## 2. MODERN EXCHANGE RATE MANAGEMENT SYSTEMS:

- 2.1 Objectives
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- 2.3 Fixed peg exchange system Features-advantages-disadvantages
- 2.4 Free Float exchange system Features- advantages- disadvantages
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#### 2.1 LEARNING OBJECTIVES:

After reading this lesson you are able to:

- Understand various types of modern exchange rate system
- Understand Fixed Exchange Rate System
- Understand Floating Exchange Rate System
- Understand Managed float exchange rate system 

  Understand Present exchange rate systems:

#### 2.2. INTRODUCTION:

Namely there are two choices in exchange rate determination. One choice is fixed peg which is similar to Bretton Woods. The country has to maintain fixed peg with a reserve currency of its choice. The other choice is a pure free float. This means that the government would not decide the exchange rate of its currency but it would be determined by the market i.e. by demand and supply of their and other currencies in the market. Thus the exchange rate is market determined and would change often. In reality, the countries have not adopted only these two choices. Many countries are maintaining semi-flexible versions.

#### 2.3 FIXED PEG EXCHANGE RATE SYSTEM:

Establishing a fixed exchange rate between two nations, practically one of a small nation and th other of a powerful industrial nation is known as fixed Peg exchange. A fixed, or pegged, rate is a rate the Central bank or the government sets and maintains as the official rate of exchange. 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). One country, "pegs" the value of its domestic currency to the value of another currency. In order to maintain the domestic exchange rate, the central bank purchases and sells its own domestic currency on the foreign exchangemarket in return for the currency to which it is pegged.

## -FEATURES OF FIXED EXCHANGE RATE SYSTEM:

(a) **Fixed exchange Rate:** The exchange rate is fixed by the central bank of the country in a fixed exchange rate system. Here the Central Bank stands ready to exchange local currency and foreign currency at a predetermined rate. Usually exchange rate is fixed in a particular ratio with another currency.

Example: Nepalese Rupee maintains fixed peg with Indian Rupee.

Exchange Rates Fixed by Nepal Rastra Bank			
Currency	Unit	Buying	Selling
Indian Rupee	Rs 100 =	160 NPR	160.15 NPR

(b) Central Bank Interference: In the modern market, there will always be situations of excess supply and excess demand. Under a flexible exchange rate system, these changes cause appreciation of the currency or depreciation of the currency. In a fixed exchange rate system, the predetermined rate may not match with the market equilibrium exchange rate. So, central bank has to interfere. This is known as Central Bank Intervention .i.e. "to defend its currency at fixed rate".

In order to maintain market equilibrium, the Central Bank remains prepared to incorporate the excess demand or supply under a fixed exchange rate system. For doing this exchange the Central Bank must hold with it reserve stocks of both foreign and domestic currency. Now the central bank can print its own domestic currency, so holding stocks of domestic currency causes no problems but the difficulty comes in holding sufficient amount of stock of foreign currency which is known as "Foreign exchange reserves."

The quantity of reserves has to be large enough to accommodate all transactions of foreign currency for domestic currency that arise.

- (c) **Reserve of foreign currencies:** In order to carry out interventions, it is necessary for the central bank to hold a large and adequate amount of foreign currencies.
- (d) **Forceful devaluation**: If the country on continues basis runs into deficits in the BOP, the central bank will eventually run out of foreign currencies, and will fail to carry out the interventions. In such a situation, the central bank will have to ultimately devalue its currency.

#### -ADVANTAGES OF FIXED EXCHANGE RATE SYSTEM:

(i) Fixed and stable exchange rate: Since exchange rate is fixed, it is stable for a long period. It changes only when the government decides to devalue or. Change its fixed rate its currency. This creates requirement of hedging for exports and imports.

- (ii) Keeps inflation Low: Since the exchange rate has to be maintained stable, the monetary policy has to be stable and tight. This controls the inflation in economy.
- (iii) **International Monetary is stable:** Fixed peg helps in the smooth working of the international monetary system.
- (iv)Reduction in economic crisis. The system prevents monetary shocks hence reducing the possibility of economic crisis.
- (v)Helpful for Small Nations.
- (vi) It promotes international trade.

#### -DISADVANTAGES OF FIXED EXCHANGE RATE SYSTEM:

- (i) Continuous intervention puts heavy burden on exchange reserve.
- (ii) Country must have adequate reserve.
- (iii) Fails to solve the balance of payment disequilibrium.(iv)It does not reflect the true value of the currency (v)It may lead to the emergence of Black markets.

(vi)It can be expensive or even impossible to hold.

# 2.4 FREE FLOAT OR INDEPENDENTFLOAT FLEXIBLE ----EXCHANGE RATE SYSTEM:

Under this system, the exchange rate of any two currencies is determined purely by demand and supply of foreign currencies as compared to home currency. Central Banks does not intervene and do not try to maintain the exchange rate at a fix value or in a particular band.

Demand for a foreign currency arises because of import of Good andimports of services, proposed investments abroad and reimbursement of benefits of investment in the country.

Supply of a foreign currency is because of exports to that country that country's investment in our country and repatriation of benefits of our earlier foreign investments.

Example:US Dollar British Pound, Australian Dollar, Euro, and Canadian Dollar are examples of free float.

#### -FEATURES OF FLOATING EXCHANGE RATE SYSTEM:

- (a) Exchange Rate is market determined: In a flexible exchange rate system, the value of the currency is determined by the market, i.e. by the interactions of thousands of banks, institutions and firms wanting to buy and sell currency for purposes of transactions clearing, hedging, arbitrage and speculation.
- (b) Market driven appreciation and depreciation of currency: Higher demand for a currency, would lead to an appreciation of the currency. Lower demand, would lead to a depreciation of the currency. An increase in the supply of a currency will lead to a depreciation of that currency while a decrease in supply, will lead to an appreciation.

(c) Follows Purchase Power and Interest Parities: equilibrium exchange rate ischaracterized under a flexible exchange rate system as the value that is consistent with Purchase Power parities, and interest rate parity.

#### -ADVANTAGES OF FLEXIBLE EXCHANGE RATE SYSTEM:

- (a) Simple operation, smoother, more fluid adjustment.
- (b) Brings realism in Forex transactions.
- (c) Disequilibrium in balance of payment auto stabilized.
- (d) No need for Forex reserve to manage exchange rate.
- (e) Prevents real shocks.

### -DISADVANTAGES OF FLEXIBLE EXCHANGE RATE SYSTEM:

- (a) Exchange rate changes every minute. So there is an exchange rate risk to exporters and importers which needs to be hedged.
- (b) It is affected by speculative trade. May cause adverse effect of speculation.
- (c) This may encourage inflation.

## 2.5 MANAGED FLOAT EXCHANGE RATE SYSTEM (DIRTY FLOAT):

Free float can drive the currency value to any extreme value depending on market conditions. This is not a comfortable situation for exports-imports and capital flows of a country. Hence many countries follow free float but do not leave it entirely to the market. They allow their central banks to intervene and adjust the currency's forex rate to a comfortable value. They do not declare any specific value of exchange rate. They may not target a very specific value as in case of fixed peg system. They just do not want to see the exchange rate driven to some extreme values (beyond a comfortable range) because of market forces. Since central bank intervention is mostly unpredictable and ad-hoc, managed float is also called as Dirty Float.

#### -FEATURES OF MANAGED FLOAT SYSTEM:

- (a) A managed floating rate systems is a hybrid of a fixed exchange rate and a flexible exchange rate system. In a country with a managed floating exchange rate system, the central bank becomes an important participant in the foreign exchange market.
- (b) Unlike in a fixed exchange rate regime, the central bank does not have andirect set value for the currency; however, unlike in a flexible exchange rate regime, it doesn't allow the market to freely determine the value of the currency.
- (c) The central bank may have either an indirect target value or andirect range of target values for their currency: it intervenes in the foreign exchange market by buying and selling domestic and foreign currency to keep the exchange rate close to this desired indirect value or within the desired target values.

Under a managed floating regime, the central bank holds stocks of foreign currency which are known as foreign exchange reserves. It is important to realize that a managed

float can only work when the indirect target is close to the equilibrium rate that would prevail in the absence of central bank intervention. Otherwise, the central bank will exhaust its foreign exchange reserves and the country will be in a flexible exchange rate system because they can no longer intervene.

#### 2.6 PRESENT EXCHANGE RATE SYSTEM:

## (1) No Separate Legal Tender (No separate currency):

In this arrangement, the government does not issue its own currency. This has two varieties:

Currency of another country is used for all the transactions and trade within and outside the country. Geographically very small countries which are very near to a big country mostly choose this option. Ecuador, Panama, Timor have adopted US dollars as their currency. Most of the countries which do not print their own currency have adopted US Dollar. That is why 'no separate legal tender' is also referred as 'Dollarization'.

Gulf countries were not having their own currency till late 1960s. They were using Indian Rupee till 1954. In 1954, Reserve Bank of India started printing a separate currency for exclusive use in gulf countries which was called as 'Gulf Rupee'. Later in 1960s and 1970s all of these countries started printing their own currency.

Countries form a currency union and print a common currency for all members of the union. So far the only example is European Union. 28 countries do not print their own currency. They use Euro as a common currency.

# (2) Currency Board:

This is a fixed peg system. In this case, it is not just a fixed dictated rate; it is actually supported by foreign exchange money with the central bank of such country. There is adirect legislative commitment to exchange domestic currency for a specified foreign currency at a fixed exchange rate. Foreign exchange assets of the central bank may be held in different foreign currencies.

# (3) Other Conventional Fixed Peg Arrangements:

The country (formally or de facto) pegs its currency at a fixed rate to another currency or a basket of a few currencies. The basket is formed from the currencies of major trading or financial partners.

There is no commitment to actually exchange. There also no promise to keep the parity very rigid. The exchange rate may fluctuate within narrow margins of less than  $\pm 1$  percent around a central rate for at least three months.

The monetary authority maintains the fixed parity through direct intervention or indirect intervention. The monetary authority can adjust the level of the exchange rate, although relatively infrequently.

## (4) Pegged Exchange Rates within Horizontal Bands:

The currency's value is maintained within certain margins of fluctuation of at least  $\pm 1$  percent around a fixed official central rate or the margin between the minimum andmaximum value of the exchange rate exceeds 2 per cent. It also includes arrangements of countries in the exchange rate mechanism (ERM) of the European Monetary System (EMS) that was replaced on January 1, 1999with the ERM II.

## (5) Crawling Pegs:

This is an intermediate exchange rate system. The rate is fixed with another currency. However, the fixed rate itself is adjusted periodically in small amounts which is why the name 'crawling peg' is given to it. The adjustment may be at a fixed and predetermined rate or in response to changes in inflation, etc.

The rate of crawl can be set to generate inflation-adjusted changes in the exchange rate. In crawling peg the 'fixed rate' itself crawls. No variation of  $\pm 1\%$  or whatever is permitted.

## (6) Crawling Bands:

This is a mix of crawling peg and horizontal bands. The rate is fixed with another currency or basket. However, the fixed rate itself is adjusted periodically in small amounts. In addition variation of  $\pm 1\%$  is permitted for real market transactions.

## (7) Managed Float (Dirty Float):

The monetary authority attempts to influence the exchange rate without having a specific exchange target. Indicators for managing the rate are broadly judgmental and may not be automatic. Intervention may be direct or indirect.

## (8) Free (Independent) Float:

The exchange rate is market-determined, with any official foreign exchange market intervention aimed at checking the rate of change and preventing undue volatility in the exchange rate, rather than at establishing a level for it.