

25.3 DETERMINATION OF EXCHANGE RATE IN SPOT MARKET

25.3.1 The Process of Determination

It is the interplay of the forces of demand and supply that determines the exchange rate between two currencies in a floating rate regime. The exchange rate between, say, the rupee and US dollar depends upon the demand for US dollars and the supply of US dollars in the Indian foreign exchange market. The demand for foreign currency comes from individuals and firms who have to make payments to foreigners in foreign currency mostly on account of the import of goods and services and purchase of securities. The supply of foreign exchange results from the receipt of foreign currency normally on account of export or sale of financial securities to foreigners.

What are the factors Determining Spot Exchange Rates

1. **Balance of Payments:** Balance of Payments represents the demand for and supply of foreign exchange which ultimately determine the value of the currency. Exports, both visible and invisible, represent the supply side for foreign exchange. Imports, visible and invisible, create demand for foreign exchange. Put differently, export from the country creates demand for the currency of the country in the foreign exchange market. The exporters would offer to the market the foreign currencies they have acquired and demand in exchange the local currency. Conversely, imports into the country will increase the supply of the currency of the country in the foreign exchange market.

When the balance of payments of a country is continuously at deficit, it implies that the demand for the currency of the country is lesser than its supply. Therefore, its value in the market declines. If the balance of payments is surplus continuously it shows that the demand for the currency in the exchange market is higher than its supply therefore the currency gains in value.

2. **Inflation:** Inflation in the country would increase the domestic prices of the commodities. With increase in prices exports may dwindle because the price may not be competitive. With the decrease in exports the demand for the currency would also decline; this in turn would result in the decline of external value of the currency. It may be noted that unit is the relative rate of inflation in the two countries that cause changes in exchange rates. If, for instance, both India and the USA experience 10% inflation, the exchange rate between rupee and dollar will remain the same. If inflation in India is 15% and in the USA it is 10%, the increase in prices would be higher in India than it is in the USA. Therefore, the rupee will depreciate in value relative to US dollar. Empirical studies have shown that inflation has a definite influence on the exchange rates in the long run. The trend of exchange rates between two currencies has tended to hover around the basic rate discounted for the inflation factor. The actual rates have varied from the trend only by a small margin which is acceptable. However, this is true only where no drastic change in the economy of the country is. New resources found may upset the trend. Also, in the short run, the rates fluctuate widely from the trend set by the inflation rate. These fluctuations are accounted for by causes other than inflation.

3. **Interest rate:** The interest rate has a great influence on the short – term movement of capital. When the interest rate at a centre rises, it attracts short term funds from other centers. This would increase the demand for the currency at the centre and hence its value. Raising of interest rate may be adopted by a country due to tight money conditions or as a deliberate attempt to attract foreign investment. Whatever be the intention, the effect of an increase in interest rate is to strengthen the currency of the country through larger inflow of investment and reduction in the outflow of investments by the residents of the country.
4. **Money Supply** An increase in money supply in the country will affect the exchange rate through causing inflation in the country. It can also affect the exchange rate directly. An increase in money supply in the country relative to its demand will lead to large scale spending on foreign goods and purchase of foreign investments. Thus the supply of the currency in the foreign exchange markets is increased and its value declines. The downward pressure on the external value of the currency then increases the cost of imports and so adds to inflation. The effect of money supply on exchange rate directly is more immediate than its effect through inflation. While in the long run inflation seems to correlate exchange rate variations in a better way, in the short run exchange rates move more in sympathy with changes in money supply. One explanation of how changes in money supply vary the exchange rate is this; the total money supply in the country represents the value of total commodities and services in the country. Based on this the outside world determines the external value of the currency. If the money supply is doubles, the currency will be valued at half the previous value so as to keep the external value of the total money stock of the country constant. Another explanation offered is that the excess money supply flows out of the country and directly exerts a pressure on the exchange rate. The excess money created, the extent they are in excess of the domestic demand for money, will flow out of the country. This will increase the supply of the currency and pull down its exchange rate.
5. **National Income:** An increase in national income reflects increase in the income of the residents of the country. This increase in the income increases the demand for goods in the country. If there is underutilized production capacity in the country, this will lead to increase in production. There is a chance for growth in exports too. But more often it takes time for the production to adjust to the increased income. Where the production does not increase in sympathy with income rise, it leads to increased imports and increased supply of the currency of the country in the foreign exchange market. The result is similar to that of inflation, viz., and decline in the value of the currency. Thus an increase in national income will lead to an increase in investment or in consumption, and accordingly, its effect on the exchange rate will change. Here again it is the relative increase in national incomes of the countries concerned that is to be considered and not the absolute increase.
6. **Resource Discoveries** when the country is able to discover key resources, its currency gains in value. A good example can be the have played by oil in exchange rates. When the supply of oil from major suppliers, such as Middles East, became insecure, the demand fro the currencies of countries self sufficient in oil arose. Previous oil crisis favoured USA, Canada, UK and Norway and adversely affected the currencies of oil importing countries like Japan and Germany. Similarly, discovery oil by some countries

helped their currencies to gain in value. The discovery of North Sea oil by Britain helped pound sterling to rise to over USD 2.40 from USD 1.60 in a couple of years. Canadian dollar also benefited from discoveries of oil and gas off the Canadian East Coast and the Arctic.

7. **Capital Movements** there are many factors that influence movement of capital from one country to another. Short term movement of capital may be influenced by the offer of higher interest in a country. If interest rate in a country rises due to increase in bank rate or otherwise, there will be a flow of short term funds into the country and the exchange rate of the currency will rise. Reverse will happen in case of fall in interest rates. Bright investment climate and political stability may encourage portfolio investments in the country. This leads to higher demand for the currency and upward trend in its rate. Poor economic outlook may mean repatriation of the investments leading to decreased demand and lower exchange value for the currency of the country. Movement of capital is also caused by external borrowing and assistance. Large scale external borrowing will increase the supply of foreign exchange in the market. This will have a favorable effect on the exchange rate of the currency of the country. When repatriation of principal and interest starts the rate may be adversely affected.
8. **Political factors** Political stability induced confidence in the investors and encourages capital inflow into the country. This has the effect of strengthening the currency of the country. On the other hand, where the political situation in the country is unstable, it makes the investors withdraw their investments. The outflow of capital from the country would weaken the currency. Any news about change in the government or political leadership or about the policies of the government would also have the effect of temporarily throwing out of gear the smooth functioning of exchange rate mechanism.