

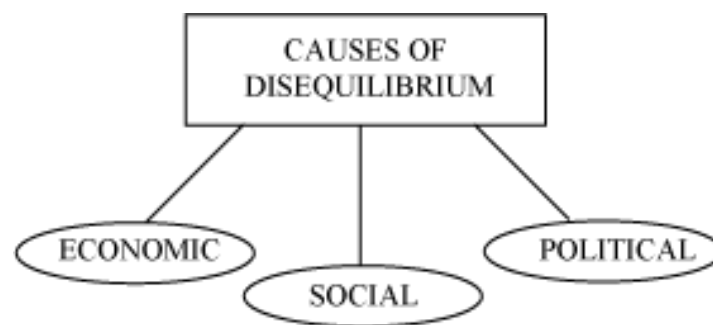
CHAPTER 6

OPEN MARKET MACROECONOMICS

- **Balance of Payment (BoP)** refers to the statement of economic transactions of a country with the rest of the world.
- **Visible items in balance of payment account** include all types of physical goods exported and imported.
- **Invisible items in BoP account** include all types of services.
- Balance of trade (BoT) takes into account only the visible items whereas Balance of Payment (BoP) includes both visible as well as invisible items.
- **Current account** is the account which maintains the records of imports and exports of goods and services as well as unilateral transfers.
- **Components of current account**
 - Export and Import of goods
 - Export and Import of services
 - Unilateral Transfers
- **Capital account** refers to that account which records all the transactions which causes change in assets or liabilities of the government or residents.
- **Components of capital account**
 - Foreign Direct investment (FDI)
 - Portfolio Investment
 - Loans
 - Other Investments
- **Autonomous items** refer to those economic transactions which are motivated by profit consideration. For example, imports and exports of goods and services and inflow and outflow of capital due to the interest differentials. Autonomous items are referred to as

‘items above the line’ in BoP. These items when included in the accounts do not affect BoP of a country.

- Those transactions that take place due to some other motive (except profit earning) are termed as **accommodating items of BoP**. These items are used to correct BoP disequilibrium. For example, government financing, injecting or withdrawing from official reserves through special drawing rights and foreign exchange reserves. They are often referred to as ‘below the line items’



- The transactions carried by monetary authority of a country, which cause changes in official reserves, are termed as **official reserve transactions**.
- **Foreign exchange rate** is the rate at which the price of one currency is measured in terms of another currency.
- **Nominal exchange rate** is the price of one currency in terms of another.
- **Real exchange rate** is the ratio of foreign prices to domestic prices.

$$\text{Real exchange rate} = \frac{eP_f}{P}$$

Where

P_f represents price level of foreign currency

P represents price level of domestic currency

e represents nominal exchange rate

- **Nominal effective exchange rate (NEER)** measures the strength of one currency in terms of another without taking into account the changes in price level.

- **Real effective exchange rate (REER)** determines the strength of one currency in terms of other with the consideration of changes in price level across different countries of the world.
- **Purchasing power parity** refers to the ratio of the price levels in different countries this indicates the ratio of purchasing power of trading countries.

$$R = \frac{P_x}{P_y}$$

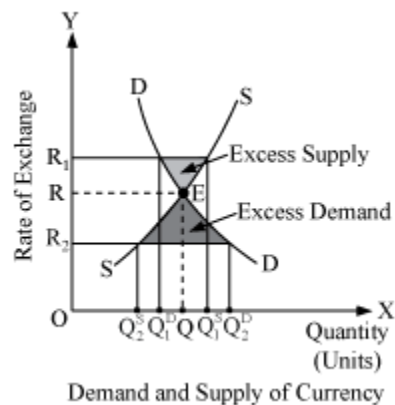
Where R represents rate of exchange

P_x represents price level in country X

P_y represents price level in country Y

- Under **flexible exchange rate (floating exchange rate)**, the rate of exchange is determined by the market forces; i.e. demand and supply.

In the figure given below, DD represents the demand for currency and SS represents the supply of currency.



The equilibrium exchange rate is determined by the intersection of the demand and supply curves, i.e. 'OR' which represents the equilibrium exchange rate under floating exchange rate regime.

- Under **fixed exchange rate (or pegged exchange rate)**, the exchange rate was held constant or fixed by the monetary authorities. Under this regime, the value of different currencies was pegged to the value of one single currency. This system avoids frequent

fluctuations in the exchange rate and made international trade more predictable and ensures guarantee returns to the exporters.

- **Under Bretton Woods System**, the monetary authorities of different countries (other than USA) pegged (fixed) maintained fixed exchange rate among their currencies and USD (\$) by intervening in the foreign exchange market. In case the value of currency is lower compared to the value of USD, then the monetary authorities of that country will buy its own currency in exchange of USD in the foreign exchange market, which pulls up the price of the currency. On the other hand, if the value of currency is high compared to that of USD, then the monetary authorities will sell its own currency in exchange of USD, which will push down the value of country's currency.
- **Devaluation** occurs when the price of currency is officially decreased under fixed exchange rate system.
- **Currency depreciation** of domestic currency implies that the domestic currency has become less expensive in terms of foreign currency. Decrease in the price of domestic currency in terms of foreign currency under flexible exchange rate regime is called depreciation.

Exchange Rate	Value of Re 1 in terms of USD	Change
USD 1 = Rs 45	$\frac{1}{45} = 0.022$	
USD 1 = Rs 50	$\frac{1}{50} = 0.020$	Indian rupee depreciated as the value of rupees in terms of dollar fell from 0.022 to 0.020
USD 1 = Rs 40	$\frac{1}{40} = 0.025$	Indian rupee appreciated as the value of rupees in terms of dollar fell from 0.022 to 0.025

- **Currency appreciation** of domestic currency implies that the domestic currency has become more expensive in terms of foreign currency. Increase in the price of domestic currency in terms of foreign currency under flexible exchange rate regime is called appreciation.
- **Managed floating system** is combination of two systems—fixed and floating. It calls for government or central bank to intervene when the need for the same is realised. This is done with the help of purchase and sell of foreign currency to moderate exchange rate movements.
- **Hedging** is a process of protecting the interest of both buyers and sellers against the fluctuations in the exchange rate in the context of forward market.
- **Foreign Trade multiplier (Open economy multiplier)**

$$FT_M = \frac{\Delta Y}{\Delta X} = \frac{1}{1 - c(1 - t) + m}$$

Where,

FT_M represents foreign trade multiplier

ΔX represents change in exports

m represents marginal propensity to import

t represents proportionate tax rate

c represents marginal propensity to consume