Lecture 3 - International Financial Environment and Government Influence on Exchange Rates

Why firms pursue international business:

Comparative advantage
- Specialization can increase productivity
- Japan and US have technology advantage while;
- Jamaica and China have an advantage in the cost of basic labour
- Virgin Islands specializes in tourism and rely completely on international trade for most products
    - (even though they could produce some goods)

Imperfect markets
- If markets were perfect, capital and labour would flow wherever they were in demand.
- This would create equality in costs and returns and remove the comparative advantage.
- MNCs exploit imperfect markets.

Product cycle
- Firm produces in home market and exports product to foreign markets
- Other firms in home/ foreign markets start to produce similar product
- To retain advantage in home/ foreign markets, firm produces in foreign market to reduce transportation costs or production costs.

How firms engage in international business:
- International trade
- Licensing
- Franchising
- Joint Ventures
- Acquisitions of existing operations
- Establishing new foreign subsidiaries
- Establishing new foreign subsidiaries

International flow of funds:
- International business is facilitated by markets that allow for the flow of funds between countries.
- The transactions arising from intl business cause money flows from one country to another.
- Balance of payments is a measure of international money flows

Balance of payments (BOP)
- BOP is a summary of transactions between domestic and foreign residents for a specific country over a specified period of time.
    - Accounts for transactions by businesses, individuals, and the government
- Components of the BOP
    - **Current account** - Summary of the flow of funds between one specified country and all other countries due to purchases of goods or services
    - **Capital account** - Summary of the flow of funds ... resulting from the sale of assets.
- Transactions that reflect inflows of funds generate positive numbers (credits)
- Transactions that reflect outflows generate negative numbers (debits) for the country's balance.

Current account:
- Payments for:
    1. Goods and services (imports and exports)
    2. Factor income (interest and dividend payments)
    3. Transfers (aid, grants, etc.)

Capital account

- Payments for:
    1. Direct foreign investment (e.g. firm's acquisition of a foreign company)
    2. Portfolio investment (purchase of stocks and bonds)
    3. Other capital investment (e.g. money market securities)

Balance:

- If a country has a negative current account balance,
    - it imports more goods than it exports or
    - it pays more interest or dividends to other countries than it receives

Identities

- $Y = C + I + EX - IM$
- $S = Y - C - I$
- $S = C + I + EX - IM - C - I = EX - IM$
- $S = CAB$

C = consumption
I = Investment
S = Savings
EX = Exports
IM = Imports
CAB = Current account balance

Case study - IPad trade deficit

The Economist estimates that iPads accounted for around $4 billion of America's reported trade deficit with China in 2011; but if China's exports were measured on a value-added basis, the deficit was only $150m.

Factors affecting international trade flows:

- National income
- Exchange rates
- Interaction of factors (e.g. inflation and exchange rate)
- Government policies/ Trade Policy
    - Subsidies for exporters, Restrictions on imports. Security reasons. Political reasons. Firms receive tax breaks, Environmental restrictions. Laws against child labour

Agencies that facilitate international flows:

- International Monetary Fund
- World Bank
- World Trade Organization
- Bank for International Settlements
- OECD (Organisation for Economic Co-operation and Development)

Government influence on Exchange rates:

Evolution of the international Monetary system:

- Bimetallism: Before 1875
- Classical Gold Standard: 1875-1914
- Interwar Period: 1915-1944
- Bretton Woods System: 1945-1972
- The Flexible Exchange Rate Regime: 1973-Present

Case study: Classical Gold Standard:

- During this period in most major countries:
  - Gold alone was assured of unrestricted coinage.
  - There was two-way convertibility between gold and national currencies at a stable ratio.
- Gold could be freely exported or imported
- The ER between 2 countries' currencies would be determined by their relative gold contents.

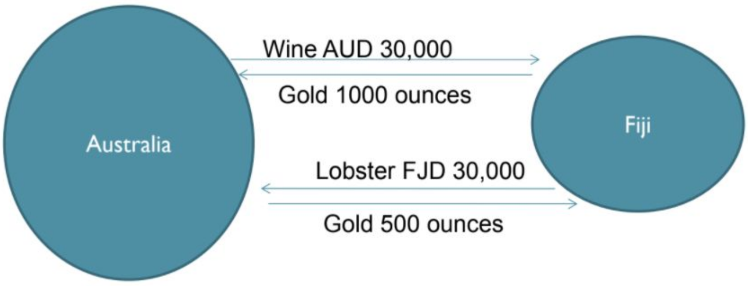
The exchange rate under the Gold standard:

- If the dollar is pegged to gold at AUD30 = 1 ounce of gold, and the British pound is pegged to gold at GBP6 = 1 ounce of gold, the exchange rate is determined by the relative gold contents.

Advantages	Disadvantages
Highly stable exchange rates under the classical gold standard provided an environment that was conducive to international trade and investment. Misalignment of exchange rates and international imbalances of payment were automatically corrected by the price-specie-flow mechanism.	The supply of newly minted gold was so restricted that the growth of world trade and investment was hampered by the lack of sufficient monetary Reserves - Deflationary pressure

Example: price-specie-flow mechanism

- Australia: AUD30 = 1 ounce of gold / Fiji: FJD60 = 1 ounce of gold



Example cont. - Price level

- Net flow of gold to Australia = 500 ounces
  - Increased amount of gold leads to larger amount of AUD in Australia and thus higher prices (=inflation)
  - Decreased amount of gold leads to lower amount of FDJ in Fiji and thus lower prices (=deflation)
- Higher price level in AUD and lower price level in Fiji implies less exports from Australia to Fiji and more exports from Fiji to Australia. This mechanism leads to a net flow of zero.

Example cont. Money supply

- Total money supply
  - Australia: AUD 30,000,000, with AUD30=1 ounce of gold, money supply is backed by 1m ounces of gold
  - Fiji: FDJ600,000, with FJD60=1 ounce of gold, money supply is backed by 10,000 ounces of gold
  - if net flow to Australia = +500 ounces of gold, money supply in Australia increases to AUD30,015,000 (= inflation) and decreases in Fiji to FJD570,000 (=deflation)

Exchange rate systems:

- Fixed peg - Bahamas, China, Vietnam
- Freely floating - Australia, Euro countries, Mexico, UK, USA
- Managed float - Argentina, India, Russia
- Currency board arrangements - Bulgaria (euro), Hong Kong (US dollar)

Fixed exchange rate system:

- In a fixed exchange rate system, exchange rates are held constant or allowed to fluctuate only within very narrow boundaries.
- Bretton Woods 1944-1973, Eurozone
- **Advantages:** No currency risk
- **Disadvantages:** Economy more vulnerable, no exchange rate buffer, Asian crisis experience

Freely floating (flexible) ER system:

- Exchange rates are determined by market forces generally without intervention by governments.
- **Advantages:**
    - Exchange rate works as a regulator of shocks from other countries (e.g. inflation and unemployment)
- **Disadvantages**
    - Exchange rate fluctuations, risk of changing currency values

Currency board example:

- Hong Kong introduces a currency board and issues 1bn HKD pegged to 0.1bn USD (the currency board is backed by USD reserves of 0.1bn)
- Exchange rate is HKD10=USD1
- Interest rates in Hong Kong and US equal (=3%)
- If HK wants to lower its interest rate, there is a capital outflow to the US putting downward pressure on the HKD
- To maintain exchange rate peg at HKD10=USD1, interest rates must be equal providing a country with limited control over the domestic interest rate.

Exercise:

- During the currency crisis of September 1992, the Bank of England borrowed DM33 billion from the Bundesbank when a pound was worth DM2.78. It sold these DM in the foreign exchange market for pounds in a futile attempt to prevent a devaluation of the pound. It repaid these DM at the post-crisis rate of DM2.50:£1.
- By what percentage had the pound sterling devalued in the interim against the DM? -10.07%
- What was the cost of intervention to the Bank of England in pounds? -3.323741 Bil DMI

Government intervention:

- Reasons for intervention: Smooth exchange rate movement; establish implicit boundaries; respond to temporary disturbance
- Direct Intervention
    - Central bank can exchange domestic currency for foreign currency in the foreign exchange market.
    - Unsterilized intervention
    - sterilized intervention
- Indirect Intervention - Government can influence factors that determine exchange rate

Speculative attacks:

- When and how can speculators “attack” a currency?
- speculators can attack currencies that are overvalued and fixed to another currency
- speculators borrow currency (that is fixed to another currency and believed to be overvalued) and convert (sell) borrowed currency to other currency
- Increased supply of currency puts downward pressure on currency
- If fixed exchange rate regime cannot be maintained (government or central bank cannot defend currency), currency is devalued and investors make a profit

Case study: Asian crisis 1997-1998

- Why did the fixed exchange rate of the Thai Baht to the USD lead to large capital inflows? Why did this cause the crisis?