International Financial Management
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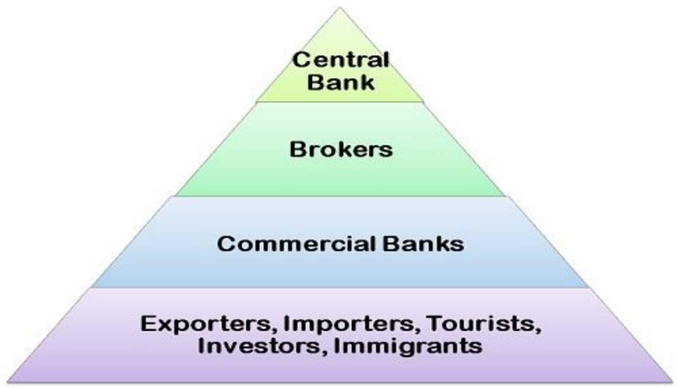
Topic: Foreign Exchange Market

Foreign Exchange Market: Nature, Structure, Types of Transactions

The **Foreign Exchange Market** is a market where the buyers and sellers are involved in the sale and purchase of foreign currencies. In other words, a market where the currencies of different countries are bought and sold is called a foreign exchange market.



The structure of the foreign exchange market constitutes central banks, commercial banks, brokers, exporters and importers, immigrants, investors, tourists. These are the main players of the foreign market, their position and place are shown in the figure below.

At the bottom of a pyramid are the actual buyers and sellers of the foreign currencies- exporters, importers, tourist, investors, and immigrants. They are actual users of the currencies and approach **commercial banks** to buy it.

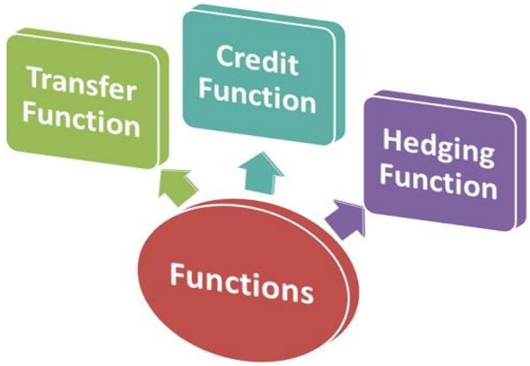
The ***commercial banks*** are the second most important organ of the foreign exchange market. The banks dealing in foreign exchange play a role of **"market makers",** in the sense that they quote on a daily basis the foreign exchange rates for buying and selling of the foreign currencies. Also, they function as **clearing houses**, thereby helping in wiping out the difference between the demand for and the supply of currencies. These banks buy the currencies from the **brokers** and sell it to the buyers.

The third layer of a pyramid constitutes the ***foreign exchange brokers***. These brokers function as a link between the central bank and the commercial banks and also between the actual buyers and commercial banks. They are the major source of market information. These are the persons who do not themselves buy the foreign currency, but rather strike a deal between the buyer and the seller on a commission basis.

The ***central bank*** of any country is the apex body in the organization of the exchange market. They work as the **lender of the last resort** and the **custodian of foreign exchange of the country**. The central bank has the power to regulate and control the foreign exchange market so as to assure that it works in the orderly fashion. One of the major functions of the central bank is to prevent the aggressive fluctuations in the foreign exchange market, if necessary, by direct intervention. Intervention in the form of selling the currency when it is overvalued and buying it when it tends to be undervalued.

Functions of Foreign Exchange Market

Foreign Exchange Market is the market where the buyers and sellers are involved in the buying and selling of foreign currencies. Simply, the market in which the currencies of different countries are bought and sold is called as a foreign exchange market.



The foreign exchange market is commonly known as FOREX, a worldwide network, that enables the exchanges around the globe. The following are the main **functions of foreign exchange market**, which are actually the outcome of its working:

1. **Transfer Function:** The basic and the most visible function of foreign exchange market is the transfer of funds (foreign currency) from one country to another for the settlement of payments. It basically includes the **conversion of one currency to another,**wherein the role of FOREX is to transfer the purchasing power from one country to another.

   For example, If the exporter of India import goods from the USA and the payment is to be made in dollars, then the conversion of the rupee to the dollar will be facilitated by FOREX. The transfer function is performed through a use of credit instruments, such as bank drafts, bills of foreign exchange, and telephone transfers.

2. **Credit Function:** FOREX provides a **short-term credit** to the importers so as to facilitate the smooth flow of goods and services from country to country. An importer can use credit to finance the foreign purchases. Such as an Indian company wants to purchase the machinery from the USA, can pay for the purchase by issuing a bill of exchange in the foreign exchange market, essentially with a three-month maturity.

3. **Hedging Function:** The third function of a foreign exchange market is to **hedge foreign exchange risks**. The parties to the foreign exchange are often afraid of the fluctuations in the exchange rates, i.e., the price of one currency in terms of another. The change in the exchange rate may result in a gain or loss to the party concerned.

Thus, due to this reason the FOREX provides the services for hedging the anticipated or actual claims/liabilities in exchange for the **forward contracts**. A forward contract is usually a three month contract to buy or sell the foreign exchange for another currency at a fixed date in the future at a price agreed upon today. Thus, no money is exchanged at the time of the contract.

There are several dealers in the foreign exchange markets, the most important amongst them are the banks. The banks have their branches in different countries through which the foreign exchange is facilitated, such service of a bank are called as **Exchange Banks**.

Types of Foreign Exchange Transactions

The **Foreign Exchange Transactions** refers to the sale and purchase of foreign currencies. Simply, the foreign exchange transaction is an agreement of exchange of currencies of one country for another at an agreed exchange rate on a definite date.

1. **Spot Transaction:** The spot transaction is when the buyer and seller of different currencies settle their payments within the two days of the deal. It is the fastest way to exchange the currencies. Here, the currencies are exchanged over a **two-day period**, which means **no contract**is signed between the countries. The exchange rate at which the currencies are exchanged is called the **Spot Exchange**

Rate. This rate is often the prevailing exchange rate. The market in which the spot sale and purchase of currencies is facilitated is called as a **Spot Market**.

2. **Forward Transaction:** A forward transaction is a future transaction where the buyer and seller enter into an agreement of sale and purchase of currency **after 90 days of the deal**at a fixed exchange rate on a definite date in the future. The rate at which the currency is exchanged is called a **Forward Exchange Rate**. The market in which the deals for the sale and purchase of currency at some future date is made is called a **Forward Market**.
3. **Future Transaction:** The future transactions are also the **forward transactions**and deals with the contracts in the same manner as that of normal forward transactions. But however, the transactions made in a future contract differs from the transaction made in the forward contract on the following grounds:

- The forward contracts can be **customized**on the client's request, while the future contracts are **standardized** such as the features, date, and the size of the contracts is standardized.
- The future contracts can only be **traded on the organized exchanges,**while the forward contracts can be traded anywhere depending on the **client's convenience**.
- **No margin**is required in case of the forward contracts, while the **margins are required** of all the participants and an initial margin is kept as **collateral** so as to establish the future position.

4. **Swap Transactions:** The Swap Transactions involve a **simultaneous borrowing and lending** of two different currencies between two investors. Here one investor borrows the currency and lends another currency to the second investor. The obligation to repay the currencies is used as collateral, and the amount is repaid at a **forward rate.** The swap contracts allow the investors to utilize the funds in the currency held by him/her to pay off the obligations denominated in a different currency without suffering a foreign exchange risk.
5. **Option Transactions:** The foreign exchange option gives an investor the**right, but not the obligation** to exchange the currency in one denomination to another at an agreed exchange rate on a pre-defined date. An option to buy the currency is called as a **Call Option**, while the option to sell the currency is called as a **Put Option.**

Thus, the Foreign exchange transaction involves the conversion of a currency of one country into the currency of another country for the settlement of payments.

Foreign Exchange Market in INDIA

Traditionally Indian forex market has been a highly regulated one. Till about 1992-93, government exercised absolute control on the exchange rate, export-import policy, FDI (Foreign Direct Investment) policy. The **Foreign Exchange Regulation Act(FERA)** enacted in 1973, strictly controlled any activities in any remote way related to foreign exchange. FERA was introduced during 1973, when foreign exchange was a scarce commodity. Post independence, union government's socialistic way of managing business and the license raj made the Indian companies noncompetitive in the international market, leading to decline in export. Simultaneously India import bill because of capital goods, crude oil & petrol products increased the forex outgo leading to sever scarcity of foreign exchange. FERA was enacted so that all forex earnings by companies and residents have to reported and surrendered (immediately after receiving) to RBI (Reserve Bank of India) at a rate which was mandated by RBI.

FERA was given the real power by making **"any violation of FERA was a criminal offense liable to imprisonment".** It a professed a policy of **"a person is guilty of forex violations unless he proves that he has not violated any norms of FERA".** To sum up, FERA prescribed a policy – **"nothing (forex transactions) is permitted unless specifically mentioned in the act".**

Post liberalization, the Government of India, felt the necessity to liberalize the foreign exchange policy. Hence, **Foreign Exchange Management Act (FEMA) 2000** was introduced. FEMA expanded the list of activities in which a person/company can undertake forex transactions. Through FEMA, government liberalized the export-import policy, limits of FDI (Foreign Direct Investment) & FII (Foreign Institutional Investors) investments and repatriations, cross-border M&A and fund raising activities.

Prior to 1992, Government of India strictly controlled the exchange rate. After 1992, Government of India slowly started relaxing the control and exchange rate became more and more market determined. **Foreign Exchange Dealer's association of India (FEDAI),** set up in 1958, helped the government of India in framing rules and regulation to conduct

Foreign Exchange Market in India: Historical Perspective

1947 to1977: During 1947 to 1971, India exchange rate system followed the par value

system. RBI fixed rupee's external par value at 4.15 grains of fine gold. 15.432grains of gold is equivalent to 1 gram of gold. RBI allowed the par value to fluctuate within the permitted margin of ±1 percent. With the breakdown of the Bretton Woods System in 1971 and the floatation of major currencies, the rupee was linked with Pound-Sterling. Since Pound-Sterling was fixed in terms of US dollar under the Smithsonian Agreement of 1971, the rupee also remained stable against dollar.

1978-1992: During this period, exchange rate of the rupee was officially determined in terms of a weighted basket of currencies of India's major trading partners. During this period, RBI set the rate by daily announcing the buying and selling rates to authorized dealers. In other words, RBI instructed authorized dealers to buy and sell foreign currency at the rate given by the RBI on daily basis. Hence exchange rate fluctuated but within a certain range. RBI managed the exchange rate in such a manner so that it primarily facilitates imports to India. As mentioned in Section 5.1, the FERA Act was part of the exchange rate regulation practices followed by RBI.

India's perennial trade deficit widened during this period. By the beginning of 1991, Indian foreign exchange reserve had dwindled down to such a level that it could barely be sufficient for three-week's worth of imports. During June 1991, India airlifted 67 tonnes of gold, pledged these with Union Bank of Switzerland and Bank of England, and raised US$ 605 millions to shore up its precarious forex reserve. At the height of the crisis, between 2^{nd} and 4^{th} June 1991, rupee was officially devalued by 19.5% from 20.5 to 24.5 to 1 US$. This crisis paved the path to the famed "liberalization program" of government of India to make rules and regulations pertaining to foreign trade, investment, public finance and exchange rate encompassing a broad gamut of economic activities more market oriented.

1992 onwards: 1992 marked a watershed in India's economic condition. During this period, it was felt that India needs to have an integrated policy combining various aspects of trade, industry, foreign investment, exchange rate, public finance and the financial sector to create a market-oriented environment. Many policy changes were brought in covering different aspects of import-export, FDI, Foreign Portfolio Investment etc.

One important policy changes pertinent to India's forex exchange system was brought in — rupees was made convertible in current account. This paved to the path of foreign exchange payments/receipts to be converted at market-determined exchange rate. However, it is worthwhile to mention here that changes brought in by government of India to make the exchange rate market oriented have not happened in one big bang. This process has been gradual.

Convertibility in current account means that individuals and companies have the freedom to buy or sell foreign currency on specific activities like foreign travel, medical expenses, college fees, as well as for payment/receipt related to export-import, interest payment/receipt, investment in foreign securities, business expenses etc. An related concept to this is the "convertibility in capital account".

Convertibility in capital account indicates that Indian people and business houses can freely convert rupee to any other currency to any extent and can invest in foreign assets like shares, real estate in foreign countries. Most importantly Indian banks can accept deposit in any currency.

Even though the exchange rate has been market determined, from time to time RBI intervenes in spot and forward market, if it feels exchange rate has deviated too much.

At this juncture, it is pertinent to discuss **"Hawala market"** operating in India before liberalization. Before 1992, RBI was strictly controlling the exchange rate. This created a parallel foreign exchange market – a black market in foreign exchange popularly known as "Hawala Market".

Hawala market is nothing but illegal foreign exchange market where forex trading happen at rates different than the rate mandated by the RBI. When the official rate "overvalues" the home currency, Hawala market starts operating.

Example of a Hawala Transaction: a NRI working in USA wants to send 20,000 US$ to his family member. If he send this money through bank, he receives rupees at prevailing exchange rate of INR 68/US$. But in the black market, the exchange rate is INR 70/US$.

In other words, RBI puts a value of INR.68 per US$, when it should have been Rs.70/US$. Hence INR is overvalued at the official rate.

The NRI contacts a hawala operator in USA and gives $20,000 to him. The USA hawala operators counterparty in India, pays Rs. 70/US$ to the family members of NRI here in India. The transaction between hawala dealer in USA and his counterparty India are done through smugglers.

During the heyday of hawala transactions in 1990's, it was a common knowledge that exporters **under invoice** their export earnings and importers **over invoice** their imports goods (so as to increase the cost of import denominated in foreign currency) and the differences are kept abroad and later repatriated back through Hawala route.

Even after 17 years of liberalization and even though exchange rate is market determined by supply & demand forces, Hawala market still operates, though at a smaller scale. According to a news report in Hindu (March 2005), many people working in the Gulf countries opt for the `pipe' or 'Hawala' transactions for obvious reasons of convenience and speedy transactions. No bank can beat these operators in delivering the money so fast, and that too at the receiver's doorstep!

Global Foreign Exchange Market Participants

Market participants are foreign exchange traders who, directly or indirectly, buy and sell currencies. These classes of participants enter the market as commercial companies, central banks, foreign exchange companies, hedge funds as speculators, investment management firms, retail foreign exchange traders, non-bank foreign exchange companies and money transfer/remittance companies.

A. Commercial Companies

An important part of the foreign exchange market comes from the financial activities of companies seeking foreign exchange to pay for goods or services. Commercial companies often trade fairly small amounts compared to those of banks or speculators, and their trades often have little short term impact on market rates. Nevertheless, trade flows are an important factor in the long-term direction of a currency's exchange rate. Some multinational companies can have an unpredictable impact when very large positions are covered due to exposures that are not widely known by other market participants.

B. Central Banks

National central banks play an important role in the foreign exchange markets. They try to control the money supply, inflation, and/or interest rates and often have official or unofficial target rates for their currencies. They can use their often substantial foreign exchange reserves to stabilize the market. Nevertheless, the effectiveness of central bank "stabilizing speculation" is doubtful because central banks do not go bankrupt if they make large losses, like other traders would, and there is no convincing evidence that they do make a profit trading.

C. Foreign Exchange Fixing

Foreign exchange fixing is the daily monetary exchange rate fixed by the national bank of each country. The idea is that central banks use the fixing time and exchange rate to evaluate behavior of their currency. Fixing exchange rates reflects the real value of equilibrium in the market. Banks, dealers and traders use fixing rates as a trend indicator. The mere expectation or rumor of a central bank foreign exchange intervention might be enough to stabilize a currency, but aggressive intervention might be used several times each year in countries with a dirty float currency regime. Central banks do not always achieve their objectives. The combined resources of the market can easily overwhelm any central bank. Several scenarios of this nature were seen in the 1992–93 when European Exchange Rate Mechanism collapsed and in more recent times in Asia.

D. Hedge Funds as Speculators

About 70% to 90% of the foreign exchange transactions conducted are speculative. This means the person or institution that bought or sold the currency has no plan to actually take delivery of the currency in the end; rather, they were solely speculating on the movement of that particular currency. Since 1996, Hedge funds have gained a reputation for aggressive currency speculation. They control billions of dollars of equity and may borrow billions more, and thus may overwhelm intervention by central banks to support almost any currency, if the economic fundamentals are in the hedge funds' favor.

E. Investment Management Firms

Investment management firms (who typically manage large accounts on behalf of customers such as pension funds and endowments) use the foreign exchange market to facilitate transactions in foreign securities. For example, an investment manager bearing an international equity portfolio needs to purchase and sell several pairs of foreign currencies to pay for foreign securities purchases. Some investment management firms also have more speculative specialist currency overlay operations, which manage client's currency exposures with the aim of generating profits as well as limiting risk. While the number of this type of specialist firms is quite small, many have a large value of assets under management and, hence, can generate large trades.

F. Retail Foreign Exchange Traders

Individual retail speculative traders constitute a growing segment of this market with the advent of retail foreign exchange platforms, both in size and importance. Currently, they participate indirectly through brokers or banks. Retail brokers, while largely controlled and regulated in the USA by the Commodity Futures Trading Commission and National Futures Association, have in the past been subjected to periodic foreign exchange fraud. To deal with the issue, in 2010 the NFA required its members that deal in the Forex markets to register as such (i.e., Forex CTA instead of a CTA). Those NFA members that would traditionally be subject to minimum net capital requirements, FCMs and IBs, are subject to greater minimum net capital requirements if they deal in Forex. A number of the foreign exchange brokers operate from the UK under Financial Services Authority regulations where foreign exchange trading using margin is part of the wider over-the-counter derivatives trading industry that includes Contract for differences and financial spread betting. There are two main types of retail FX brokers offering the opportunity for speculative currency trading: brokers and dealers or market makers.

Brokers serve as an agent of the customer in the broader FX market, by seeking the best price in the market for a retail order and dealing on behalf of the retail customer. They charge a commission or mark-up in addition to the price obtained in the market. Dealers or market makers, by contrast, typically act as principal in the transaction versus the retail customer, and quote a price they are willing to deal at.

G. Non-bank Foreign Exchange Companies

Non-bank foreign exchange companies offer currency exchange and international payments to private individuals and companies. These are also known as foreign exchange brokers but are distinct in that they do not offer speculative trading but rather currency exchange with payments (i.e., there is usually a physical delivery of currency to a bank account). It is estimated that in the UK, 14% of currency transfers/payments are made via Foreign Exchange Companies. These companies' selling point is usually that they will offer better exchange rates or cheaper payments than the customer's bank. These companies differ from Money Transfer/Remittance Companies in that they generally offer higher-value services.

H. Money Transfer/Remittance Companies and Bureaux de change

Money transfer companies/remittance companies perform high-volume low-value transfers generally by economic migrants back to their home country. In 2007, the Aite Group estimated that there were $369 billion of remittances (an increase of 8% on the previous year). The four largest markets (India, China, Mexico and the Philippines) receive $95 billion. The largest and best known provider is Western Union with 345,000 agents globally followed by UAE Exchange Bureaux de change or currency transfer companies provide low value foreign exchange services for travelers. These are typically located at airports and stations or at tourist locations and allow physical notes to be exchanged from one currency to another. They access the foreign exchange markets via banks or non bank foreign exchange companies.

Financial Instruments in Global Foreign Exchange Market

1. **Spot**

   A spot transaction is a two-day delivery transaction (except in the case of trades between the US Dollar, Canadian Dollar, Turkish Lira, Euro and Russian Ruble, which settle the next business day), as opposed to the futures contracts, which are usually three months. This trade represents a “direct exchange” between two currencies, has the shortest time frame, involves cash rather than a contract; and interest is not included in the agreed-upon transaction. Spot trading is one of the most common types of Forex Trading. Often, a forex broker will charge a small fee to the client to roll-over the expiring transaction into a new identical transaction for a continuum of the trade. This roll-over fee is known as the "Swap" fee.

2. **Forward**

   One way to deal with the foreign exchange risk is to engage in a forward transaction. In this transaction, money does not actually change hands until some agreed upon future date. A buyer and seller agree on an exchange rate for any date in the future, and the transaction occurs on that date, regardless of what the market rates are then. The duration of the trade can be one day, a few days, months or years. Usually the date is decided by both parties. Then the forward contract is negotiated and agreed upon by both parties.

3. **Swap**

   The most common type of forward transaction is the foreign exchange swap. In a swap, two parties exchange currencies for a certain length of time and agree to reverse the transaction at a later date. These are not standardized contracts and are not traded through an exchange. A deposit is often required in order to hold the position open until the transaction is completed.

4. **Futures**

   Futures are standardized forward contracts and are usually traded on an exchange created for this purpose. The average contract length is roughly 3 months. Futures contracts are usually inclusive of any interest amounts. Currency futures contracts are contracts specifying a standard volume of a particular currency to be exchanged on a specific settlement date. Thus the currency futures contracts are similar to forward contracts in terms of their obligation, but differ from forward contracts in the way they are traded. They are commonly used by MNCs to hedge their currency positions. In addition they are traded by speculators who hope to capitalize on their expectations of exchange rate movements.

5. **Option**

   A foreign exchange option (commonly shortened to just FX option) is a derivative where the owner has the right but not the obligation to exchange money denominated in one currency into another currency at a pre-agreed exchange rate on a specified date. The options market is the deepest, largest and most liquid market for options of any kind in the world.