CHAPTER - 11

THE MECHANISM OF FOREIGN EXCHANGE

MEANING:

An exchange rate is the rate at which one currency can be exchanged for another. In other words, it is the value of another country's currency compared to that of your own. If you are traveling to another country, you need to "buy" the local currency. Just like the price of any asset, the exchange rate is the price at which you can buy that currency. If you are traveling from India to US, for example, and the exchange rate for U.S. dollars is 1: 64.67 Indian Rupee, this means that for every U.S. dollar, you can buy 64.67 Indian Rupee. Theoretically, identical assets should sell at the same price in different countries, because the exchange rate must maintain the inherent value of one currency against the other.

THE DETERMINATION OF THE RATE OF FOREIGN EXCHANGE:

In a system of flexible exchange rate, the exchange rate of a currency (like price of a good) is freely determined by forces of market demand and supply of foreign exchange. Expressed graphically the Intersection of demand and the supply curves determines the equilibrium exchange rate and equilibrium quantity of foreign currency. This is called equilibrium in foreign exchange market.

Let us assume that there are two countries India and USA and the exchange rate of their currencies, viz., rupee and dollar are to be determined. Presently there is floating or flexible exchange regime in both India and USA. Therefore, the value of currency of each country in terms of the other currency depends upon the demand for and supply of their currencies.

❖ DEMAND FOR FOREIGN EXCHANGE (CURRENCY):

Demand for foreign exchange is caused because of following reasons:

- ☑ To Purchase Abroad Goods and Services by Domestic Residents
- ☑ To Purchase Assets Abroad
- ☑ To Send Gifts Abroad
- ☑ To Invest Directly In Shops, Factories Abroad
- ☑ To Undertake Foreign Tours
- ☑ To Make Payment Of International Trade, Etc.

The demand for dollars varies inversely with rupee price of dollar, i.e., higher the price, the lower is the demand. The demand curve in Figure below is downward sloping because there is inverse relationship between foreign exchange rate and its demand.

❖ SUPPLY OF FOREIGN EXCHANGE:

Supply of foreign exchange is caused because of following reasons:

- ☑ When foreigners purchase home country's (say, India's) goods and services through our exports

- ☑ When foreigners make direct investment in bonds and equity shares of home country
- ☑ When speculation causes inflow of foreign exchange
- ☑ When foreign tourists come to home country

The supply curve is upward sloping (vide Fig. 10.1) because there is direct relationship between foreign exchange rate and its supply.

❖ Determination of Exchange Rate:

This is determined at a point where demand for and supply of foreign exchange are equal. Graphically, intersection of demand and supply curves determines the equilibrium exchange rate of foreign currency. At any particular time, the rate of foreign exchange must be such at which quantity demanded of foreign currency is equal to quantity supplied of that currency. It is proved with the help of the following diagram. The price on the vertical axis is stated in terms of domestic currency (i.e., how many rupees for one US dollar).

The horizontal axis measures quantity demanded or supplied of foreign exchange (i.e., dollars). In this figure, demand curve is downward sloping which shows that less foreign exchange is demanded when exchange rate increases (i.e., inverse relationship). The reason is that rise in the price of foreign exchange (dollar) increases the rupee cost of foreign goods which makes them more expensive. The result is fall in imports and demand for foreign exchange.

The supply curve is upward sloping which implies that supply of foreign exchange increases as the exchange rate increases (i.e., direct relationship). Home country's goods (here Indian goods) become cheaper to foreigners because rupee is depreciating in value.

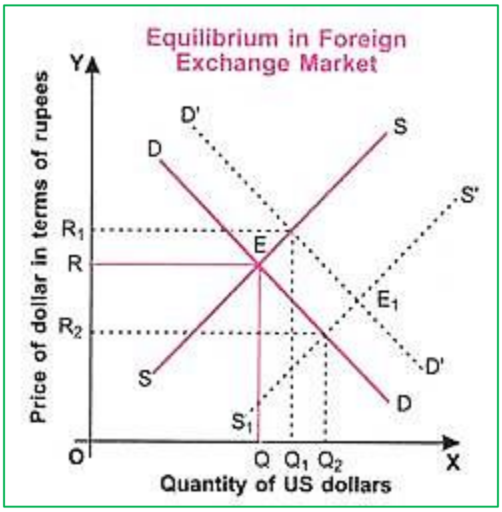
As a result, demand for Indian goods increases. Thus, our exports should increase as the exchange rate increases. This will bring greater supply of foreign exchange. Hence, the supply of foreign exchange increases as the exchange rate increases which proves the slope of supply curve.

In the Figure below, demand curve and supply curve of dollars intersect each other at point E which implies that at exchange rate of OR (QE), quantity demanded and supplied are equal (both being equal to OQ). Hence, equilibrium exchange rate is OR and equilibrium quantity is OQ.

❖ Change in Exchange Rate:

Suppose, exchange rate is 1 dollar = Rs 50. An increase in India's demand for US dollars, supply remaining the same, will cause the demand curve DD shift to D'D'. The resulting intersection will be at a higher exchange rate, i.e., exchange rate (price of dollar in terms of rupees) will rise from OR to OR, (say, 1 dollar = 52 rupees). It shows depreciation of Indian currency (rupees) because more rupees (say, 52 instead of 50) are required to buy 1 US dollar. Thus, depreciation of currency means a fall in the price of home currency.

Likewise, an increase in supply of US dollar will cause supply curve SS shift to S'S' and as a result exchange rate will fall from OR to OR_2. It indicates appreciation of Indian currency (rupees) because cost of US dollar in terms of rupees has now fallen, say, 1 dollar = Rs 48, i.e., less rupees are required to buy 1 US dollar or now Rs 48 instead of Rs 50 can buy 1 dollar. Thus, appreciation of currency means 'a rise in the price of home currency'.



The Adjustable 'Peg' System:

An adjustable peg exchange rate is a system where a currency is fixed to a certain level against another strong currency such as the Dollar or Euro. Usually the peg involves a degree of flexibility of 2% against a certain level. However, if the exchange rate fluctuates by more than the agreed level, the Central bank needs to intervene to maintain the target exchange rate peg.

- An adjustable peg system usually allows countries to revalue their peg, if it is necessary to regain competitiveness.
- The adjustable peg is effectively a semi fixed exchange rate.
- The Bretton woods system of the 1960s and 1970s was an example of an adjustable peg system.
- Many Asian countries have an unofficial peg against the dollar. However, with the weakening dollar, many countries are considering revaluing their target exchange rate

Fixed Exchange Rates:

A country's exchange rate regime under which the government or central bank ties the official exchange rate to another country's currency (or the price of gold). The purpose of a fixed exchange rate system is to maintain a country's currency value within a very narrow band. Also known as pegged exchange rate.

A fixed exchange rate, sometimes called a pegged exchange rate, is a type of exchange rate regime where a currency's value is fixed against the value of another single currency, to a basket of other currencies, or to another measure of value, such as gold. A fixed exchange rate is usually used to stabilize the value of a currency against the currency it is pegged to. This makes trade and investments between the two currency areas easier and more predictable, and is especially useful for small economies in which external trade forms a large part of their GDP. It can also be used as a means to control inflation. However, as the reference value rises and falls, so does the currency pegged to it.

There are two ways the price of a currency can be determined against another. A fixed, or pegged, rate is a rate the government (central bank) sets and maintains as the official exchange rate. A set price will be determined against a major world currency (usually the U.S. dollar, but also other major currencies such as the euro, the yen or a basket of currencies). In order to maintain the local exchange rate, the central bank buys and sells its own currency on the foreign exchange market in return for the currency to which it is pegged.

Advantages of Fixed Exchange Rates:

Fixed rates provide greater certainty for exporters and importers and under normally circumstances there is less speculative activity - although this depends on whether the dealers in the foreign exchange markets regard a given fixed exchange rate as appropriate and credible. Sterling came under intensive speculative attack in the autumn of 1992 because the markets perceived it to be overvalued and ripe for a devaluation.

Fixed exchange rates can exert a strong discipline on domestic firms and employees to keep their costs under control in order to remain competitive in international markets. This helps the government maintain low inflation which in the long run should bring interest rates down and stimulate increased trade and investment.

Floating Exchange Rates:

A floating exchange rate or fluctuating exchange rate is a type of exchange-rate regime in which a currency's value is allowed to fluctuate in response to market mechanisms of the foreign-exchange market. A currency that uses a floating exchange rate is known as a floating currency. A floating currency is contrasted with a fixed currency.

Unlike the fixed rate, a floating exchange rate is determined by the private market through supply and demand. A floating rate is often termed "self-correcting," as any differences in supply and demand will automatically be corrected in the market. Look at this simplified model: if demand for a currency is low, its value will decrease, thus making imported goods more expensive and stimulating demand for local goods and services. This in turn will generate more jobs, causing an auto-correction in the market. A floating exchange rate is constantly changing.

In reality, no currency is wholly fixed or floating. In a fixed regime, market pressures can also influence changes in the exchange rate. Sometimes, when a local currency reflects its true value against its pegged currency, a "black market" (which is more reflective of actual supply and demand) may develop. A central bank will often then be forced to revalue or devalue the official rate so that the rate is in line with the unofficial one, thereby halting the activity of the black market.

In a floating regime, the central bank may also intervene when it is necessary to ensure stability and to avoid inflation. However, it is less often that the central bank of a floating regime will interfere.

Advantages of Floating Exchange Rates:

Fluctuations in the exchange rate can provide an automatic adjustment for countries with a large balance of payments deficit. If an economy has a large deficit, there is a net outflow of currency from the country. This puts downward pressure on the exchange rate and if depreciation occurs, the relative price of exports in overseas markets falls (making exports more competitive) whilst the relative price of imports in the home markets goes up (making imports appear more expensive).

This should help reduce the overall deficit in the balance of trade provided that the price elasticity of demand for exports and the price elasticity of demand for imports is sufficiently high. A second key advantage of floating exchange rates is that it gives the government/monetary authorities' flexibility in determining interest rates. This is because interest rates do not have to be set to keep the value of the exchange rate within pre-determined bands.

A currency can operate under one of four main types of exchange rate system:

Free Floating:

- Value of the currency is determined solely by market demand for and supply of the currency in the foreign exchange market.
- Trade flows and capital flows are the main factors affecting the exchange rate
- In the long run it is the macro economic performance of the economy (including trends in competitiveness) that drives the value of the currency
- No pre-determined official target for the exchange rate is set by the Government. The government and/or monetary authorities can set interest rates for domestic economic purposes rather than to achieve a given exchange rate target
- It is rare for pure free floating exchange rates to exist - most governments at one time or another seek to "manage" the value of their currency through changes in interest rates and other controls

Managed Floating Exchange Rates:

- Value of the pound determined by market demand for and supply of the currency with no pre-determined target for the exchange rate is set by the Government
- Governments normally engage in managed floating if not part of a fixed exchange rate system.

Semi-Fixed Exchange Rates:

- Exchange rate is given a specific target
- Currency can move between permitted bands of fluctuation
- Exchange rate is dominant target of economic policy-making (interest rates are set to meet the target)
- Bank of England may have to intervene to maintain the value of the currency within the set targets
- Re-valuations possible but seen as last resort

Fully-Fixed Exchange Rates

- Commitment to a single fixed exchange rate
- No permitted fluctuations from the central rate

- Achieves exchange rate stability but perhaps at the expense of domestic economic stability
- Gold Standard in the inter-war years - currencies linked with gold