Exchange Rates And Its Economic Effects

The Exchange Rate

- Price of one currency expressed in terms of units of another currency
- Represents the number of units of one currency that exchanges for a unit of another.
- In an exchange rate two currencies are involved

Direct quote (Rs 76 for 1 US$) More common

- The number of units of a local (home) currency exchangeable for one unit of a foreign currency
- Direct quote is the convention of expressing currency exchange in terms of units of domestic currency per unit of foreign currency.
- <u>Home currency per unit of foreign currency</u>

An indirect quote($ 0.0151 per rupee)

- **The number of units of a foreign currency exchangeable for one unit of local currency**
- **Indirect quote is the reporting of foreign exchange rate in terms of units of foreign currency per unit of domestic currency.**
- **Foreign currency per unit of home currency**

Link between direct and indirect

- Direct quote for a given currency ($) is indirect quote for that currency in the other country An indirect quote is the reciprocal of the direct quote and vice versa
- Indirect quote =1 /Direct Quote
- Direct Quote = 1/Indirect quote

Exchange Rate Regimes

- The system by which a country manages its currency in respect to foreign currencies.
- The method by which the value of the domestic currency in terms of foreign currencies is determined.

Two types

- Floating exchange rate regime (also called a flexible exchange rate), and
- Fixed exchange rate regime (also called pegged exchanged rate)
- Intermediate exchange rate regimes
- Soft peg
- Hard peg

Classification of

- exchange rate arrangements is primarily based on the degree to which the exchange rate is determined
- by the market rather than by official action, with market determined rates being more flexible overall.

There are four categories

1. Hard pegs (such as exchange arrangements with no separate legal tender and currency board arrangements)
2. soft pegs (including conventional pegged arrangements, pegged exchange rates within horizontal bands, crawling pegs, stabilized arrangements, and crawl-like arrangements)

3. **Floating regimes (such as floating and free floating)**
4. **A residual category, other managed**

Exchange Rate Arrangement	% of IMF Members
Hard peg No separate legal tender	**12.5** 6.8
Currency board	5.7
Soft peg	**46.4**
Conventional peg	22.4
Stabilized arrangement	14.1
Crawling peg	1.6
Crawl-like arrangement	7.8
Pegged exchange rate within horizontal bands	0.5
Floating	**34.4**
Floating	18.2
Free floating	16.1
Other managed Arrangements	6.8

De jure regime vs de facto

- **Actual, de facto arrangements may differ from their officially announced, de jure arrangements.**
- **Many countries that say they float, in fact intervene heavily in the foreign exchange market.**
- **Many countries that say they fix, in fact devalue when trouble arises.**

13 numbers

- No separate legal tender
- Complete surrender of the monetary authorities' independent control over domestic monetary policy.

Partial and Full Dollarization

- Full Dollarization is a situation in which a country abandons its own currency and adopts another country's currency as a means of payment and unit of account e.g. Panama

Dollar

- Ecuador
- El Salvador
- Marshall Islands
- Micronesia
- Palau
- Panama
- Timor-Leste
- Zimbabwe

Euro

- Kosovo
- Montenegro
- San Marino

Others

- Kiribati
- Nauru(04/16)
- Tuvalu

- **Currency board 11 countries**
- **Conventional peg 43 countries**
- **Stabilized arrangement18 countries**
-

Fixed exchange rate

- **Government announces or decrees what its currency will be worth in terms of either another country's currency or a basket of currencies or another measure of value, such as gold**

Advantages of a fixed rate regime

- Avoids currency fluctuations
- Eliminates exchange rate risks and transaction costs
- More likely lower levels of inflation
- Greater trade and investment
- Credibility of the country's monetary-policy
- But
- The central bank is required to stand ready to intervene

Floating exchange rate regime

- **The equilibrium value of the exchange rate of a country's currency is market-**
- **determined i.e the demand for and supply of currency.**

Advantages of floating exchange rate

- Government to pursue its own independent monetary policy
- Exchange rate to be used as a policy tool
- Central bank is not required to maintain a large pool of international reserves

Disadvantages

- Volatile exchange rates generate a lot of uncertainties
- Add a risk premium to the costs of goods and assets traded across borders
- Greater policy flexibility; but less stability.

Nominal versus Real Exchange Rates

- **Real Exchange Rate (RER) incorporates changes in prices.**
- **The real exchange rate is the rate at which a person can trade the goods and services of one country for the goods and services of another.**
- **describes 'how many' of a good or service in one country can be traded for 'one' of that good or service in a foreign country.**

Important

- Trade flows are affected not by nominal exchange rates, but instead, by real exchange rates.
- The person or firm buying another currency is interested in what can be bought with it.

- **the rate at which a person can trade the goods and services of one country**
- **for the goods and services of another.**

- **‘how many’ of a good or service in one country can be traded for ‘one’ of that good or service in a foreign country**

Calculation

The Foreign Exchange Market (Forex Market)

- By far the largest market in the world in terms of cash value traded
- Over-the-counter market
- Not a physical place
- Electronically connected
- Narrow spreads
- High traded volume

Participants

- Central banks, how ?
- Commercial banks
- Governments
- Multinational corporations that engage in international trade and investments
- Nonbank financial institutions such as asset-management firms
- Insurance companies
- Brokers
- Arbitrageurs and speculators

Forex Market

- Efficient
- Highly integrated
- Tend to have the same exchange rate for a given currency.
- Arbitrage

Types of transactions

- **Spot market**
- **Spot exchange rates**
- **Current transactions**
- **Immediate delivery**
- **By convention – to be settled on the second working day**

Forward and futures markets

- Buy or Sell Currencies for Future Delivery
- Price decided today –Delivery and
- settlement at a future date
- Forward Exchange Rates
- Forward Premium
- Forward Discount
- Currency Futures

Arbitrage

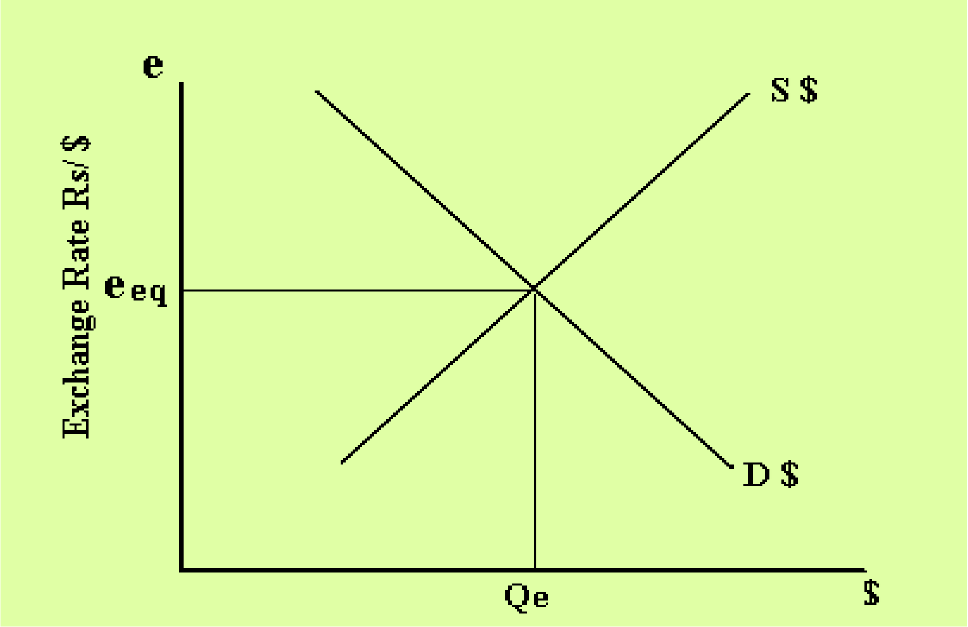
- Stops when
- Prices in the two markets are equalized, or
- They differ only by the amount of transaction costs
- Vehicle currency - Dollar

Exchange Rate Determination

- The demand side
- Purchase goods and services
- For unilateral transfers such as gifts, awards, grants, donations or endowments
- To make investment income payments abroad
- To purchase financial assets, stocks or bonds abroad

- **To open a foreign bank account**
- **To acquire direct ownership of real capital, and**
- **For speculation and hedging activities related to risk-taking or risk-avoidance activity**

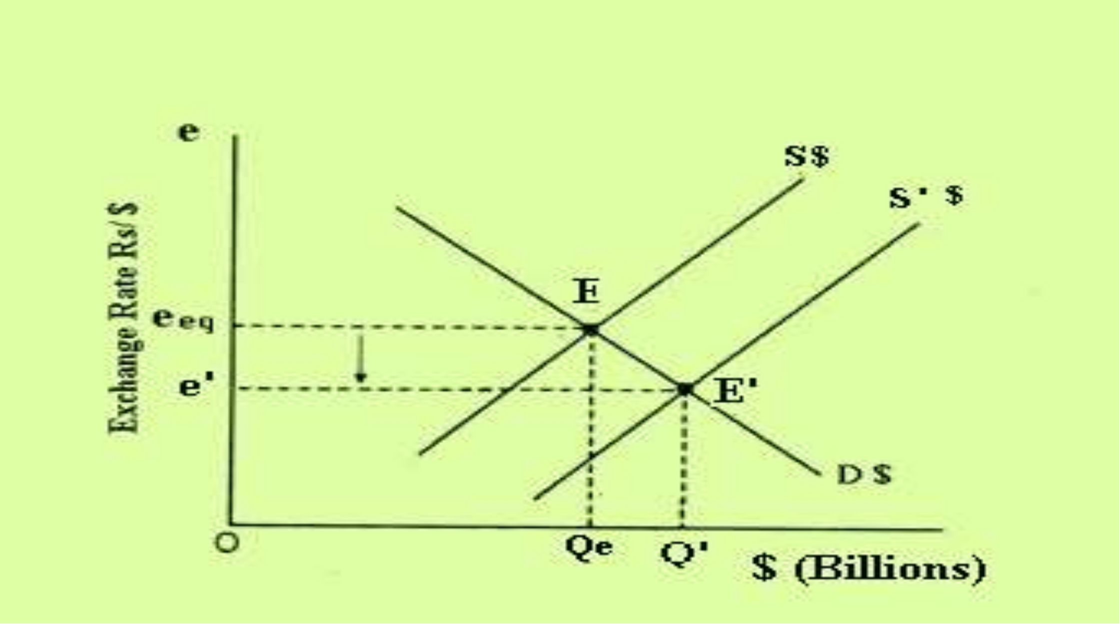
Exchange rate determination



Exchange rate determination

- Demand for and supply of currency
- Currency appreciation
- Currency appreciates when its value increases with respect to the value of another currency or a basket of other currencies

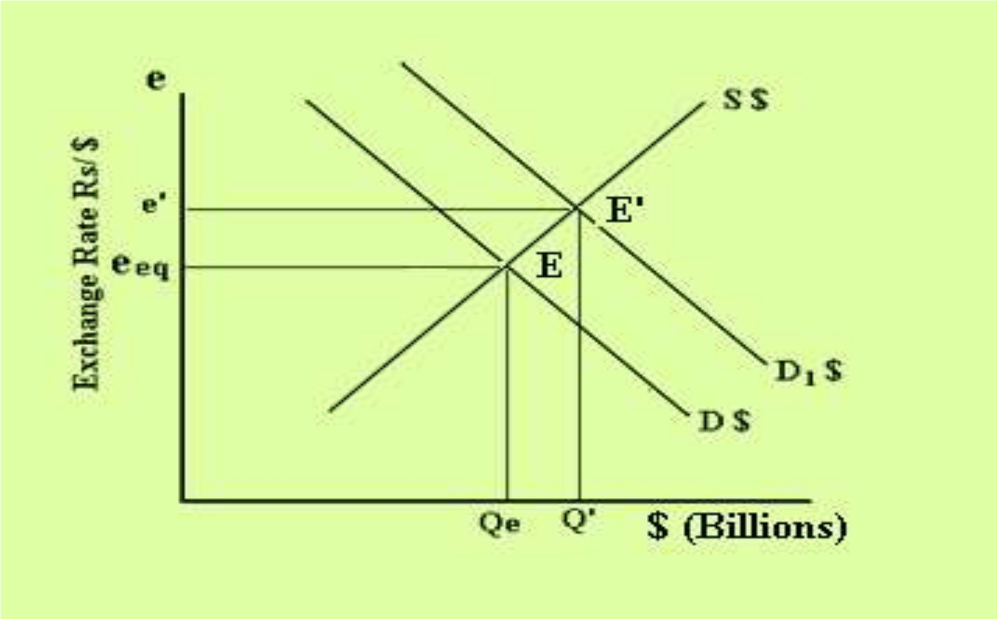
Home-Currency Appreciation under Floating Exchange Rates



Currency depreciation

- **Currency depreciates when its value falls with respect to the value of another currency or a basket of other currencies**
- **When one currency depreciates against another, the second currency must simultaneously appreciate against the first**
- **With depreciation, the home currency becomes <u>relatively</u> less valuable**

Home Currency depreciation



Devaluation

- A deliberate downward adjustment in the value of a country's currency relative to another currency, group of currencies or standard
- Revaluation is the opposite of devaluation
- A discrete raising of the otherwise fixed par value of a nation’s currency

Impacts of Exchange Rate Fluctuations on Domestic Economy

- Affect the domestic economy both directly and indirectly
- Initially felt by economic agents who are directly involved in international trade or international finance
- Trade, investments, consumption output, economic growth and inflation.

Affect

- The nature and extent of a country's trade
- Changes in import and export prices
- Changes in import and export volumes
- Changes in import spending and export revenue.

How ?

- **Change the relative prices of domestically-produced and foreign-produced goods and services**

Appreciation

- Raises the relative price of its exports
- Lowers the relative price of its imports
- Foreigners pay more for the country's products
- Domestic consumers pay less for foreign products.

A depreciation

- **Lowers the relative price of a country's exports**
- **Raises the relative price of its imports**
- **Foreigners find its exports cheaper**
- **Domestic residents find imports from abroad more expensive.**

When?

- Importers will be affected most as they will have to pay more rupees on importing products.
- Exporters will be benefitted as goods exported abroad will fetch dollars which can now be converted to more rupees.

A depreciation of domestic currency

- Diverts spending from foreign goods to domestic goods
- Increased demand, both for domestic import-competing goods and for exports
- Encourages economic activity and
- Creates output expansion
- Expansionary impact on the economy at an aggregate level.

Exp. effect depends on

- **Whether the switching of demand has taken place in the right direction and in the right amount**
- **The capacity of the home economy to meet the additional demand by supplying more goods to meet the increased domestic demand.**

Currency depreciation

- Increase the international competitiveness of domestic industries
- Increases the volume of exports
- increase windfall profits in export and import-competing industries
- Promotes trade balance.
- In case the country's imports exceed exports, the net result is a reduction in real income within the country.

Depreciation may also cause contractionary effects

- Under developed or semi industrialized country
- Inputs and components for manufacturing are mostly imported and cannot be domestically produced
- Increased import prices will increase firms’ cost of production ,
- Push domestic prices up and decrease real output.

Depreciation

- If exports originate from labour-intensive industries,
- Increased export prices will have spiraling effects on wages, employment and income.

Depreciation likely to fuel consumer price inflation

- Directly through its effect on prices of imported consumer goods and also due to increased demand for domestic goods.
- Indirectly, cost push inflation may result through possible escalation in the cost of imported components and intermediaries used in production.

Effect

- The central bank of the country will have no incentive to cut policy rates
- Likely to increase the burden of all types of borrowers including businesses.

Economic wastes

- Factors of production will be induced to move into the tradable goods sectors and out of the non tradable goods sectors

Likely to affect a country's terms of trade

- (The ratio of the price of a country's export commodity to the price of its import commodity)
- Price of exports rises by more than = ?
- less than =?
- same percentages as price of imports. =?

Fiscal health of a country

- **Affected with rising import payments and consequent rising current account deficit (CAD**

Borrowed?

- ECB
- Negatively affect – if not hedged
- Increase debt burden
- Affect their bottom lines
- Investments ?
- Increases hedging costs

Radical impact on patterns of international capital flows

- Affecting the value of investments on an international level
- Volume – investor sentiments
- Business volumes,
- Profit forecasts,
- Investment plans and
- Investment outcomes

Likely to shrink

- Foreign portfolio investment flows into debt and equity
- Foreign direct investments
- Shoots up capital account deficits affecting the country's fiscal health
- widen the gap between investments required for growth and actual investments.
- Over a period of time, unemployment is likely to mount in the economy.

Hot money

- Large scale withdrawal of portfolio investments
- huge redemptions through global exchange traded funds lead to further depreciation of domestic currency.
- Result in a highly volatile domestic equity market affecting the confidence of domestic investors

- **Windfall gains for export oriented sectors**
- **Remittances to homeland by non residents and businesses abroad**
- **Enhance government revenues from import related taxes**
- **Higher amount of local currency for a given amount of foreign currency borrowings of government**
- **Positive impact on country's trade deficit**

An appreciation of currency

- Raises the price of exports
- Increase in the quantity of imports
- Domestic aggregate demand falls and therefore economic growth is likely to be negatively impacted.

An appreciation of currency

- Lower the price of imported capital goods, components and raw materials
- Lead to decrease in cost of production which reflects on decrease in prices
- Reduction in the levels of inflation

- **Competitiveness of domestic industry is adversely affected**
- **Firms have greater incentives to introduce technological innovations and capital intensive production to cut costs to remain competitive.**

- **Cause larger deficits and worsen the current account.**
- **The impact of appreciation on current account depends upon the elasticity of demand for exports and imports**

Depends on the stage of the business cycle

- If appreciation sets in during the recessionary phase, the result would be a further fall in aggregate demand and higher levels of unemployment
- If the economy is facing a boom, an appreciation of domestic currency would trim down inflationary pressures and soften the rate of growth of the economy.

The USA

- **if currency appreciation is because of strong fundamentals of the economy.**

Government debts

- **Foreign currency denominated government debts**
- **Strain to the exchequer for repaying and servicing foreign debt**