EC566 – Macroeconomics for Business

Week 22 – Lecture 1

Exchange Rate and Balance of Payment

L&C – Ch.24

B&P – Ch. 19

Learning Objectives

- How is exchange rate determined
- Forces for Demand and Supply in Foreign Exchange Market
- The role of components of Balance of Payments (BoP) in determining exchange rate

The foreign exchange market

- Markets where one country's currency is exchanged for another's can be analysed with the tools of demand and supply just like any other market.

Note!

Trade between nations typically requires the exchange of one nation’s currency for that of another.

The major exception is the Eurozone, where member states have a common currency.

Exchange rate Appreciation & Exchange Rate Depreciation

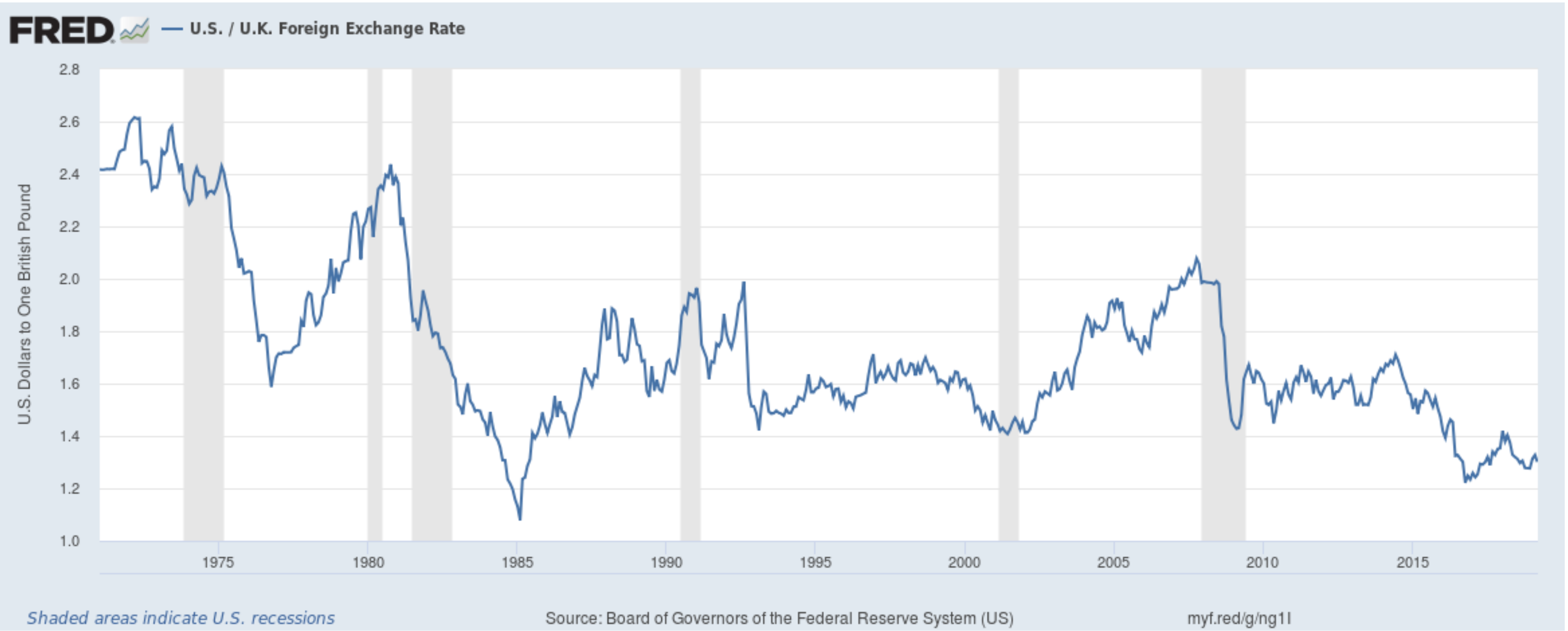
- A rise in the external value of the pound (i.e. a rise in the exchange rate) is called an appreciation of the pound

- A fall in the external value of the pound (i.e. a fall in the exchange rate) is called a depreciation of the pound

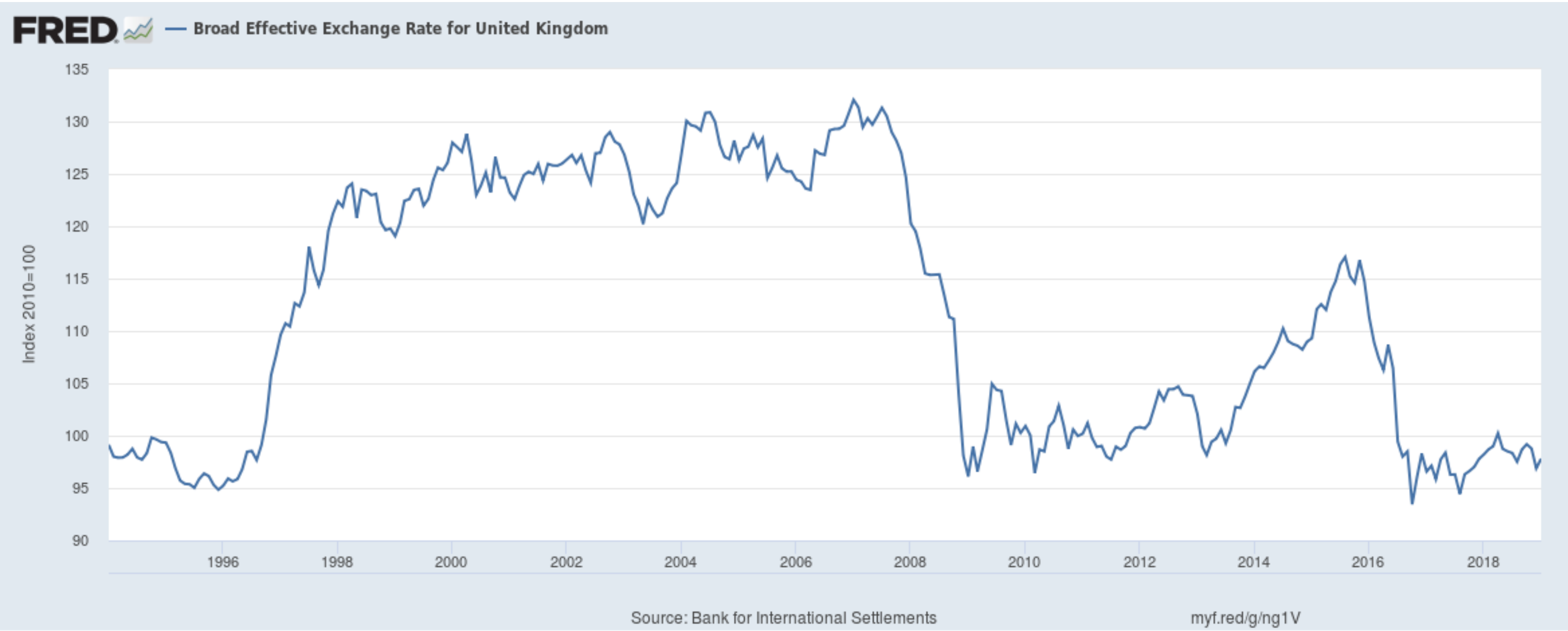
Note!

Because the exchange rate expresses the value of one currency in terms of another, when one currency appreciates, the other must depreciate.

The UK exchange rate



UK effective exchange rate index, 1994–2018 (2010 = 100)



The determination of the exchange rate

- The exchange rate is just a price, albeit a very important price.

- Since it is determined in a competitive market in which there are many buyers and many sellers, we can analyse its behaviour using the demand and supply analysis

Note!

Because one currency is traded for another in the foreign exchange market, it follows that a demand for foreign exchange (dollars) implies a supply of pounds, while a supply of foreign exchange (dollars) implies a demand for pounds.

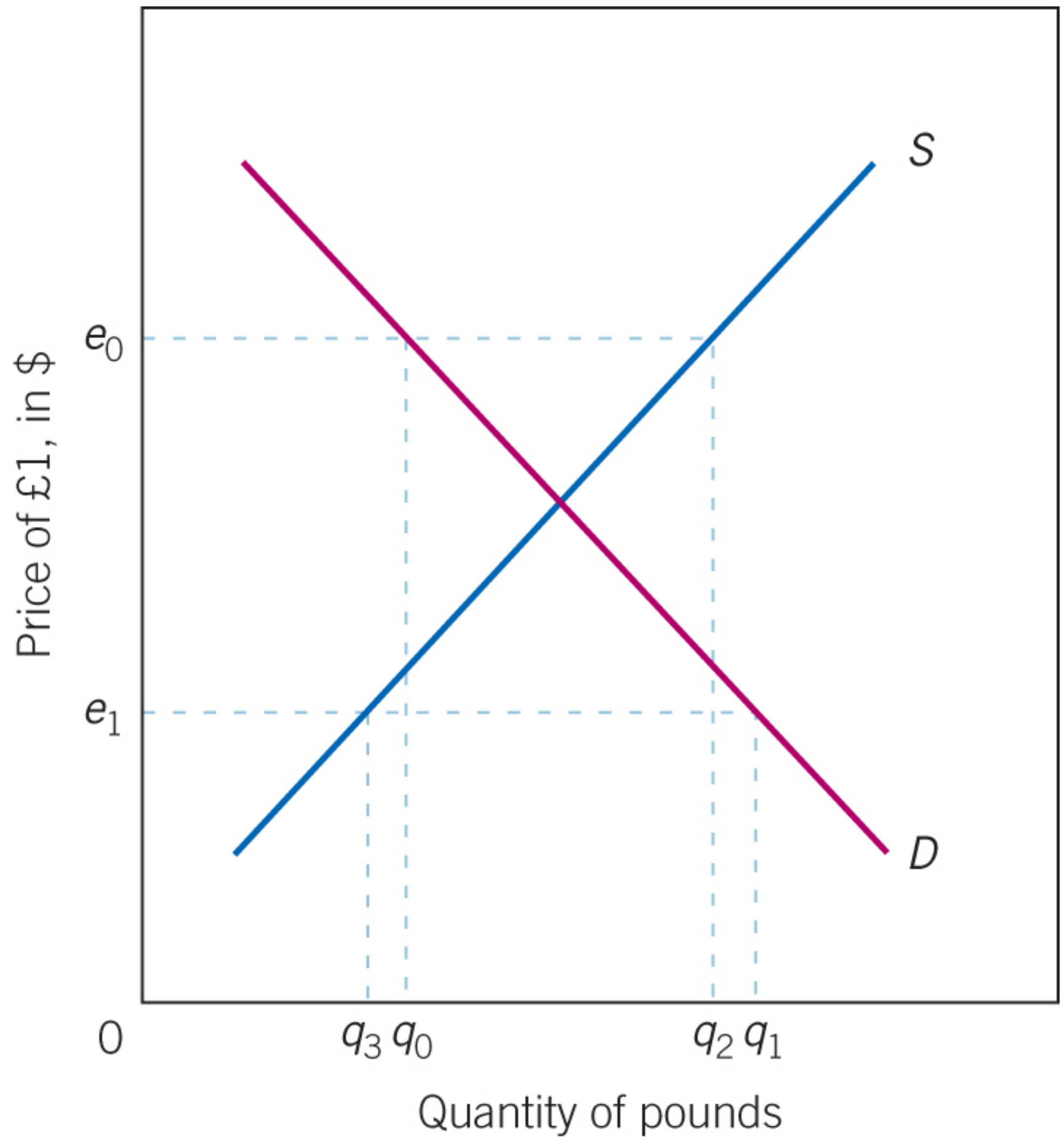
The demand for pounds

- The demand for pounds arises from all international transactions that generate a receipt of foreign exchange:
  - UK exports
  - Income payments and transfers
  - Capital inflows
  - reserve currency

Note!

The demand curve for pounds in the foreign exchange market is negatively sloped when it is plotted against the dollar price of £1.

The market for foreign exchange



The supply of pounds

- The sources of supply of pounds in the foreign exchange market are merely the opposite side of the demand for dollars.
- The supply curve of pounds in the foreign exchange market is positively sloped when it is plotted against the dollar price of £1.

Changes in Exchange Rate

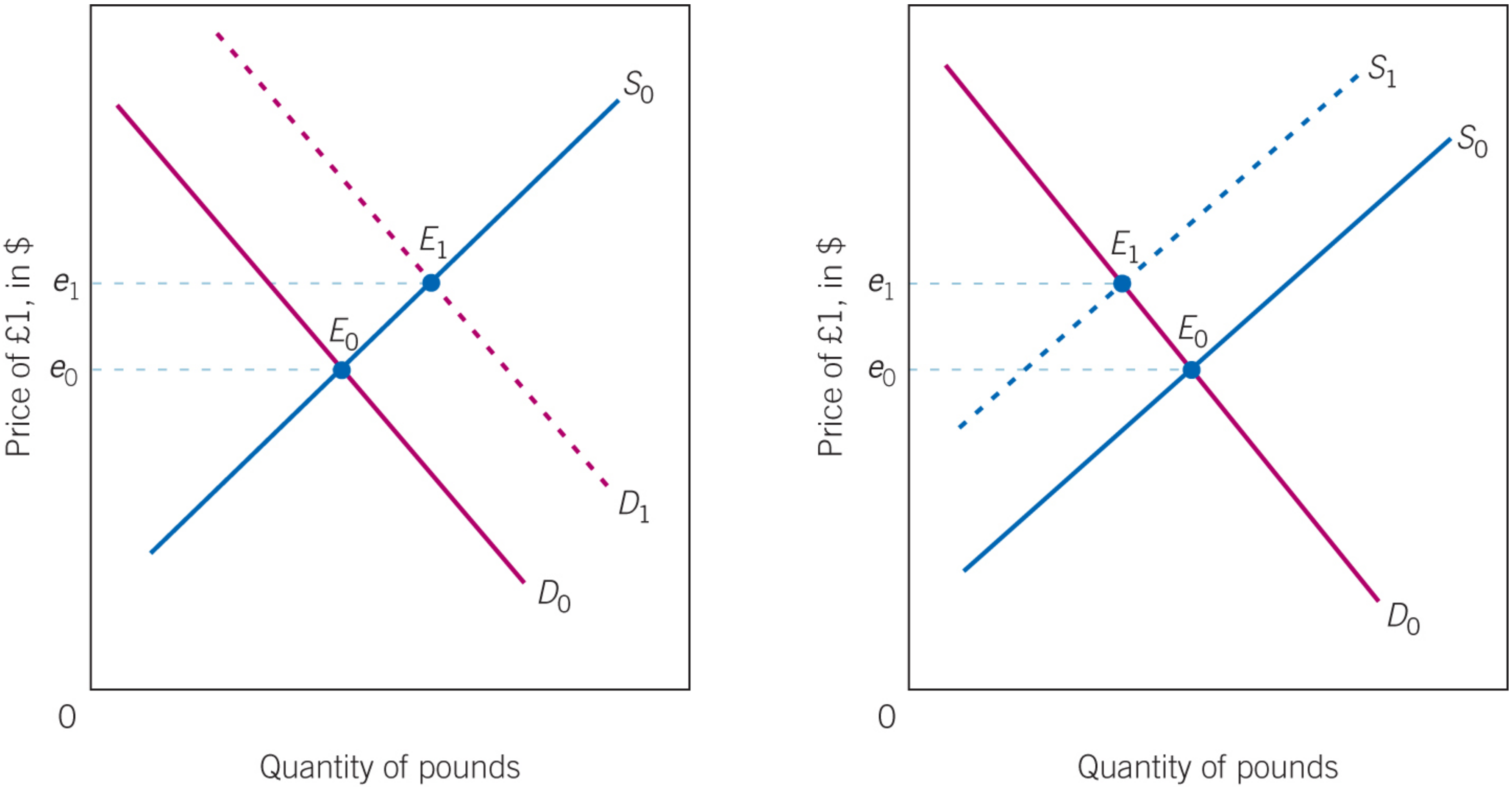
- A foreign exchange market is like other competitive markets. The forces of demand and supply lead to an equilibrium price at which quantity demanded equals quantity supplied.

- What causes flexible exchange rates to move?

changes in demand or supply

in the foreign exchange market.

Changes in exchange rates



(i) Demand shifts

(ii) Supply shifts

Changes in exchange rates

- What causes the shifts in demand and supply that lead to changes in exchange rates?
  - a rise in the domestic price of exports (Increase in price of UK made equipment; demand for pounds related to price elasticity of foreign demand for UK goods)
  - a rise in the foreign price of imports
  - Changes in price levels
  - Capital movements (short-term and long-term capital movements)

Note!

If the price level of one country is rising relative to that of another country, the equilibrium value of its currency will be falling relative to that of the other country.

Capital movements

- Major capital flows can exert a strong influence on exchange rates

- ***A significant movement of investment funds has the effect of appreciating the currency of the capital-importing country and depreciating the currency of the capital-exporting country.***

Short-term capital movements

- A major motive for short-term capital flows is a change in interest rates.
- A second motive for short-term capital movements is speculation about a country's exchange rate

Long-term capital movements

- Long-term capital movements are largely influenced by long-term expectations about another country's profit opportunities and the long-run value of its currency.

- Also structural changes that alter its equilibrium exchange rate affect long term capital movements.

Exchange rate experience

- The degree of exchange rate variability experienced since the advent of floating in the early 1970s has been bigger than was expected.

Why have exchange rates been volatile?

- This question remains at the centre of debate and controversy among researchers and policy commentators

Purchasing power parity

- Purchasing power parity (PPP) theory holds that over the long term the average value of the exchange rate between two currencies depends on their relative purchasing power.

- The theory holds that a currency will tend to have the same purchasing power when it is spent in its home country as it would have if it were converted to foreign exchange and spent in the foreign country.

Exchange rate policies

- Today's exchange rate regime is generally one of free floating, which means that demand and supply forces are free to determine the exchange rate.

- However, some central banks do intervene in the market from time to time to try to influence their country's exchange rate.

Exchange rate overshooting

- Short-run excessive movement of exchange rate
- Differences in interest rates between countries, arising from differences in monetary and fiscal policies among other factors, can trigger large capital flows as investors seek to place their funds where returns are highest.
- These capital flows will in turn result in swings in the exchange rate between the two countries.
- Some economists argue that this is the fundamental reason for the wide fluctuations in exchange rates that have been observed.

Exchange rate overshooting

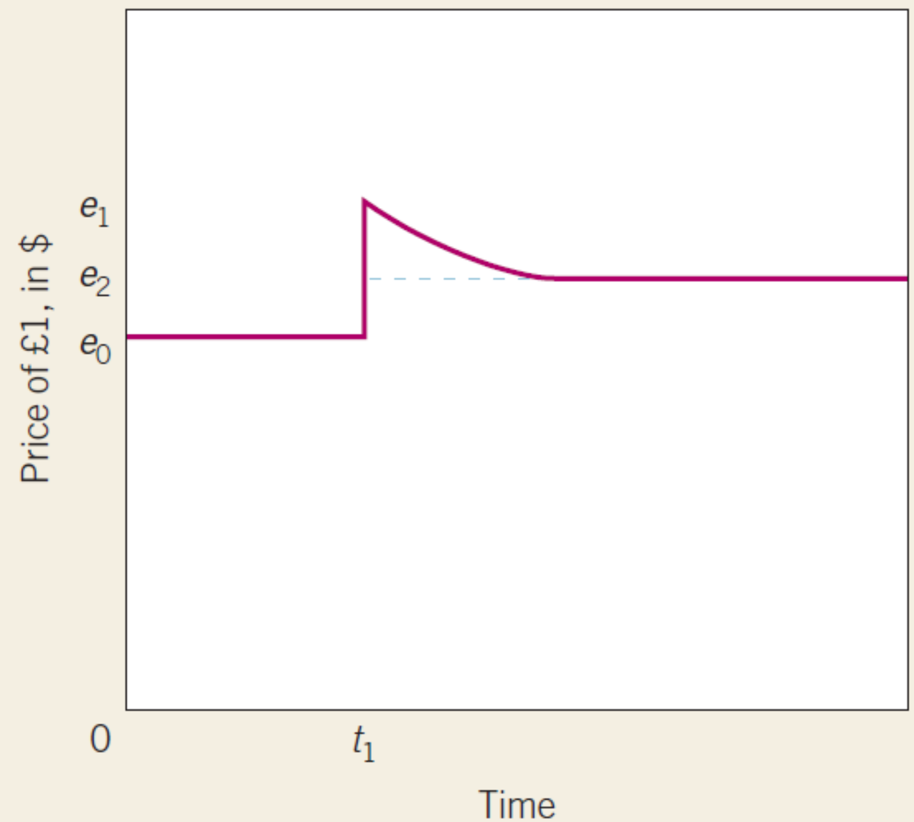


Figure 24.4 Exchange rate overshooting

Implications of overshooting

- Over- shooting of the exchange rate in response to interest rate changes may be one of the most important elements of the monetary transmission mechanism.
- Central banks using monetary policy to attain domestic policy target i.e inflation – can result in large fluctuations in exchange rate
- Tight monetary policy – appreciation of exchange rate and may lead to recession through decreased demand for domestic exports
- Two UK recessions in early 1980s and 1990s – tight monetary policy – overvalued exchange rate

Balance of Payments

– A country’s **balance of payments accounts** records its international trading, borrowing, and lending.

– **Current account** records goods and services to other countries (exports), minus payments for goods and services bought from other countries (imports), plus the net amount of interest and transfers received from and paid to other countries.

Balance of Payments

– **Capital and financial account** records foreign investment in a country minus the country's investment abroad.
– **Official settlements account** records the change in a country's official reserves.
– **Official reserves** are the government's holdings of foreign currency.
– Next slide shows the U.S. balance of payments in 2015.

The U.S. Balance of Payments Accounts in 2015

Current account	**(billions of dollars)**
Exports of goods and services	+2,261
Imports of goods and services	−2,761
Net interest	+193
Net transfers	−156
Current account balance	**−463**
Capital and financial account	
Foreign investment in the United States	+402
U.S. investment abroad	−200
Other net foreign investment in the United States	−1
Statistical discrepancy	+268
Capital and financial account balance	**+469**
Official settlements account	
Official settlements account balance	**−6**

- There is nothing inherently ‘good’ or ‘bad’ about a current account deficit or surplus.
- However – ‘favourable’ or ‘unfavourable’ balance often termed to excess of exports over imports
- Comparative advantage theory of trade – though advocated specialisation in production of some goods
- International payments imbalances played an important role in the build up to the recent global financial crisis.

Summary

- The exchange rate (along with incomes) is a major determinant of both exports and imports.
- If sterling is expensive (other currencies are cheap in relation to sterling), this will reduce our exports and increase our imports.
- If sterling is cheap (other currencies expensive), this will increase our exports and reduce our imports.
- Movements in trade for goods and services and capital movements affect the demand for and supply of foreign exchange affecting exchange rate