Edexcel

A Level

Economics

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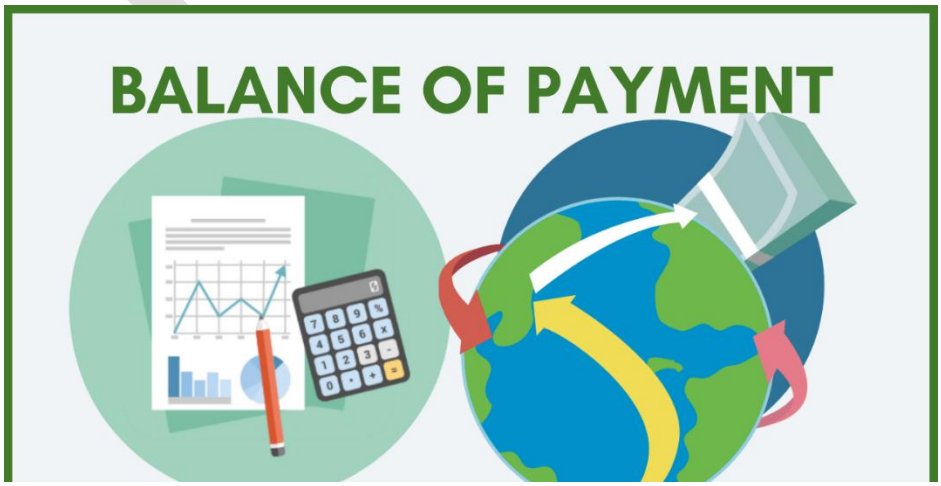
Unit 04-Section 3

Balance of payments, exchange rates and international competitiveness



Chapter 28 – Balance of payments

COMPONENTS OF THE BALANCE OF PAYMENTS

The balance of payments records all financial transactions made between residents of one country and the rest of the world. These residents are made up of consumers, businesses and the government.

Flows of money into the country are given a positive (+) sign on the accounts. These inflows are recorded as a credit item. Flows of money out of the country are given a negative (-) sign. These outflows are recorded as a debit item.

The components of the balance of payments were introduced in Student Book 1, with particular reference to the **current account.** This is developed in this chapter.

The balance of payments accounts can be split into two components:

- The current account is where payments for the purchase and sale of goods and services are recorded, along with primary and secondary income flows. The cross-border income flows are associated with the international ownership of financial assets and current transfers of money between residents and non-residents.
- The capital and financial accounts are where flows of money associated with saving, investment, speculation and currency stabilisation are recorded. The **capital account** shows the credits and debit items for non-produced, non-financial assets and capital transfers between residents and non-residents.

The financial account records almost all the flows of financial capital into and out of a country. The financial account records transactions that result in a change of ownership of financial assets and liabilities between residents and non-residents: It is split into three main parts.

- Foreign direct investment (FDI) involves money flows to purchase a controlling interest in a foreign firm, such as BT buying 15% of a Brazilian telecommunications company. It also includes reinvested earnings, where profits from foreign-owned companies are reinvested in the company, like BT reinvesting $10 million from a US subsidiary.
- Portfolio investment includes flows of money to purchase foreign shares where this is less than 10 per cent of the company. It also includes flows of money to purchase debt securities such as bonds (long-term loans issued by governments and firms).
- 'Other investments' is investment other than direct and portfolio investment. It includes trade credit, loans, purchases of currency and bank deposits.

REASONS FOR INTERNATIONAL CAPITAL FLOWS ON THE FINANCIAL ACCOUNT

World capital flows have been growing over time at a much faster rate than growth in world GDP. This has been one aspect of globalisation. International capital flows occur for a number of reasons.

- Speculators, driven by quick profits, shift capital globally, buying and selling debt and shares, and predicting currency appreciation and fall. This short-term capital flow, known as hot money, serves an economic function by adjusting prices to reflect long-term demand, supply, and price conditions.
- Capital flows are an essential part of the finance of trade. A Polish resident may take out a German loan to buy a car. A German firm may take out a loan from abroad to finance the purchase of a machine from abroad.

- Banks in one country are finding it increasingly profitable to lend to economic agents in another country on a short-term basis. A UK bank, for example, may decide to expand its operations in the French loan market.
- Individuals transfer funds abroad for a number of reasons. One is that they might have a holiday house in another country.
- Foreign direct investment occurs because a firm in one country can see that it can make a profit by investing in the longer term in a firm in another country.
- Portfolio investment (a combination of assets, typically stocks, bonds, and cash equivalents) may occur for the same reasons as FDI or it may be more speculative in motivation.
- Part of portfolio investment is investment in government bonds, a form of long-term loan to governments. Governments may encourage foreigners to buy their bonds to increase the amount of credit available within a national economy.

THE RELATIONSHIP BETWEEN THE CURRENT ACCOUNT, CAPITAL ACCOUNT AND FINANCIAL ACCOUNT

The current and capital account balances indicate a country's net lending or borrowing status. The financial account, the counterpart to both, records how a country finances its deficit from the rest of the world. A deficit indicates a country building up liabilities, while a surplus indicates a country lending to the rest of the world, buying foreign assets.

In 2017, the US's financial account surplus was $330 billion, less than the $94 billion deficit recorded on the current and capital accounts. This is due to the US central bank selling reserves of foreign currency to finance the deficit on the current account. However, this leaves a shortfall of $92 billion, known as the balancing item or net errors and omissions. The current account balance is in deficit, but the primary income component recorded a surplus. The US was a net borrower from the rest of the world in 2017, with net liabilities of $330 billion. Foreign direct investment from Japan created a liability to Japan, while money flowing out of the US was recorded as a portfolio asset.

CAUSES OF SURPLUSES AND DEFICITS ON THE CURRENT ACCOUNT

The current account balance of a country is never likely to equal zero. The current account is made up of millions of different transactions. So, countries can expect surpluses and deficits to occur in the short term. In the long term, countries can be split into three groups:

United States US dollars (billions)	
Current account	–449
Capital account	25
Balance on current and capital account	–424
Financial account	+330
Drawing on reserves	+2
Balancing item	+92
Balance	0

▲ Table 1 The balance of payments for the United States

Note: Adapted. The data for the current account and financial account excludes reserves and related items.

- countries where the current account broadly is in balance such as France or Chile
- countries which run persistent current account surpluses such as Norway, China, Germany and Switzerland
- countries which run persistent current account deficits such as the UK, the US, Turkey, Poland and Australia.

There are a number of reasons why countries run persistent surpluses or deficits on their current accounts.

Natural resources Some countries sell large quantities of natural resources relative to the size of their population.

Underlying competitiveness Some countries have acquired over time an underlying competitiveness which makes their goods particularly attractive to foreign buyers. These countries are likely to experience a current account surplus.

Exchange rates Some governments deliberately keep their exchange rates artificially low. This means that the prices of their exports are lower than they would be if the exchange rate was fixed by free market forces. It also means that imports are more expensive to buy in local currency terms. Exchange rate manipulation which dramatically reduces the exchange rate can then lead to persistent surpluses on the current account.

Domestic demand If aggregate demand is high in an economy, then imports are likely to be high. As national income rises, spending on imports rises. The concept which links changes in income to changes in imports is the marginal propensity to import. So reflationary or deflationary policies can cause current account deficits or surpluses.

Overspending by consumers and government Deficits indicate overspending by consumers and governments, leading to foreign borrowing. Countries like Argentina, Greece, and Portugal have experienced financial crises due to high debts. Countries must choose between defaulting on debts or cutting domestic spending to create a current account surplus, as Greece and Portugal have experienced since the 2008 financial crisis.

Commodity prices For some countries the export of commodities is an important part of their balance of trade. If commodity prices fall on global markets, then exports will fall. This could cause a current account deficit over this period. Equally commodity importers are likely to see an improvement on their current account.

Balance of payments for the US (US dollars billions)	2017
Balance on goods and services	–552
Primary income (credit)	928
Primary income (debit)	706
Secondary income (credit)	154
Secondary income (debit)	273
Current account balance	**–449**
Capital account (credit)	25
Capital account (debit)	0
Balance on current account and capital account	**–424**
Financial account	+330
Balance on current, capital and financial accounts	**–94**
Drawing down reserves	**2**
Net errors and omissions	**92**
Balance	**0**

▲ Table 2 The balance of payments for the US, 2017 (adapted)

Financial account US 2017 (US dollars billions)	
Direct investment assets	379
Direct investment liabilities	355
Portfolio investment assets	587
Portfolio investment liabilities	799
Other investment assets	242
Other investment liabilities	384
Financial account	**–330**

▲ Table 3 Financial account US 2017 (US dollars billions) (adapted)

Inflation Relatively high rates of domestic inflation compared to international competitors will quickly reduce price competitiveness of exports and of domestically produced goods competing against imports. High inflation without a corresponding fall in the exchange rate can therefore cause growing current account deficits.

Age composition of the population Changes in the age composition of the population of an economy will affect the current account. Younger people tend to have a lower savings ratio, so consumption is a relatively high proportion of their income. This suggests that spending on imports will be relatively high.

MEASURES TO REDUCE IMBALANCES ON THE CURRENT ACCOUNT

There is a variety of ways in which a government can affect the current account of its economy.

EXCHANGE RATE CHANGES

If an economy is running a persistent deficit on its current account, then a currency devaluation or depreciation is likely to increase exports and reduce imports. A fall in the value of the currency should make exports cheaper to foreigners while making imports more expensive for domestic buyers.

Depreciation or devaluation is an example of an expenditure switching policy. Expenditure is switched from higher priced imports to more price competitive domestically produced products. Expenditure is also switched from

products for sale in the domestic market to exports (products for sale in foreign markets). Devaluation or depreciation will be more successful if:

• price elasticities of demand for exports and imports are relatively high. If exports and imports are mainly being bought on quality or because they are different from domestically produced goods, changing prices for exports and imports will have much less impact on demand.

• resulting cost-push inflation is low. Depreciation or devaluation will inevitably push up the prices of some imported goods, including raw materials.

It should be remembered that **devaluation of a currency** means that the government has somehow fixed its value against other currencies. Many developing countries use different varieties of fixed exchange rate. However, developed countries almost all have floating exchange rates.

DEFLATIONARY POLICIES

These policies are aimed at reducing aggregate demand in the economy, for example by raising interest rates or increasing taxes. Deflationary policies reduce income and therefore the demand for imports. They can therefore be used to reduce a current account deficit. Deflationary policies mean households will have less money to spend and so they will reduce their consumption of domestically produced goods and imported goods. Equally, firms will cut back on investment including purchases of imported capital equipment. Imports therefore decline.

Deflationary policies will be more effective if:

- the marginal propensity to import (MPM) is high. The MPM is the change in imports divided by the change in national income. The higher the fall in imports for every $1 fall in income, the greater will be the improvement on the current account.
- they lead to a significant fall in the domestic rate of inflation. A fall in the rate of inflation relative to other countries will give exports a competitive edge in terms of price. Equally, it will make imports less price competitive.

SUPPLY-SIDE POLICIES

Supply-side policies aimed at reducing unit labour costs, increasing investment, increasing the skills of the labour force and improving the quality and design of products should lead to increased exports and reduced imports. The major problem with supply- side policies is that they are almost always long- term policies. Devaluing a currency or deflating the economy can affect the current account within a few years. Supply-side policies often take decades to improve the competitiveness of an economy.

PROTECTIONISM

Protectionist policies, such as increasing tariffs or quotas, can reduce imports and improve the current account position by encouraging households and firms to spend on domestically produced goods and services. However, these policies can lead to increased international uncompetitivity and may result in trade partner responses. Additionally, they are forbidden by the WTO and membership in trading blocs like the European Union limits individual countries' ability to limit imports.

CURRENCY CONTROLS

A government may choose to impose or tighten currency controls or foreign exchange controls. These are controls on the purchase of foreign currency by domestic citizens and firms. Many countries today have currency controls including Pakistan, Russia and Venezuela in 2015. Restricting the purchase of foreign currency limits the amount of imports that consumers and firms can buy. The tighter the currency controls, in theory, the lower will be the level of imports. In practice, black markets develop to get round the restrictions and inefficiency results.

THE SIGNIFICANCE OF GLOBAL TRADE IMBALANCES

A country's current account surplus can turn into a deficit, creating instability in the global economic system. Countries with large surpluses and deficits create instability. For example, China's surplus has caused the US current account deficit over the past 15 years. The US has bought goods from China, making it difficult to export its own. Global imbalances have been a concern since the late 1990s.

These can be measured in two ways:

- Imbalances on the current account of the balance of payments
- Imbalances in assets owned abroad or borrowing from abroad.

The two are linked. If a country has a persistent current account surplus, it will tend to build up a stock of assets abroad. If it has a persistent current account deficit, it will owe more and more to foreign creditors. This is no different from a household. If a household consistently spends $5000 more per year than it earns, then after 10 years its borrowing, all other things being equal, will be $50,000 plus interest.

Persistently running a current account deficit means a country is building up its liabilities to the rest of the world. Money is flowing in on the financial account,

but eventually this must be paid back. A persistent current account deficit may not be regarded as a major problem if:

● the borrowed funds are used to help finance long term growth, because the country is ensuring it has the ability to repay this borrowing in the future. Many developing countries do not generate sufficient savings to fund investment (this is called a savings gap, discussed in Chapter 40).

● it can be financed easily by inflows on the financial account. Whether running a current account deficit creates a problem for an economy will depend upon how large its foreign liabilities are in relation to the country's ability to repay these debts. Borrowing money also incurs a cost (for example, the annual interest or profit flows out of the country). This should be balanced against the use of the borrowing to generate long term growth However, running a current account deficit may be a problem if:

● the country cannot finance it with inflows on the financial account, making it unsustainable. If foreign individuals, firms and governments are suddenly unwilling to provide finance, then a country can no longer run a current account deficit. This means consumption, government spending and investment must fall sharply, so that spending on imports is balanced with exports. So, running a current account deficit may lead to a demand-side shock to the economy.

● it indicates a lack of international competitiveness for a country. This may be causing rising unemployment in the country.

● it results in depreciation of the currency, which might lead to higher inflation.

One way for countries to attempt to correct their deficit is through a devaluation of their currency. However, countries in surplus may consider this a threat to their exports and devalue their currencies in return.

In the 1970s, Western developed countries adopted floating exchange rates, leading to less concern about deficits. Countries like the UK and US have not faced problems financing deficits, and net borrowings have not built up unsustainablely. Current account deficits often arise when governments cannot repay foreign currency debts.

It should also be remembered that surplus countrie pay a price for running large surpluses.

• They are not receiving the benefits that extra imports could bring them. For China, its citizens could enjoy a higher standard of living if imports were raised to match exports.

• If the surpluses that countries like China earn are poorly invested, giving low returns or even negative returns, then they will receive little if any benefit in the future. Running a large surplus, therefore, is not necessarily a good policy to pursue.

• It might cause other countries to impose protectionist measures.

SUBJECT VOCABULARY

balance of payments a record of all financial transactions made between residents of one country and the rest of the world

capital account shows the credit (money inflows) and debit items (money outflows) for non-produced, non-financial assets and capital transfers between residents and non-residents

current account where payments for the purchase and sale of goods and services are recorded, along with primary and secondary income flows

current account deficit when debits (– outflows of money) are greater than credits (+ inflows of money) on the current account

current account surplus when credits (+ inflows of money) are greater than debits (– outflows of money) on the current account

devaluation of a currency when a government or central bank officially fixes a new lower exchange rate for the currency in a fixed or pegged system of exchange rates

expenditure reducing in a balance of payments context, government policies to reduce the level of aggregate demand in order to reduce imports and boost exports

expenditure switching in a balance of payments context, government policies such as devaluation or protectionism designed to switch production currently being sold domestically to exports

financial account a record of almost all the flows of financial capital into and out of a country; it is split into three main parts

Chapter 29 – Exchange rate systems

THE EXCHANGE RATE

Different countries use different types of money or currency. In Malaysia, goods and services are bought and sold with the Malaysian ringgit, in France with the euro, and in the USA with the dollar.

The rate at which one currency can be converted (i.e. bought or sold) into another currency is known as the **exchange rate** or bilateral exchange rate. For instance, an Indian company may wish to purchase US dollars. If it pays 80 million rupees to purchase $1 million, then the exchange rate is 80 rupees to the dollar.

However, it is possible to calculate the exchange rate of one currency in terms of a group or basket of currencies. **The effective exchange rate or trade** weighted exchange rate or exchange rate index are calculations of the average movement of the exchange rate, usually on the basis of weightings determined by the value of trade undertaken with a country's main trading partners.

EQUILIBRIUM EXCHANGE RATES

Currency is bought and sold on the foreign **exchange markets**. Governments may buy and sell currencies in order to influence the price of a currency. Here we will assume that governments do not intervene and that currencies find their own price levels through the forces of demand and supply.

• International trade in goods and services needs to be financed. Exports create a demand for currency while imports create a supply of currency.

• Long-term capital movements occur. Inward investment to an economy creates a demand for its currency. Outward investment from an economy creates a supply.

• There is an enormous amount of speculation in the foreign exchange markets.

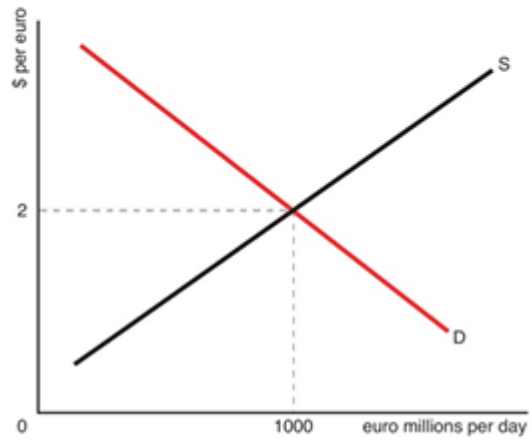
The demand curve is assumed to be downward sloping. If the price of the euro falls against the dollar, then the price of Eurozone goods will fall in dollar terms. For instance, if the exchange rate falls from $2 €1 to $1 = €1, then a Eurozone good costing €1000 will fall in price for Americans from $2000 to $1000. Americans should therefore buy more Eurozone goods and demand more euros to pay for them. So a fall in the price of the euro should lead to an increase in quantity demanded of euros, causing the downward sloping demand curve. Similarly the supply curve is upward sloping because a fall in the value of the euro will increase the price of foreign imports for the Eurozone, leading them to reduce their purchases of foreign goods and therefore of foreign exchange.

All other things being equal, a fall in the value of the euro from, say, $2 to $1 is likely to make the euro look cheap and this may attract speculative buying of the euro and discourage speculative selling. This would then produce downward sloping demand curves and upward sloping supply curves for the euro.

FIGURE 1

Floating exchange rate systems

In a free exchange rate market, the price of a currency is determined by demand and supply. Equilibrium price is $2 to the euro while equilibrium quantity demanded and supplied is 1000 million euros per day.



THE DISTINCTION BETWEEN FIXED, MANAGED AND FLOATING EXCHANGE RATES

FIXED EXCHANGE RATE SYSTEMS

A fixed exchange rate system is one where a currency has a fixed value against another currency or commodity.

MANAGED EXCHANGE RATE SYSTEMS

Most countries currently use some form of managed exchange rate system, sometimes called a hybrid or intermediate system. In a managed exchange rate system, free market forces of demand and supply help determine the exchange rate. However, government also plays some part in determining the exchange rate of the currency.

FLOATING EXCHANGE RATE SYSTEM

An exchange rate system is any system that determines the conditions under which one currency can be exchanged for another. In a pure floating or free exchange rate system, exchange rates are solely determined by the free market forces of demand and supply. There are no government controls over how much foreign currency can be bought and sold.

GOVERNMENT INTERVENTION IN CURRENCY MARKETS

The government can do this either by intervening directly, buying and selling currency using the **gold and foreign currency reserves** held by its central bank. Or it can intervene indirectly, for example by raising or lowering interest rates which then influence the free market demand for and supply of the currency. Quantitative easing will also have an indirect impact on the exchange rate. There are many forms of managed exchange rate system some of which are, confusingly but not necessarily incorrectly, sometimes labelled as fixed exchange rate systems. These are called **adjustable peg systems and crawling peg systems.**

FOREIGN CURRENCY TRANSACTIONS

One way for a government to intervene in the market, through the intervention of its central bank, is by buying or selling currency. If the central bank wants to raise the value of the currency, it will buy its own currency in exchange for foreign currencies. For example, in Figure 2, the equilibrium value of the euro is Ere. If the European

central bank wants to raise the value of the euro to ER1, then it will need to intervene. At ER1 there is an excess supply of euros on the foreign exchange market shown by AB. This excess supply causes the value of the euro to fall to its equilibrium value Ere. To maintain the value of the euro at ER1, the central bank needs to buy up the excess supply of euros AB using its foreign currency reserves.

Adjustable peg systems, crawling peg systems and **managed float or dirty float** are examples of managed exchange rate systems where central banks intervene, by buying and selling currency, to maintain the price of the currency at a particular level.

FIGURE 2

Buying currency to raise the value of a currency

Raising the value of a currency from ERe to ER1 can be achieved by the central bank buying the excess supply of the currency AB on foreign exchange markets. This means its foreign currency reserves will fall.

ADJUSTABLE PEG SYSTEMS

An adjustable peg system is an exchange rate system where, in the short term, currencies are fixed or pegged against each other and do not change in value, while in the longer term the value of a currency can be changed if economic circumstances change. Sometimes, adjustable peg systems are classified as fixed exchange rate systems because the value of the currency is fixed at least in the short term. Between the end of the Second World War and the early 1970s, exchange rates were determined by an adjustable peg system called the **Bretton Woods system**.

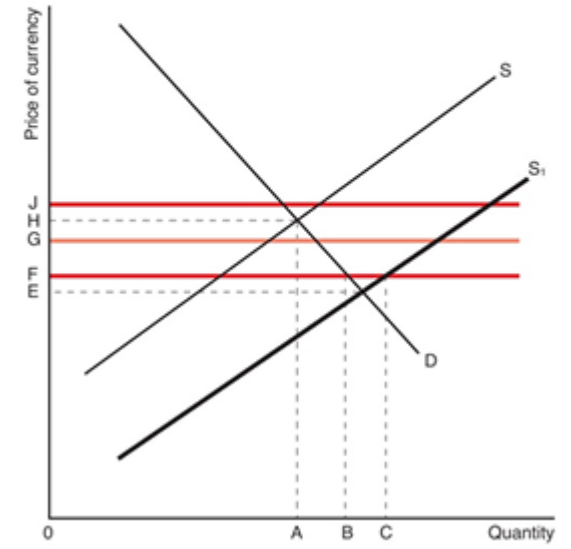
CRAWLING PEG SYSTEMS

A crawling peg system is a form of adjustable peg system. A country fixes its currency against another currency or currencies within a band. However, there is a mechanism built into the system which allows the band to rise and fall regularly over time. For example, the band may be moved every three months. The central value could then be based on the average value of the currency in the previous three months.

FIGURE 3

Central bank intervention in the foreign currency markets

If the central bank wishes to maintain a minimum price of OF for its currency, but the supply curve is S_1 and the demand curve is D, then it has to buy BC currency.



MANAGED OR DIRTY FLOAT

A managed or dirty float occurs when exchange rates are freely floating but governments and their central banks occasionally intervene to change the value of the currency. Central banks may intervene on a day-to-day basis to reduce volatility of the currency. This means they want to smooth out sudden sharp rises and falls in the currency that can disrupt foreign trade.

THE USE OF INTEREST RATES

In a managed exchange rate system, the central bank can influence the exchange rate by raising interest rates. This increases the attractiveness of financial savings, leading to a rise in the demand for US dollars on the foreign exchange market. This reduces the supply of dollars, raising the value of the dollar. Additionally, a rise in interest rates reduces consumption and investment, leading to lower GDP and lower imports. The government can use a combination of methods to raise currency value, such as buying excess supply using foreign currency reserves or increasing interest rates to reduce excess supply.

QUANTITATIVE EASING

Under a managed float, quantitative easing is also a way for the government to change the value of their currency. Quantitative easing, discussed in Student Book 1, is a monetary policy instrument where the central bank buys financial assets in exchange for money in order to increase borrowing and lending in the economy. Quantitative easing has the effect of lowering the interest rates for any type of financial asset which the central bank buys as part of its policy of quantitative easing. It also indirectly lowers other interest rates.

CURRENCY CONTROLS

Central banks can control currency supply and demand through currency or exchange controls, which limit the amount of foreign currency available. These controls can lead to the development of black markets and corruption, as firms can sell scarce currency at higher black market rates, making a profit. For example, a firm importing cars would have to buy the foreign currency from the central bank.

BORROWING FROM INTERNATIONAL INSTITUTIONS SUCH AS THE IMF

A last resort for a country wanting to maintain a high exchange rate would be borrowing from an institution such as the International Monetary Fund (IMF). The borrowed money can then be used to buy up the currency and so raise its price. It is a last resort because borrowing like this is taken to be a sign of economic failure. Lenders such as the IMF will also insist on economic reforms which are likely to be highly unpopular with voters in the country.

FACTORS INFLUENCING FLOATING EXCHANGE RATES

The exchange rate will change if there is a change either in demand for or in supply of a currency. Figure 4 shows the market for Turkish lira, the currency of Turkey. An initial equilibrium exchange rate of OB, with OQ being bought and sold, exists. Factors which influence the value of the Turkish lira, under a system of floating exchange rates, include the following:

RELATIVE INTEREST RATES

If the rate of interest in the money markets of Turkey increases, US savers (or indeed savers throughout the world) will switch funds into Turkey. This is likely to be short-term money or hot money which flows from financial centre to financial centre attracted by the highest rate of return. An increase in these flows will increase the demand for Turkish lira, shifting the demand curve from D, to D2, and increasing the value of the Turkish lira from OB to OC.

RELATIVE INFLATION RATES (PURCHASING POWER PARITY THEORY)

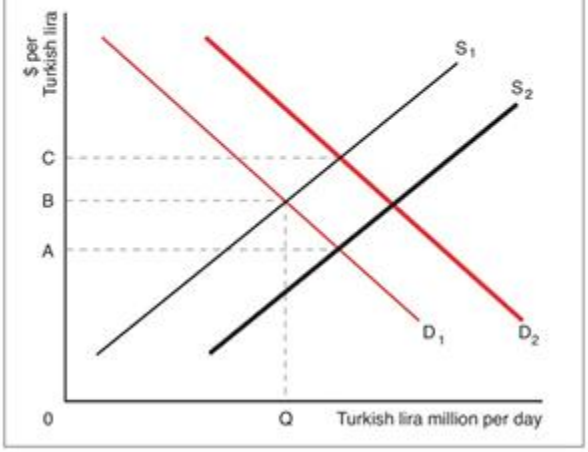
Different countries have different inflation rates. The cost of living may also be different. The **nominal exchange rate,** which is the current market exchange rate, takes no account of this. However, **real exchange rates** can be constructed using a comparison of the cost of living in one country with another country

At any point in time, the nominal exchange rate is unlikely to be the same as the real exchange rate. This is because nominal exchange rates reflect short- term day-to-day speculative activity on the foreign exchange rate markets. In contrast, the **purchasing power parity theory** of exchange **rates** states that exchange rates in the long-term change in line with inflation rates between economies.

FIGURE 4

Changes in exchange rates

The equilibrium value of the Turkish lira will change if there is a change in either the demand for or supply of Turkish lira (or both).



CURRENT ACCOUNT OF THE BALANCE OF PAYMENTS

A rise in exports from Turkey If Turkey exports to the USA increase, American firms will need to buy more Turkish lira than before to pay for them. Hence the increase in the value of Turkey exports will increase the demand for Turkish lira, shifting the demand curve from D, to D2 (This assumes that the rise in demand for Turkey exports is caused by factors other than the value of the Turkish lira changing.) The exchange rate will therefore rise from OB to OC.

A rise in Turkey imports If imports from the USA increase, Turkish firms will need to buy more dollars than before to pay for them. They will buy these dollars with Turkish lira. Hence an increase in the value of Turkey imports will increase the supply of Turkish lira. The supply curve will shift to the right from S, to S2. The equilibrium value of the Turkish lira will fall from OB to OA.

STRENGTH OF THE ECONOMY

The strength of the economy can also influence the exchange rate. A slowdown in economic growth is likely to reduce the exchange rate.

CAPITAL FLIGHT

Capital flight is a rapid movement of large sums of money out of a country, usually motivated by substantial economic and political uncertainty. It can also be triggered by speculation that the exchange rate, in a fixed or managed exchange rate system, is about to be **devalued**. This means there is speculation that the value of the currency will fall.

EXPECTATIONS AND SPECULATION

Speculation is an important cause today of the minute- by-minute changes in the value of a currency.

GLOBAL FACTORS

Many economies rely on the export of commodities. The prices of commodities vary and are determined on global markets. For an economy that relies on these exports, a fall in prices is likely to reduce its export values. This is because the price elasticity of demand tends to be inelastic.

SUBJECT VOCABULARY

adjustable peg system an exchange rate system where currencies are fixed in value in the short term but can be devalued or revalued in the longer term

Bretton Woods system an adjustable peg exchange rate system which was used in the post-Second World War period until its collapse in the early 1970s

crawling peg system an adjustable peg system of exchange rates where there is an inbuilt mechanism for regular changes in the central value of the currency

depreciation of a currency when the value of a currency falls because of free market forces or with a managed float, because of government intervention

effective exchange rate or trade weighted exchange rate index measure of the exchange rate of a country's currency, usually against a basket of currencies of a country's major trading partners

exchange rate the value of one currency when traded for another currency

exchange rate systems systems which determine the conditions under which one currency can be exchanged for another

fixed exchange rate system a rate of exchange between at least two currencies which is constant over a period of time

floating or free exchange rate system where the value of a currency is determined by free market forces and where the value of a currency changes from day to day

foreign exchange markets trading arrangements where currencies are bought and sold for each other

gold and foreign currency reserves gold and foreign currency owned by the central bank of a country and used mainly to change the foreign exchange value of the domestic currency by buying and selling currency on foreign exchanges

managed exchange rate system or hybrid or intermediate system an exchange rate system where free markets determine the value of a currency but where central banks intervene from time to time to change the value of their currency

managed or dirty float where the exchange rate is determined by free market forces but governments intervene from time to time to alter the free market price of a currency

nominal exchange rate the rate at which one currency is bought and sold on the foreign exchange markets for another currency

purchasing power parity theory of exchange rates the hypothesis that long run changes in exchange rates are caused by differences in inflation rates between countries

real exchange rate the ratio of the cost of a typical bundle of goods in one country compared to its cost in another country in the currencies of each country

Chapter 30 – Impact of changes in exchange rate

REVALUATION/APPRECIATION AND DEVALUATION/DEPRECIATION

A **devaluation** means that the value of the currency officially falls.

A **revaluation** means that the value of the currency officially rises. Devaluation and revaluation suggest that the government is committed to maintaining the new official rate of exchange, for instance, through buying and selling in the market or through interest rate policy. Devaluation is different from depreciation.

Depreciation of a currency is when it falls in value because of free market forces or intervention by the central bank. **Appreciation** of a currency is when it rises in value because of buying and selling in the market. A devaluation or revaluation can only occur when a country has pegged its currency to another currency or basket of currencies.

THE IMPACT OF CHANGES IN EXCHANGE RATES

Changes in the value of a currency will affect the current account of the balance of payments, the rate of inflation, economic growth, employment and unemployment, foreign direct investment and the capital and financial accounts of the balance of payments.

THE CURRENT ACCOUNT OF THE BALANCE OF PAYMENTS

Changes in exchange rates affect the economy mainly through their impact on exports and imports. In most cases, a fall in the exchange rate (a depreciation in a floating exchange rate system or a devaluation in a fixed exchange rate system) will lead to:

- a rise in the value of exports
- a fall in the value of imports
- an improvement in the current account on the balance of payments.

The effects of a fall in the value of the exchange rate If the euro falls by 10% against other currencies, import prices will rise in euros. A US car sold to Eurozone importers for $20,000 would cost 10,000 in euros. The new exchange rate would be $1.8, causing a fall in demand. The effect on import value depends on the elasticity of demand for US cars. If demand is elastic, the price rise will offset the decrease in demand.

In summary, a fall in the value of the euro will:

- leave the US dollar price unchanged but increase the euro price of imported goods
- result in a fall in import volumes
- lead to a fall in the total euro value of imports assuming that domestic demand for imports is elastic; if demand is inelastic, there will be a rise in the euro value of imports.

A fall in the value of the euro should have no effect on the euro price of exports. A 10,000 euro car exported to the USA will still be 10,000 euros after the fall.

But the price will have fallen in US dollars. If the value of the euro falls from $2 = 1 euro to $1.8 = 1 euro, the 10,000 euro car will fall in price in the USA from $20,000 to $18,000. This should lead to a rise in demand for cars produced in the Eurozone.

A fall in the value of the euro will therefore:

- leave the euro price of exports unchanged but reduce the price in foreign currency terms
- lead to a rise in export volumes
- increase the total euro value of exports.

Devaluation/depreciation and elasticity and the Marshall-Lerner condition Overall, a fall in the value of the euro will increase the euro value of exports, but may or may not lead to a fall in the value of imports depending upon the elasticity of demand for imports. It is likely that, even if import values increase, export values will increase even more.

The Marshall-Lerner condition states that, given very specific conditions, a fall in the value of a currency will result in an improvement on the current account if the combined price elasticities of demand for exports and imports are greater than 1. If the combined elasticities for exports and imports are less than 1, then the correct policy response to a current account deficit should be a currency revaluation.

Devaluation/depreciation and pricing strategies So far it has been assumed that exporters from the Eurozone will choose to keep the euro price of exporters in both countries adopt the strategy of leaving the prices they charge to their customers unchanged, a fall in the value of the euro will still improve the current account position for the Euro area. Assume the value of the euro depreciates.

• The euro value of exports will rise because Eurozone exporters have chosen to increase the euro price of exported goods rather than reduce their foreign currency price. Export volumes will remain unchanged because the foreign currency price has remained unchanged. Therefore euro export values will increase because of the euro price increase.

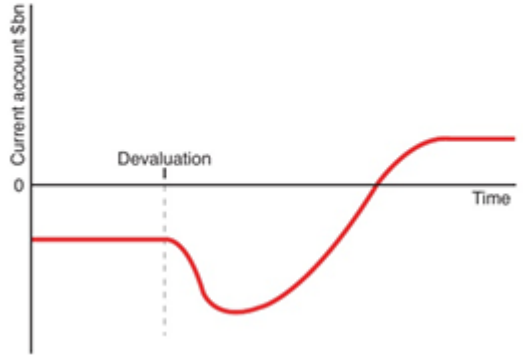
• The euro value of imports will stay the same. Foreign firms have chosen to keep the euro price of their goods constant. Hence volumes will not change. Neither, therefore, will the euro value of imports. With export values increased and import values unchanged, there will be an improvement in the current account position.

The current account following devaluation or depreciation is likely to get worse before it gets better. This is known as the **J curve effect** and it is shown in Figure 1.

FIGURE 1

The J curve effect

Devaluation/depreciation will initially lead to a deterioration of the current account position before it improves in the longer term.



ECONOMIC GROWTH

A change in the exchange rate may have an impact on long-term growth rates. A higher exchange rate which discourages exports and encourages imports may lead to lower domestic investment, and vice versa for a lower exchange rate. However, the main impact of a changing exchange rate will be felt on short- run output. A rise in the exchange rate will reduce output in the short term because exports will fall and imports rise, leading to a fall in aggregate demand.

THE RATE OF INFLATION

Devaluation and depreciation cause imported inflation. This is not serious if there is a one-off increase in prices. But if it starts or fuels a cost-push inflationary spiral, then the increased competitiveness achieved by the devaluation will quickly disappear. For this reason, devaluation is usually only successful in improving a current account position if it is part of a much wider package of measures designed to increase the competitiveness and performance of a deficit economy.

EMPLOYMENT AND UNEMPLOYMENT

A rise in the exchange rate will tend to increase unemployment. This is because an exchange rate rise will tend to lower aggregate demand and thus equilibrium output. A fall in the exchange rate will tend to reduce unemployment. Changes in unemployment will be felt unequally in different sectors of the economy. In those industries which export a significant proportion of output, or where imports are important, there will tend to be larger changes in employment and unemployment as a result of exchange rate changes. In industries, particularly some service industries, where little is exported or imported, changes in the exchange rate will have little effect on employment and unemployment.

THE RATE OF INFLATION

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SUBJECT VOCABULARY

appreciation of a currency when the value of a currency rises because of free market forces or with a managed float, because of government intervention

depreciation of a currency when the value of a currency falls because of free market forces or with a managed float, because of government intervention

devaluation of a currency when a government or central bank officially fixes a new lower exchange rate for the currency in a fixed or pegged system of exchange rates

J curve effect in the short term, a devaluation is likely to lead to a deterioration in the current account position before it starts to improve

Marshall–Lerner condition devaluation will lead to an improvement in the current account so long as the combined price elasticities of exports and imports are greater than 1

revaluation of a currency when a government or central bank officially fixes a new higher exchange rate for the currency in a fixed or pegged system of exchange rates

THE CAPITAL AND FINANCIAL ACCOUNTS OF THE BALANCE OF PAYMENTS

Exchange rate changes can impact the financial account, leading to increased foreign direct investment (FDI) inflows and a decrease in FDI inflows. A weak currency can also cause investors to lose confidence, leading to capital flight and increased outflows on the financial account.

COMPETITIVE DEPRECIATIONS/ DEVALUATIONS AND THEIR CONSEQUENCES

Devaluing a currency for a competitive advantage risks other countries devaluing it. Countries with persistent current account deficits face international recognition, but may devalue despite having a current account surplus to stimulate demand due to low growth or high unemployment.

Chapter 31 International competitiveness

COMPETITIVENESS

Competitiveness can be used in the context of national economies. For example, it could be argued that the Chinese economy is more internationally competitive than the Indian economy. In this chapter, we will consider how competitiveness can be measured, what influences international competitiveness, what policies the government can use to improve competitiveness and the significance of **international competitiveness.**

MEASURES OF COMPETITIVENESS

There are several measures of international competitiveness, which include the following.

RELATIVE PRODUCTIVITY RATES

Labour productivity, measured as output per hour worked, reflects the efficiency of labour in the production process. Between 1997 and 2016, G7 countries experienced varying levels of productivity growth. Italy and the UK

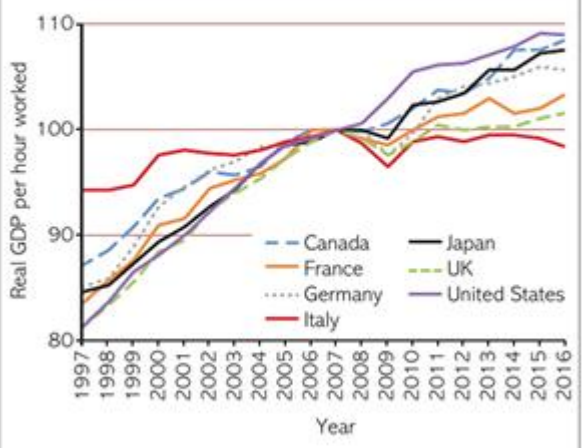
experienced the lowest productivity growth rates since 2007, while the US and Canada experienced the most significant rise. The USA saw a 34% rise in productivity.

A rise in **relative productivity**, all other things being equal, will improve a country's international competitiveness.

Multifactor productivity is also used to measure international competitiveness. This measure considers both labour and capital productivity.

FIGURE 1

Real GDP per hour worked, G7 countries, index 2007 = 100



RELATIVE UNIT LABOUR COSTS

Unit labour costs are the average cost of labour per unit of output produced, calculated by dividing total wages by real output. They depend on labour productivity and worker output, with higher productivity leading to lower costs. Conversely, higher wages lead to higher costs. Therefore, unit labour costs are influenced by both factors.

Relative unit labour costs are unit labour costs compared to other countries.

RELATIVE EXPORT PRICES

Relative export prices are the export prices of a country's goods and services compared to the export prices of that country's main trading partners, expressed as an index.

FACTORS INFLUENCING COMPETITIVENESS

There are a number of factors which affect international competitiveness, which include the following.

PRODUCTIVITY

An economy's productivity relative to its main trading partners increases competitiveness. For instance, if a US export firm can produce 20% more goods with the same labour, it reduces unit labour costs, leading to price reduction. Conversely, if foreign firms increase production by 30%, the US firm's productivity falls, making it less competitive.

QUALITY OF HUMAN CAPITAL

Human capital is the value of the productive potential of an individual or group of workers. It is made up of the skills, talents, education and training of an individual or group of workers. An improvement in the quality of human capital should increase labour productivity and therefore reduce unit labour costs. This increases the price competitiveness for firms.

EXCHANGE RATES

The exchange rate affects the price at which products are bought and sold internationally. Changes in the exchange rate will affect the price competitiveness of goods and services on international markets. For example, a rise in the US's exchange rates is likely to make US goods less price competitive abroad and imports more competitive in US markets. A fall in the US's exchange rates is likely to make US goods more price competitive abroad and imports into the US less competitive. The extent to which there is a change in competitiveness depends in part on the price elasticity of demand for a good. The lower the price elasticity of demand, the less impact a change in price caused by a change in the exchange rate will have on quantity demanded. Also, the way in which firms respond to a change in the exchange rate will affect competitiveness.

WAGE AND NON-WAGE COSTS

The cost of employing labour for a firm are the wages it pays, as well as non-wage costs paid by the employer. Both these will affect the average cost of labour per unit of output produced.

REGULATIONS

Increases in regulation of industry tend to increase costs of production for firms.

QUALITY OF INFRASTRUCTURE

The quality of infrastructure in an economy will affect the cost of transporting goods and services. Poor infrastructure in roads, rail and air will increase the time it takes to transport goods. This will increase transport costs and make it harder for firms to remain price competitive. Problems with electricity supply and transport, which disrupt production, will reduce labour productivity - output per worker will fall. This means unit labour costs will rise. International competitiveness will be reduced.

NON-PRICE FACTORS

Prices and costs are only one factor determining demand and supply. **Non-price factors** are factors other than price which influence a consumer's demand for a product. These include design, branding and quality. Firms which produce better-quality products than their international rivals will have a competitive advantage. In advanced economies, the manufacturing sector in recent years has only survived because it has avoided price competition with cheap labour countries and produced unique better-quality products.

MEASURES TO INCREASE INTERNATIONAL COMPETITIVENESS

POLICIES TO IMPROVE EDUCATION AND TRAINING

The quality of government education and training is influenced by per capita spending, but can be maximized through changes in curriculums, vocational courses, and digital learning. Governments must ensure training opportunities for individuals throughout their lives, and firms may be given tax incentives or subsidies to extend their training schemes. Access to quality education and training is essential for all groups, regardless of income, as government support affects the skills of the population.

INVESTMENT INCENTIVES

Investing in advanced technology boosts capital and labor productivity, increasing international competitiveness. Research and development (R&D) also contributes to competitiveness, influencing product uniqueness and reducing production costs. Governments can promote investment by keeping profits taxes low and using interventionist supply-side policies like grants and tax relief on investment spending. This helps firms have more finance sources for investment.

PRIVATISATION AND DEREGULATION

Privatisation is the sale of government organisations to the private sector. Deregulation is the process of removing government controls from markets. Deregulation can occur in both product and labour markets. The impact of deregulating product markets and privatisation is to increase competition. A more competitive business environment incentivises firms to keep prices as low as possible.

MEASURES TO DEPRECIATE THE EXCHANGE RATE OF A COUNTRY

A government may control the value of its currency on international markets, either by changing interest rates or through the central bank's buying and selling of foreign exchange reserves. A competitive devaluation is when a central bank buys foreign exchange reserves to cause the value of their currency to fall. Depreciating the exchange rate would cause international price competitiveness to increase.

TRADE LIBERALISATION

Trade liberalisation is the removal or reduction of restrictions on free trade between countries. The impact of trade liberalisation will be to increase competition. A more competitive business environment drives innovation and efficiency. Firms will want to find ways to increase labour productivity to keep unit labour costs down. This will be necessary to remain price competitive in international markets. Firms also have an incentive to invest in product innovation, so that they develop non-price competitive advantages.

TAXATION

Firms argue that levels of company taxation are important to international competitiveness. Low taxes on profit encourage investment and innovation, which lead to improved international competitiveness. High taxes on profits might therefore lead to deteriorating international competitiveness. However, it can be argued that high taxes could lead to increased spending on education and infrastructure which would increase international competitiveness.

BENEFITS OF BEING INTERNATIONALLY COMPETITIVE

Current account surpluses Countries which are internationally competitive are likely to run current account surpluses on the balance of payments. This is because exports are likely to be larger than imports. A surplus frees them from the limitations that a country with a very large deficit may face. A current account surplus gives the country the opportunity to invest overseas and build up a surplus of assets overseas on which interest, profit and dividends can be earned.

Foreign currency Selling goods and services to other countries means an economy receives foreign currency. This is then used to purchase imports. Many developing countries need to purchase capital goods from abroad. A lack of foreign currency may therefore limit their investment in capital goods. This would reduce their potential growth.

Foreign direct investment inflows A competitive economy is likely to attract inflows of foreign investment. Foreign companies might want to set up factories and offices in the country either to sell into the domestic market or to use as an export base. Equally, foreign companies might want to buy domestic firms to exploit their competitiveness.

Employment Being internationally competitive suggests that exports are likely to be high in relation to imports. The economy can gain from export-led growth. This creates jobs in the domestic economy and reduces any unemployment that might be present.

Economic growth Greater efficiency is likely to lead to higher economic growth. Greater demand for exports will lead to higher investment and will contribute to higher aggregate demand and long-run aggregate supply.

Wage growth For developing countries, a major source of their international competitiveness might be low wages which allow for low costs of production. Being internationally competitive should lead to higher exports and greater demand for workers.

Higher domestic purchasing power Consumers in the economy are likely to benefit. First, their incomes are likely to rise faster because of higher economic growth. Second, they will be able to buy goods and services that are lower in price and more attractive to buy than if the country was less internationally competitive.

PROBLEMS OF SUSTAINING INTERNATIONAL COMPETITIVENESS

The problem with being internationally competitive is that this competitiveness can be lost.

• For low and middle-income countries, the competitive benefits of low wage costs are likely to reduce as the country becomes more developed and wage rates rise at a relatively high rate.

• Other costs, such as the price of land or the materials bought from other domestic firms, are likely to rise as a country becomes more developed. Again, this could slowly reduce international price competitiveness.

• A current account surplus could lead to a rise in the exchange rate, making exports more expensive to foreign buyers and imports cheaper for domestic buyers. This reduces competitive advantage.

• Less competitive foreign countries may impose trade barriers to protect their own less competitive industries. This will reduce a country's competitive advantage.

However, international competitiveness is not inevitably lost as a country becomes more developed. Germany and Singapore are two examples of highly competitive economies that have retained their competitiveness over a long period of time.

SUBJECT VOCABULARY

international competitiveness the ability of a firm or a country to compete effectively in international markets

labour productivity output per hour worked or output per worker; it is often measured as real GDP per hour worked

multifactor productivity the overall efficiency with which labour and capital inputs are used together in the production process

non-price factors factors other than price which affect competitiveness

relative export prices export prices of a country's goods and services compared to the export prices of that country's main trading partners

relative productivity labour productivity compared to other countries

relative unit labour costs unit labour costs compared to other countries

trade liberalisation the move towards greater free trade through the removal of protectionist barriers to trade

unit labour cost the cost of employing labour per unit of output or production