

Chapter 26

1. Fly-by-night Corporation is in need of capital funds to expand its production capacity. It is selling short- and long-term bonds and is issuing shares. You are considering the prospect of helping finance their expansion.
 - a. If you were to buy both short- and long-term bonds from Fly-by-night, from which bond would you demand a higher rate of return: short or long term? Why?

Answer:

Long term, because it is more likely that you may need to sell the long-term bond at a depressed price prior to maturity.

- b. If Standard and Poor's lowered the credit worthiness of Fly-by-night, would this affect the rate of return you would demand when buying their bonds? Why?

Answer:

Yes, the credit risk has increased and lenders would demand a higher rate of return.

- c. If Fly-by-night is issuing both shares and bonds, from which would you expect to earn the higher rate of return over the long run? Why?

Answer:

Owners of shares demand a higher rate of return because it is riskier.

- d. Which would be safer: putting all of your personal saving into Fly-by-night shares, or putting all of your personal saving into an investment fund that has some Fly-by-night shares in its portfolio? Why?

Answer:

It is safer to put money in an investment fund because it is diversified (not all of your eggs are in one basket).

2. Use the saving and investment identities from the National Income Accounts to answer the following questions. Suppose the following values are from the national income accounts of a country with a closed economy (all values are in billions).

$$Y = \text{€}6,000$$

$$T = \text{€}1,000$$

$$C = \text{€}4,000$$

$$G = \text{€}1,200$$

- a. What is the value of saving and investment in this country?

Answer:

$$(\text{€}6,000 - \text{€}1,000 - \text{€}4,000) + (\text{€}1,000 - \text{€}1,200) = \text{€}800 \text{ billion}$$

b. What is the value of private saving?

Answer:

$$€6,000 - €1,000 - €4,000 = €1,000 \text{ billion}$$

c. What is the value of public saving?

Answer:

$$€1,000 - €1,200 = -€200 \text{ billion}$$

d. Is the government's budget policy contributing to growth in this country or harming it? Why?

Answer:

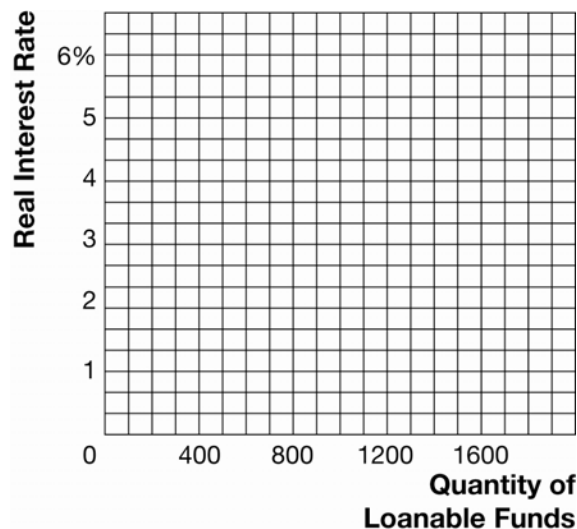
It is harming growth because public saving is negative so less is available for investment.

3. The following information describes a loanable funds market. Values are in billions.

Real Interest Rate	Quantity of Loanable Funds Supplied	Quantity of Loanable Funds Demanded
6%	€1,300	€700
5	1,200	800
4	1,000	1,000
3	800	1,200
2	600	1,500

a. Plot the supply and demand for loanable funds in Exhibit 1. What is the equilibrium real interest rate and the equilibrium level of saving and investment?

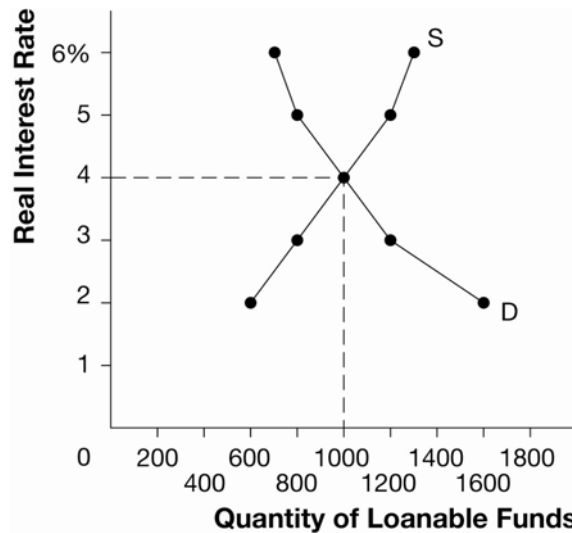
Exhibit 1



Answer:

Equilibrium real interest rate = 4%, equilibrium S and I = €1000 billion.

Exhibit 4



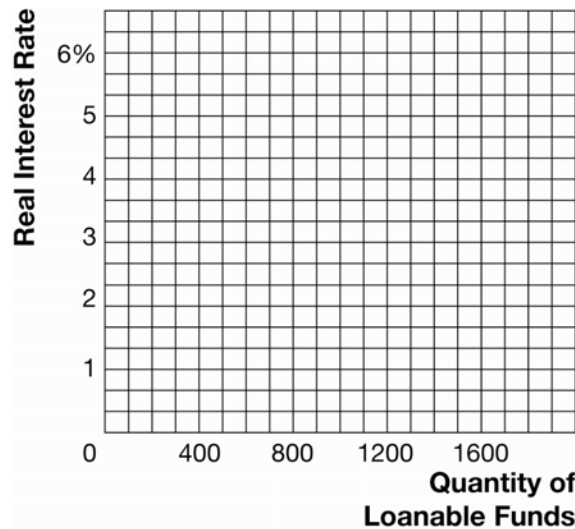
- b. What "market forces" will not allow 2 per cent to be the real interest rate?

Answer:

At 2 per cent interest, the quantity demanded of loanable funds exceeds the quantity supplied by €900 billion. This excess demand for loans (borrowing) will drive interest rates up to 4 per cent.

- c. Suppose the government suddenly increases its budget deficit by €400 billion. What is the new equilibrium real interest rate and equilibrium level of saving and investment? (Show graphically in Exhibit 2.)

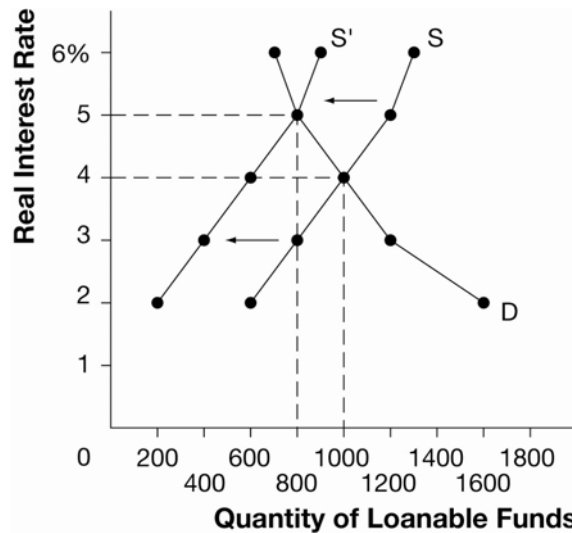
Exhibit 2



Answer:

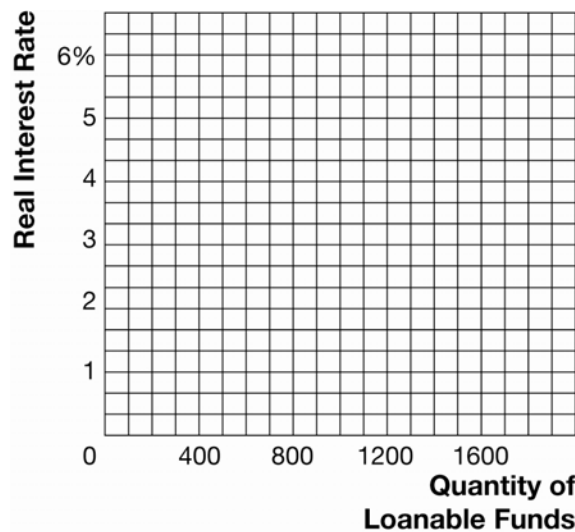
Equilibrium real interest rate = 5%, equilibrium S and I = €800 billion.

Exhibit 5



- d. Starting at the original equilibrium, suppose the government introduces an investment tax credit that stimulates the demand for loanable funds for capital investment by €400 billion at any real interest rate. What is the new equilibrium real interest rate and equilibrium level of saving and investment? (Show graphically in Exhibit 3.)

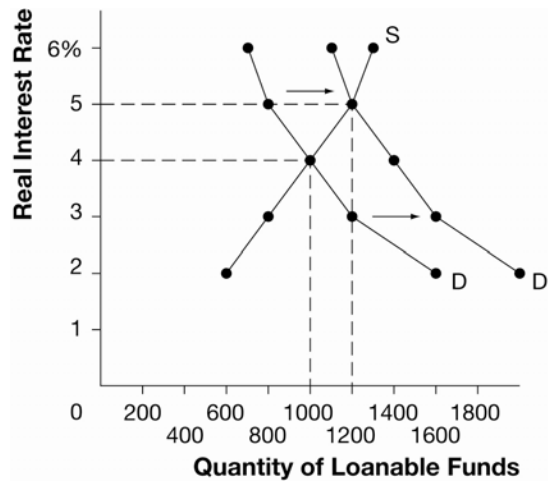
Exhibit 3



Answer:

Equilibrium real interest rate = 5%, equilibrium S and I = €1200 billion.

Exhibit 6



- e. With regard to (c) and (d), which policy is most likely to increase growth? Why?

Answer:

An investment tax credit, because it shifts the demand for loanable funds to invest in capital to the right, raising the level of investment in capital and stimulating growth.