

# FINS 3616 Notes

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## Topic 1: MNCS, International Monetary Systems, and Exchange Rate Determination

### Comparative Advantage

Every Nation should

- Specialize in **production and export** of goods it produces with **highest relative efficiency**
- **Import** goods that other nations produce relatively more efficiently

**Absolute Advantage:** produce a good or service in greater quantity for the same cost

**Comparative Advantage:** produce it at a lower cost than anyone else (considers opportunity cost)

### Disadvantages

- Production factors (employees, machines etc.) cannot be moved across countries
- Only deals with undifferentiated products: ignores economies of scales, production costs, uncertainty and technology
- MNC's existence is based on international mobility of factors of production and carry over skills and resources to other countries
  - o Firms ability to use globally available resources and skills > macro economic differences between countries

### Multinational Corporation

- Company with **production and distribution** facilities in **more than one country**
- Parent company located in home country
- At least **5 or 6 foreign subsidiaries**

### Reasons to go Global

- **Raw Material Seekers (earliest MNC)**
  - o Exploit markets in other countries (E.g. Oil)
  - o Historically first to appear
  - o Firms such as BHP, EXXON
- **Market Seekers**
  - o Produce and sell in foreign markets (saturated domestic market)
  - o Have major foreign direct investors
  - o Firm such as IBM, Maccas, Nestle, Levi Strauss
- **Minimize costs of production**
  - o Seek lower cost production abroad
  - o Want to remain cost competitive
  - o Firm such as Apple, Texas Instruments
- **Knowledge Seekers**
  - o Enter foreign markets to gain information to be used elsewhere (E.g. production process)
- **Domestic Customer Followers**
  - o Guaranteeing continuing product flow across countries (E.g. banks, consulting firms, accounting firms – KPMG, EY)
- **Financial market Imperfection exploiters**
  - o Reduce taxes (US companies relocating to Ireland), circumvent currency controls, benefit from international diversification

## Process of Overseas Expansion

### 1. Exporting

- Minimal costs, risks and profit
- Get to know the market

### 2. Sales Subsidiary

- Local Office
- Greater customer service, Increased communication
- More risk

### 3. Creation of Distribution System

- New service facilities set up
- Create warehouse system
- Marketing within company's own distribution system

### 4. Overseas Production

- Realize full sales potential
- Keep abreast of market developments
- Fill order faster
- Greater risk for the potential for profit

### #Licensing

- Alternate to setting up local production
- Less risk than local production
- Faster market entry time
- Maintaining quality standards may be a problem

E.g. Maccas does not deliver burgers from US  
license the formula

#Primary reason for MNC to produce abroad (US) is to respond more quickly to marketplace

**Reverse Foreign Investment:** any other country acquiring/investing US and Western Europe

## Globalization

### Concerns

- **Protectionism**
  - o Increasing tariffs, setting quotas, trade litigation
  - o May be politically beneficial in short run
- **Employment**
  - o FDI comes at cost of domestic exports and domestic jobs
  - o Local corporations investing abroad are job exporters
  - o Poor countries drain jobs from rich countries and depress wages
- **Other Concerns**
  - o Income inequality
  - o Race to the bottom in environmental and labor standards
  - o Creative Destruction
    - Industry patterns are distributed: some industries advance, and others recede
    - Workers may be forced to change jobs

### Benefits

- Allocating resources to most productive uses
- Risk sharing beyond what is possible domestically
- Lower cost of capital due to lower risk

### Costs

- **Creative Destruction:** causes considerable disruption in some industries
  - o Government may need to intervene to provide re-training or subsidies to reallocate wealth
- **Foreign Capital** may leave quickly → financial volatility
- **Tax avoidance** by MNCs is costly

## The Exchange Rate

- price of one unit of foreign currency expressed as a price in local currency

**Foreign Currency Demand:** demand for foreign country's goods, services and financial assets

- higher exchange rates Australian demands less foreign currency

**Foreign Currency Supply:** demand for local goods and services by foreign countries

- higher exchange rates, foreign countries supply more of foreign currency

## Terminology

Home Currency **Depreciation:** home currency value decreases relative to foreign currency

Home Currency **Appreciation:** home currency value increases relative to foreign currency

Home Currency **Devaluation:** home currency value is decreased by government

Home Currency **Revaluation:** home currency value is increased by government

## Calculating Exchange Rate Changes

*Exchange Rate Change for numerator (foreign) currency* =  $\frac{e_1 - e_0}{e_0}$

- if  $\frac{e_1 - e_0}{e_0} > 0$  = depreciation of numerator currency, otherwise appreciation

*Exchange Rate Change for denominator (domestic currency)* =  $\frac{e_0 - e_1}{e_1}$

## Factors affecting Exchange Rates

- inflation rates
- interest rates
- GNP/GDP growth rates
- Political and economic risk

## Role of Expectation

- **Asset Market Model**
  - o Exchange rates are **forward looking**
  - o Based on **investors' expectations** about factors affecting currency supply and demand
- **Liquidity**
  - o **Ease of exchanging money** for other goods or services
  - o Depends on **volume** of transactions and demand for assets (i.e. interest rates, expected economic growth and political and economic stability)
- **Store of Value**
  - o Ability to **maintain value** over time
  - o Depends on expected inflation (i.e. future monetary policy)

## Central Bank Reputations and Expectations

- Nation's **official monetary authority**
  - o Uses monetary policy to achieve price stability, set interest rates, or maintain fixed currency value
- Money is fiat currency (not linked to underlying asset stock), central banks play crucial role in setting risk associated with holding currency

- **Reputation**
  - o **Focus:** limited responsibilities increase likelihood of achieving this responsibility (price stability, inflation, unemployment)
  - o **Independence:** avoid interference by politicians with short-term economic views
    - E.g. controlling inflation by reducing money supply or interest rate to support economy

**Unsterilized Intervention:** monetary authorities have not insulated their domestic money supplies from the foreign exchange transaction

- **No action** on domestic government treasury security markets

**Sterilized Intervention:** Neutralize the impact on money supply when using market intervention

- **Increase** value of domestic currency → spend foreign exchange reserve to buy domestic currency → purchase domestic government treasury security (lower money supply and stabilise interest)
- **Decrease** value of domestic currency → buy foreign currency with domestic currency (sell) → sell domestic government treasury security (lower money supply and stabilise interest)

### Central Bank Independence, Inflation and Economic Growth

Independent Central Bank: low inflation and high growth

Dependent Central Bank: high inflation and low growth

- E.g. NZ Dependent → Independent, inflation decrease significantly, one goal to reduce inflation no matter what (high focus)

### International Monetary System

#### Trilemma and Exchange Rate Regime Choice

**Monetary Independence:** ability to set own interest rate and inflation independently

**Exchange Rate Stability:** predictable exchange rate movements to help businesses

**Capital Market Integration:** free flow of capital

E.g. To guarantee monetary independence and capital market integration, we cannot have exchange rate stability. To counteract changes of exchange rate due to free flow of capital by setting interest rate and inflation, the exchange rate will become very volatile.

US: monetary independence and free flow of capital, but volatile exchange rate

China: monetary independence and fixed exchange rate, but capital controls

### Exchange Rate Mechanism

#### 1. Free Float (clean float)

- Market forces of supply and demand determine rates
- Rates fluctuate over time
- Influenced by price level, interest rate and economic growth

#### 2. Managed Float (Dirty Float)

- Market forces set rates unless excess volatility occurs
- Then central bank determines rate

- i. **Smoothing out daily fluctuations:** follow this route attempt only to preserve an orderly pattern of exchange rate changes (ease the transition of one rate to another)
  - ii. **Leaning against the wind:** moderate or prevent abrupt short and medium fluctuations bought by random events whose effects to be only temporary (delaying rather than resisting)
  - iii. **Unofficial pegging:** resisting for reasons clearly unrelated to exchange market forces and fundamental upward or downward exchange rate movements
- 3. Targe-zone Arrangement**
- Rate Determination
    - o Market forces constrained to upper and lower range of rates
    - o Countries in arrangement adjust national economic policies to maintain rate
- 4. Fixed Rate System**
- Rate Determination
    - o Government maintain target rates
    - o If rates threatened, central banks buy/sell currency
    - o Monetary policies coordinated
  - Some Government Control
    - o Restrictions on global portfolio investments
    - o Ceiling on direct foreign insurance
    - o Import restrictions
- 5. Current System**
- Hybrid System
    - o Major currencies are a free float
    - o Other move in and out of various fixed-rate systems

## International Monetary System

### Brief History

#### 1821-1931 Gold Standard

- Fixed currency rates in terms of specified amount of gold
- Finding gold is random and storage is costly and pays no interest
  - o No upward pressure on inflation as supply is random
- Long run stability of price level includes alternating periods of inflation and deflation
- Broke down during and after WW1 and during Great Depression to WW2
  - o Dissolved as some countries prefer to hold gold instead of dollars
- If prices fall in the US, gold flow into US, and US see balance of trade increase
  - o FIXED EXCHANGE RATE

#### 1946 Bretton Woods System

- Fixed exchange rates with respect to USD (USD pegged at \$35/ounce gold)
  - o Exchange rate could fluctuate 1% around fixed parity
- Created IMF and world bank
  - o Country who ran into temporary balance of payment problem (current account deficit) that threated end the peg could draw lending facilities from IMF
  - o Allowed to change peg when at fundamental disequilibrium
- Required monetary policy coordination: 19 out of 21 countries devalued or revalued or floated their currencies by mid-1971
- Fixed exchange rate does not reflect the growing nature of the countries

#### 1971- Bretton Woods System abandoned, Floating exchange rates

- Increased exchange rate volatility, more uncertainty

## International Finance Institutions

- International Monetary Fund (IMF)
  - o Oversees exchange rate policies and provides rescue funding to countries in crisis (short term)
- World Bank
  - o Lending to develop countries and supports business entering developing markets
- Bank for International Settlements (BIS)
  - o Central bank for industrial countries' central banks
  - o Helps manage and invest central bank's foreign exchange reserves

## Monetary Union: EMS and EMU

### 1979-1993 European Monetary System (EMS)

- **Target-zone arrangement** held exchange rates within pre-specified limits of mutually agreed-on central exchange rate
- Provided exchange rate stability but required coordination of economic and monetary policies, which broke down

### 1999- European Monetary Union (EMU) and European Central Bank (ECB)

- Creation of single currency (euro), issued by ECB
- All monetary autonomy of EMU members surrendered to ECB