Chapter 31

1. How would each of the following transactions affect UK *NCO* (net capital outflow)? Does the transaction affect direct investment or portfolio investment?

a. UK bank Barclays buys shares in South African bank Absa.

Answer:
NCO rises. Foreign portfolio investment.

b. UK firm JCB buys steel from a Japanese manufacturer to use in the production of its diggers, excavators and trucks.

Answer:
UK *NX* falls and a Japanese manufacturer is holding UK pounds, so *NCO* falls. Foreign portfolio investment.

c. French car manufacturer Peugeot expands its plant in Coventry in England.

Answer:
NCO falls. Foreign direct investment.

d. An American investment fund buys shares in UK aerospace and defence firm BAE Systems.

Answer:
NCO falls. Foreign portfolio investment.

e. UK oil company BP builds a plant in Venezuela.

Answer:
NCO rises. Foreign direct investment.

2. Suppose a resident of Portugal buys a set of golf clubs from a UK manufacturer using euros.

a. If the UK manufacturer holds on to the euros, does UK *NX* = *NCO* in this case? Explain.

Answer:
Yes, *NX* has risen by the size of the sale and *NCO* has risen an equal amount and is the size of the company's holdings of foreign currency.

b. Suppose the UK manufacturer uses the euros to help build a factory in Portugal. Does *NX* = *NCO* in this case? Explain. What kind of foreign investment is this?

Answer:
Yes, *NX* has risen by the size of the sale and *NCO* has risen an equal amount and is the size of the company's purchase of foreign capital. Foreign direct investment.

c. Suppose the UK manufacturer uses the euros to buy shares in a Portuguese company. Does *NX* = *NCO* in this case? Explain. What kind of foreign investment is this?

Answer:
Yes, *NX* has risen by the size of the sale and *NCO* has risen an equal amount and is the size of the company's purchase of foreign capital. Foreign portfolio investment.

d. Suppose the UK manufacturer uses the euros to buy leather made in Portugal. Does NX = NCO in this case? Explain.

Answer:
Yes, *NX* and *NCO* are both unchanged because exports rise by the same amount as imports, leaving *NX* unchanged. *NCO* was not involved.

3. Suppose the nominal exchange rate is 1,000 Chilean pesos per UK pound. Further, suppose the price of a bushel of UK wine is £5 per bottle and the price of a bottle of Chilean wine is 7,500 pesos.

a. What is the real exchange rate between Chile and the UK in terms of wine?

Answer:
(1000 pesos/£ x £5/bottle) / 7,500 pesos/bottle = 0.67 Chilean bottle per UK bottle

b. Does a pound have purchasing power parity in the UK and Chile? Explain.

Answer:
No. £1 buys £1/£5 bottles or 0.20 of a bottle of UK wine. £1 buys 1000 pesos and 1000 pesos buys 1000/7500 or 0.1333 of a bottle of Chilean wine. (Or 1 bottle costs £5 in the UK and £7.50 in Chile.)

c. Is there a profit opportunity that you could exploit with arbitrage? Where would you buy and where would you sell?

Answer:
Yes. Buy wine in the UK and sell it in Chile.

d. If the nominal exchange rate stayed the same, what should happen to the price of wine in the UK and Chile? Explain.

Answer:
The price should rise in the UK due to an increase in demand and fall in Chile due to an increase in supply.

e. Suppose prices move as you have suggested in part (d). What has happened to the real exchange rate?

Answer:
The real exchange rate will rise until it is equal to one (1 Chilean bottle to 1 UK bottle).

4. Suppose the price of a pair of Levi's jeans is €40 in Spain and 400 pesos in the Philippines.

a. What is the nominal peso/euro exchange rate if purchasing-power parity holds?

Answer:
400 pesos/40 euros = 10 pesos/euro

b. Suppose the central bank in the Philippines is politically pressured to double the country's money supply, which doubles the price level in the Philippines. If purchasing-power parity holds, what is the new peso/euro exchange rate? Did the peso appreciate or depreciate?

Answer:
800 pesos/40 euros = 20 pesos/euro. The peso depreciated.

c. Suppose the ECB now doubles the Eurozone money supply, which doubles the price level in the Eurozone, including, of course, Spain. If purchasing power parity holds, what is the new value of the peso/euro exchange rate? Did the euro appreciate or depreciate?

Answer:
800 pesos/80 euros = 10 pesos/euro. The euro depreciated.

d. Compare your answer to part (a) and part (c). What has happened to the exchange rate? Why?

Answer:
It is unchanged. When prices rise symmetrically, it has no effect on the nominal exchange rate if purchasing power parity holds.