Investment Demand

Investment spending consists of spending on new buildings, machinery, plant and equipment. Investment spending is a part of total spending or aggregate expenditures. Any increase in investment spending would necessarily increase total spending or aggregate expenditures.

Decisions on investment spending are based on a comparison of marginal cost and marginal benefit: If you expect a particular project to yield a greater benefit than cost, you will undertake it. One of the costs associated with investment spending is the interest expense on borrowed money to engage in the project.

Part A

1. Figure 22.1 lists the expected cost of various projects and the associated expected benefit. Fill in the decision column with Yes if you would undertake the project and No if you would not. The first example has been completed for you.

Figure 22.1
Comparison of Costs and Benefits of Different Projects

Cost	Benefit	Decision
$65	$20	No
$55	$30	*No*
$45	$40	*No*
$35	$50	*Yes*
$25	$60	*Yes*

2. If interest rates fell and the cost associated with the project fell by $15 at each level, indicate in Figure 22.2 which projects you would undertake. The first example has been completed for you.

Figure 22.2
Comparison of Project Costs and Benefits with Decrease in Costs

Cost	Benefit	Decision
$50	$20	No
$40	$30	*No*
$30	$40	*Yes*
$20	$50	*Yes*
$10	$60	*Yes*

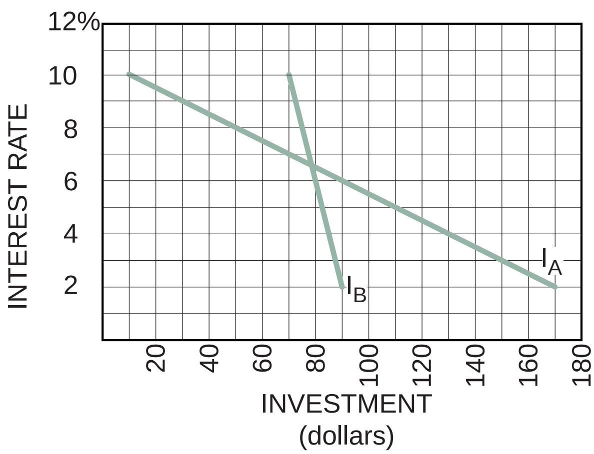
Part B

Figure 22.3 lists the dollar value of investment projects that would be profitable at each interest rate.

Figure 22.3
Country A and Country B Investment Data

Interest Rate	Country A Investment	Country B Investment
10%	$10	$70
8	50	75
6	90	80
4	130	85
2	170	90

Figure 22.4
Investment Demand Curves



3. Plot the investment demand curve for Country A on Figure 22.4 and label it I_A.

4. Plot the investment demand curve for Country B on Figure 22.4, and label it I_B.

5. Which country would experience the larger increase in the amount of investment spending if interest rates in each country dropped from 8 percent to 6 percent? *Country A*

6. How would you characterize the responsiveness of investment spending to the interest rates in Country A compared with Country B? *In Country A, investment demand is more interest elastic.*

7. Assuming an MPC of 75 percent, what would be the effect on real GDP in Country A and Country B if real interest rates decline from 8 percent to 6 percent? *In Country A, real GDP would increase by $160 ($40 x 4); in Country B, real GDP would increase by $20 ($5 x 4).*

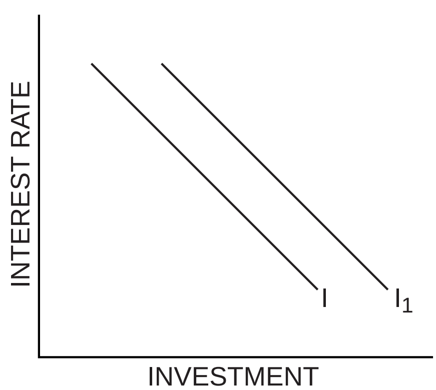
8. What conclusions can be reached about the elasticity of the investment demand curve and the effect a given change in interest rates would have on equilibrium real GDP? *The more inelastic the investment demand, the smaller the impact on investment of a given change in interest rates and, thus, a smaller impact on real GDP.*

9. Looking at the graph you drew, the investment demand curve is downward sloping in both Country A and Country B. Why does the investment demand curve have a downward slope? *As the interest rate declines, more investment opportunities become profitable because the cost of borrowing has declined.*

Part C

Use Figure 22.5 to help answer questions 10, 11 and 12.

Figure 22.5
Shift in Investment Demand Curve



10. If interest rates rise, will the investment demand curve shift to a new location? If so, in what direction? *No. A change in interest rates is a movement along the investment curve.*

11. The shift in the investment demand curve shown in Figure 22.5 (I to I_1) represents a new location for the entire curve. How would you interpret the difference between movement along an existing investment demand curve and a shift in the location of the curve? *A movement along the curve is caused by a change in interest rates. A shift in the curve results from factors other than interest rate. For example, business confidence may increase and cause the investment curve to shift to the right.*

12. List two factors that could cause a shift in the investment demand curve as shown in Figure 22.5.

Change in business conditions
Change in expected profitability of an investment project