

Edexcel (A) Economics A-level  
**Theme 4: A Global Perspective**

4.1 International Economics

**4.1.8 Exchange rates**

Notes



## Exchange rate systems

The exchange rate of a currency is the weight of one currency relative to another.

### Floating:

The value of the exchange rate in a floating system is determined by the forces of supply and demand.



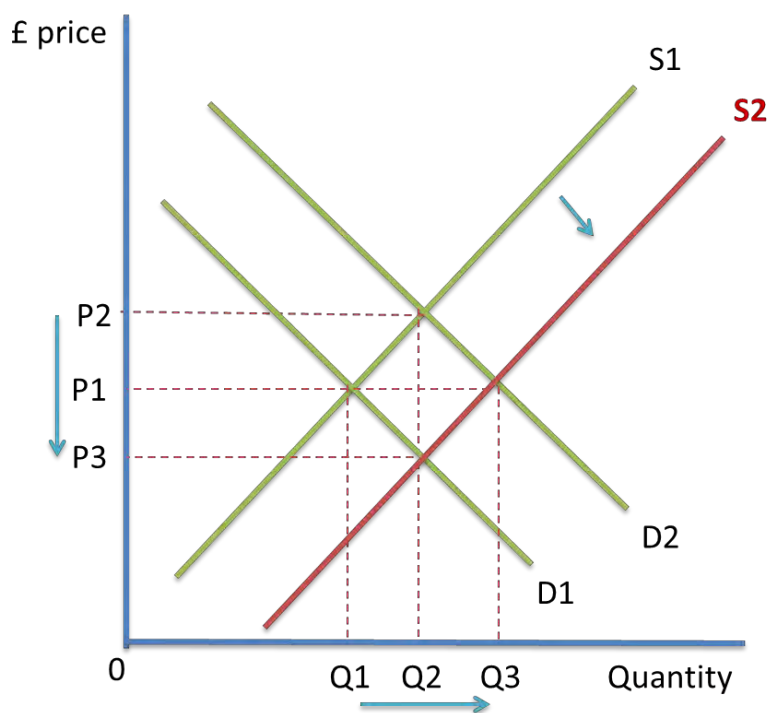
In a floating exchange rate system, the market equilibrium price is at  $P_1$ . When demand increases from  $D_1$  to  $D_2$ , the exchange rate appreciates to  $P_2$ .

The demand for a currency is equal to exports plus capital inflows. The supply of a currency is equal to imports plus capital outflows.

### Fixed:

A fixed exchange rate has a value determined by the government compared to other currencies.





In a fixed exchange rate system, the supply of the currency can be manipulated by the central bank, which can buy or sell the currency to change the price to where they want. In the diagram, the supply has been increased ( $S1$  to  $S2$ ) by selling the currency so more is on the market ( $Q1$  to  $Q3$ ). The currency depreciates as a result ( $P2 \rightarrow P3$ ), which makes exports more competitive.

### Managed:

Managed exchange rate systems combine the characteristics of fixed and floating exchange rate systems. The currency fluctuates, but it doesn't float on a fully free market. This is when the exchange rate floats on the market, but the central bank of the country buys and sells currencies to try and influence their exchange rate.

The Japanese central bank has also attempted to make exports more competitive by manipulating the Yen, even though the Yen floats on the market.

The Indian rupee fluctuates on the market, but the central bank intervenes when it falls outside a set range.



## Distinction between revaluation/appreciation and devaluation/depreciation of a currency

**Revaluation:** This is when the currency's value is adjusted relative to a baseline, such as the price of gold, another currency or wage rates.

**Appreciation:** when the value of a currency increases. Each pound will buy more dollars, for example.

**Devaluation:** This is when the value of a currency is officially lowered in a fixed exchange rate system.

**Depreciation:** when the value of a currency falls relative to another currency, in a floating exchange rate system.

## Factors influencing floating exchange rates

### Inflation:

A lower inflation rate means exports are relatively more competitive. This increases demand for the currency. This causes the currency to appreciate.

### Speculation:

If speculators think a currency will appreciate in the future, demand will increase in the present, since they believe a profit can be made by selling the currency in the future. This can cause an increase in the value of the currency.

### Other currencies:

If markets are concerned about major economies, such as the EU, the currency might rise. This happened with the Swiss Franc in 2010 when markets were worried about the EU economy.

### Government finances:

A government with a high level of debt is at risk of defaulting, which could cause the currency to depreciate. This is since investors start to lose confidence in the economy, so they sell their holdings of bonds.



### **Balance of payments:**

When the value of imports exceeds exports, there is a current account deficit. Countries which struggle to finance this, such as through attracting capital inflows, have currencies which depreciate as a result.

### **International competitiveness:**

An increase in competitiveness increases demand for exports, which increases demand for the currency. This causes an appreciation of the currency.

### **Government intervention in currency markets through foreign currency transactions and the use of interest rates**

Governments might try and influence their currency, such as by maintaining a fixed exchange rate. For example, China has previously kept the Yuan undervalued by buying US dollar assets to make their exports seem relatively cheaper.

#### **Interest rates:**

An increase in interest rates, relative to other countries, makes it more attractive to invest funds in the country because the rate of return on investment is higher. This increases demand for the currency, causing an appreciation. This is known as **hot money**.

#### **Quantitative easing:**

This is used by banks to help to stimulate the economy when standard monetary policy is no longer effective. This has inflationary effects since it increases the money supply, and it can reduce the value of the currency. QE is usually used where inflation is low and it is not possible to lower interest rates further.

#### **Foreign currency transactions:**

The Bank of England uses this to manage the UK's gold and foreign currency reserves, as well as managing the MPC's pool of foreign currency reserves. It involves buying and selling foreign currency to manipulate the domestic currency. China kept



large reserves of the US Dollar by purchasing government bonds, in order to undervalue the Yuan.

### **Competitive devaluation/depreciation and its consequences**

-  A devalued currency makes exports cheaper and imports more expensive. It could increase economic growth as a result. However, inflation is likely to increase due to the higher costs of imports and demand pull inflation from the increase in AD.
-  The current account is likely to improve since there are fewer imports and more exports.
-  When firms know that the value of the currency is lower relative to another currency, it allows for them to plan investment, because they know that they will not be affected by harsh fluctuations in the exchange rate.
-  However, the government and the central bank do not necessarily know better than the market where the currency should be and the balance of payments would not automatically adjust to economic shocks.
-  It can be costly and difficult for the government to hold large reserves of foreign currencies in order to maintain a devalued currency.
-  It also depends on the PED of exports and imports. Inelastic exports will not increase significantly if price falls.
-  If the main trading partners are in a recession, then demand for exports is likely to be low, and depreciating the exchange rate is unlikely to affect it.

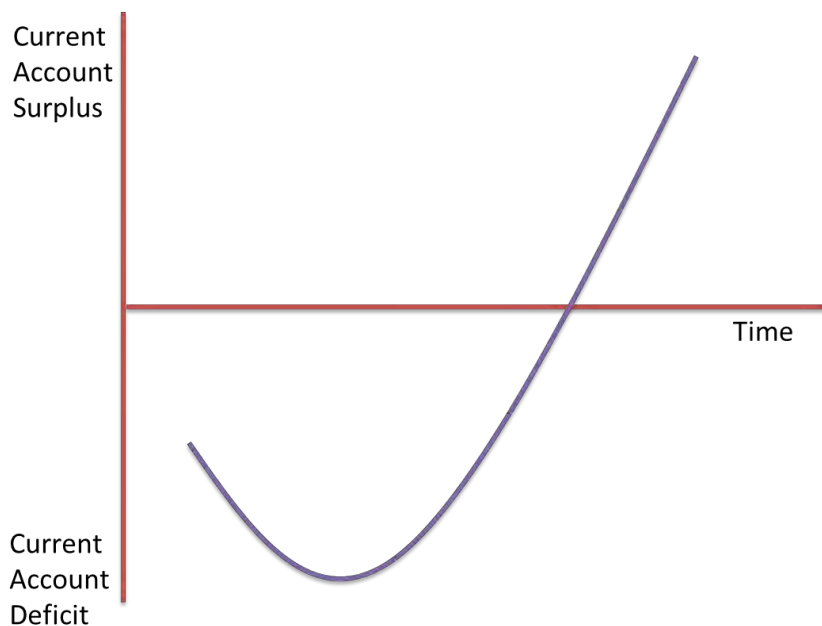
### **Impact of changes in exchange rates:**

- **The current account of the balance of payments (reference to Marshall-Lerner condition and J curve effect)**

A reduction in the exchange rate causes exports to become cheaper, which increases exports. This assumes that demand for exports is price elastic. It also causes imports to become relatively expensive. This means the UK current account deficit would improve.

The Marshall-Lerner condition states that a devaluation in a currency only improves the balance of trade if the absolute sum of long run export and import demand elasticities is greater than or equal to 1.





The J-curve effect occurs when a currency is devalued. Since devaluing the currency causes imports to become more expensive, at first the total value of imports increases, which worsens the deficit. Eventually, the value of exports decreases, which leads to a reduction in the trade deficit.

When the currency is devalued, there may be a time lag in changing the volume of exports and imports. This could be due to trade contracts and the price inelasticity of demand for imports in the short run, whilst consumers search for alternatives. In the long run, consumers might start purchasing domestic products, for example, which helps improve the deficit.

### ○ **Economic growth and employment/unemployment**

Exchange rate affects AD because they affect the price of exports and imports. If the exchange rate appreciates, AD is likely to fall since imports become cheaper and exports become more expensive. Households are likely to switch from buying domestically produced goods to imports. However, this depends on the inflation rate. A lower domestic inflation rate, compared to other countries, might mean that consumers still purchase domestic goods. It also depends on the price elasticity of demand for domestic goods and imports. The UK has a high marginal propensity to import, so households are still likely to import goods, even if the pound appreciates.



A weaker exchange rate is likely to increase exports. This means that domestic firms can increase their sales and increase their profits. Jobs might be created as a result. If it is cheaper to import goods, because the value of the exchange rate increased for example, then jobs in the domestic industry might be lost since demand falls.

- **Rate of inflation**

A depreciation in the exchange rate is likely to be inflationary due to the increase in the price of imported raw materials. Production costs for firms increase, which causes cost-push inflation. Moreover, since AD will be increasing due to the higher level of exports, there could be upward pressure on the average price level.

- **Foreign direct investment (FDI) flows**

FDI is the flow of capital from one country to another, in order to gain a lasting interest in an enterprise in the foreign country.

A depreciation in the currency means the country's wages and production costs have fallen relative to other countries. This makes the country more internationally competitive and it is likely to attract more FDI.

The effects of exchange rates on imports and exports can be remembered using the acronym SPICED:

**S**trong  
**P**ound  
**I**mports  
**C**heap  
**E**xports  
**D**ear

