
UNIT 5 FOREIGN EXCHANGE MARKETS

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5.0 OBJECTIVES

After studying this unit you should be able to :

- explain meaning of foreign exchange market
- discuss various types of exchange transactions, quotations and rates prevailing in foreign exchange markets
- describe the functions of the foreign exchange market and the role of its participants
- discuss the operations of Indian foreign exchange market.

5.1 INTRODUCTION

International trade and investment create need for buying, selling borrowing and lending foreign currencies. Let us take an example, an exporter in Japan sells goods to a customer in the U.K. The sale will be priced in Yen, Sterling or perhaps a third currency such as U.S. dollar.

- a) If the sale is priced in Yen, the U.K. customer will purchase Yen with Sterling in order to make payment.
- b) If the sale price is in Sterling, the Japanese supplier will normally wish to convert the receipts into domestic currency Yen to meet operating expenses in Japan, and will sell Sterling in exchange for Yen.
- c) If the sale price is in a third currency, such as US dollars, the customer will buy dollars in exchange for Sterling to make the payment and supplier will then sell the dollars in exchange for Yen.

Sometimes, international trade transactions do not result in the sale or purchase of foreign currency because companies set-off foreign currency receipts against foreign exchange payments. However, buying and selling, borrowing and lending foreign currencies are common activities which support international trade and investment. These activities are undertaken in the financial markets called foreign exchange markets. As student of International Business Operations, it is thus important for you to know the terminology, operations and mechanisms of foreign exchange markets. In this unit, you

will learn about the meaning of foreign exchange market and its functions, types of transactions made and the rates used in this market. You will also learn about the operations and dynamics of Indian foreign exchange market.

5.2 MEANING

Foreign exchange in short form is called Forex. The foreign exchange market or forex market is the market where one currency is exchanged or traded for another currency. Forex markets are also called foreign currency or just currency markets. There are domestic and international foreign currency markets. Domestic foreign currency markets serve the foreign currency buying, selling, borrowing and lending needs of residents whereas international markets serve non-residents also. Much of the foreign currency lending and borrowing take place in the Euromarkets.

Currencies are also traded in other forms as "derivative contracts" such as currency swaps, options and futures. These are more sophisticated instruments for trading in foreign currencies. You will study about them in the following units in this block.

5.3 FUNCTIONS

As you know in the past most of the financial markets had a physical centre or say trading floor, where dealers met to transact their trade by "out cry" method. But things have changed for many of the markets in many countries. Floor trading has been replaced by screen trading, meaning trades are made through the network of telephone and computers from dealers' dealing rooms. Foreign exchange markets have led this trend.

Despite its lack of a physical centre, the forex market is still a market, in the sense that it is a system for bringing buyers and sellers together and for supplying informations about prices and trading activity to participants. The dealers responsible for setting prices at which their banks will exchange currencies must have access to the latest prices in the market. This information is provided constantly by computer networks and brokers. Thus, forex market performs very useful functions.

The global foreign exchange market has established three principle (major) dealing centres, each operating with a specific time zone : London, New York and Tokyo. London is the main forex market centre.

5.3.1 Players

There are various participants in the foreign exchange market. The major participants are commercial banks which act as a clearing house between users and earners of foreign exchange. The banks also deal with foreign exchange brokers. These brokers act as a middleman for a fee between banks. The investors, exporters, importers and tourists also participate in the market. They are users and suppliers of foreign currencies.

Nation's central bank acts as the lender or buyer of last resort when the nation's total foreign exchange earnings are not equal to expenditures. In that case the central bank either draws down its foreign exchange reserves or adds to them.

Most foreign exchange trading is conducted between banks. Non-financial companies wishing to make foreign currency transactions will either deal with a bank or within the same group in case companies have internal procedures for inter-company currency trading.

Major international banks trade in many currencies from offices in several countries. Other banks specialise in certain currencies. A bank will want to be a major dealer in a particular currency in any country, if its trading profits are sufficient to support the costs of its dealing operation. The bank will employ a dealer (or dealers) with

responsibility for fixing the exchange rates (price) at which the bank will buy or sell the currency at any time. Trading profits represent the difference between selling (offer or ask) and buying (bid) prices. We will discuss more about bid-offer prices a little later. Exchange rate movements occur because dealers must continuously adjust their prices to match buying and selling pressures.

5.3.2 Currencies Commonly Traded

The US dollar is the most heavily traded currency in the international forex markets. It indicates : a) The role of the dollar as the favoured currency of major energy and agricultural commodities b) The power of the US economy and its central role in the world economy and c) The dollar's status on the traditional reserve' currency and a safe heaven for investors in the times of world crises.

In recent years, world wide trading in Yen and Deutsche Mark has increased in volume and these currencies have begun to challenge the supremacy of the dollar. Euro, the currency of European Union or Euroland, is aimed to challenge the supremacy of US dollar, though the experience till now does not bear any such sign. Every currency is quoted against dollar and most currency transactions included the dollars as one of the two constituent currencies.

Most non-dollars transactions are called 'cross-currency' deals and involve two transactions, a purchase and a sale transaction in exchange for dollars. An INR/French Franc exchange, for example, would be a cross-currency deal, involving the bank in two transactions INR/Dollar and Dollar/French Franc.

Cross-Currency Deal

Purpose is	Sell Currency A Buy Currency B	
Effected by	Sell Currency A Buy US Dollars	Sell US Dollars Buy Currency B

If a bank wants to purchase of a large quantity of French francs in exchange for Sterling, it would sell Sterling and purchase French francs for US dollars in two separate transactions.

5.3.3 Trading Hours

The trading hours of the three major foreign exchange markets virtually span 24 hours, expressed in local time, are

London	8.00 - 16.30
New York	8.30 - 16.30
Tokyo	8.00 - 17.30

Allowing for the five-hours time lag between London and New York and nine hours between Tokyo and London, the effective opening hours in UK time (GMT) are virtually round the clock. As one major forex market closes for the day, trading will switch to another centre. For banks and other organisations, with heavy involvement in the forex markets, buying and selling currencies can be done virtually round the clock.

5.4 FOREIGN EXCHANGE RATES

The price at which one currency is traded in exchange for another in the forex market is known as the exchange rate between the two currencies. In the free market these prices move up or down according to demand and supply, whereas in regulated markets exchange rates are regulated or controlled. Forex markets are indeed at least partially regulated as each government tries to stabilise the exchange rate for their domestic

currency against other major currencies. The exchange rate mechanism (ERM) of the European monetary system (EMS), intervention by central banks of different countries from time-to-time, and the keenness with which board meetings of Federal Reserve (US central bank) or Deutsche Bank (German central bank) and central banks of other G-7 countries are watched by forex market players highlight the importance and role of regulation in the forex markets.

To a large extent, however, the main forex markets are now fairly free from controls and exchange rates between the major currencies, most notably the US dollar, the Yen, and the Deutsche mark, fluctuate freely according to demand and supply. How exchange rates are determined and forecasted, you will read more about it in unit 6.

5.5 FOREIGN EXCHANGE QUOTATIONS

The foreign exchange quotations, meaning the way relative prices or rates are quoted for trade between players in the foreign exchange markets, can be direct, indirect or cross.

Direct Quotation is the price of one unit of a foreign currency quoted in terms of the home country's currency. In other words, it is the home currency that would cost you to purchase one unit of the foreign currency. For instance, a quotation of Rs. 43.50 per dollar in New Delhi is a direct quotation for rupee. This is also known as a quotation in European terms.

Indirect Quotation is just the reverse. It is the price of one unit of the home country's currency quoted in terms of foreign currency. In other words, it is the amount of foreign currency that you can buy using one unit of your own currency. For example, a quotation of \$.0435 per rupee is an indirect quotation for rupee. You will notice here that the direct and indirect quotations are reciprocals of each other. In other words, the direct quotation is equal to one divided by the indirect quotation. This is also known as quotation in American terms.

Cross Rates

Although banks deal with non-bank customers in any convertible currency, for a French franc/Italian lira, Sterling/Spanish peseta, Swiss franc/French francs and so on, the inter bank market normally quotes currencies against the US dollars. This avoids the trouble of having to quote many individual rates between currencies. The exchange rate for any non-dollar currencies is then calculated from their respective dollar exchange rates, to derive a cross rate. For example, the Swiss Franc/French franc exchange rate can be derived from Swiss franc/dollar and dollar/French franc rates. Cross rates are the rates between two currencies where neither one is the US dollar.

5.6 TYPES OF FOREIGN EXCHANGE TRANSACTIONS

A foreign exchange transaction is a contract to buy or sell a quantity of one currency in exchange for another at a specified time for delivery and settlement and at a specified price (exchange rate). These transactions take place in foreign exchange markets. In terms of counter parties and settlement dates, the forex transactions may be classified as follows:

5.6.1 Trade Transactions

Trade transaction is a transaction between a bank and a non-bank customer, where the customer wishes to buy or sell a quantity of currency to complete a business transaction or (occasionally) speculates for profit by anticipating future changes in the exchange rate.

5.6.2 Interbank Transactions

Interbank transactions are where two banks trade currencies between themselves. Banks buy and sell huge quantities of foreign currencies. They also accept currency deposits and lend in foreign currency.

5.6.3 Spot Transactions

A spot transaction is a contract to buy or sell a quantity of a foreign currency for immediate settlement. Immediate settlement as per convention of forex market means two working days from the date of contract. The settlement date is also known as 'value date'. The exchange rate for a spot transaction is known as the 'spot rate' and the market where spot transactions are conducted is called spot market.

Value Date and Dealing Date for Spot Transactions

As noted above, spot transactions traditionally require two banking day's for settlement. The date on which the spot transaction (agreement) is made is called 'dealing date' and the exchange of currencies will occur two working days after the dealing date. Settlement date is known as 'spot value date', this is the day when the exchanged currencies are delivered with good value into the (bank) accounts of the counter-parties to the transaction. This allows time for necessary paper work and cash transfers to be arranged. These arrangements consist of the verification of the transaction, through an exchange of confirmation, between the counter parties detailing the terms of the deal, the issue of settlement instructions by each counter party to its bank to pay the amount on the appointed date and satisfying exchange control requirements, if any.

When one counter party is a bank, payment may be made by its own branches or by another bank acting as an agent. The actual transfers of funds will be carried out on the value date.

Working days do not include Saturdays, Sundays or bank holidays in either of the countries of the two currencies involved.

To take an example, a spot deal transacted on a Tuesday will be settled on the Thursday of the same week and a deal agreed on a Friday will be settled on the following Tuesday. But there are some exceptions. For example :

A transaction for US dollar against Canadian dollars is often for delivery on the next working day. Forex market in the Middle East are closed on Fridays but open on Saturdays. A transaction involving the exchange of US dollars and Saudi riyals could therefore have a split settlement date, with US dollar delivered on the Friday and the riyals delivered on the Saturday.

There are over night (O/N) contracts also available in forex markets.

Interbank Spot Rates

Interbank spot rates are the current selling and buying prices for spot transactions in a currency. These are the benchmark rates for trade transactions. They are used for foreign currency transactions above a certain size. They also provide the basis for an exchange rate for transactions of smaller size.

For example, if a company wishes to buy US\$ 5 million spot, its bank will quote the current interbank spot rate for the transaction. However, if the company wished to buy a smaller quantity of dollars; say \$ 50,000, the bank would quote a rate less favourable to the customer (although based on interbank rate) in order to obtain a reasonable profit from a relatively small transaction.

The minimum transaction size at which a bank will be willing to deal at the interbank spot rate varies with currencies and individual banks.

Spot rates are quoted as one unit of base currency against a number of units of variable currency. Quoted rates are therefore, the rates at which a bank will buy or sell the base currency : e.g. Pound £1 = \$1.4705 or \$1 = ¥ 1.66.510. The spot rates are published in daily newspapers. There are two spot rates for a currency, namely, Bid Rate and Offer (or Ask) Rate.

Bid and Offer Rates

As the bank and the customer are counter parties, they are on opposite sides of the transaction. If a UK company is converting the proceeds of its sales in Japan by selling Yen for Sterling, the bank is then buying Yen for Sterling.

There is a bid rate at which a bank will buy and the counter party sell the base currency; and an offer rate at which the bank will sell and the counter party buy the base currency.

The terms 'bid' and 'offer' can be confusing and it is easy to mix them up. They originate from interbank transactions which are normally against US dollars. The bid rate is the rate at which the bank is willing to pay to buy dollars (and sell the non-dollar currency) and offer rate is the rate at which the bank will offer to sell dollars (buy non-dollar currency).

In quotes, the offer rate follows the bid rate. So in a quotation, Sterling / US \$ 1.4957 - 1.4962; 1.4957 is bid rate and 1.4962 is the offer rate or ask rate. What it means that the quoting bank is prepared to buy a sterling for 1.4957 US dollars and is prepared to sell a sterling for 1.4962 US dollars. Implicitly, a counterparty can buy a sterling from this bank for US \$ 1.4962 and sell sterling to it for US \$ 1.4957. You notice that offer rate is higher than the bid rate. That is the trading margin of this bank.

Remember as a ready to use rule that the bank will always buy and sell currency at the more favourable of these two rates. The difference between the two rates is known as the spread (sometimes called the bid-offer spread in the UK and the bid-ask spread in the US).

5.6.4 Forward Transactions

Currency can be traded spot or forward. In a spot transaction, the purchase or sale of currencies takes place for settlement two working days later. With a forward transaction, the purchase or sale is agreed now but will take place at sometime in the future, there by fixing the rate now for a future exchange of currencies. Forward transactions are forward exchange contracts (or forward contract). The rate at which forward transactions contracted in the present for future delivery of foreign currency is the forward rate. The market where purchase and sales of currencies are contracted in the present for receipt and delivery in future is called forward market.

Forward Quotation

As you know, the forward rate is the rate quoted by foreign-exchange traders for the purchase or sale of foreign exchange in the future. There is a difference between the spot rate and the forward rate known as the 'spread' or swap rate in the forward market. In order to understand how spot and forward rates are determined, let us now understand how to calculate the spread between the spot and forward rates. In the example given below, we compute the points, or the difference between the spot and forward rates, for a 3 months contract for the Canadian dollar and the Japanese yen quoted in US terms.

	Canadian dollars	Japanese yen
Spot	\$0.8590	\$0.00760
3 months forward	0.8510	0.00762
Points	-80	+2

The spread in Canadian dollars is 80 points; because the forward rate is less than the spot rate, the Canadian dollar is at a discount in the 3 months forward market. The spread in Japanese yen is only 2 points, and since the forward rate is more than the spot rate, the yen is at a premium in the forward market. Thus, we can say that a foreign currency is at a forward discount if the forward rate is below the spot rate whereas it is at forward premium if the forward rate is above the spot rate.

The premium or discount can also be quoted in terms of annualized per cent. The following formula can be used to determine the annualized percentage.

$$\text{Premium (discount)} = \frac{F_1 - S_1}{S_1} \times \frac{12}{N} \times 100,$$

Where F_1 is the forward rate on the day the contract is entered into, S_1 is the spot rate on that day, N is the number of months forward, and 100 is used to convert the decimal to per cent amounts (e.g., $0.05 \times 100 = 5\%$).

$$\text{Discount} = \frac{0.8510 - 0.8590}{0.8590} \times \frac{12}{3} \times 100 = 3.725\%$$

which means that the Canadian dollar is selling at a discount of 3.725 per cent under the spot rate. Lets work out forward premium rate for yen, in our example :

$$\text{Premium} = \frac{0.00760 - 0.00762}{0.00760} \times \frac{12}{3} \times 100 = 1.05\%$$

Check Your Progress A

1. Assume that the following spot rates apply to each question.

Spot Rate	Against Sterling
US Dollars	1.4957 – 1.4962
Deutsche Mark	2.6197 – 2.6221
Yen	167.728 – 167.859

- a) UK Company has to make a payment of \$ 400,000 to a supplier. What price would bank quote in Sterling for the dollars?

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- b) The UK company wishes to convert the DM 600,000 it has just received from a German Customer into Sterling. How much would the bank be willing to offer?

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- c) A UK importer of electronic goods from Japan must pay ¥45 million to a supplier. At what price would the bank fix the foreign exchange transaction with this customer?

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2. Explain the following terms:

- a) Bid and Offer Rate

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- b) Value date

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c) Forward rate

d) Spread

3. If \$: DM exchange rate is DM 1 = \$0.36 and the DM : FF exchange rate is FF1 = DM 0.32. Find out the FF : \$ exchange rate.

5.7 INDIAN FOREIGN EXCHANGE MARKET

Indian forex market is still in the developmental stage. In Indian forex market not all the currencies are bought or sold. The banks use London, New York or Singapore market. for the currencies which are not frequently traded in Indian forex market. From these rates, the cross rates are calculated.

The structure of forex market in India is three tier. The first part consists of transactions between the Reserve Bank of India and the authorised dealers. These dealers are usually the commercial banks. The second is the interbank market in which the banks transact among themselves. The third is the retail part in which the authorised dealer deal with their corporate clients and other retail customers. In the retail part money changers also operate. These are licensed dealers in the currency market to cater to the needs of retail customers. In the interbank market the quotes appear in swap points. There are currency brokers also who match the buyers and sellers and they work on commission basis.

The authorised dealers face two main types of transactions : (i) Clean instruments (known telegraphic transfers (TT)), and (ii) Payment against collection (bill for collection) of documents. The authorised dealers (ADs) have to provide more services for the second category of transactions therefore the two rates are different. While fixing the exchange rate for a transaction ADs must consider (a) is the transaction clean or documentary? (b) is the bill under consideration a sight or time draft or a usance bill? (c) does the ADs have to fork out funds in rupees or in foreign exchange or the reimbursement would be more or less immediate or after some time? After considering these things, ADs quote the rates for the following types of instruments : (a) TT Clean Buying Rate (b) TT Documentary Buying Rate (c) On Demand (OD) Bills Buying Rate (d) Long Rates (e) Tel Quel Rate (f) D/A Bill Buying Rate

Let us now understand about them one by one:

TT clean buying rate is quoted for transaction of which the reimbursement is more or less immediate. This rate also applies to remittances by mail transfers and bank drafts provided the required conditions are met. It is the best rate a customer can get. TT documentary buying rate will be lower than TT clean, because in this case certain documents are to be collected, therefore handling charges are involved. On demand bill buying rate is used for sight draft or demand bills that are negotiated or purchased by authorised dealers. For discounting usance bills, long exchange rates are required. Since different usance bills have different usance periods; therefore, various long terms exchange rates are required. Thus there are several long terms rates. These quotations are used for usance bills that are discounted by ADs. The applicable rate depends on the usance period. In all the cases, the usance period will have run for some time before the bill is presented to an authorised dealer for discounting. In such cases, the Tel Quel rates are quoted. These rates cover the unbroken period of usance. D/A stands for documents against acceptance and all the D/A rates are long rates. Tel Quel rates

and the D/A rates depend on the transit time involved. The time between the payment made to the document holder and the reimbursement of the document from the issuing agency is called the transit time. A traveller cheque is paid at sight, but it takes time to realise these cheques from the issuing bank. Exports bills also involve transit time. Foreign exchange dealers association of India (FEDAI) has prescribed transit periods and interest factors. These are taken into account and loaded onto the exchange rates. The main loading factors are : (a) handling charges, (b) expenses on postage, (c) administrative charges, (d) stamp duties, (e) commission to the exchange brokers or to correspondent banks, (g) exchange rate fluctuations, and (g) profit margins.

In Indian forex market besides spot contract, an over night (O/N) and tomorrow night (T/N) foreign exchange contract can also be done which means the delivery next business day or on second business day. Before August 2, 1993, the quotes were indirect. The quotations were made in the form of foreign currency per hundred rupees. But now-a-days, in the interbank market, the rates are quoted per unit or per hundred units of foreign currency. Only authorised dealers trade in interbank market. The rates quoted by ADs are merchant rates at which trading can take place. There are four types of rates being quoted in the newspapers. These are TT-Bill Rate, Bill Rate, Currency Notes and the Traveller Cheque Rate.

TT-Bill Rate for immediate payment : TT Bill Rate is a sight draft i.e. a draft to be paid on seeing or a bill to be paid immediately. The buying and selling rates for such payments are fixed as follows:

$$\text{TT-Buying Rate} = \text{Base Rate} - \text{Exchange Margin}$$

$$\text{TT-Selling Rate} = \text{Base Rate} + \text{Exchange Margin}$$

The base rate is the interbank rate.

Example : Assume the interbank rate between rupees and dollars is Rs. 43.50 and the exchange margin is 0.12% then TT Buying Rate is : $= 43.50 - 43.50 \times 0.12\%$

$$\text{or} \quad = 43.50 (1 - 0.0012) = 43.46$$

$$\text{TT Selling} \quad = 43.50 + 43.50 \times 0.12\%$$

$$\text{or} \quad = 43.50 (1 + 0.0012) = 43.55$$

Bill rate when the Bill is to be sent for collection : If some delay is involved in payments such as in the case of time draft (the draft to be paid after specified time) or bill for collection another margin for lag in payment to the bank is added in the form of interest payment. This charge is called transit time charges.

Foreign Exchange Dealers Association of India fixes the exchange margins, transit time and rules for charging interest. These involve discounting for immediate payment. If some service is required the service charges are also to be added or subtracted to the base rate, for example, banker's drafts issued by other banks or personal cheques then in that case the clearance is involved, i.e., the bills are to be sent for collection overseas; so in this case the bill buying and selling rates are fixed as follows:

Bill Buying Rate = Base rate (\pm) forward premium (discount) for transit time period plus usance period rounded off to the higher (lower) month minus exchange margin.

Bill Selling Rate = Since it is the issuing of the bill to the importer only, therefore it only involves a service, i.e., issuing and service the collection of bills therefore its rate is formed as per TT-Selling Rate plus a margin for the service rendered.

$$\text{Bill Selling Rate} = \text{TT Selling Rate} + \text{Service Margin}$$

Forward Buying and Selling of Bills. The buying and selling in the forward are determined as follows:

Forward buying rate = Spot rate (+) Forward Premium (Discount) for transit time period plus usance period plus forward period rounded off to the higher (lower) month minus Exchange Margin.

Spot rate is the spot bill buying rate.

Forward Selling Rate = Interbank spot selling rate (+)
Forward premium (discount) for forward period
+ Exchange Margin

Bill Selling Rate = Forward TT selling rate
+ Exchange Margin for Selling a Bill

In the case of forward buying, the forward period, usance period and the transit period are to be added together. Thus for 60 days bill bought 2 months forward, with transit period of 15 days, the total comes to $60 + 60 + 15 = 135$ days. If the currency is at a discount the bank will charge the discount for 150 days and if the currency is at a premium the bank will pay premium for four months.

In India national newspaper contains quotes on major currencies traded in India. They provide exchange rates on major currencies and buying and selling rate for some currencies. The TT rates given in the figure are the rates for telegraphic transfer. Apart from the TT rates, the rates on travellers cheque and currency notes are also quoted in the financial newspapers. All major banks provide currency buying and selling rates for major trading currencies.

In case of forward rates the premiums and discounts on dollar contracts till six month forward are quoted. However, one year forward transactions can be contracted. Month-wise premium and discounts as well as annualised premium/discounts are quoted. These quotes usually are tentative and are subject to change at the time of contract.

Some of the financial newspapers also provide expected exchange rate matrix (cross currency matrix) for other forex markets. These are calculated on the basis of inverse and cross rate calculations.

The official rate is determined by the RBI on the basis of the multi-currency basket. The official buying and selling rates are announced. The Foreign Exchange Dealers Association announces indicative free market rate on every business day. The RBI has the discretion to enter the market to stabilise the exchange rate. Every authorised dealer has to maintain, at the close of the day a square or near square position in each foreign currency, except for the limits of open positions prescribed for each currency or total currency value. Now a days the authorised dealers have much wider powers or realising foreign exchange for business travel abroad, medical treatment, the remittance of agency commissions and legal expenses. The banks payment, in those countries where the bank does not have their branch, are done through a correspondent bank account called nostro account. It literally means our account with you and its opposite is called vostro account.

5.8 LET US SUM UP

The market where one currency is traded for another is called forex market. Its primary function is to facilitate international trade and investment. The market consists of the interbank market in which major banks deal with each other and the retail market, in which banks deal with their commercial customers. Foreign exchange market has two segments; (a) spot market; and (b) forward market. In spot market, currencies are traded for settlement two business days after. In the forward market contracts are made to buy or sell currencies for future delivery. The foreign exchange quotation can be in direct, indirect or cross. They can also be expressed in European terms or American terms. The participants in the foreign exchange markets are commercial banks, brokers, customers, MNCs and central banks. Indian forex market is in a developing stage. All the currencies are not traded in the markets.

5.9 KEY WORDS

Foreign Exchange Market : The market in which currencies are brought and sold.

Bid Rate : The rate at which the customer is willing to buy quoted currency in exchange for base currency.

Offer Rate : The rate at which customer is willing to sell quoted currency in exchanges for base currency.

Exchange Rate : The price at which one currency is trade for another.

Direct Quotation : Price of one unit of foreign currency quoted in terms of home country's currency.

Indirect Quotation : Price of one unit of home country's currency quoted in terms of foreign currency.

Spot Transaction : A transaction in which the exchange of currencies occur two business days later.

Forward Transaction : A transaction in which exchange of currencies take place in the future at a rate which is fixed on a day when the transaction is entered into.

Interbank Market : The market is which major banks trade with one another.

Spot Market: The market where spot transactions are conducted.

Forward Market : The market where forward transactions are conducted.

5.10 ANSWERS TO CHECK YOUR PROGRESS

- A.1 a) The bank is selling dollars against sterling and the spot rate is therefore 1.4957. The customer will have to pay £ 267,433.31 ($400,000 / 1.4957$) for the dollars.
- b) The bank is buying Deutsche Marks against Sterling and the Spot rate is therefore 2.6221. The customer will obtain £ 228,824.22 ($600,000 / 2.6221$) in exchange for DM.
- c) The bank is selling Yen against Sterling and the spot rate is therefore 167.728. The customer will have to pay £ 268,291.52 ($45 \text{ million} / 167.728$) for the Yen.
3. FF : \$ exchange rate is $FF1 = \$ 0.115$

5.11 TERMINAL QUESTIONS/EXERCISES

- What are foreign exchange markets. What is their most important function?. How is this function performed?
- Explain the following terms
 - Spot transaction
 - Exchange rate
 - Direct quotes
 - Indirect quotes
- Who are the major participants in the forex market?
- The spot rate for the pound is \$ 1.1386 and 90 day forward rate is \$1.1352. What is the forward premium or discount on the pound?

**Foreign Exchange Risk
Management**

5. If \$ 1=£, 2.4210 in US, \$1 = FF 3.990 in France and Ff£ = \$0.1098 in UK, how will you take advantage of these rates?
6. A small investor wants to buy French francs spot at \$0.1180 and sells french franc forward for 90 days at \$ 0.1186. What is the group rate on french francs and the premium on 90 days French francs.
7. The spot rate for DM in US is \$ 0.55 what should be the spot price for the US \$ in Germany?
8. If the buying rate for DM spot in US is \$ 0.45, what would be the price of US dollar in Germany? If the dollar in Germany is DM 2.65, how will the market react to it?