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## UNIT 14 FOREX MANAGEMENT

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### Objectives

The objectives of this unit are to :

- understand forex treasury organisational structure.
- acquaint you with dealing room operations and its objectives.
- a familiarise with the functions of front office, back office and mid office.
- a describe the role of market maker, broker.
- identify the different types of risk in dealing room operations.

### Structure

- 24.1 Introduction
- 14.2 Treasury Structure
- 14.3 Front Office
- 14.4 Back Office
- 14.5 Mid Office
- 14.6 Dealing Room
- 14.7 Quotes
- 14.8 Market Makers
- 14.9 Broker
- 14.10 Mechanics of Trading
- 14.11 Dealing Room Terminology
- 14.12 Support Systems in Dealings
- 14.13 Risks
- 14.14 Eliminating/Reducing Risks
- 14.15 Reconciliation
- 14.16 Summary
- 14.17 Key Words
- 14.18 Self Assessment Questions
- 14.19 Further Readings

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### 84.1 INTRODUCTION

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Forex market is an over the counter market in which currencies are bought and sold against each other. The market is basically characterised by – no physical presence, huge size, dominated by financial flows, deep, highly liquid and efficient, pre-ponderance of inter-bank flows, sleek being screen-based, highly volatile 24 hours a day market and yet a profit centre with simultaneous potential for losses.

The global forex market is one of the largest in the world, the daily turnover being more than a trillion US dollars and even Indian market is growing volumes, currently being around 3.0 to 3.5 billion US dollars per day. With the liberalisation, these volumes are likely to go up further demanding greater skills from the market operators. This unit attempts to present an overview of the market mechanics.

## 14.2 TREASURY STRUCTURE

Dealing operations is a highly specialised function and has to be performed by a set of well trained personnel. The treasury structure for dealing department should consist of Dealers, back up staff, responsible for the follow up of the deals made by the dealers, giving feedback of collated information to the dealers, helping dealers to get overseas telexes, checking rates, etc. There is considerable scope for abuse by overlapping of functions through manipulation of rates on contracts already concluded, manipulation of position, mismatching, etc. The effectiveness of and control over the dealing operations largely depend upon how the department is organised/structured. A Model of organisational structure is suggested as under :

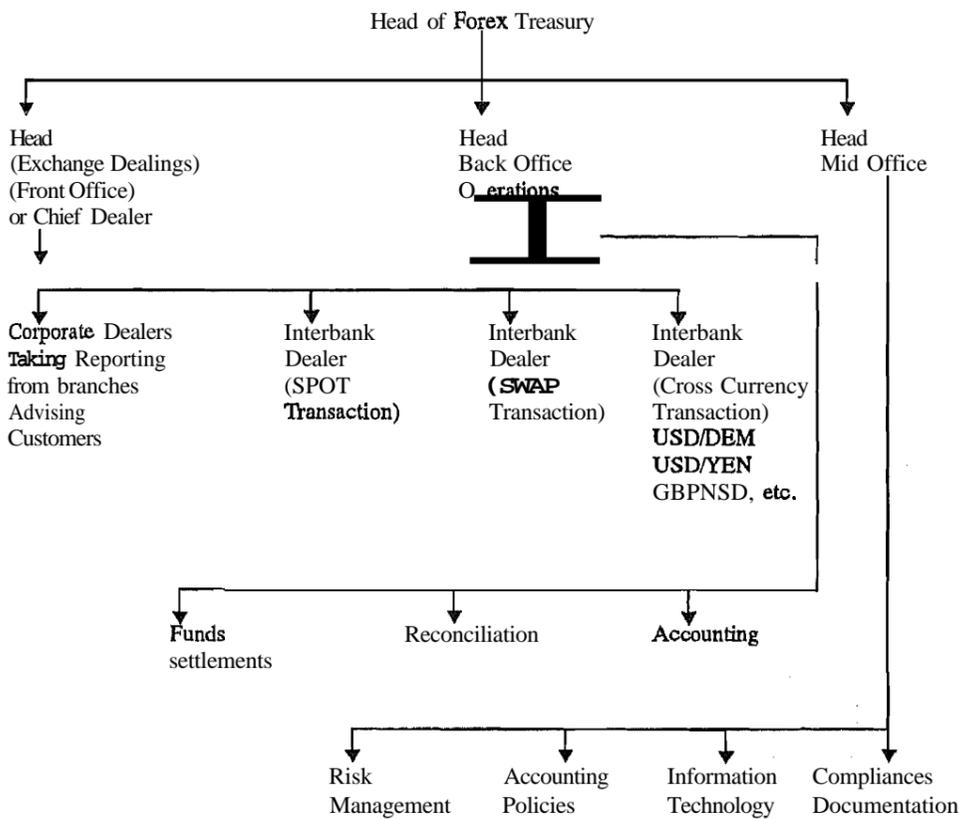


Figure 14.1: Organisational Structure of Foreign Exchange Treasury

The organisation chart of the forex treasury indicates that the dealings are the domain of the head of the treasury, unless another Assistant Treasurer is exclusively looking after dealings. Back office and Mid office work however, is looked after by other Heads. Heads, Back-up supervises forex settlement, reconciliation of Nostro accounts and accounting. The Head of Mid office looks after the work relating to formulation of strategies for risk management, laying down accounting policies and work relating to information technology. Let us know more about functioning of each of these offices, viz. Front Office, Back Office and Mid Office.

## 14.3 FRONT OFFICE

### Dealing Room Operations

In the morning, Head of the forex treasury, meets all in the Dealing Room operators (Dealers) and after a brief discussion takes a view of the market which is duly recorded. In the integrated set up the Corporate treasurer takes a view of fund position in Rupees available, prevailing call rates, investment rates, etc, to take a view of arbitrage

opportunities with a view to earn more profit.

The sitting arrangement of Chief Dealer and all the dealers is made in the same room so as to save time for consultation as any delay in concluding deal may mean loss of the transactions/business opportunities/profit. This will also give Chief Dealer better opportunities for continually monitoring the various exposure limits granted to him by getting timely feedback from the dealers on the spot.

Bank normally do not set out any profit targets for any of the dealers so as to operate in a relaxed manner without resorting to any unnecessary speculative dealing.

Dealers keep a track of the Nostro Account balances transmitted through the swift or any other electronic system daily in the morning by the overseas correspondents and the Nostro Account Statements received from the overseas branches of the Bank.

Dealers maintain position pads and prepare sheets on an ongoing basis.

All the interbank deals done are immediately recorded in triplicate in the serially numbered printed Deal slips in the prescribed form. One copy is retained by the Dealer, one copy is sent to computer operator for keying in and the other is given to Back-up Dept. for further processing.

All the spot merchant transactions reported by the branches/offices are given a separate docket number which is noted on the deal slip prepared for each such transaction. The docket no. is required to be mentioned by the branch concerned in the relative reporting form to be sent to the Head of Back Office, Accounts Wing while reporting the transaction with a view to facilitating reconciliation work.

The operations of the dealers are controlled through limits fixed in respect of Day Light/Over Night Exposures (both currency wise and overriding) individual gap limit, aggregate gap limit, balances in Nostro Accounts, counter party bank limits and country limits.

Each dealer maintains a separate position pad/sheet which is updated throughout the dealing time to ensure effective control of operations in the dealing room.

There is a system of checking entry into the dealing room. Considering confidential nature of business being handled and with a view to allow dealers to function without any interruption, it is ensured that those who are required to access the dealing room, only get entry into the Dealing Room. Banks may install electronic devices for controlling entry of all eligible officials inside the Dealing Room. The above safeguards are necessary from security angle also.

The infrastructure to be made available to the dealing room should be such that the dealers should be able to handle the large volume of business reported to them effectively and have also some scope for handling larger volume of business in future. Provision of Reuters Screen, Telex, Hot Lines, computer generated statements would facilitate the operations of the Dealing Room. System of voice recording may be provided to record conversation with brokers/branch officials reporting transactions over telephone. Hot line with branches reporting large volume of business be provided for efficient handling of operations. A printer for the graphics showing movement of rates of different currencies during the day is another important aid which should be provided, with a view to make an in-depth study and analysis of the trend on the basis of the printed copy of the graphs. Such infrastructure will help the dealers to ensure improved performance and enhancement of the profitability in dealing operations.

Financial newspapers, periodicals, journals, various forex publications both Indian & Foreign are provided for keeping the dealing officials abreast of the development in the foreign exchange markets in India and abroad. This definitely contributes to the competence of the dealing officials and in turn lead to effective dealing operations.

Dealing hours should be fixed for carrying out dealing operations. The business timings should be clearly laid down and the circumstances in which deals can be done beyond working hours should also be clearly indicated. The deals done beyond the prescribed working hours should be separately accounted for, monitored and controlled.

Internal Control system on dealing operations should be put in place such as :

- a) Dealers sheets prepared by the dealers should be signed by Dealer and Chief Dealer.

- b) Deal slips **must** be properly filled with all the details such as Time of Deal, Date, Bought/Sold, From/To, Currency, Account, Rate, Usance, Delivery (Cash/TOM/SPOT/FWD), Local Currency Equivalent, Funds, Name of Broker, Brokerage, Name of Correspondent and the deal slip/ticket should be duly signed by the concerned dealer.
- c) Any alteration/overwriting must be authenticated under full signature of the dealer.
- d) Deals slips should be used in serial order and suitable record should be kept of the number of deal slips used, cancelled, etc. Cancelled deal slip should be properly authenticated by the official who has cancelled and should be kept on record.
- e) Proper control on customer's credit risk by fixing suitable limits per customer.
- f) Up-to-date file containing various instructions, guidelines, etc., issued by Head Office international division should be kept for information of dealing officials. Rules of Foreign Exchange Dealer's Association of India, RBI guidelines for internal control over foreign exchange business should **also** be kept for the information of and use by dealers and other officials.
- g) Bank's own internal control guidelines should be **framed** and given to dealers for strict compliance.
- h) Dealing functions and back-up functions should be segregated. Dealers **should** not have any access to records maintained by back-up staff **and** MID office staff.

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## 14.4 BACK OFFICE

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This department caters to the needs of the **Forex** Dealers as well as take care of follow-up action in respect of **interbank/merchant** deals as well as money market operations. Back office looks after foreign exchange settlement, interbank confirmations, **Nostro** mirror ledgers, returns, merchant forward contracts, advance bills, EEFC, reporting forms, receipt from branches **regarding** purchase and sale of foreign exchange transactions. **FBP** reversals, interbranch transactions, preparations of detailed reports on currency positions at the end of the day, preparation and maintenance of fund's chart, statement of maturity pattern of contracts, carry out **maturity** wise analysis of deals done, Preparation of rate scan report. Any lapse on the part of backup department can cause a substantial drain on earnings. Each days receipts and payments of foreign funds and counter values must be closely watched. Reconciliation of interbank transaction must be closely supervised.

Backup department monitors receipt of exchange brokers' notes for deals concluded through them and are checked with corresponding deal slips **immediately** on receipt and discrepancies in any are observed in the particulars of **the** deals with those furnished in broker's notes **they** are brought to the **notice** of concerned dealer and corrective action is taken. Statements giving broker-wise summary of deals put through during the month and brokerage payable to each broker are **generated** on **computer/prepared manually** at the end of each month. Payments due to brokers should be paid promptly.

Confirmation of contract **advices** are generated and sent to counter party banks **for** deals done on **each day**. Or, **receipt** of **confirmation** of contracts **from** the counter party banks backup officials recheck accuracy of the particulars of the deals furnished therein.

Head of backup checks all the deals slips prepared by the dealers and verify particulars of direct deals done in the inter-bank market with **Telex/Reuters** Print Out. He also **checks** the rates quoted by the dealers **vis-à-vis**, the card rates in respect of merchant transactions reported by the branches and also verifies rates quoted on merchant forward contracts booked and cancelled during the day. **Forex** hourly rates (both for major currencies and exotic **currencies**) are **prepared/generated** by computers to undertake random checks of some deals with reference to **those** rates to find out any significant variations **in** the rates quoted for those deals. Head of back up attend to the work relating to validation of deals recorded in Gold (Position) Book. A register is maintained to **keep** an account of deal slips used, **cancelled** and keyed in the computers. Number of deals done should tally with number of slips used and the same is tallied with the number of deals keyed in the computer. Opening balance of the printed **stock** of deal slips in hand **minus** deal slips **used** and cancelled during the day should **tally** with the printed stock of deal slips **in** hand

at the end of the day. Verification of deals as per dealer's pad and those recorded in Gold (Position) Book is done at the end of the day. Back up staff needs to check every computer print out very carefully and authenticate them. On computer print outs additions alterations by hand/manually should not be allowed for obvious reasons. However, if there are compelling reasons, the same should be done under the instructions of Top Management and should be properly authenticated by the competent official.

**Co-ordination & Control :** There should be proper co-ordination between the back-up department and dealing room. Proper monitoring of the day light limits, overnight limits, counter party bank limits, country limits. Cases where these limits are exceeded should be studied, reasons for exceeding the limits should be ascertained from the dealers and facts should be reported to the Top Management without delay. True position statements (currency wise) as of last Friday of each month should be generated for all transactions including transactions of small amounts (specified as per card rates – not reported by the branches over telephone or telegram on the date of deals done) reported by branches in reporting forms for submission to international division, for proper monitoring of currency positions.

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## 14.5 MID OFFICE

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Mid-office continuously work for formulating the strategies for various risk management. Normally the risks which the treasurer has to face are :

1. **Political Risk :** Assets or Earnings in a Foreign Country may be frozen or expropriated.
2. **Regulatory Risk :** Accounting procedure on taxation or taxation principles may be altered either by domestic authorities or across the border.
3. **Economic Risk :** Long Term Contract with Foreign Suppliers or Purchasers may be affected by changes in relative inflation rates.
4. **Interest Rate Risk :** Risk due to changes in interest rates, particularly at the time of repricing.
5. **Exchange Rate Risk :** Risk due to fluctuations in the exchange rate.
6. **Credit Risk :** Risk of default by the counter party.

This department also attends to the work of laying down accounting policies keeping in view the regulatory authority instructions/guidelines.

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## 14.6 DEALING ROOM

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Going by logistics we find that a dealing room is a centralized establishment, usually of a commercial bank, which is willing to make/offer a two way dealing price for different currencies at all times even when they may not wish to deal, but all during prescribed business hours. It is a common practice amongst dealers to quote only the last 2 points of the rate as every dealer is expected to know the full price. A dealer tries to make profit while quoting his rate rather than attempting it from the quote made to him. Usually, dealer call other dealing rooms for a quotation rather context/currency tends to quote his spread in such a way that it expresses itself his unwillingness to carry out the deal. At times, the dealers also prefer to qualify his quote with words like "good for standard lots", "choice price", etc. To sum up, the whole range of transactions in forex market are carried out through the dealing rooms of participating banks.

### Qualities of a Dealer

Dealer is supposed to be endowed with traits viz :

- survival instincts
- being good at understanding the changing nature of markets;
- quick to react to new opportunities and situations;
- quick in reversing a previous stance;

- overcomes the natural tendency to salvage something from a loss making situation;
- hunches as to what market will do next rather than sticking with his own view; and
- able to work under stress;

To be effective, a dealer has to be trusted in the forex market. He can very quickly gain a reputation as a good or bad dealer. Forex market is one place where dealer needs all the friends that one can get.

Dealers are freed from undertaking accounting work of any kind as otherwise they would not be able to concentrate on the market. Dealers maintain "deal slips" indicating the name of the broker, if any, the counter-party bank, currency, amount, time, rate and due date under his signature as soon as the deal is struck with and pass-on to back office for further processing. However, in an automatic system, separate "deal slips" are redundant.

Voice Recording

Some dealing rooms do maintain gadgets like voice recorders, etc., to record the dealing room conversations for such taped conversations hasten resolution of differences. The control box has to be with chief of treasury operations.

Dealing Room Operations – Objectives

- To give the best possible service to customers Dealing room should have adequate number of well attended phones and the telexes, sound counselling about economic developments, competitive rates and capability to transact the entire amount of currency deal requested by the customer.
- To manage the bank's position so that inventory in each foreign currency is kept at the desired level. It is done through matching the inflows and outflows of various currencies with matching deployment.
- e To produce a profit for the bank while accomplishing the first two objectives through exchange rate differentials etc.

Corporates/Organisations/Individuals who knock on the dealing rooms?

- \* For payment towards imports, conversion of export receipts, hedging of receivables and payables, payment of interest and principal of foreign currency loans,
- \* Giant multinationals, of course, do take speculative positions purely for profit generation through their own well-established treasury/dealing room.

Commercial Banks

- 90% of forex trade is accounted for by inter bank transactions.
- e Trade in currencies to meet client requirements;
- Buy and sell on their own account and carry inventory of currencies for speculative purpose since foreign exchange trading profits have become an important source of revenue for commercial banks.

Central Banks

- Intervene to move exchange rates in a particular direction as desired by the local government.
- Currencies : 19 currencies viz are dealt with in the dealing rooms.
- Multinational banks deal in large number of currencies.
- Major currencies : US Dollar, Euro, Mark, Yen, Pound Sterling, French Franc, Swiss Franc.
- Minor currencies : Lira, Spanish Peseta, Singapore Dollar, Hong Kong Dollar, Belgium Franc, Dutch Guilders, Austrian Schillings, Australian Dollar, Canadian Dollar, Danish Kroner,

Activity 1

1. List out any five pre-cautions that are required to be taken while operating a front office,
  - a) .....
  - b) .....

- c) .....
- d) .....
- e) .....

2. Identify some of the traits that Dealer needs to have.

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## 14.7 QUOTES

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### *Direct Quote/Foreign Currency Quote :*

Unit of foreign currency is kept constant against the amount of home currency to be exchanged for it.

It otherwise means how much of home currency is worth of one unit of foreign currency.

Example : **US\$** - INR 47.00

Since 2.8.1993, Indian Forex Market switched over to direct quote system.

### *Indirect Quote/Home Currency Quote :*

It is just opposite of Direct Quote i.e. number of units of foreign currency which will be exchanged for a fixed number of home currency units,

Example : INR 100 = **USD 2.12**

**However**, this method of distinguishing rates, on the basis of home currency relationship, may not always hold good say for example :

when neither is a home currency;

when global markets quote their rates as equivalent of US\$ (which is a well-established tradition) it looks indirect quotation in US while in other countries it sound as a direct quotation.

It may, therefore, be sensible to differentiate the direct and indirect quotes :

Based on **currency**, which is dealt in i.e.

**Direct quote** - when currency dealt in is expressed as **fixed** unit e.g. USD - 1.5440 DM which means deals are done in dollar terms and parties contract to buy or sell.

**Indirect quote** - currency dealt in is the one whose quantity is variable i.e. just reverse to direct quote, e.g. DM 1 - **USD .6476**

### *Two way Quote :*

- In forex market, it is **customary** for a dealer to quote both the prices at which he is willing to buy and sell foreign currency, which in usual parlance **known** as two way quote/bid and offer rate e.g. US\$ v/s. Rupee = 47.10111
- While offering a **two** way quote, a trader will always ensure some profit margin by fixing buying and selling prices **differently**.

It is needless to say that a dealer, while quoting a bid and offer rate, would always **work** on it from bank's point of view i.e. desires to give less units of home currency **while** purchasing foreign currency and give less units of foreign **currency** while selling it against rupees.

- So, in a direct quotation, the market dictum would be buy low, sell high or give **less** take more.

## 14.8 MARKET MAKERS

- Major commercial banks act as 'Market Makers' in most of the major currencies by offering 'two-way' quotes and be prepared to take either side of the transaction.
- In a normal two-way market, a dealer expects 'to be hit' on both sides of his quotes in roughly equal amounts. But, it is always not necessary. He may suddenly **find** "being hit" on one side of his quote, much more often than the other side. It means that he is either buying many more dollars than he is selling or vice versa. This leads to the trader building up "a position" :

If he has sold more \$ than he has bought, he is said to have a "short position";

If he has bought more \$ than he has sold, then he is said to have a "long position".

- In a highly volatile **forex** market, a **long/short** position for too long can be risky.
- For instance, net short position may lead to a loss if it is to be covered at an appreciated price or **gain** if currency depreciated.
- Similarly, a net **long** position may lead to loss if it is to be covered at a lower price or gain if it is to be covered at a higher price.
- Therefore a dealer, realising that he has built up an undesirable net position; quickly adjusts his bid offer quote in such a **manner** that it **discourages** one type of deal (which has already landed him in a over... position) and encourages the opposite deal.

## 14.9 BROKER

- Act as middlemen between two market-users;
- They provide information to market-making banks about prices at which there are **firm** buyers and sellers in a pair of currencies;
- Carry out bank's instructions to buy or sell a specific amount of currency at specified rate and collects commission on conclusion of deal;
- **Banks** also use brokers to acquire information about general state of the market. In the Indian context;
- Brokers are prohibited from **acting** as principals and maintaining positions in foreign currencies;
- Brokers notes should be received promptly by the dealers before close of the business day to which it relates;
- Nomination of brokers for deals not done through them is not permitted;
- Desirable to have panel of brokers and air-shuffling of business among them;
- Dealers to be separated from maintaining broker-wise record and payment of brokerage claims, etc.
- **Standard Lot** : 1 million US \$ (in Indian Market)

## 14.10 MECHANICS OF TRADING

- Inter-bank market deals are done on the **telephone/screen (Reuter dealing)**.
- A trader in bank A, needing GBP against dollars, calls his counterpart in **Bank B** and ask for a quotation.
- If the price is acceptable, deal is struck and both will enter the details – amount **bought/sold**, the price, identity of **the** counter party, **etc.** in their **computerised** record **systems**.
- Written **confirmations** will be sent subsequently.
- On the day of settlement, bank 'A' will transfer dollars to **Bank B** and 'B' GBP to **A**.
- Non-bank customer transactions are entertained during normal banking business hours while inter-bank transactions are carried-out **upto 4 p.m.**

## 14.11 DEALING ROOM TERMINOLOGY

Some of the expressions often repeated in the forex market and their standard/uniformly accepted meaning are as under :

- Offered at; Comes at; I give at; I sell at; I offer at = Sellers or lender of currency
- I bid at; I pay at; I take at; I buy at = Buyers or borrower of currency
- Bid, Wanted, Firm, Strong = Currency in question is appreciating/in demand/buyers pre-dominant
- a Offered, Weak = Currency in question is depreciating/sellers pre-dominant
- a Value today = Same day value
- Value tomorrow = next working/business day
- End/end = Forward swaps intended for maturity on the last working day of the appropriate future month are described as End/end.
- e Short dates = Deals for a broken number of days upto one week
- Broken/Odd Date = Value date which is not the regular forward date.
- Overnight - Today/Tomorrow = Currency deposit transaction/simultaneous purchase and sale of currency for value today against the next working day,
- Tomorrow/Next; Tom/Next = Currency deposit transaction/swap for value the next working day against the spot value.
- Spot/Next = Currency deposit transaction/swap for the spot value date against next working day.
- Weekend = Currency deposit transaction/swap for value the last working day of the week, normally Friday against the first working day of the following week, normally Monday.
- Outright/outright = Purchase or sale of currency for delivery for any day other than spot not being a swap transaction.
- Parity or same = No proposition on the rates quoted by the other party. It does not imply that the party using the expression is ready to do a deal at the rates quoted.
- For indication/information = Quotes no firm
- a Details = Needs of a dealer regarding rate and dates following a transaction,
- Mine = Dealer takes the spot/forward/deposit which ever has been quoted from the counter party. It is dangerous to use the expression unless amounts have been qualified first.
- Yours = Opposite of Mine.
- Point/pip = Last decimal place of a quotation.  
Mio = One million
- Billion/Millard = One thousand millions.
- Art your risk - Quote is subject to change.

### Types of transaction :

Ot	Exchange of currencies takes place on the date of deal
TOM (Tomorrow)	Exchange of currencies takes place on the next working day
Spot	Exchange of currencies takes place on the 2 <sup>nd</sup> working day, after the date of deal
Forward	Delivery, for any day other than spot
Swap	Simultaneous sale and purchase of identical amounts of currency for different maturities

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## 14.12 SUPPORT SYSTEMS IN DEALINGS

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### Information Systems

- o Real time on line prices
- Information affecting and likely to affect currency prices;
- Analysis of information

Available through – Reuters Monitor services – a million individual quotes are flashed on the screen/12 weeks.

Tele rate

Knight rider

2002-2-besides being a dealing system it also acts as an electronic broker, wherever it can match the quoted rates of the subscribing banks. Trading is **not** confined to local markets alone. A fellow in London trades with Banks in Frankfurt, New York, etc., and even with places in **different** time zones.

### Payment Systems

- **Once** a deal is done, the dealers will specify where they want the currencies to be delivered. For example, in a \$-Mark transaction, the buyer of the \$ may want \$ to be credited to his account with New York Bank whereas the receiver of Marks may want it to be credited to his account in a bank located in Frankfurt.
- To cope up with such mind boggling volumes, the banks have given up traditional settlement style through cheques and instead **developed** electronic inter-bank funds transfer systems. Best known of them are **CHIPS** in New York and **CHOPS** in London.
- "Netting" inter-bank payment arising out of **Forex** transactions is another development – **FXNET**.
- **SWIFT** – to transmit messages in **standardised** format – **CHOPS** have been designed to reformat **SWIFT** messages electronically.

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## 14.13 RISKS

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### Risks in Dealing Room Operations

With free flow of capital all around the globe and the concomitant rise in volumes, the need for risk identification in dealing room operations and its management has become quite imperative.

Management therefore, formulate policy – guidelines and control mechanism for smooth functioning of the dealing room, perhaps covering broad parameters viz.

- business strategies for trading in different product groups; markets;
- limits for counter parties;
- procedures for measuring, **analysing**, monitoring and managing risks;
- ceilings for risk position;
- Procedures for reacting to **situation** like over-shooting of **limits** and market extremities;
- Functions and responsibilities of front, middle and back office;
- Internal accounting and reporting;
- Internal control and monitoring systems;
- Maintaining confidentiality.

It is also desirable to obtain written acknowledgement of such guidelines **from** the operating staff of dealing rooms.

Let us take a look at different types of risk associated with **forex** dealing.

#### Open Position Risk

- Long - } Bought more GBP  
overbought/plus } than sold
  
- Short - } Sold more GBP  
Oversold/minus } than bought

If one is overbought and currency weakens, one will be able to square the overbought position by selling the currency at a loss. Same is the case if one is oversold and currency hardens.

#### Maturity Mismatch Risk

- Gaps arising out of – merchant transaction position – others. Unmatched forward maturities may cause loss if forward differentials go against the bank.

#### Credit/Counter Party Risk

- Failure of counter party to honour his side of the contract.

#### Contract Risk

- Assume one has sold forward \$ to a customer say at Rs 46.00 per \$. Before the contract matures, if the customer fails, we have to dispose of the earmarked dollars in the market at the going rate despite it has weakened to Rs. 47.00 per dollar. This is nothing but replacement cost. It is also known as Pre-settlement Risk.

#### Clean Risk

- Assume we have sold Marks against \$ and accordingly, we have credited Marks to the bank account say in Germany and waiting for the German bank to deposit dollars in our New York Account. Till German bank credits Dollars in our New York Account, we will be running credit risk and if in between the bank fails, we have to put up with the loss.
- This type of risk, also known as Settlement Risk, may arise in international transactions owing to time-zone differences.

#### Interest Rate Risk

- Owing to adverse movements in implied interest rates or actual interest rate differentials relating to foreign currency deposits, forward contracts, currency swaps, FRAs, etc.

#### Legal Risk

- Defective/unenforceable agreements likely to result in frustrating the deals.

#### Operational Risks

- Omissions/commissions in operational procedures viz.
  - Dealing & Accounting functions
- Follow up of dealings and contract confirmation,  
Settlement of funds  
Pipeline transactions  
Overdue bills and contracts  
Likely to result in losses.

#### Sovereign Risk

- Risk of externalisation
- Basically political in nature  
Generally for banks in other countries.

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### 14.14 ELIMINATING/REDUCING RISKS

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Banks, assessing the risk involved in trading and non-trading activities, usually come up with a well-drafted risk management procedure that could be well understood by dealers,

back office staff, etc. Such a mechanism shall assist in limiting and monitoring risk prone activities across the Dealing Room. Some of such time-tested mechanisms are :

#### Open Position Risk

- Since these positions are taken at a particular rate, any adverse movement in the rate leads to loss.

To prevent/minimise such losses, banks prescribe various limits in consistent with adequacy of its capital to undertake such activities.

- **Day light limit** – Dealer cannot take a position of more than day light limit prescribed by the bank.
- **Overnight Limit** – Fixes overnight limit for a open position in each currency – usually lesser than daylight limits – global limit for all the currencies put together is also fixed.
- **Cut-loss limit** – While undertaking transactions, if the rate goes on moving against the bank, one never knows, where the loss would end. Hence, banks fix a cut-loss limit. Irrespective of the dealer's view, if the rate moves so adversely that the resultant loss is equivalent to the limit, the dealer has to liquidate the position and book loss.

All deals done in a day should be accounted for against the corresponding limits. The limits when exceeded should be promptly reported to the Senior Management giving reasons and to get it approved.

In Indian context, pipeline transactions and operations in foreign currency notes needs to be specially attended to while assessing risks.

People not connected with dealing room operation should constantly monitor compliance to these limits through timely, accurate and comprehensive MIS.

#### Maturity Mismatch Risk

**Individual Gap Limit (IGL)** : Limit put on mismatch in the currency bought and sold for a particular month.

**Aggregate Gap Limit (AGL)** : Aggregate of gap limits for particular currency all the O/B & O/S positions for various months.

**Total Aggregate Gap Limit** : Aggregate of all' the AGLs in all currencies.

#### Credit Risk

Banks impose exposure limits on customers as well as on other banks. In general, separate limits are fixed for spot and forward, the latter being lower than the spot. In case of Forwards, the limits imposed, maximum level of the net outstanding forward contracts.

#### Operational Risk

- Dealing and execution function are separated for early discovery of any transgression of the imposed limits – by dividing dealing room into front office solely concentrating on dealings and back office for recording the transactions and pursuing settlements, etc.
- Further confirmations are obtained.
- Prompt follow-up for execution of funds transfer instructions.
- Monitor amalgam of transactions in accordance with the tenor.

#### Legal Risk

- to obviate the risk involved in enforcing compliance with contractual obligations securities, banks usually enter into following master agreements with counter party banks/clients.
- Spot and Forward Exchange – International foreign Exchange Master Agreement.
- Foreign Exchange Options – International Currency Options Market Agreement.
- All others – International Swap Dealers' Association Master Agreement.

Banks also obtain Board Resolutions from their Corporate Clients, specifically authorising their officials to deal and execute contracts.

Banks also obtain specific confirmation for each transaction with full details regarding amount, rate, value date, etc., duly signed by the authorised signatories.

**Sovereign Risks**

- Limits are fixed to overseas parties taking country risks too into consideration.

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## 14.15 RECONCILIATION

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**Reconciliation Nostro Balances**

Reconciliation of Nostro Account Balances is quite essential for ensuring that every transaction undertaken through Nostro Account is correctly executed.

Reconciliation is undertaken through Bank Statements and Mirror Accounts. Unreconciled entries must be followed up on an on-going basis else, computerised accounting system and micro filming procedures practised by overseas/correspondent branches/banks may pose problems for back references.

No set off of debit and credit items of write-off/appropriation to Profit & Loss account of unreconciled entries is attempted, unless permitted by the exchange control authorised official of the bank.

**Management of Risks in Vostro Account**

Exchange Control in India commands close monitoring of funds flow in vostro accounts with a view to averting hot money flows/speculative dealings on Rupees. Similarly, sudden variations in operations say unusually large operation in an otherwise inactive account demands closer scrutiny for assessing genuineness of operation.

The amount of credit risk arising from drawings on branches can be immeasurable unless flow of information regarding paid drafts, etc., from drawee branches to account maintaining office is prompt and accurate.

These risks are minimized by -

- Reducing number of branches on whom drafts can be drawn;
- Imposing drawing limits per day;
- Securing draft advices directly from the correspondents/telex/SWIFT messages of large payments from paying branches;
- e Prompt value dating.

Monitoring of vostro accounts further ensures discipline in the usage of credit lines extended to correspondent banks, identification of concealed overdrafts and interest recovery there against, etc.

Balance confirmation letters are mailed to the overseas banks maintaining vostro accounts and confirmations are obtained.

**Evaluation** : Profits and Losses of foreign transactions are calculated at the end of each month, using uniform standard accounting procedure prescribed.

**Activity 2**

What do you mean by :

- a) Short Position : .....
- b) Long Position : .....
- c) Mio : .....

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## 14.16 SUMMARY

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It may thus be seen that countries apex bank has moved from micro level operations control to policy level risk control measures so that individual banks are free to formulate the nitty-gritty. With regard to routine operations to its own satisfactions risk control mechanisms perse do not guarantee fool proof results. It is highly necessary that the implementation of the risk control measures are adequately geared up. **As** India is gearing itself into high volume forex trading besides the onset of derivative products it would be necessary to satisfy that appropriate risk control mechanism exists and sub-systems are subjected to regular review.

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## 14.17 KEY WORDS

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**Back Office** : A settlement desk watching out receipts of deal slips.

**Front Office** : The forex dealing room consist of trained dealers.

**Mid Office** : Office which efficiently reviews various functional departments,

**Market Maker** : Financial intermediary which will provide both bid and offer price.

**Nostro** : Account of Indian bank with foreign bank in foreign country in foreign currency.

**Vostro** : Account of foreign bank with Indian bank in India in Indian rupees.

**Loro** : Payment are settled via reciprocal account-maintained by the bank.

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## 14.18 SELF ASSESSMENT QUESTIONS

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1. Draw the structure of Dealing room (Front Office, Back Office, **MID** Office)
2. What are Dealing room functions/operations?
3. What infrastructure should be provided to the dealers for efficient and profitable working?
4. What Internal Control System should be adopted for dealing operation?
5. What are back office functions?
6. Why front office & back office functions are clearly segregated and dealers are not allowed to have access to the back office records?
7. What are mid office functions?

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## 14.19 FURTHER READINGS

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1. *Risk Management Systems in Banks*, Guidelines by Reserve Bank of India, 1999.
2. Trivedi and Hassan, *Treasury Operations and Risk Management*, Genesis Publishers, Mumbai.
3. *Banking in New Millenium : Report an Conference of Chairmen of Banks, NIBM, Pune, 2000.*
4. Bhardwaj, H.P., *Foreign Exchange Handbook*, Bhardwaj Publishing Company, Mumbai.
5. Rajwade, A.V., 2000, *Foreign Exchange Risk Management and International Finance*, A.V. Rajwade & Co.
6. Jod Bessis, 1998, *Risk Management in Banking*, John Willey Sons, New York.
7. Maurice Levi, 1996, *International Finance ; The Markets and Financial Management of Multi-national Business*, McGraw Hill, USA.