanied by an increase in consumption spending.
 - will shift the expenditure schedule down.
 - will not affect the level of income as neither the aggregate demand nor the aggregate supply curve will shift.
 - shifts the aggregate demand curve up.
- When compared with increases in autonomous spending, decreases in autonomous spending are likely to have
 - greater effects on both prices and real output.
 - greater effects on prices and smaller effects on real output.
 - smaller effects on prices and greater effects on real output.
 - smaller effects on both prices and real output.

Changes on the Demand Side: Multiplier

Test B

Circle T or F for True or False as appropriate.

- The multiplier is defined as the ratio of a change in autonomous spending divided by the resulting change in the equilibrium level of income. T F
- Multiplier responses mean that the equilibrium level of national income is likely to change by less than any change in autonomous spending. T F
- Multiplier increases illustrated on the income-expenditure diagram are based on the assumption that prices do not change. T F
- In the actual world, multiplier responses to changes in autonomous spending are likely to be less than that suggested by the simplified textbook formula $1/(1 - MPC)$. T F
- Multiplier increases associated with an increase in investment spending are apt to have some effect on prices as well as on real output because the aggregate supply curve is not horizontal. T F
- An autonomous increase in savings by all consumers will lead to higher levels of real GNP immediately as resources are freed for higher levels of investment. T F
- The multiplier for autonomous increases in investment spending is always greater than the multiplier for autonomous increases in consumption spending. T F
- If the marginal propensity to consume suddenly became larger, the multiplier would become bigger. T F
- Price changes associated with the multiplier process mean that a decrease in autonomous spending is likely to lead to an even greater reduction in output than suggested by the oversimplified formula. T F
- The multiplier works for increases in autonomous spending, but because of price and wage rigidity, the multiplier is irrelevant when examining decreases in autonomous spending. T F
- The impact of a shift in the aggregate demand curve on prices and real output will depend upon the slope of the aggregate supply curve. T F

SUPPLEMENTARY EXERCISE

- In 1963 the President's Council of Economic Advisers was considering how large a tax cut would be necessary to return the economy to full employment. These economists estimated that actual output was about \$30 to \$35 billion less than potential, or full-employment, output. That is, they wanted a tax cut that would increase output by \$30 to \$35 billion, to be divided between consumers (\$10 billion) and businesses (\$3 billion). How could these economists expect that total spending could rise by \$30 to \$35 billion when taxes were only reduced by \$13 billion? Even if consumers and businesses spent the whole \$13 billion, not nearly enough to return the economy to full employment. What is wrong with this analysis?

$$C = 650 + .75Y - 5P$$

Let the aggregate supply function be

$$Y = 400 + 20P$$

- What is the oversimplified multiplier for this economy; that is, the multiplier assuming prices do not change?
- What is the multiplier—the change in the equilibrium level of income divided by the change in autonomous spending producing the change in income—allowing for a change in P ? How does your answer compare with the multiplier in a.? How do your answers here compare with the answers implicit in the Supplementary Exercise to Chapter 9?

Supplementary Exercise