Fixed Exchange Rates

RIDLEY COLLEGE
SINCE 1889

Assessment Objectives

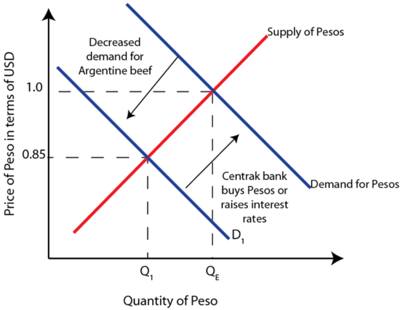
Specific Expectations	
AO3	Evaluate the consequences of changes in exchange rates on economic variables such as inflation, unemployment, economic growth, the current account balance, and standard of living
AO4	Draw AS–AD diagrams to show consequences of exchange rate changes of important macroeconomic variables.
AO2	Explain exchange rate determination in a fixed exchange rate system, including currency devaluation and revaluation
AO4	Diagram to show how fixed exchange rates are maintained
AO2	Explain exchange rate determination in a managed exchange rate system
AO2	Explain overvalued and undervalued currencies
AO4	Draw a diagram to show how equilibrium exchange rates are determined and change in a managed exchange rate system
AO3	Evaluate fixed versus floating exchange rate systems

Fixed Exchange Rates

- **Fixed exchange rate system** an exchange rate system where exchange rates are fixed by the central bank of each country.
  - The exchange rate is not permitted to change freely in response to changes in currency supply and demand
  - The exchange rate is still determined by demand and supply, but these are manipulated by the central bank or government in order to arrive at the equilibrium that will give rise to the desired exchange rate.
    - Exchange rates are always determined by demand and supply in both floating and fixed exchange rate systems
    - In a floating exchange rate system the "price" of a currency adjusts freely to changes in supply and demand.
    - In a fixed exchange rate system the currency supply and demand are forced to adjust to the predetermined "price", or fixed exchange rate, through central bank and government intervention that manipulates them.

Fixed Exchange Rates

- Maintaining the value of a currency at its fixed exchange rate requires constant intervention by the central bank or government.



- **Revaluation** refers to an increase in the value of a currency in the context of a fixed or pegged exchange rate system
  - Revaluation leads to more expensive exports to foreigners and cheaper imports for domestic residents, and therefore fewer exports and more imports.

Fixed Exchange Rates

- An **overvalued currency** has a value that is too high relative to its equilibrium free market value. Its exchange rate has been set at a higher level than the equilibrium market exchange value.
- The main reason to overvalue a currency is to access cheap imports from foreign countries.

- **Devaluation** refers to a decrease in the value o a currency in the context of a fixed or pegged exchange rate system.
  - Devaluation results in cheaper exports to foreigners and more expensive imports for domestic residents, given rise to more exports and fewer imports.
  - Undervaluation is used as a method to expand export industries, expand the economy and therefore increase employment levels.
  - Achieving these objectives by means of an undervalued currency is considered to involve the creation of an unfair competitive advantage.

Intervention to maintain fixed exchange rates

- Intervention takes the form of buying and selling reserve currencies by the central bank, as well as making other adjustments in the domestic economy.

1. **Using official reserves to maintain the exchange rate**
   - Where there is upward pressure in the currency due to excess demand, the central bank can keep on selling the domestic currency and buying foreign exchange, thus maintaining the exchange rate.
   - Where there is downward pressure in the currency due to excess supply, the central bank can keep on buying the domestic currency and selling some of its foreign currency reserves.
2. **Changing interest rates**
   - The central bank can increase or decrease interest rates, influencing the level of financial investments from other countries
   - Increases in interest rates involve contractionary monetary poicy and may lead to a recession in the domestic economy.

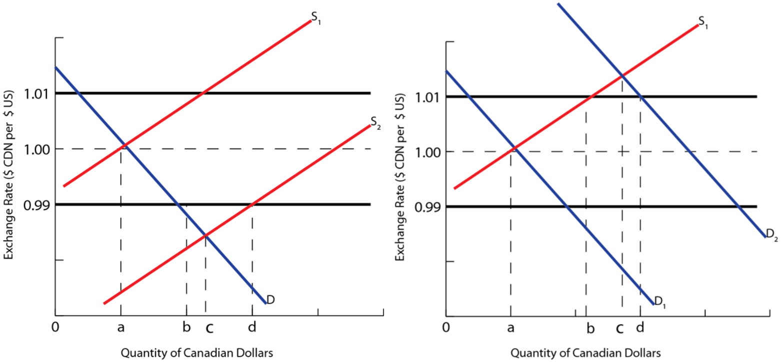
Intervention to maintain fixed exchange rates

3. **Borrowing from abroad**
   - If the country borrows from, its loans will come in the form of foreign exchange, which when converted to the domestic currency will increase the demand.
   - Excessive borrowing from abroad comes with a number of costs.
4. **Efforts to limit imports**
   - The government could use policies to limit imports because this reduces the supply of the domestic currency, causing a leftward shift of the currency supply curve.
   - To limit imports, government can may use contractionary fiscal and monetary policies (**expenditure-reducing**), which lower aggregate demand demand, lower incomes, and therefore result in fewer imports.
   - Alternatively, they may use trade protection policies (**expenditure-switching**) which work to directly lower the quantity of imports that can enter a country.
   - Contractionary policies may lead to a recession, while trade protection comes with the possibility of retaliation by trading partners.

Managed Exchange Rate

- **Managed exchange rate (Managed float)** exchange rates that are for the most part free to float to their market levels over long periods of time; however, central banks periodically intervene in order to stabilize them over the short-run.
  - The objective of central bank intervention is to prevent large and abrupt fluctuations in exchange rates that could arise if currencies were left entirely to market forces.
  - Large and abrupt exchange rate changes disrupt international trade flows and economic activity.
  - A number of countries peg (fix) their currencies to the US dollar, and float together with it, while a few other economies peg their currencies to the euro, and float in relation to all other currencies.
  - The pegged currency is allowed to fluctuate only within a narrow range above and below the target exchange rate, so that if the actual exchange ate hits the upper or lower limit of the range, the central bank intervenes to keep it within the limits.

Managed Exchange Rate



- A pegged currency combines fixed and floating exchange rates.
- Pegging a currency stabilizes its exchange rate in relation to currency in which it is pegged, preventing abrupt or strong fluctuations.

Consequences of changes in exchange rates

1. **Effects on the balance of trade**
   - Currency appreciation can be expected to result in a decrease in net exports (X – M).
   - Currency depreciation can be expected to lead to an increase in net exports (X – M).
2. **Demand-pull inflation**
   - A currency depreciation, by making exports cheaper and imports more expensive, works to increase the quantity of exports and lower the quantity of imports, thus increasing net exports (X – M), causing AD to increase.
   - A currency appreciation will work to reduce demand-pull inflationary pressures in an economy due to a decrease in net exports (X – M), causing AD to fall.

Consequences of changes in exchange rates

3. **Cost-push inflation**

    - A currency depreciation, makes imports more expensive. If domestic producers are heavily dependent on imported factors of production, their costs of production increase, resulting in a leftward shift of the SRAS curve resulting in cost-push inflation.
    - A currency appreciation, by making imports less expensive, results in a rightward shift of the SRAS curve, lowering inflationary pressures in the economy.

4. **Effects of Economic Growth**

    - A currency depreciation increases net exports, increasing aggregate demand, thus causing an increase in real GDP produced.
    - If the growth of export industries leads to increased investment spending in the domestic economy, there may be effects on aggregate supply, causing increases in potential output.

Consequences of changes in exchange rates

- To the extent that there is cost-push inflation there may be downward pressure on real GDP which may fall due to the decrease in short-run aggregate supply.
- What will happen to GDP depends on which of the effects is stronger: the upward effect due to the increase in aggregate demand or the downward effect due to the decrease in short run aggregate supply.

5. **Effect on unemployment**

- Currency depreciation increases net exports and therefore aggregate demand.
- This causes a fall in cyclical unemployment if the economy is in a recessionary gap or a temporary decrease in the natural unemployment.
- Employment in export industries is likely to increase since exports are likely to rise.
- In addition employment in industries producing goods that compete with imports is also likely to increase since imports are expected to fall with depreciation.

Consequences of changes in exchange rates

6. **Effects on the current account balance**
   - Depreciation is likely to cause imports to decrease and exports to increase.
   - If a country has an excess of imports over exports (**"trade deficit"**), its deficit is likely to become smaller after a period of time.
   - If it has excess exports over imports (**"trade surplus"**), its trade surplus is likely to become larger.
   - An appreciation, by contrast, will cause imports to increase and exports to fall, thus having the opposite effects on the current account balance.
7. **Effects of foreign debt**
   - A depreciation, by lowering the value of the domestic currency, causes the value of foreign debt to increase.
   - This is a problem faced by many developing countries, which find themselves having a larger debt burden if their currency depreciates.

Consequences of changes in exchange rates

- On the other hand, a currency appreciation causes the value of foreign debt to fall.

8. **Effects on living standards**

   - When currency depreciates, it causes imported goods to become more expensive in the domestic economy, therefore residents become worse off as all imported goods become more expensive with real income decreasing.
   - If, a currency appreciates, the effects on living standards of the residents are likely to be positive due to real income increasing.