

tutor2u™

Supporting Teachers: Inspiring Students

Economics Revision Focus: 2004

A2 Economics

Exchange Rates

tutor2u™(www.tutor2u.net) is the leading free online resource for Economics, Business Studies, ICT and Politics.

Don't forget to visit our [discussion boards](#) too as part of your Economics revision.



Revision Focus on Exchange Rates (A2)

A2 Syllabus Requirements

The Exchange Rate as a Target and Instrument of Economic Policy

Candidates should understand the relationship between **interest rates** and the **exchange rate** and how the **exchange rate influences macroeconomic policy objectives**, such as inflation, unemployment and the balance of payments. They should also understand the reasons for, and the implications of, the **exchange rate as a target of economic policy**.

The relationship between interest rates and the exchange rate

In a floating exchange rate system **relative interest rates** do have an influence on the market value of one currency against another. To understand this, consider the **risks and returns** that face investors when deciding in which country to allocate their financial investments.

If UK interest rates are relatively higher than rates on offer in the Euro Zone, then ceteris paribus we expect to see a net inflow of currency into UK banks and other financial institutions. The higher the interest rate differential, the greater is the incentive for funds to flow across international boundaries and into the economy with the higher interest rates.

Speculative flows of currency will also flow into those economies where the expected returns on other types of investment are also higher. For example, money may flow into the UK as investors look to put their money into property or the stock and bond markets. Such a wall of speculative funds can have a powerful effect in the currency markets. You could show this by drawing an outward shift in the demand for sterling, leading to an appreciation in the value of the currency.

There are inevitable **risks** in shifting funds across international markets. What might happen to the currency if you leave \$200,000 worth of cash in a UK bank account? What happens to the value of your investment if sterling depreciates against the US dollar? What are the risks in exchanging a similar value of US dollars and putting it into the UK stock market or into government bonds?

Investors often consider the **risk-adjusted relative rate of return** from different financial investments. Thus if UK interest rates are persistently above those in other countries, and the risks are pretty similar, then we would expect to see a rising demand for sterling and an appreciation of the currency. Interest rates are not the only factor that drives the external value of a currency in the foreign exchange markets – but they undoubtedly do have some effect.

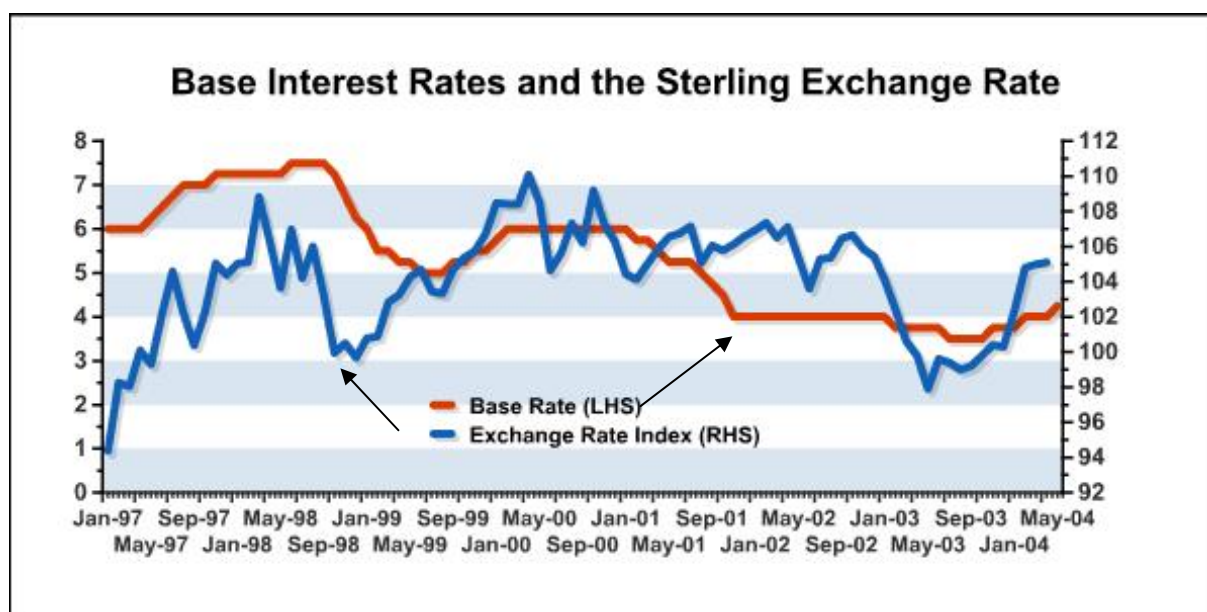
	Sterling exchange rate index	US \$/£	Euro/£
1996	86.3	1.56	1.25
1997	100.5	1.64	1.45
1998	103.9	1.66	1.48
1999	103.8	1.62	1.52
2000	107.5	1.51	1.64
2001	105.8	1.44	1.61
2002	106.0	1.50	1.59
2003	100.2	1.63	1.45

The table provides a summary of the average exchange rate values for sterling against the US dollar, the Euro and the sterling index (the trade weighted index of sterling against a basket of leading currencies).

Key points

1. Significant appreciation of sterling from 1996 – 1998 (a 20% appreciation)
2. Since then sterling has been quite stable – although the pound dipped by over 5% on a trade-weighted basis during 2003
3. Since 2000, sterling has depreciated against the Euro but has appreciated against a weakening US dollar

The chart below tracks the sterling index against UK base interest rates.



How the exchange rate influences policy objectives, such as inflation, unemployment and the balance of payments.

For A2 economics, it is important to understand the **transmission mechanism** between a change in the exchange rate and its impact on the wider macro-economy. Recent trends in currencies and currency forecasts certainly figure prominently in the assessment of economic conditions made each month by the Monetary Policy Committee, although the Bank does not formally target the exchange rate since the UK operates with a floating exchange rate system.

For evaluation, remember that the macroeconomic effects of exchange rate movements are always subject to a time lag. Recent research from the Bank of England suggests that the full effects take up to two years to feed through.

The exchange rate and inflation:

The exchange rate affects inflation in a number of direct and indirect ways:

1. **Changes in the prices of imported goods and services** – this has a **direct effect** on the **consumer price index**. For example, an appreciation of the exchange rate usually reduces the sterling price

of imported consumer goods and durables, raw materials and capital goods. The effect of a changing currency on the prices of imported products will vary by type of import and also the **price elasticity of demand** which is influenced by the extent of competition within individual markets.

- 2. Commodity prices and the CAP:** Many internationally traded commodities are priced in dollars – so a change in the sterling-dollar exchange rate has a direct impact on the £ price of commodities such as oil. The operation of the **Common Agricultural Policy (CAP)** can also help to absorb fluctuations in the prices of imported foodstuffs because of the variable import tariff. If world prices rise, the import tariff can fall to insulate the EU from the effects of higher import costs.
- 3. Changes in the growth of UK exports** – movements in the exchange rate affect the competitiveness of UK export industries in global markets. A higher exchange rate makes it harder to sell overseas because of a rise in relative UK prices. If exports slowdown (price elasticity of demand is important in determining the scale of any change in demand), then exporters may choose to cut their prices, reduce output and cut-back employment levels. A fall in export demand will reduce real national income relative to potential output – and thus might lead to a negative output gap. This puts downward pressure on inflation
- 4. The exchange rate and wage bargaining** – some economists believe that the exchange rate influences the power of employees to bargain for increases in real wages. When the exchange rate is high, there is pressure on businesses to control their costs of production in order to remain competitive – this may lead to downward pressure on wage inflation.

Bank of England research suggests that a 10% depreciation in the exchange rate can add up to 3% to the level of consumer prices three years after the initial change in the exchange rate.

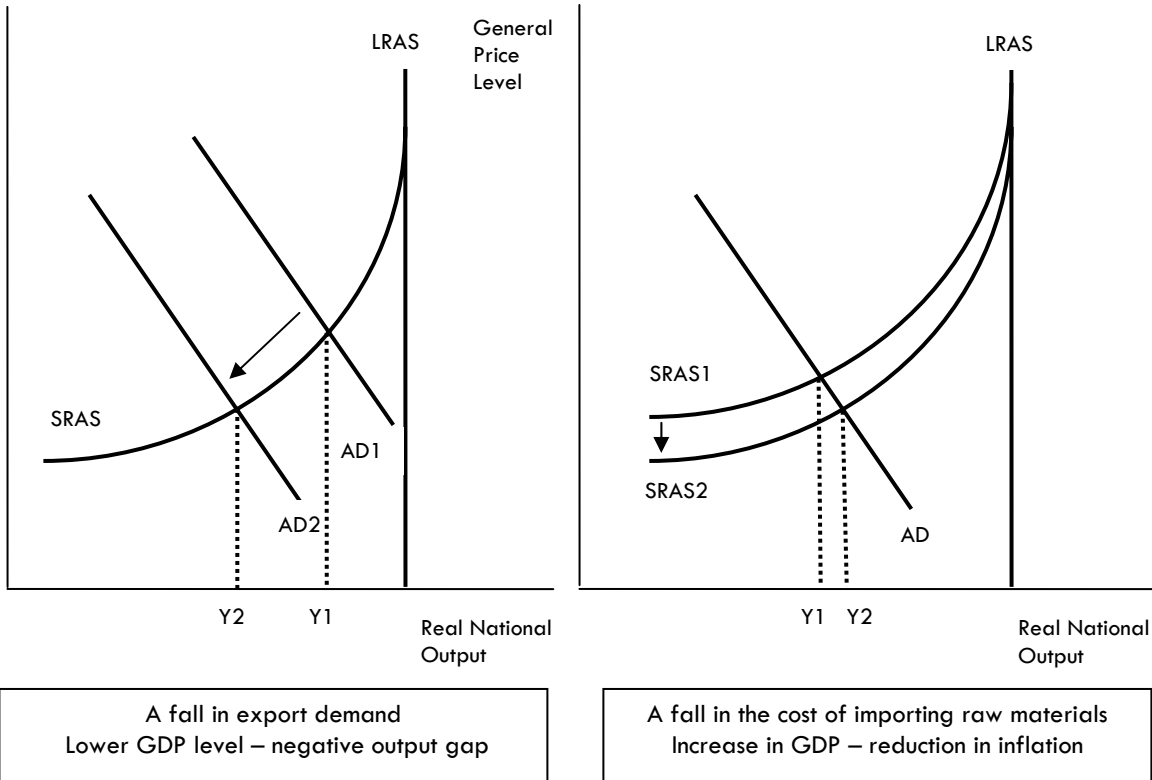
Interest rate response: The final effects on inflation depend also on the response of economic policies to exchange rate movements. For example if a rising value of sterling causes inflation to drop below target, the Monetary Policy Committee might opt to reduce short term interest rates in order to stabilise demand and prevent the risk of price deflation.

The exchange rate and unemployment

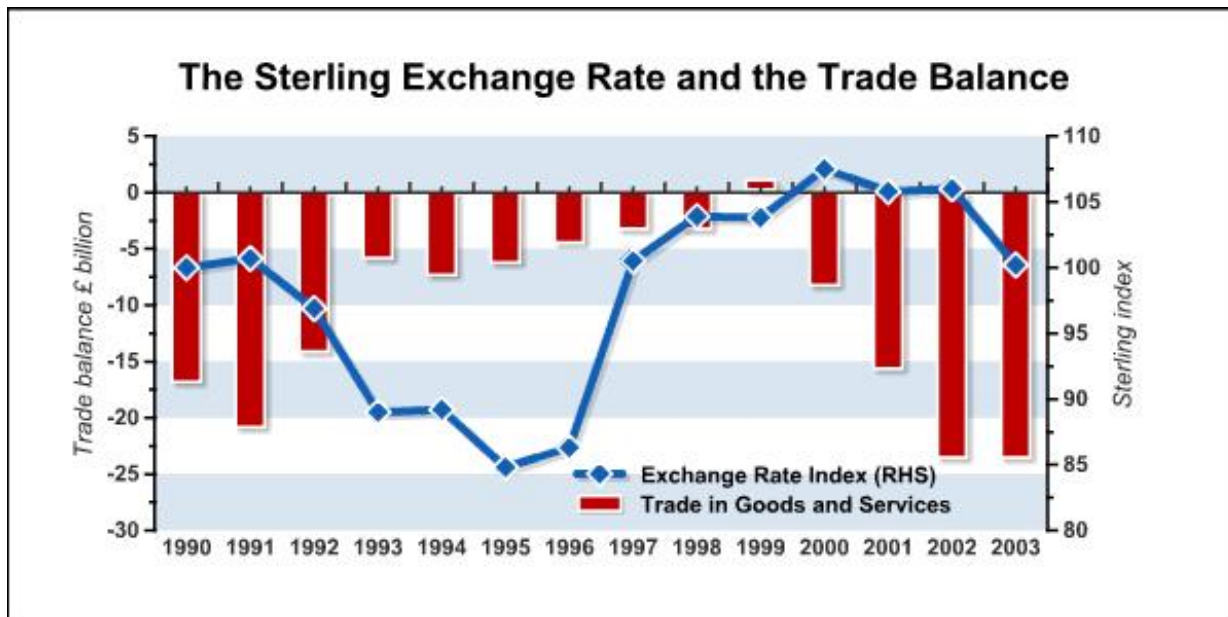
To the extent that movements in the exchange rate affect the growth of demand, output and investment in those sectors of the economy exposed to international trade, the rate of unemployment can also be influenced by currency fluctuations. In broad terms:

- An exchange rate appreciation tends to cause a slower rate of growth of real GDP (e.g. because of a fall in net exports)
- A reduction in demand and output may cause job losses as businesses seek to control costs and rationalise their operations. Some job losses are temporary – reflecting short term changes in export demand and import penetration. Others are permanent if domestic industries move out of some export markets or if imports take up a permanently higher share of the UK market
- Some industries are more exposed than others to currency fluctuations – e.g sectors where a high percentage of total output is exported and where demand is highly price sensitive (price elastic)

AD-AS analysis can be used to illustrate the effects. In the first diagram, we see an inward shift in the AD curve due to a rise in net imports and in the second diagram we draw the effects of a reduction in production costs arising from cheaper raw material and component prices.



The exchange rate and the balance of payments

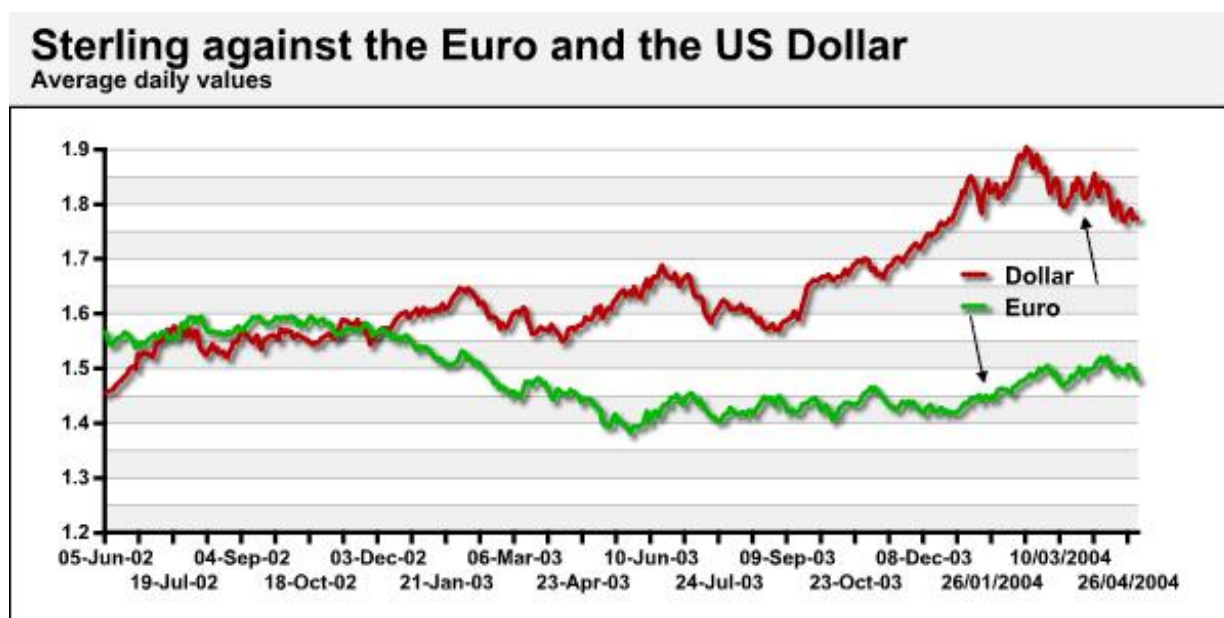


The chart above plots the annual trade balance in goods and services and the sterling exchange rate index since 1990. Britain has run a trade deficit in each of the years shown, the trade gap narrowed in the first half of the 1990s due to the recession in 1990-92 and because of a depreciation in sterling from 1993-95. From 1996 onwards sterling appreciated and dealt a blow to the competitiveness of British exporters. The sustained strength of the currency allied to high consumer demand at home has been the

two main factors explaining the large increase in the trade deficit in goods that reached a record level in 2002-03.

Asymmetrical effects: According to econometric research by economists Nick Fawcett and Mike Kitson, a 10% appreciation in the sterling exchange rate leads to only a 2.2% decline in exports. However a 10% depreciation in the exchange rate raises export volumes by only 1%. This research suggests that the macroeconomic effects of exchange rate movements tend to be **asymmetric**. When the pound is rising against other currencies, the response of some British exporters is to withdraw from some overseas markets - sometimes never to return. Whereas a lower exchange rate, which ought to restore some of the lost price competitiveness, is often the cue for exporters to restore their own profit margins rather than seek an increased share of overseas markets.

Fixed versus floating exchange rates – which is best for an economy?



Each country must decide on the most appropriate currency regime or system. There is an ongoing debate in economics about the **merits and de-merits of fixed versus floating exchange rates**.

1. **1973-1990:** UK operated with a managed floating exchange rate. Some intervention by the central bank to influence the exchange rate and government was in control of interest rates
2. **October 1990- September 1992:** UK a member of the European exchange rate mechanism (ERM) – the exchange rate was a specific target of economic policy. Interest rates had to be set at a level consistent with keeping sterling within the agreed ERM bands (limits)
3. **September 1992 – present day:** the UK has operated with a free-floating exchange rate – no intervention by the Bank of England. Exchange rate is purely market determined. Since 1999, the Euro has been in existence as twelve nations have established a single currency. Sterling floats freely against the Euro and also against the dollar, yen etc.

The case for floating exchange rates:

1. **Reduced need for currency reserves:** There is no exchange rate target so there is little requirement for the central bank (e.g. the Bank of England) to hold large scale reserves of gold and foreign currency to use in possible official intervention in the markets
2. **Useful instrument of macroeconomic adjustment:** A floating rate can act as a useful tool of macroeconomic adjustment – for example a depreciation should provide a boost to net export demand and therefore stimulate growth. This assumes that the gains from a lower exchange rate are not dissolved in higher wage claims or export prices. The countries inside the Euro Zone for example might be hoping for a more competitive exchange rate as a means of creating an injection of demand into their slow-growing economies.
3. **Partial automatic correction for a trade deficit:** Floating exchange rates offer a degree of adjustment when the balance of payments is in fundamental disequilibrium – i.e. a large trade deficit puts downward pressure on the exchange rate which should help the export sector and control demand for imports because they become relatively expensive
4. **Reduced risk of currency speculation:** The absence of an explicit exchange rate target reduces the risk of currency speculation. Often, currency market speculators target an exchange rate target that they believe to be fundamentally over or undervalued.
5. **Freedom (autonomy) for domestic monetary policy:** The absence of an exchange rate target allows short term interest rates to be set to meet domestic macroeconomic objectives such as stabilising growth or controlling inflation. The Bank of England has enjoyed the autonomy that a floating exchange rate gives since it was made independent in May 1997.
6. **Floating exchange rates are not always volatile exchange rates** - although the sterling exchange rate has been floating, the volatility has not been that great. Businesses have learnt to cope with modest fluctuations – helped by having a flexible labour market.

The Case for Fixed Exchange Rates

The main arguments for adopting a fixed exchange rate system are as follows:

1. **Trade and Investment:** Currency stability can help to promote trade and investment because of lower currency risk – this is one of the reasons why currencies were locked within the Euro Zone in preparation for the launch of the Euro.
2. **Some flexibility permitted:** Some adjustment to the fixed currency parity is possible if the economic case becomes unstoppable (i.e. the occasional devaluation or revaluation of the currency if agreement can be reached with other countries). That said, countries with fixed exchange rates are often reluctant to make parity adjustments – these decisions are often seen as politically damaging.
3. **Reductions in the costs of currency hedging:** Because we can never predict what will happen to the market value of a currency, many businesses hedge against this volatility by buying the currency they need in the forward currency markets. With fixed exchange rates, businesses have to spend less on currency hedging if they know that the currency will hold its value in the foreign exchange markets (hedging involves risk)
4. **Disciplines on domestic producers:** A stable (fixed) currency acts as a discipline on producers to keep their costs and prices down and may lead to greater pressure for exporters to raise labour productivity and focus more resources on research and innovation. In the long run, with a fixed

exchange rate, one country's inflation must fall into line with another (and thus put substantial competitive pressures on prices and real wages)

- 5. Reinforcing gains in comparative advantage:** If one country has a fixed exchange rate with another, then differences in relative unit labour costs will quite easily be reflected in changes in the rate of growth of exports and imports. Consider the example of China and the United States. China has a \$100 billion trade surplus with the United States and it has also fixed its exchange rate against the US dollar. The pegged exchange rate between the yuan and the dollar has been in place for several years. Most estimates indicate that the Chinese currency is undervalued against the dollar. This makes Chinese products cheaper than they would otherwise be and has led to a surge in import penetration from China into the US economy. This has led to numerous calls from US manufacturers for the Chinese to be persuaded to switch to a floating exchange rate or to adjust their currency by appreciating against the dollar.