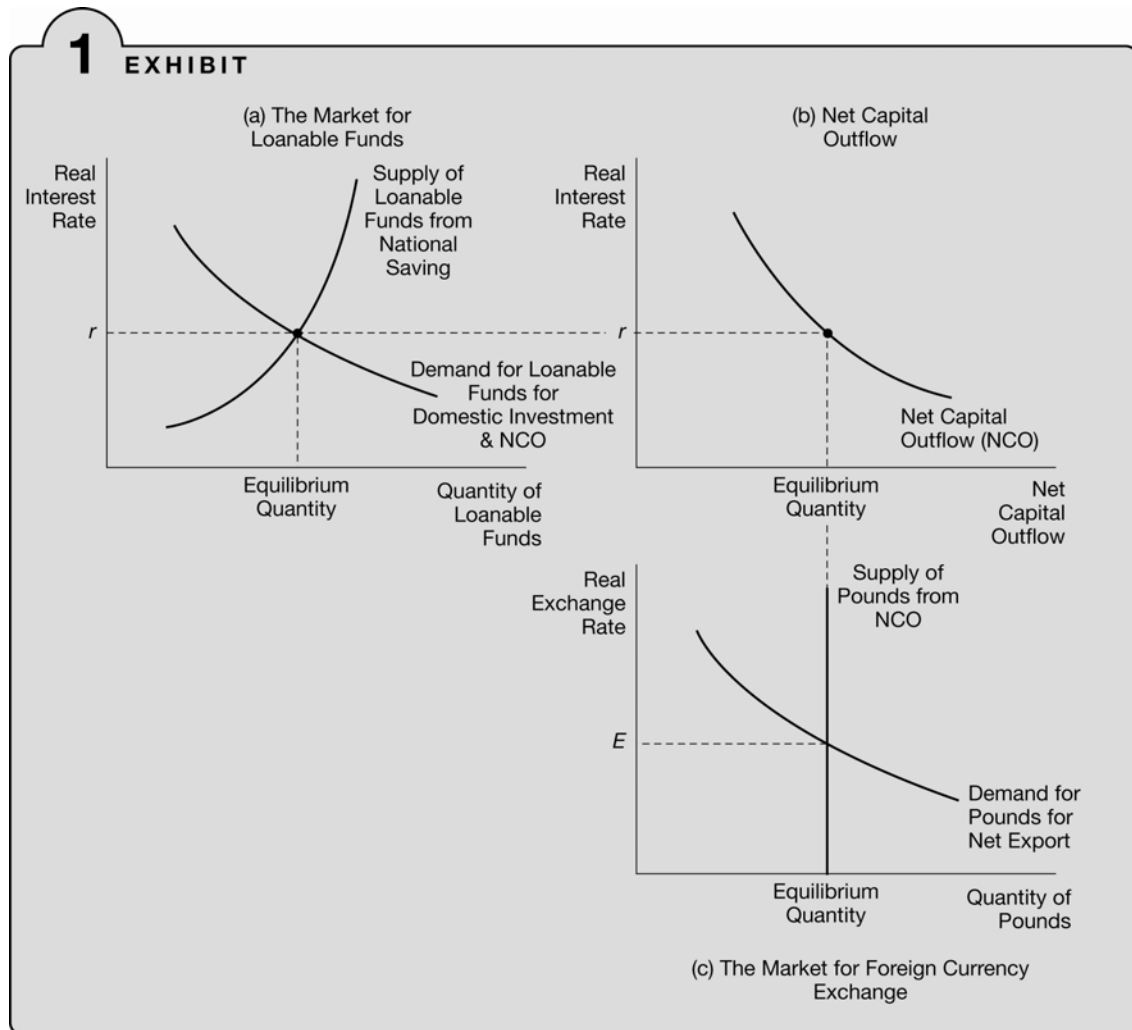


## Chapter 32

- This problem is composed of the examples found in the chapter except the direction of the change in each case has been reversed. Use the model described by Exhibit 1 to answer the following questions.



- Suppose the government reduces its budget deficit. Describe the sequence of events in the model by describing the shifts in the curves in Exhibit 1 and discuss the movements in the relevant macroeconomic variables.

**Answer:**

Panel (a), supply of loanable funds shifts right, real interest rate decreases.  $NCO$  increases, increasing the supply of pounds in the foreign currency exchange market and causing the real exchange rate to depreciate. Saving and domestic investment have increased and the trade balance has moved toward surplus.

- b. Suppose an existing quota on the importing of Japanese cars is removed. Describe the sequence of events in the model by describing the shifts in the curves in Exhibit 1 and discuss the movements in the relevant macroeconomic variables.

Answer:

Panel (c),  $NX$  fall at each exchange rate as imports increase causing the demand for pounds in the foreign currency exchange market to shift left; the real exchange rate falls increasing  $NX$  to their original level. No change in trade balance, but a higher volume of trade (more imports and more exports).

- c. Suppose there is a sudden inflow of capital into the United Kingdom because the country is believed to be more politically stable than other countries. Describe the sequence of events in the model by describing the shifts in the curves in Exhibit 1 and discuss the movements in the relevant macroeconomic variables.

Answer:

$NCO$  falls as UK residents and foreigners buy UK assets. In panel (a), demand for loanable funds shifts left. Panel (b),  $NCO$  shifts left because of a decrease in  $NCO$  at each interest rate causing the supply of pounds in the foreign currency exchange market to shift left and the exchange rate to rise. The result is: real interest rate down;  $NCO$  and  $NX$  down; value of the pound up; increase in domestic investment.

2. a. Suppose private saving increased at each real interest rate. What would happen to the important macroeconomic variables in our model of an open economy?

Answer:

Panel (a), supply of loanable funds shifts right, real interest rate decreases.  $NCO$  increases, increasing the supply of pounds in the foreign currency exchange market and causes the real exchange rate to depreciate. Saving and domestic investment have increased and the trade balance has moved toward surplus.

- b. Is there any difference between your answer above and the answer you would write if the government had reduced its deficit? Why?

Answer:

No, because it doesn't matter why national saving increased. Either one will shift the supply of loanable funds to the right.

- c. Suppose the government were to introduce an investment subsidy that increases domestic investment at each real interest rate. How would this change the important economic variables in the model?

Answer:

It would increase in the demand for loanable funds, raise the real interest rate, lower  $NCO$  and  $NX$ , decrease the supply of pounds in the foreign currency exchange market, and so raise the value of the pound. Domestic saving and investment would increase.

- d. Compare your answer in part (a) (an increase in saving at each real interest rate) to your answer in part (c) (an increase in domestic investment at each real interest rate). Are there any differences?

Answer:

Both increase domestic saving and investment, but an increase in saving moves the trade balance toward surplus while an increase in investment demand moves it toward deficit.

3. Suppose that UK consumers' taste for Japanese cars increases. Answer this question using the open economy model from the Japanese perspective.
- a. What happens to the demand for yen in the foreign currency exchange market?

Answer:

Shifts right.

- b. What happens to the value of yen in the foreign currency exchange market?

Answer:

Real exchange rate rises so value of yen rises.

- c. What happens to Japanese net exports? Why?

Answer:

$NCO$  is unchanged therefore  $NX$  as a total is unchanged.

- d. If the Japanese are selling more cars, what must be true about Japanese imports and exports of other items?

Answer:

If  $NX$  is constant, then Japan must be importing more or exporting less of other items.

- e. Keeping in mind your answers to (a) through (c), do you think Japan runs an overall trade surplus with the rest of the world because its cars are better built or because of its domestic saving and  $NCO$ ? Explain.

Answer:

$NX$  is determined by  $NCO$  so Japan's overall level of trade surplus is based on the saving behaviour of economic agents in Japan. However, the composition of its exports may be based on the relative quality of Japanese production.

4. Suppose the United Kingdom is perceived to be politically unstable, which induces capital flight to the United States.
- a. Describe what happens in the foreign currency exchange market from the perspective of the United Kingdom.

Answer:

The supply of pounds shifts right and the value of the pound falls.

- b. Describe what happens in the foreign currency exchange market from the perspective of the United States.

Answer:

The supply of US dollars shifts left and the value of the dollar rises.

- c. Are your answers to part (a) and (b) above consistent with one another? Why?

Answer:

Yes. A fall in the value of the pound relative to the US dollar should correspond to the rise in the value of the US dollar relative to the pound.

- d. If the economy of United Kingdom is small when compared to the economy of the United States, what should this event do to each country's balance of trade?

Answer:

The fall in the value of the pound should increase the UK's  $NX$  while the rise in the value of the US dollar may be expected to reduce the USA's  $NX$ . But the change in  $NX$  will be greater in percentage terms for the UK than for the USA.

- d. Which country will tend to grow faster in the future? Why?

Answer:

The UK is increasing its  $NCO$  to the USA and the USA is decreasing its  $NCO$  to the UK so the USA will probably grow faster.