

# EXCHANGE RATES & THEIR DETERMINATION

- Exchange rates are the price of one currency in terms of another (e.g. £1 = 9.71 TRY — this shows the price of pounds in terms of the Turkish Lira).
- Exchange rates are needed because different countries use different currencies. When trading with other countries, payments must usually be made in another currency and in their own currencies.

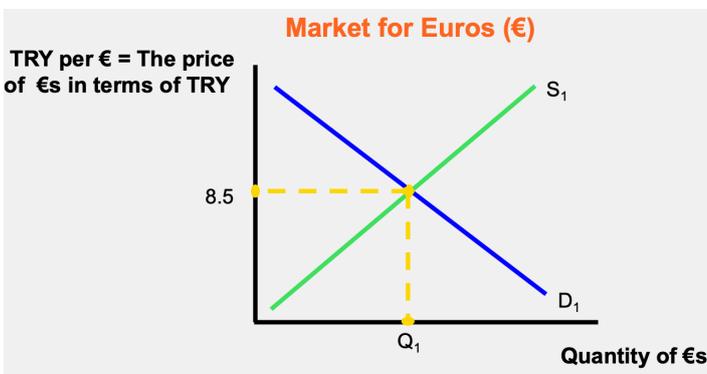
**Question:** Calculate the amount paid in MXN by TMT for the €2.5 million components bought from Germany (assume MXN 1 = €0.45).

MXN 1 = €0.45

$$x = € 2.5 \times 10^6 \quad \frac{2.5 \times 10^6}{0.45} = 5555555.556 \text{ MXN}$$

- Market forces (forces of supply & demand) determines the price of a currency and if those forces change, the price is also likely to change. Currencies are bought and sold like commodities on a foreign exchange market.
- Foreign exchange market is a market where foreign currencies can be bought and sold. Banks and other financial institutions trade in these markets to obtain foreign currencies for their customers.

**Question:** Draw a graph to show the supply & demand for euros in terms of the Turkish Lira, if the exchange rate is €1 = 8.5 Turkish Liras.

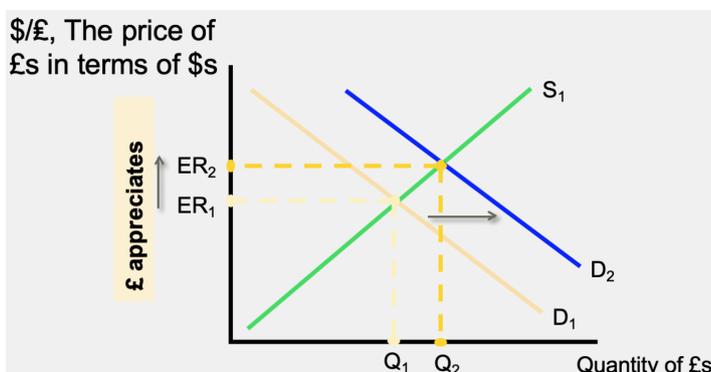


The equilibrium exchange rate is where supply & demand for euros is equal.

## Factors Affecting the Demand for a Currency

### 1) Interest Rates in the Country

If interest rates are high, more people from around the world will want to save in that country. They can only save in the currency of that country. This will increase demand for that currency and push exchange rates up. A fall in interest rates will have the opposite effect.



This will shift the demand curve for pounds to the right from D<sub>1</sub> to D<sub>2</sub>. As a result, the exchange rate will rise from ER<sub>1</sub> to ER<sub>2</sub>.

## 2) Currency Speculators

Speculators are firms, individuals or financial institutions that buy and sell currencies in the hope of making a capital gain (profit) i.e. they will buy it at one price and hope to sell it for a higher price later. E.g. if they think the value of the \$ is going to rise in the future, they will buy \$. This will increase demand for \$ and drive up the exchange rate.

## 3) The Demand for Exports

Firms that sell goods & services to foreigners expect to be paid in their own currency i.e. if a firm in Germany bought a British product the British firm would expect to be paid in £, so the German would buy £ and they are likely to obtain pounds from the bank. Therefore, demand for UK exports increase the demand for pounds, which increases the exchange rate. A fall in demand for exports will have the opposite effect.

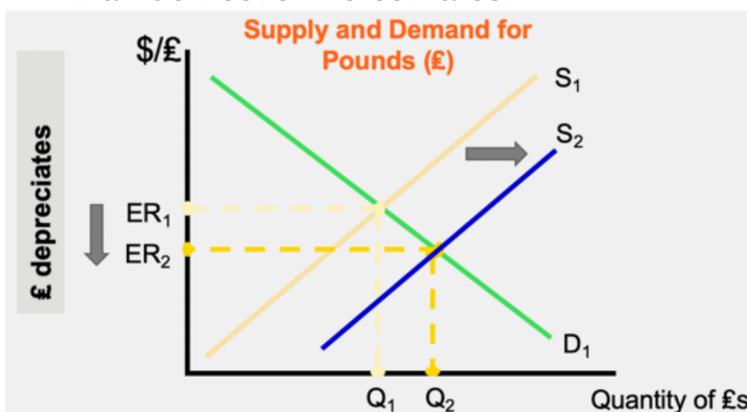
## 4) Inward Foreign Direct Investment (Movements of Investment Capital)

If an investor from one country (i.e. Italy) invests in another (i.e. USA), this represents an increase in inward FDI (foreign direct investment). For this investment, they will have to make the purchase in \$, which increases the demand for a currency and pushes the exchange rate up for \$. A decrease in inward FDI will have the opposite effect.

## Factors Affecting the Supply of a Currency

### 1) Interest Rates in Other Countries

If interest rates are higher in other countries, this could result in a flow of capital out of domestic banks as savers may decide to place their money in foreign banks. Buying foreign currency will increase the flow of domestic currency into the foreign exchange markets. This will increase supply of the domestic currency and reduce the exchange rate. The opposite will happen if overseas interest rates are lower than domestic interest rates.



*This will shift the supply curve for pounds to the right from  $S_1$  to  $S_2$ . As a result, the exchange rate will fall from  $ER_1$  to  $ER_2$ .*

## 2) Currency Speculators

If the speculators believe the price of a currency will fall, they will sell the currency in exchange for another currency. This will increase supply of the original currency into the foreign exchange market and lower the exchange rate.

## 3) Demand for Imports

Imported goods & services have to be bought with foreign currency. Therefore, if UK importers buy more foreign goods & services, they will have to buy more foreign currency with £s. The flow of £s, provided by importers, onto the foreign exchange market increases supply, which drives down the exchange rate.

#### ***4) Outward Foreign Direct Investment (Movements of Investment Capital)***

If UK MNCs develop business interest abroad, this is an increase FDI. There will be an increase in the supply of pounds in the foreign exchange markets as the MNCs will buy the currency of the country they want to invest with pounds, which will lead to more pounds flowing into the market and this will reduce the exchange rate for pounds. A decrease in outward FDI will have the opposite effect.