

The exchange rate, then, is determined by the intersection of demand and supply. This is shown in Figure 11.5. The exchange rate E is defined as the amount of domestic currency required to purchase a unit of foreign currency, so appreciation refers to a fall in E and depreciation refers to a rise.

Figure 11.5 Equilibrium exchange rate

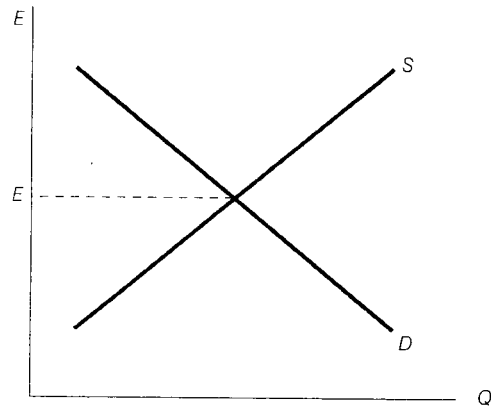


Figure 11.6 A fall in demand for domestic goods and the exchange rate

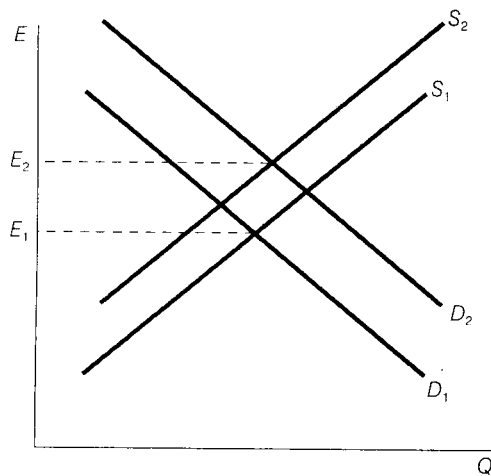
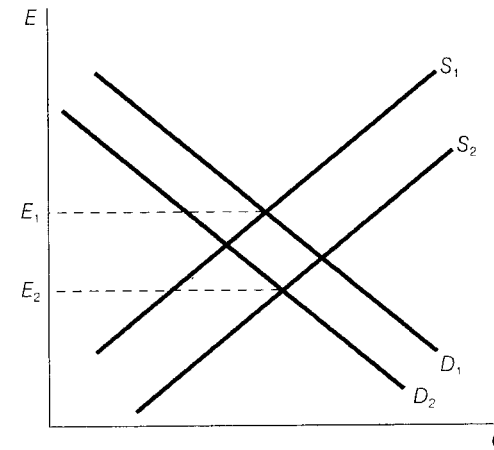


Figure 11.7 An increase in the demand for domestic goods and the exchange rate



It is now easy to see why the exchange rate is determined by trade flows. For example, if there is now a preference for foreign-produced goods, then two things will happen. The first is that domestic residents will switch their consumption from domestic to foreign goods, so the demand for foreign currency will rise. This is shown in Figure 11.6 with the shift in the demand schedule from D_1 to D_2 . In addition, foreign residents will switch their consumption towards the goods produced in their own country, so the supply of foreign currency will fall – shifting the supply curve of foreign currency from S_1 to S_2 . Taking both these movements together, the domestic exchange rate will depreciate from E_1 to E_2 . The weakness in the domestic currency reflects the fall in demand for domestically produced goods.

Figure 11.7 shows the opposite case, where the demand shift is towards domestically produced goods. In this case, the demand for foreign currency will fall and the supply of foreign currency will rise. This changing pattern of trade, where there is an increasing preference for domestic goods, will lead to an appreciation in the exchange rate from E_1 to E_2 .

The relative demands and supplies of currencies, and therefore the exchange rates, are trade determined. With this in mind, there are two main theories of exchange rate determination. **Purchasing power parity (PPP)** refers to trade in goods and services, and **uncovered interest parity (UIP)** refers to the trade in financial assets.

11.4.1 PPP: purchasing power parity

This theory argues that the exchange rate will change so that the price of a particular good or service will be the same regardless of where you buy it. For this reason, the theory of PPP is often known as the *law of one price*. The theory of PPP therefore argues that the nominal exchange rate will change to offset price differences and the real exchange rate should remain constant. If we recall, the £-\$/ real exchange rate was defined as:

$$R = (\text{£}/\$) * (P_{US}/P_{UK}) = E * (P_{US}/P_{UK})$$