

Unit Trust of India Unit Trust of India was first Set up in 1st February 1964 under the Unit Trust of India Act, 1963. It is a statutory public sector investment institution having the main objective to encourage and mobilize the savings of the community and canalize them into productive corporate investment.

Unit Trust of India (UTI) is a statutory private sector investment body. It was set up on February 1, 1964 as per the Unit Trust of India Act of 1963. The primary objective of setting up this institution was to channel corporate investments through encouraging productive community savings. Therefore, it allows small-time savers to invest in risk-diverse fields

Unit Trust is an investment plan where the funds are pooled together and then the investment. The fund that has been pooled is later unitized. The investor is known as a unitholder. He or she holds a certain number of units.

The Unit Trust of India Act The Unit Trust of India act was introduced in the year 1963 to provide for the establishment of a co-operation. It was established with a view to encouraging saving and investment and the participation in the income, profits, and the gains accruing to Co-operation from the holding, management, and disposal of the securities.

Primary Objectives of UTI

- to promote and pool the small savings from the lower and middle-income persons who cannot have direct access to the stock exchange, and
- to provide them with an opportunity to share the benefits of prosperity resulting from rapid industrialization in India.

Functions of UTI

- Mobilize the saving of the relatively small investors.
- Channelize these small savings into productive investments.
- Distribute the large scale economies among small income groups.
- Encourage savings of lower and middle-class people.
- Sell nits to investors in different parts of the country.
- Convert the small savings into industrial finance.
- To give investors an opportunity to share the benefits and fruits of industrialization in the country.
- Provide liquidity to units.
- Accept discount, purchase or sell bills of exchange, warehouse receipt, documents of title to goods etc.,
- To grant loans and advances to investors.
- To provide merchant banking and investment advisory service to investors.
- Provide leasing and hire purchase business.
- To extend portfolio management service to persons residing in other countries.
- To buy or sell or deal in foreign currency.
- Formulate a unit scheme or insurance plan in association with GIC.
- Invest in any security floated by the RBI or foreign bank.

MODULE 4: FINANCIAL SERVICES 12 HOURS

Concept, Objectives / Functions, Characteristics, Financial Services – Concept, Classification, Regulatory Framework. Merchant Banking, Mutual Funds, Leasing, Credit Rating.

Meaning & Definition

Financial services refer to services provided by the finance industry. The finance industry consists of a broad range of organizations that deal with the management of money. These organizations include banks, credit card companies, insurance companies, consumer finance companies, stock brokers, investment funds and some government sponsored enterprises.

Financial services may be defined as the products and services offered by financial institutions for the facilitation of various financial transactions and other related activities.

Financial services can also be called financial intermediation. Financial intermediation is a process by which funds are mobilised from a large number of savers and make them available to all those who are in need of it and particularly to corporate customers. There are various institutions which render financial services. Some of the institutions are banks, investment companies, accounting firms, financial institutions, merchant banks, leasing companies, venture capital companies, factoring companies, mutual funds etc.

Features of Financial services

- Financial services are Intangible
- Financial services are customer oriented
- The production and delivery of a service are simultaneous functions therefor are inseparable
- They are perishable in nature and cannot be stored
- They are dynamic in nature as a financial service varies with the changing requirements of the customer and the socio-economic environment. – must be dynamic socio economic changes, disposable income
- They are proactive in nature and help to visualize the expectations of the market
- They acts as link between the investor and borrower
- They aid in distribution of risks

Importance of Financial services

➤ **Facilitates Transactions:** Financial services facilitate the smooth functioning of transactions in an economy. Various financial instruments such as debit cards, credit cards, cheque, bill of exchanges and many more assist people in doing payments.

➤ **Ensures liquidity:** These services ensure proper liquidity by facilitating free movement of funds among people. Financial services enable people to easily acquire the required funds through credit cards or loan facilities.

➤ **Mobilizes Savings:** Mobilization of people's savings is another important role played by financial services. It brings together those who have excess idle lying resources and one who are in need of funds for investing into productive means.

➤ **Risk Minimization:** Financial services reduce the effect of risk to customers through diversification. Insurance policies offered by companies provide protection to people against various losses.

➤ **Allocates Capital Funds:** It enables people to allocate their fund into efficient sources. Financial services provide various investment options to customers like mutual funds, stocks, saving and fixed deposits which can generate income for them.

➤ **Generates Employment:** Financial services helps in creating more employment opportunities in a country. There are large numbers of people who are associated with financial institutions selling these services. Such institutions via selling financial services generate their income and pay remuneration to their employees.

➤ **Economic Growth:** These services enable the overall development of all sectors of the economy. Financial services provide sufficient funds to all key sectors that is a primary sector, secondary sector and tertiary sector. It results in a balanced growth of the whole economy.

➤ **Contribution to GNP:** Recently the contribution of financial services to GNP has been increasing year after year in almost countries.

The Scope of Financial Services:

The following scope of financial services, and cover a wide range of activities. They can broadly classify into two, namely:

1] Traditional Activities:

2] Modern Activities:

1] Traditional Activities:

Traditionally, the financial intermediaries have been rendering a wide range of services encompassing both capital and money market activities. They can group under two heads, viz.

- 1. Fund based activities and**
- 2. Non-fund based activities.**

Fund based activities: The traditional services which come under fund based activities are the following:

- Underwriting or investment in shares, debentures, bonds, etc. of new issues (primary market activities).
- Dealing with secondary market activities.
- Participating in money market instruments like commercial papers, certificates of deposits, treasury bills, discounting of bills, etc.
- Involving in equipment leasing, hire purchase, venture capital, seed capital, etc.
- Dealing in foreign exchange market activities. Non-fund based activities

Non-fund based activities:

Financial intermediaries provide services-based on non-fund activities also. This can call “fee-based” activity. Today customers, whether individual or corporate, not satisfy mere provisions of finance. They expect more from their companies. Hence a wide variety of services, are being provided under this head.

They include:

- Managing the capital issue i.e. management of pre-issue and post-issue activities relating to the capital issued by the SEBI guidelines and thus enabling the promoters to market their issue.
- Making arrangements for the placement of capital and debt instruments with investment institutions.
- The arrangement of funds from financial institutions for the client’s project cost or his working capital requirements.
- Assisting in the process of getting all Government and other clearances.

2] Modern Activities:

Besides the above traditional services, the financial intermediaries render innumerable services in recent times. Most of them are like the non-fund based activities. Because of the importance, these activities have been in brief under the head “New-financial-products-and-services”. However, some of the modern services provided by them are given in brief here under.

1. Rendering project advisory services right from the preparation of the project report until the raising of funds for starting the project with necessary Government approvals.
2. Planning for Mergers & Acquisitions and assisting with their smooth carry out.
3. Guiding corporate customers in capital restructuring.
4. Acting as trustees to the debenture holders.
5. Recommending suitable changes in the management structure and management style to achieve better results.
6. Structuring the financial collaborations/joint ventures by identifying suitable joint venture partners and preparing joint venture agreements.
7. Rehabilitating and restructuring sick companies through an appropriate scheme of reconstruction and facilitating the implementation of the scheme.
8. Hedging of risks due to exchange rate risk, interest rate risk, economic risk, and political risk by using swaps and other derivative products.
9. Managing in-portfolio of large Public Sector Corporations.
10. Undertaking risk management services like insurance services, buy-back options, etc.
11. Advising the clients on the questions of selecting the best source of funds taking into consideration the quantum of funds required their cost, lending period, etc.
12. Guiding the clients in the minimization of the cost of debt and the determination of the optimum debt-equity mix.
13. Promoting credit rating agencies for rating companies that want to go public by the issue of the debt instrument.
14. Undertaking services relating to the capital market, such as
 - Clearing services
 - Registration and transfers
 - Safe custody of securities

- Collection of income on securities

Types of Financial Services

The financial services can be broadly classified into two: (a) fund based services and (b) non-fund services (or fee-based services)

Fund based Services

The fund based or asset based services include the following:

1. Underwriting
2. Dealing in secondary market activities
3. Participating in money market instruments like CPs, CDs etc.
4. Equipment leasing or lease financing
5. Hire purchase
6. Venture capital
7. Bill discounting.
8. Insurance services
9. Factoring
10. Forfeiting
11. Housing finance
12. Mutual fund

Non-fund based Services

Today, customers are not satisfied with mere provision of finance. They expect more from financial service companies. Hence, the financial service companies or financial intermediaries provide services on the basis of non-fund activities also. Such services are also known as fee based services.

These include the following:

1. Securitization
2. Merchant banking
3. Credit rating
4. Loan syndication
5. Business opportunity related services
6. Project advisory services
7. Services to foreign companies and NRIs.
8. Portfolio management
9. Merger and acquisition
10. Capital restructuring
11. Debenture trusteeship
12. Custodian services
13. Stock broking

The most important fund based and non-fund based services (or types of services) may be briefly discussed as below:

A. Asset/Fund Based Services

1. Equipment leasing/Lease financing: A lease is an agreement under which a firm acquires a right to make use of a capital asset like machinery etc. on payment of an agreed fee called lease rentals. The person (or the company) which acquires the right is known as lessee. He does not get the ownership of the asset. He acquires only the right to use the asset. The person (or the company) who gives the right is known as lessor.

2. Hire purchase and consumer credit: Hire purchase is an alternative to leasing. Hire purchase is a transaction where goods are purchased and sold on the condition that payment is made in instalments. The buyer gets only possession of goods. He does not get ownership. He gets ownership only after the payment of the last instalment. If the buyer fails to pay any instalment, the seller can repossess the goods. Each instalment includes interest also.

3. Bill discounting: Discounting of bill is an attractive fund based financial service provided by the finance companies. In the case of time bill (payable after a specified period), the holder need not wait till maturity or due date. If he is in need of money, he can discount the bill with his banker. After deducting a certain amount (discount), the banker credits the net amount in the customer's account. Thus, the bank purchases the bill and credits the customer's account with the amount of the bill less discount. On the due date, the drawee makes payment to the banker. If he fails to make payment, the banker will recover the amount from the customer who has discounted the bill. In short, discounting of bill means giving loans on the basis of the security of a bill of exchange.

4. Venture capital: Venture capital simply refers to capital which is available for financing the new business ventures. It involves lending finance to the growing companies. It is the investment in a highly risky project with the objective of earning a high rate of return. In short, venture capital means long term risk capital in the form of equity finance.

5. Housing finance: Housing finance simply refers to providing finance for house building. It emerged as a fund based financial service in India with the establishment of National Housing Bank (NHB) by the RBI in 1988. It is an apex housing finance institution in the country. Till now, a number of specialised financial institutions/companies have entered in the field of housing finance. Some of the institutions are HDFC, LIC Housing Finance, Citi Home, Ind Bank Housing etc

6. Insurance services: Insurance is a contract between two parties. One party is the insured and the other party is the insurer. Insured is the person whose life or property is insured with the insurer. That is, the person whose risk is insured is called insured. Insurer is the insurance company to whom risk is transferred by the insured. That is, the person who insures the risk of insured is called insurer. Thus insurance is a contract between insurer and insured. It is a contract in which the insurance company undertakes to indemnify the insured on the

happening of certain event for a payment of consideration. It is a contract between the insurer and insured under which the insurer undertakes to compensate the insured for the loss arising from the risk insured against.

According to Mc Gill, "Insurance is a process in which uncertainties are made certain". In the words of Jon Megi, "Insurance is a plan wherein persons collectively share the losses of risks".

Thus, insurance is a device by which a loss likely to be caused by uncertain event is spread over a large number of persons who are exposed to it and who voluntarily join themselves against such an event. The document which contains all the terms and conditions of insurance (i.e. the written contract) is called the 'insurance policy'. The amount for which the insurance policy is taken is called 'sum assured'. The consideration in return for which the insurer agrees to make good the loss is known as 'insurance premium'. This premium is to be paid regularly by the insured. It may be paid monthly, quarterly, half yearly or yearly.

7. Factoring: Factoring is an arrangement under which the factor purchases the account receivables (arising out of credit sale of goods/services) and makes immediate cash payment to the supplier or creditor. Thus, it is an arrangement in which the account receivables of a firm (client) are purchased by a financial institution or banker. Thus, the factor provides finance to the client (supplier) in respect of account receivables. The factor undertakes the responsibility of collecting the account receivables. The financial institution (factor) undertakes the risk. For this type of service as well as for the interest, the factor charges a fee for the intervening period. This fee or charge is called factorage.

8. Forfeiting: Forfeiting is a form of financing of receivables relating to international trade. It is a non-recourse purchase by a banker or any other financial institution of receivables arising from export of goods and services. The exporter surrenders his right to the forfaiter to receive future payment from the buyer to whom goods have been supplied. Forfeiting is a technique that helps the exporter sell his goods on credit and yet receive the cash well before the due date. In short, forfeiting is a technique by which a forfaiter (financing agency) discounts an export bill and pay ready cash to the exporter. The exporter need not bother about collection of export bill. He can just concentrate on export trade.

9. Mutual fund: Mutual funds are financial intermediaries which mobilise savings from the people and invest them in a mix of corporate and government securities. The mutual fund operators actively manage this portfolio of securities and earn income through dividend, interest and capital gains. The incomes are eventually passed on to mutual fund shareholders.

Non-Fund Based/Fee Based Financial Services

1. Merchant banking: Merchant banking is basically a service banking, concerned with providing non-fund based services of arranging funds rather than providing them. The merchant banker merely acts as an intermediary. Its main job is to transfer capital from those who own it to those who need it. Today, merchant banker acts as an institution which understands the requirements of the promoters on the one hand and financial institutions, banks, stock exchange and money markets on the other. SEBI (Merchant Bankers) Rule, 1992 has defined a merchant banker as, "any person who is engaged in the business of issue management either by

making arrangements regarding selling, buying or subscribing to securities or acting as manager, consultant, advisor, or rendering corporate advisory services in relation to such issue management”.

2. Credit rating: Credit rating means giving an expert opinion by a rating agency on the relative willingness and ability of the issuer of a debt instrument to meet the financial obligations in time and in full. It measures the relative risk of an issuer's ability and willingness to repay both interest and principal over the period of the rated instrument. It is a judgement about a firm's financial and business prospects. In short, credit rating means assessing the creditworthiness of a company by an independent organisation.

3. Stock broking: Now stock broking has emerged as a professional advisory service. Stock broker is a member of a recognized stock exchange. He buys, sells, or deals in shares/securities. It is compulsory for each stock broker to get himself/herself registered with SEBI in order to act as a broker. As a member of a stock exchange, he will have to abide by its rules, regulations and bylaws.

4. Custodial services: In simple words, the services provided by a custodian are known as custodial services (custodian services). Custodian is an institution or a person who is handed over securities by the security owners for safe custody. Custodian is a caretaker of a public property or securities. Custodians are intermediaries between companies and clients (i.e. security holders) and institutions (financial institutions and mutual funds). There is an arrangement and agreement between custodian and real owners of securities or properties to act as custodians of those who hand over it. The duty of a custodian is to keep the securities or documents under safe custody. The work of custodian is very risky and costly in nature. For rendering these services, he gets a remuneration called custodial charges.

Thus custodial service is the service of keeping the securities safe for and on behalf of somebody else for a remuneration called custodial charges.

5. Loan syndication: Loan syndication is an arrangement where a group of banks participate to provide funds for a single loan. In a loan syndication, a group of banks comprising 10 to 30 banks participate to provide funds wherein one of the banks is the lead manager. This lead bank is decided by the corporate enterprises, depending on confidence in the lead manager. A single bank cannot give a huge loan. Hence a number of banks join together and form a syndicate. This is known as loan syndication. Thus, loan syndication is very similar to consortium financing.

6. Securitisation (of debt): Loans given to customers are assets for the bank. They are called loan assets. Unlike investment assets, loan assets are not tradable and transferable. Thus loan assets are not liquid. The problem is how to make the loan of a bank liquid. This problem can be solved by transforming the loans into marketable securities. Now loans become liquid. They get the characteristic of marketability. This is done through the process of securitization. Securitisation is a financial innovation. It is conversion of existing or future cash flows into marketable securities that can be sold to investors. It is the process by which financial assets such as loan receivables, credit card balances, hire purchase debtors, lease receivables, trade debtors etc. are transformed into securities. Thus, any asset with predictable cash flows can be securitised.

Securitisation is defined as a process of transformation of illiquid asset into security which may be traded later in the opening market. In short, securitization is the transformation of illiquid, non- marketable assets into securities which are liquid and marketable assets. It is a process of transformation of assets of a lending institution into negotiable instruments. Securitisation is different from factoring. Factoring involves transfer of debts without transforming debts into marketable securities. But securitisation always involves transformation of illiquid assets into liquid assets that can be sold to investors.

Factoring

Factoring

Factoring is a continuing arrangement between the financial institutions (factor) and business concern (client) which sells goods and services to trade customers whereby, the factor purchases the clients accounts receivables and give payment to client It is a transaction in which a business sells its accounts receivable, or invoices, to a third party commercial financial company, known as a factor." This is done so that the business can receive cash more quickly than it would by waiting 30 to 60 days for a customer payment.

Factoring is sometimes called accounts receivable financing."

So, a Factor is,

- A Financial Intermediary
- That buys invoices of a manufacturer or a trader, at a discount, and
- Takes responsibility for collection of payments.

Parties involved in factoring

- Factor-financing company
- Client- seller of goods
- Customer- buyer of goods

Features of factoring

1. There are three parties to factoring one is the company which initiates the process by selling the receivables, second party is the debtor and the third party is the factor which is usually bank or financial institution.
2. Some of the basic services provided are: Administration of sales ledger, Collection of debit purchased, Advisory services relating to expenses and credit and financial dealings, Covering the credit risk involved.
3. It enables conversion of outstanding receivables in to cash
4. Factor will not pay full amount of the debts to the client but pay only part amount which may be between 50 to 80 percent and rest of payment is made after the collection of money from the debtors.
5. The factor charges fees for providing this service and this fee vary depending on the type of factoring, market conditions and quality of debt and so on.

Function of factoring/ services provided by factor

1. **Financing**-Providing finance to client against outstanding debt
2. **Debt administration**-factor also extend services like maintenance of sales ledger, preparing and sending monthly statements,

3. **Credit risk-** sometimes factor will also undertake risk of credit from client
4. **Advisory services-** provides information and advices to client regarding management of company

Advantages of factoring:

1. Factoring is a way to finance requirement of working capital of the company in respect of receivables.
2. It provides a large and quick increase in cash flow of the business.
3. Due to existence of many factoring companies prices are usually competitive.
4. It is a cost effective way of outsourcing your sales ledger at the same time managing your business.
5. Factoring firms are specialized in their field thus the company might get useful information about the credit worthiness of its customers.
6. Protection from bad debts if non-recourse factoring is chosen.
7. Factors check the credibility of company's customers which help business trade with better quality customers.

Disadvantages of factoring:

1. Cost: Factoring is a costly mean of financing as the cash price of the invoices is discounted by the factor company, the upfront cash price being usually 70-90% of the face value, depending on the credit history of the customers and the nature of selling company's business which reduces the profit margin of the selling company.
2. Selling company gets locked in to the relationship with the factor as they rely completely on the services of a factor because of the cash flow implications of any arrangements.
3. Possible harm to the customer: Selling Company fully gives the charge of collecting invoice to the factoring company and pays more attention on money collection methods which impairs company's relationship with their customers.
4. Company image distortion: In the past, factoring was considered a sign on the financial difficulties of the company. However in recent times this perception has changed and it has considered a normal way of doing business.
5. Impose constrains the way of doing business: In the case of non-recourse factoring the factoring company pre-approve the selling company's customers, which cause delay in placing new orders. Also the factoring company applies its credit limits to individual customers and will apply credit limits to individual customers.
6. The selling company may have to pay extra to remove its liability for bad debtors.
7. Some customers might want to deal directly with the selling company instead of dealing with factor

Mechanism of Factoring

- The Client (Seller) sells goods to the buyer and prepares invoice with a notation that debt due on account of this invoice is assigned to and must be paid to the Factor (Financial Intermediary).

- The Client (Seller) submits invoice copy only with Delivery Challan showing receipt of goods by buyer, to the Factor.
- The Factor, after scrutiny of these papers, allows payment (, usually up to 80% of invoice value). The balance is retained as Retention Money (Margin Money). This is also called Factor Reserve.
- The drawing limit is adjusted on a continuous basis after taking into account the collection of Factored Debts.
- Once the invoice is honored by the buyer on due date, the Retention Money credited to the Client's Account.
- Till the payment of bills, the Factor follows up the payment and sends regular statements to the Client.

Meaning of Forfaiting

The term 'forfait' is a French word. It means 'to surrender something' or 'give up one's right'. Thus forfaiting means giving up the right of exporter to the forfaitor to receive payment in future from the importer. It is a method of trade financing that allows exporters to get immediate cash and relieve from all risks by selling their receivables (amount due from the importer) on a 'without recourse' basis.

Leasing

Leasing: It is a contractual arrangement or an agreement between two parties whereby one party allows the other to use his/her property for a certain period of time in exchange for a periodic fee. The property covered in a lease is usually real estate or equipment such as an automobile, machinery or office equipment.

Parties

Lessee: A party who makes use of property owned by another party (the lessor) and pays the lessor, usually in the form of rentals.

Lessor: Company, Bank or leasing entity that is the owner of the leased equipment .

Features of leasing

- Parties in lease must competent to enter in contract
- It will not provide transfer of ownership to the lessee
- Agreement is for specific period

Benefits of leasing:

- The most important merit of leasing is flexibility. The leasing company modifies the arrangements to suit the leases requirements.
- In the leasing deal less documentation is involved, when compared to term loans from financial institutions.
- It is an alternative source to obtain loan and other facilities from financial institutions. That is the reason why banking companies and financial institutions are now entering into leasing business as this method of finance is more acceptable to manufacturing units.
- The full amount (100%) financing for the cost of equipment may be made available by a leasing company. Whereas banks and other financial institutions may not provide for the same.
- The 'Sale and Lease Bank' arrangement enables the lessees to borrow in case of any financial crisis.

- The lessee can avail tax benefits depending upon his tax status.
- Permits alternative use of funds: enables use of asset without the huge capital expenditure.
- Protection against obsolescence: it is highly useful in those assets which become obsolete or outdated at a faster rate.
- Boon to small firms: as acquiring asset with no down payment and utilising the same fund for other avenues.

Disadvantages of Leasing:

- In leasing the cost of interest is very high.
- The asset reverts back to the owner on the termination of the lease period and the lesser loses his claim on the residual value.
- Leasing is not useful in setting up new projects as the rentals become payable soon after the acquisition of assets.
- The lessor generally leases out assets which are purchased by him with the help of bank credit. In the event of a default made by the lessor in making the payment to the bank, the asset would be seized by the bank much to the disadvantage of the lessee.
- Termination of contract in the middle of the agreement period becomes difficult

Meaning of Stock Exchange

A stock exchange is an important factor in the capital market. It is a secure place where trading is done in a systematic way. Here, the securities are bought and sold as per well-structured rules and regulations. Securities mentioned here includes debenture and share issued by a public company that is correctly listed at the stock exchange, debenture and bonds issued by the government bodies, municipal and public bodies.

Typically bonds are traded Over-the-Counter (OTC), but a few corporate bonds are sold in a stock exchange. It can enforce rules and regulation on the brokers and firms that are enrolled with them. In other words, a stock exchange is a forum where securities like bonds and stocks are purchased and traded. This can be both an online trading platform and offline (physical location).

Functions of Stock Exchange

Following are some of the most important functions that are performed by stock exchange:

1. **Role of an Economic Barometer:** Stock exchange serves as an economic barometer that is indicative of the state of the economy. It records all the major and minor changes in the share prices. It is rightly said to be the pulse of the economy, which reflects the state of the economy.
2. **Valuation of Securities:** Stock market helps in the valuation of securities based on the factors of supply and demand. The securities offered by companies that are profitable and growth-oriented tend to be valued higher. Valuation of securities helps creditors, investors and government in performing their respective functions.

3. **Transactional Safety:** Transactional safety is ensured as the securities that are traded in the stock exchange are listed, and the listing of securities is done after verifying the company's position. All companies listed have to adhere to the rules and regulations as laid out by the governing body.
4. **Contributor to Economic Growth:** Stock exchange offers a platform for trading of securities of the various companies. This process of trading involves continuous disinvestment and reinvestment, which offers opportunities for capital formation and subsequently, growth of the economy.
5. **Making the public aware of equity investment:** Stock exchange helps in providing information about investing in equity markets and by rolling out new issues to encourage people to invest in securities.
6. **Offers scope for speculation:** By permitting healthy speculation of the traded securities, the stock exchange ensures demand and supply of securities and liquidity.
7. **Facilitates liquidity:** The most important role of the stock exchange is in ensuring a ready platform for the sale and purchase of securities. This gives investors the confidence that the existing investments can be converted into cash, or in other words, stock exchange offers liquidity in terms of investment.
8. **Better Capital Allocation:** Profit-making companies will have their shares traded actively, and so such companies are able to raise fresh capital from the equity market. Stock market helps in better allocation of capital for the investors so that maximum profit can be earned.
9. **Encourages investment and savings:** Stock market serves as an important source of investment in various securities which offer greater returns. Investing in the stock market makes for a better investment option than gold and silver.

Features of Stock Exchange:

- **A market for securities-** It is a wholesome market where securities of government, corporate companies, semi-government companies are bought and sold.
- **Second-hand securities-** It associates with bonds, shares that have already been announced by the company once previously.
- **Regulate trade in securities-** The exchange does not sell and buy bonds and shares on its own account. The broker or exchange members do the trade on the company's behalf.
- **Dealings only in registered securities-** Only listed securities recorded in the exchange office can be traded.
- **Transaction-** Only through authorised brokers and members the transaction for securities can be made.
- **Recognition-** It requires to be recognised by the central government.
- **Measuring device-** It develops and indicates the growth and security of a business in the index of a stock exchange.
- **Operates as per rules-** All the security dealings at the stock exchange are controlled by exchange rules and regulations and SEBI guidelines.

Trading and Settlement Procedure

1] Selecting a Broker or Sub-broker

When a person wishes to [trade](#) in the stock market, it cannot do so in his/her individual capacity. The transactions can only occur through a broker or a sub-broker. So according to one's requirement, a broker must be appointed.

Now such a broker can be an individual or a [partnership](#) or a company or a [financial institution](#) (like banks). They must be registered under SEBI. Once such a broker is appointed you can buy/sell shares on the stock exchange.

2] Opening a Demat Account

Since the reforms, all securities are now in electronic format. There are no issues of physical shares/securities anymore. So an investor must open a dematerialized account, i.e. a Demat account to hold and trade in such electronic securities.

So you or your broker will open a Demat account with the depository participant. Currently, in India, there are two depository participants, namely Central Depository Services Ltd. (CDSL) and National Depository Services Ltd. (NDSL).

3] Placing Orders

And then the investor will actually place an order to buy or sell shares. The order will be placed with his broker, or the individual can transact online if the broker provides such services. One thing of essential importance is that the order /instructions should be very clear. Example: Buy 100 shares of XYZ Co. for a price of Rs. 140/- or less.

Then the broker will act according to your transactions and place an order for the shares at the price mentioned or an even better price if available. The broker will issue an order confirmation slip to the investor.

4] Execution of the Order

Once the broker receives the order from the investor, he executes it. Within 24 hours of this, the broker must issue a Contract Note. This document contains all the information about the transactions, like the number of shares transacted, the price, date and time of the transaction, brokerage amount, etc.

Contract Note is an important document. In the case of a legal dispute, it is evidence of the transaction. It also contains the Unique Order Code assigned to it by the stock exchange.

5] Settlement

Here the actual securities are transferred from the buyer to the seller. And the funds will also be transferred. Here too the broker will deal with the transfer. There are two types of settlements,

- On the Spot settlement: Here we exchange the funds immediately and the settlement follows the T+2 pattern. So a transaction occurring on Monday will be settled by Wednesday (by the second working day)
- Forward Settlement: Simply means both parties have decided the settlement will take place on some future date. It can be T+% or T+9 etc.

Stock market regulations in India

The Indian stock markets are efficiently regulated and tracked by The Securities and Exchange Board of India (SEBI), The Reserve Bank of India, and the Ministry of Finance. The Ministry of Finance operates via the Department of Economic Affairs (Capital Markets Division).

The Ministry formulates rules and regulations required for the functioning of the capital markets. It also develops laws necessary for safeguarding the interests of the investors in the stock market.

Securities Contracts (Regulation) Act, 1956 (SCRA)

- SCRA is an Act of the Parliament of India enacted to prevent undesirable exchanges in securities and to control the working of the stock exchange in India
- It provides the legal framework for the regulation of securities contracts in India.
- It also covers the listing and trading of securities, the registration and regulation of stockbrokers and sub-brokers, and the prohibition of insider trading.

Securities and Exchange Board of India Act, 1992 (SEBI Act)

- The Capital Markets Division of the Department of Economic Affairs sees to the administration of rules made within the bounds of the SEBI Act of 1992.
- This is the act that established the Securities and Exchange Board of India, or SEBI, the main authorized regulatory body that regulates Indian stock exchanges.
- The key function of SEBI is to keep the interest of investors/traders protected.
- While trading in the Indian stock market, investors and traders have to execute trades while abiding by rules, to promote fairness. SEBI monitors the rules.

Depositories Act, 1996

- The Depositories Act, of 1996 regulates the depositories of securities in India.
- It sets out the procedures for the dematerialization and transfer of securities held in electronic form.

Companies Act, 2013

- This act regulates the incorporation of a company, responsibilities of a company, directors, and dissolution of a company.
- The act enabled companies to be formed by registration, set out the responsibilities of the companies, their executive director, and secretaries, and also provides for the procedures for its winding.
- The amendment to the act was passed in 2020. Ministry of Corporate affairs governs this act.
- It also sets out the rules for the issue and transfer of securities by companies.

Role of SEBI in stock market regulations

SEBI regulates Capital Markets through certain measures it takes.

- Protects the interests of traders and investors, thereby, promoting fairness in the stock exchange.
- regulates how the security markets and stock exchanges function.
- regulates how transfer agents, stock brokers, and merchant bankers, etc, function.
- handles the registration activity of new brokers, financial advisors, etc.
- encourages the formation of Self-regulatory Organizations.
- promotes investor learning opportunities.
- makes rules to prevent malpractice.

- manages and controls a 'complaints' division
- It regulates mutual funds, both government and private-sector-related.

SEBI can issue directions to those who are associated with the market and has powers to regulate trading and settlement on stock exchanges.

SEBI has the power to carry out routine inspections of market intermediaries to ensure compliance with prescribed standards. It also has investigation powers similar to that of a civil court in terms of summoning persons and obtaining information relevant to its inquiry.

Safeguards against fraud

SEBI notified the Prohibition of Fraudulent and Unfair Trade Practices Regulations in 1995 and the Prohibition of Insider Trading Regulations in 1992 to prevent market manipulation and insider trading.

- Insider Trading Regulations, 2015 prohibits insider trading in securities listed on Indian stock exchanges. They prescribe the code of conduct for insiders, the procedures for disclosures, and the penalties for violations.

Violations of these regulations are ground offenses that can lead to a deemed violation of the Prevention of Money Laundering Act 2002.

Major stock exchanges in India

There are two major types of Stock Exchanges in India, namely the –

Bombay Stock Exchange (BSE): This particular stock exchange was established in 1875 in Mumbai at Dalal Street. It renowned as the oldest stock exchange not just in Asia and is the 'World's 10th largest Stock Exchange'.

The estimated market capitalisation of Bombay Stock Exchange as of April stands at \$ 4.9 Trillion and has around 6000 companies publicly listed under it. The performance of BSE is measured by the Sensex, and it reached its all-time high in June in 2019, when it touched 40312.07.

National Stock Exchange (NSE): The NSE was established in 1992 in Mumbai and is accredited as the pioneer among the demutualised electronic stock exchange markets in India. This stock exchange market was established with the objective to eliminate the monopolistic impact of the Bombay Stock exchange in the Indian stock market.

The estimated market capitalisation of National Stock Exchange as of March 2016 was US\$ 4.1 trillion and was acclaimed as the 12th largest stock exchange in the world. NIFTY 50 is NSE's

index, and it is extensively used by investors across the globe to gauge the performance of the Indian capital market.

Here is a list of stock exchanges in India

1. The Bombay Stock Exchange Ltd

- India International Exchange or India INX
- Metropolitan Stock Exchange of India Ltd (was valid up to September 15th, 2019)
- National Stock Exchange of India Ltd.
- NSE IFSC Ltd.

INDIAN FINANCIAL SYSTEM



The Financial System

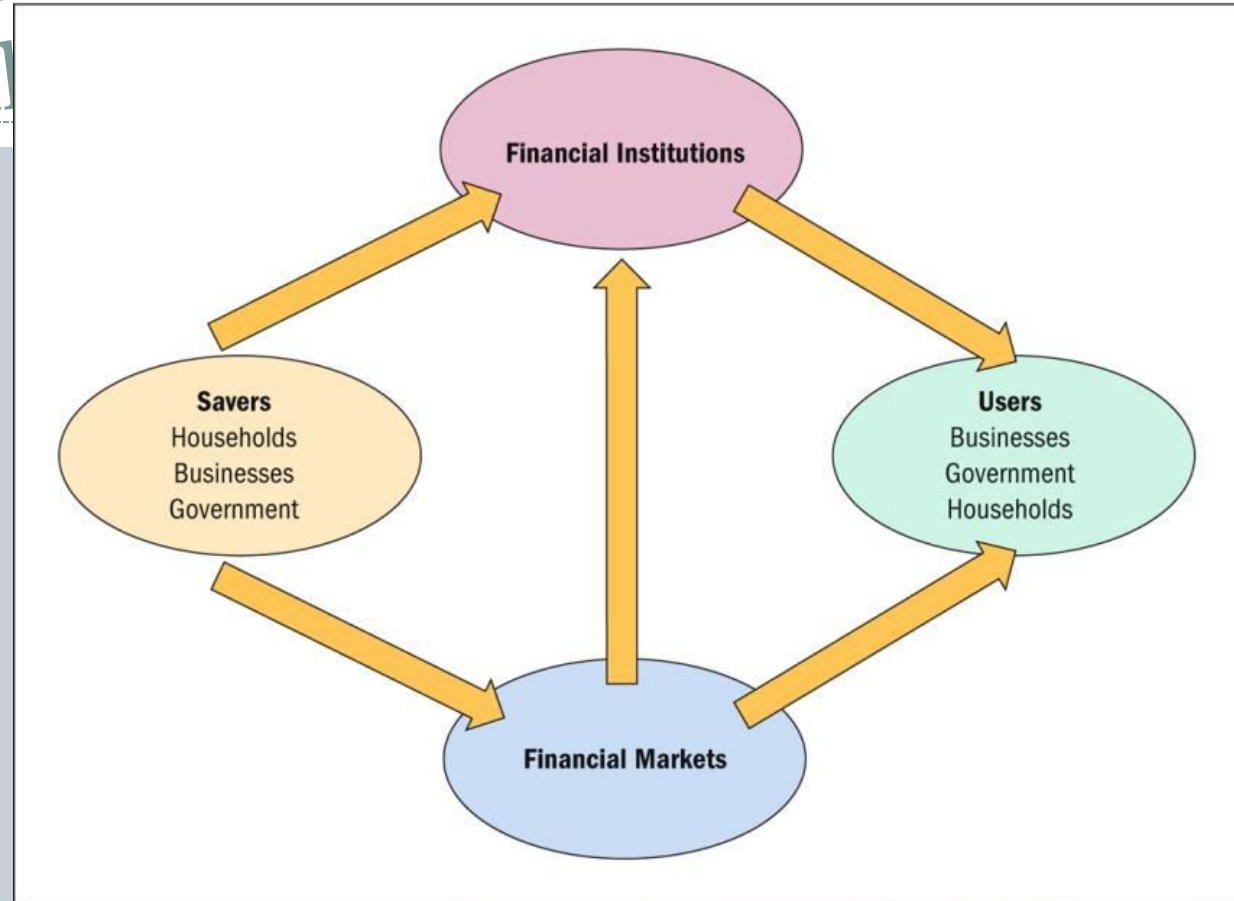


The *financial system* is the process by which money flows from savers to users.

Figure 17.1

Understar Financial

Overview of the Financial Systems and Its Components



- **Financial System**

- Savers

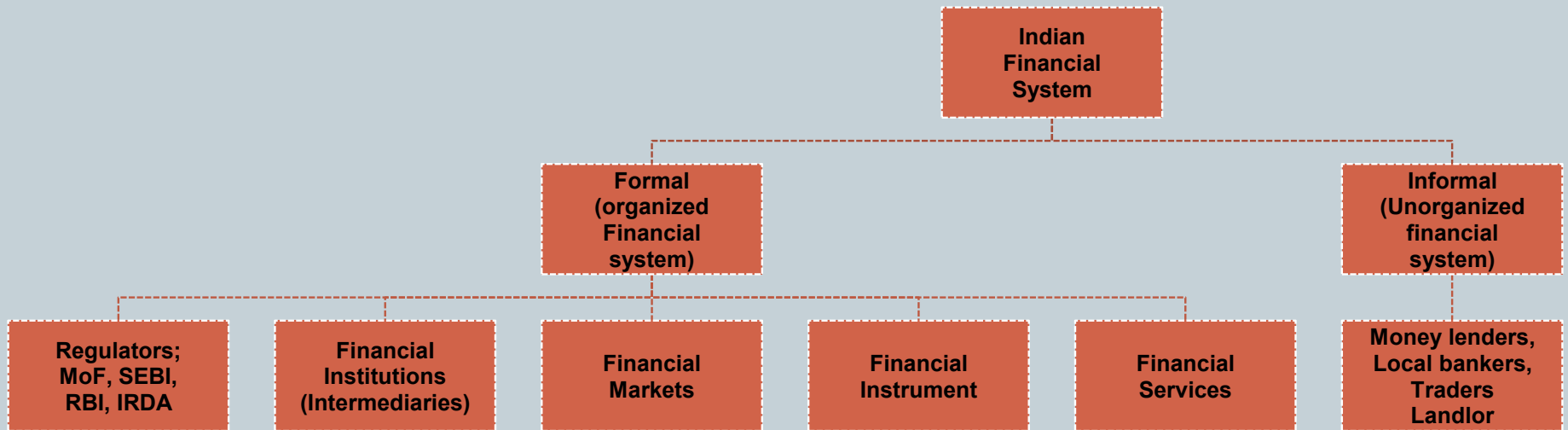
- Users

- Financial

- Institutions

- Financial Markets

- Funds can be transferred between users and savers directly or indirectly.



Regulators

5

- The formal financial system comes under the regulations of the ministry of finance (MOF), Reserve Bank of India (RBI), Securities and Exchange Board of India (SEBI) and Insurance Regulatory and Development Authority

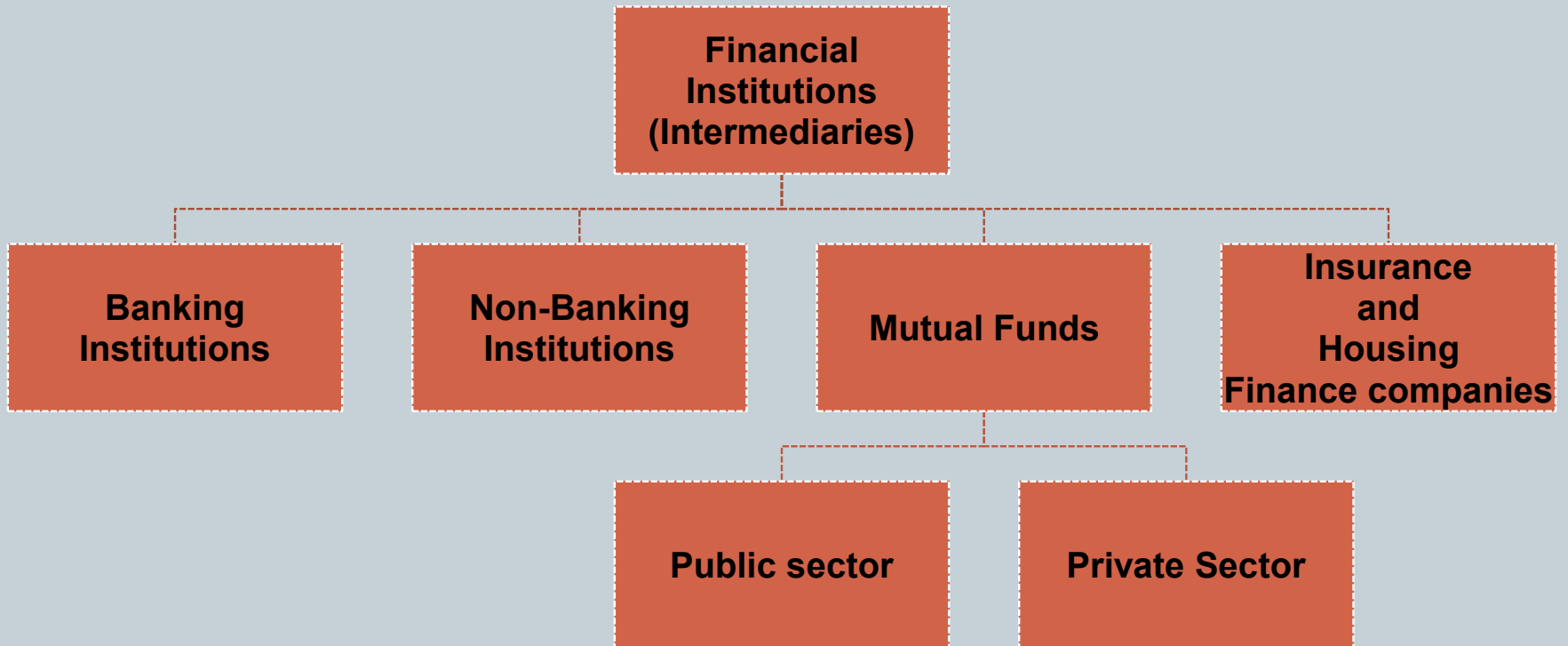
Ministry of Finance



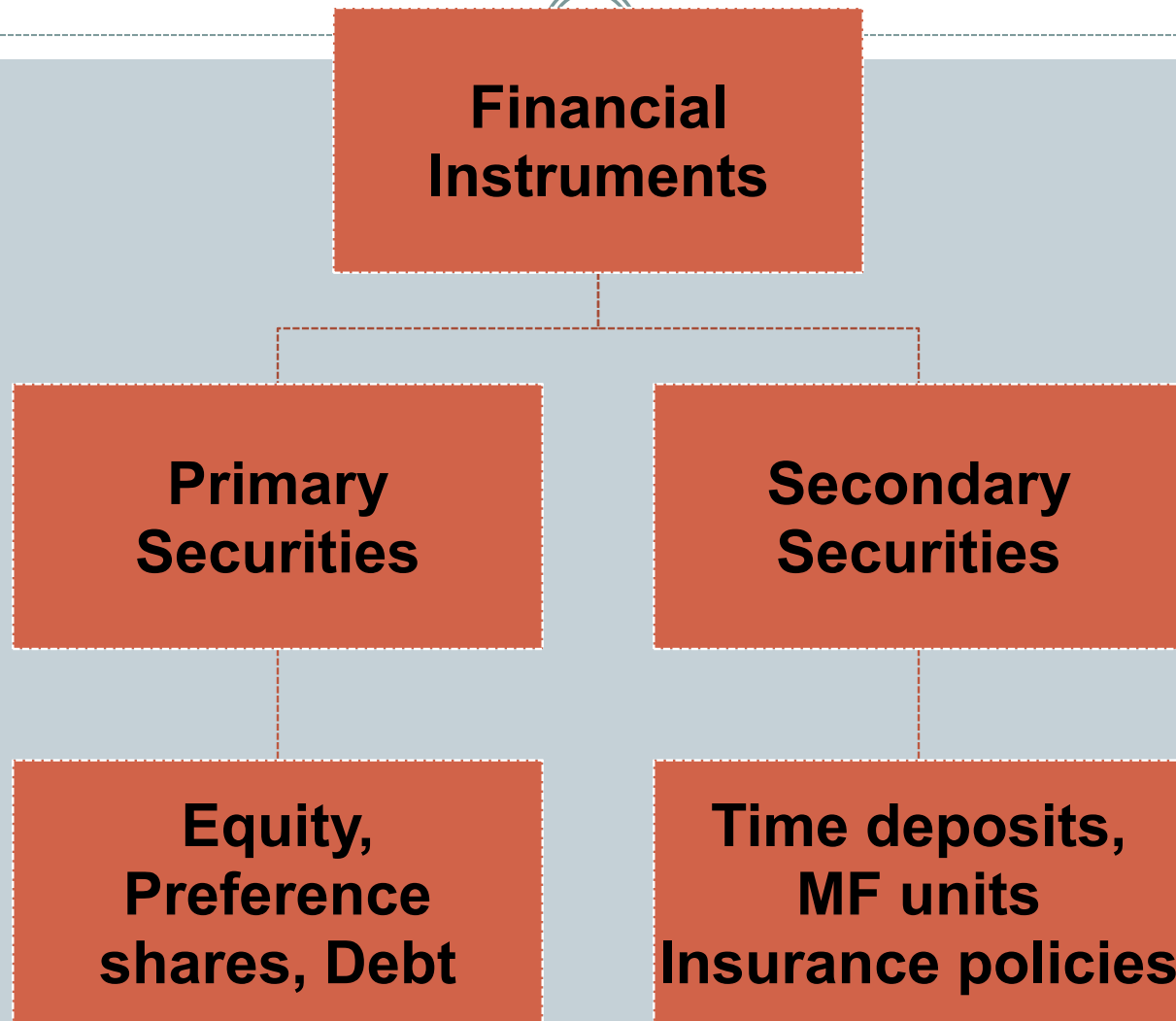
- The **Ministry of Finance** is a ministry within the [Government of India](#) concerned with the [economy of India](#), serving as the Indian Treasury Department. In particular, it concerns itself with [taxation](#), financial legislation, financial institutions, capital markets, [centre](#) and [state](#) finances, and the [Union Budget](#)

Financial Institutions

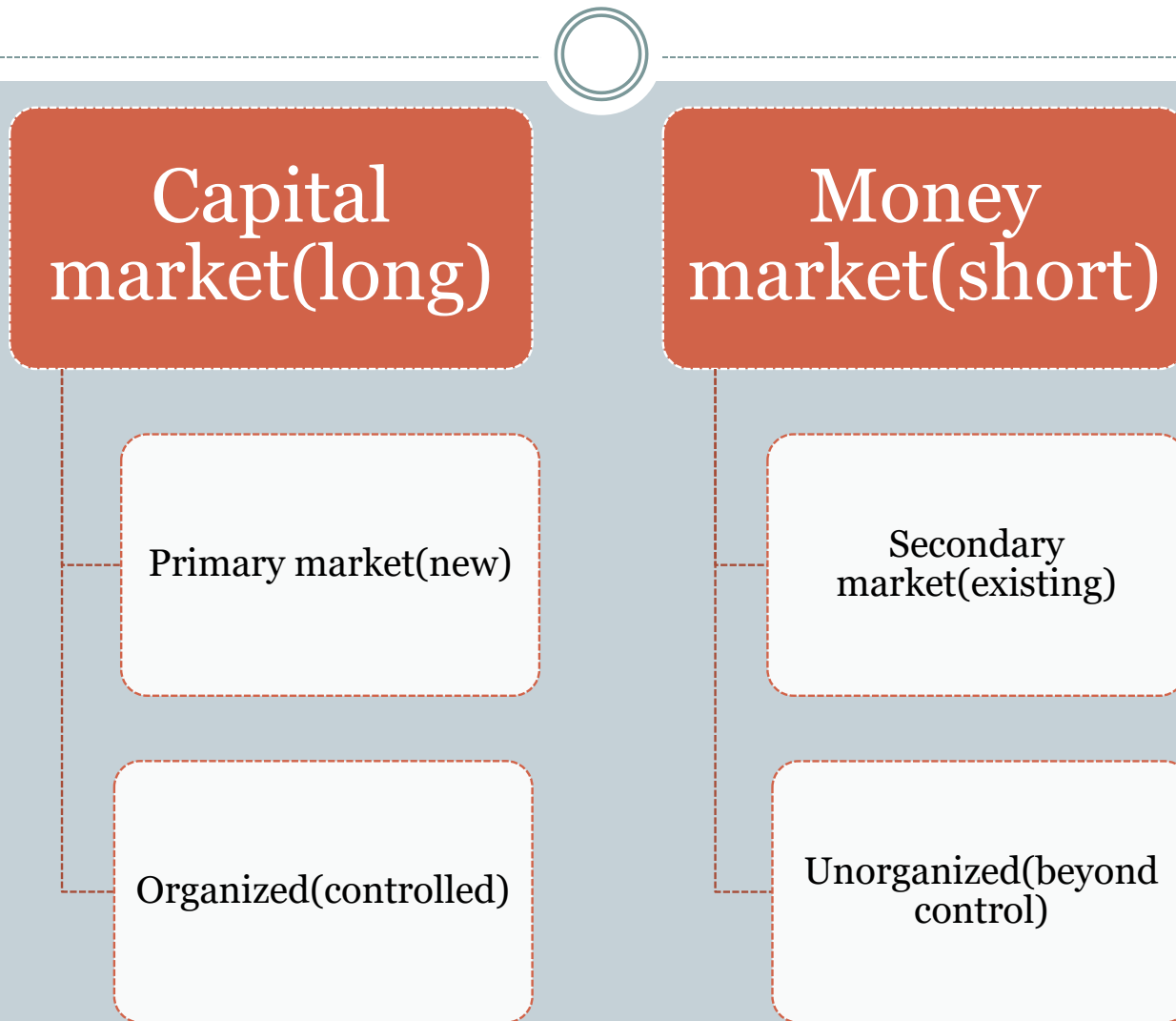
7



Financial Instruments--ranges from coins, currency, cheques, bond, stocks etc



Financial Markets



Financial services



- Financial institution sells their service to household, business and government.
- Mainly they required **FINANCIAL NEEDS**
 - **SHORT TERM-INVENTARIES**
 - **LONG TERM-CAPITAL EXPANSATION**

Function of financial sectors



- Facility for the distribution and exchange of goods and services.
- Mobilization of funds for being transferred into capital accumulation and allocation
- Finding out way and means of managing uncertainty and controlling risk
- Contributing to the activities for the promotion of economy

Function of financial system



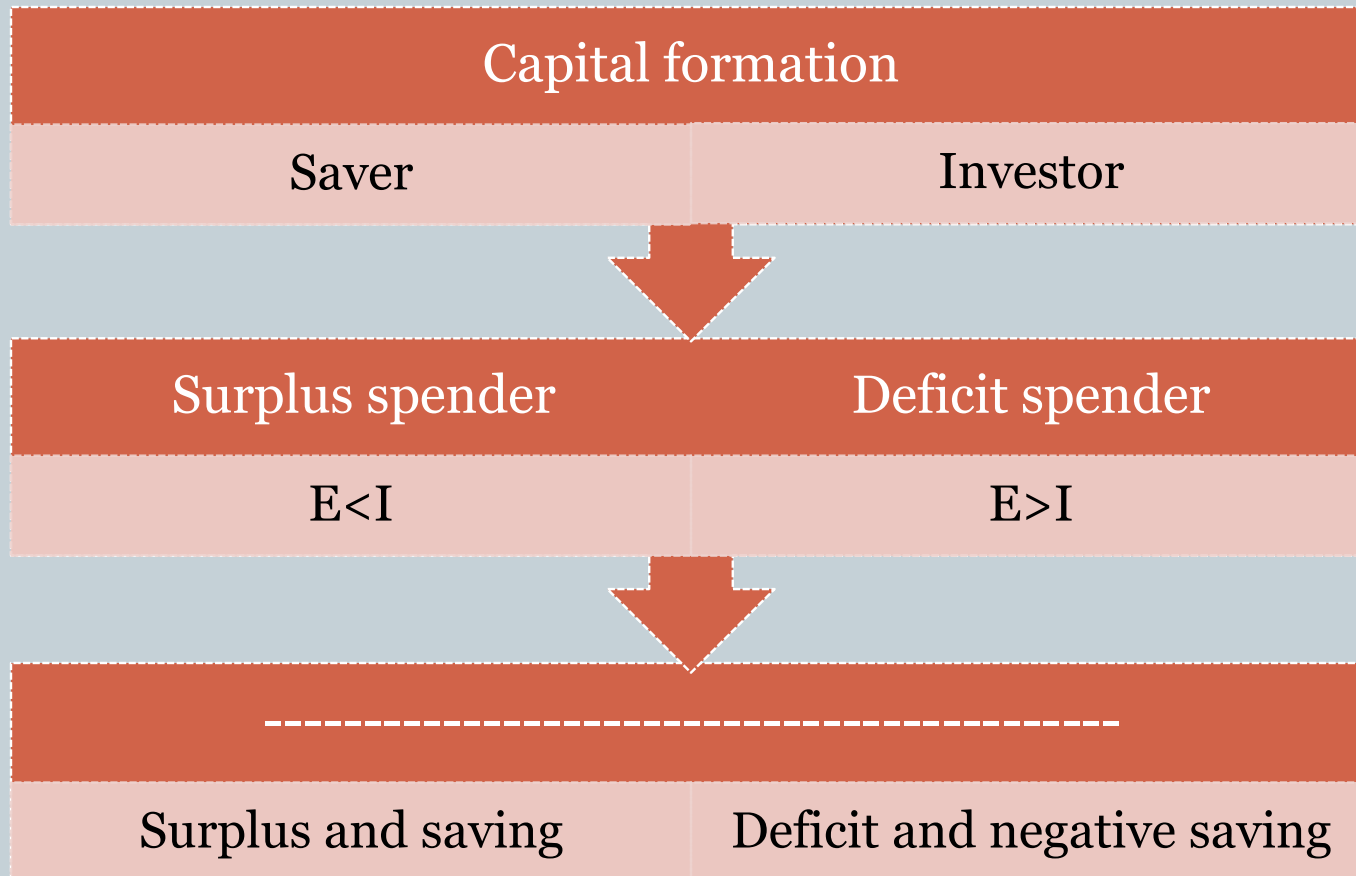
- **The function can be achieved by various institutions**
 - RBI-(issues notes, banker bank, exchange foreign currency)
 - Commercial banks-
 - Mutual fund-invest in capital security like share bond –(not all eggs in one basket)
 - Insurance company(life, fire, theft, marine, accident)
 - Development banks(agriculture, industry, housing, infrastructure, rural areas)
 - Merchant bankers

FUNCTION SYSTEM AND ECONOMIC DEVELOPMENT



- Financial system plays a very important role in Economic development. W.r.t
 - Level of nation income
 - Employment
 - Standard of living
 - Social welfare.

Economic development



RESERVE BANK OF INDIA



INTRODUCTION

- It is the Central Bank of India Established in “**1st April 1935**” under the “**RESERVE BANK OF INDIA ACT**”.
- Its head quarter is in **Mumbai** (Maharashtra). Its present governor is “**MR. Shakithi kanth**”
- It has “**22 Regional Offices**”, most of them in State capitals.

BRIEF HISTORY

- It was set up on the recommendations of the “**Hilton Young Commission**”.
- It was started as **Share-Holders Bank** with a paid up capital of **5 crores**.
- Initially it was located in **Kolkata**.
- It moved to **Mumbai** in **1937**.
- Initially it was **Privately Owned**.
- Since **Nationalization in 1949**, the Reserve Bank is fully owned by the Government of India.



FUNCTIONS OF RBI

- Issue of currency
- Development role
- Banker to government
- Banker to bank
- Role of RBI in inflation control
- Formulate monetary policy
- Manager of foreign reserve
- Clearing house functions
- Regulations of banking system



Issue of Currency

- To ensure adequate quantity of supplies of currency notes and coins of good quality.
- Issues new currency and destroys currency and coins not fit for circulation.
- It has to keep in forms of gold and foreign securities as per statutory rules against notes & coins issued.

Developmental Role

- To develop the quality of banking system in India.
- Performs a wide range of promotional functions to support national objectives.
- To establish financial institutions of national importance, for e.g: NABARD, IDBI etc.

Banker to the Government:

➤ Performs all banking function for the central and the state governments and also acts as their banker excepting that of Jammu and Kashmir. It makes loans and advances to the States and local authorities. It acts as adviser to the Government on all monetary and banking matters.



- Maintains banking accounts of all scheduled banks.
- It provide loan to the bank when needed
- RBI also regulates the opening /installation of ATM Fresh currency notes for ATMs are supplied by RBI.
- RBI regulates the opening of branches by banks.
- It ensures that all the **N.B.F.S** follow the Know Your Customer guidelines.

➤ The Reserve Bank of India also regulates the trade of gold. Currently **17 Indian banks** are involved in the trade of **gold** in India.

➤ Collection and publication of data.

➤ It issues guidelines and directives for the **commercial banks**.

Role of RBI in inflation control



- Inflation arises when the demand increases and there is a shortage of supply. There are two policies in the hands of the RBI.
- **Monetary policy** relates to the supply of money, which is controlled via factors such as interest rates and reserve requirements (CRR) for banks. For example, policy-makers (usually an independent central bank) can raise interest rates thereby reducing money supply.
- **Fiscal policy** relates to government spending and revenue collection. It can lower taxes to increase disposable income for people as well as corporations.

Formulate monetary policy

- Maintain price **stability** and ensuring **adequate flow** of credit in the economy.
- Instruments: qualitative & quantitative.

Quantitative Measures

- Quantitative Measures “**BANK RATE**” also called “**Discount Rate**”.
- It also includes “**Repo Rate**”.
- “**Open Market Operations**” buying and selling of government securities.
- “**Variable Reserve Ratio**” it includes **C.R.R** and **S.L.R**

Qualitative Measures

1. Direct Action
2. Moral persuasion
3. Legislation
4. Publicity

Quantative-BANK RATE

➤ It's the interest rate that is charged by a **country's central bank** on loans and advances to control money supply in the economy and the banking sector. (long term)

➤ **10.25% (w.e.f. 15/07/2013)**

➤ This is typically done on a quarterly basis to control **inflation** and stabilize the country's **exchange rates**.

➤ A fluctuation in **bank rates** **Triggers a Ripple-Effect** as it impacts every sector of a country's economy.

➤ A change in bank rates affects customers as it influences **Prime Interest Rates** for personal loans.(14.5%)

➤ Less person will come for loan-so liquidity will increase in the market.

REPO RATE

- Whenever the banks have any shortage of funds they can borrow it from the central bank. Repo rate is the rate at which our **banks borrow currency** from the central bank.(short term)
- **7.25% (w.e.f.03/05/2013)**
- A reduction in the repo rate will help banks to get Money at a **cheaper rate.**
- When the repo rate increases borrowing from the central bank becomes **more expensive.**
- In order to increase the liquidity in the market, the central bank does it.
- **Reverse repo rate-RBI** can take loan from banks when there is surplus liquidity inmarket. **6.25% (w.e.f.03/05/2013)**

Open market operation



- It refers to buying and selling of government securities in open market in order to expand and contract the money supply
- RBI buys securities(bonds) to inject money in the system
- RBI sells securities(bonds) to sack money in the system

-



GOVT. APPROVED SECURITIES (BONDS) BEFORE PROVIDING CREDIT TO ITS CUSTOMERS.

- SLR RATE IS DETERMINED AND MAINTAINED BY THE RBI (RESERVE BANK OF INDIA) IN ORDER TO CONTROL THE EXPANSION OF BANK CREDIT.

- THE PRESENT SLR RATE IS **23% (W.E.F. 11/08/2012)** AGGREGATE OF TOTAL TIME AND DEMAND LIABILITIES.



gold)that the banks have to keep with RBI.

- This Ratio is basically to secure solvency of the bank and to drain out the excessive money from the banks.
- The present CRR rate is **4.00% (wef 09/02/2013)** - Aggregate of total time and demand liabilities.

MARGINAL STANDING FACILITY (MSF)

10.25% (W.E.F. 15/07/2013)

2. MORAL SUASION: IT IS ANOTHER METHOD BY WHICH CENTRAL BANK MAY GET CREDIT SUPPLY EXPANDED OR CONTRACTED. BY MORAL PRESSURE IT MAY PROHIBIT OR DISSUADE COMMERCIAL BANKS TO DEAL IN SPECULATIVE BUSINESS.

IF THE BANK WANTS TO LIMIT THE CREDIT THEN NOT ALLOW TO MEET THE MANAGER, STRICT POLICY STRICT INSPECTION, VAGUE THREATS.

- **3:Credit Rationing**

- The bank limits the supply of loan although it has enough fund to lend.(by raising the interest rate on loan)

- **4. Publicity:**

The central bank may resort to massive advertising campaign in the news papers, magazines and journals depicting the poor economic conditions of the country suggesting commercial banks and other financial institutions to control credit either by expansion or by contraction.

Manager of Foreign Exchange

- To facilitate external trade and payment and promote orderly development and maintenance of foreign exchange market in India.
- It acts as a custodian and Manages the **Foreign Exchange Management Act,(FEMA) 1999.**
- RBI buys and sells foreign currency to maintain the exchange rate of Indian Rupee v/s foreign currencies like the US Dollar, Euro, Pound and Japanese yen.

Clearing House Functions

- The RBI operates clearing houses to settle banking transactions. The RBI manages 14 major clearing houses of the country situated in different major cities. The State Bank of India and its associates look after clearing houses function in other parts of the country as an agent of RBI.



BANKING REGULATION ACT 1949

16TH MARCH 1949



Pos

ance

An Introduction:



- Till 1949, There was no separate Act for Banking in India. So it was controlled by Indian Companies Act



- The **Central Banking Enquiry Committee** recommended the need of a **separate legislation** to control banks due to **mushroom growth of banks** with inadequate capital, dishonest management, speculative business etc etc..
- Accordingly a bill was introduced in parliament in March 1948.
- It was Passed in parliament in February 1949 and **The Banking Regulation Act** 1949 came to exist from 16th March 1949.

IMPORTANT PROVISIONS OF ACT

- 1. Definition of Banking.**
- 2. Form of Business.**
- 3. Provision of Capital**
- 4. Management**
- 5. Maintenance of Liquid Assets.**
- 6. Licensing of Banks.**
- 7. Opening of New Banks.**
- 8. Provision Regarding Loans and Advances.**
- 9. Inspection of Banks.**
- 10. Powers of the Reserve Bank of India.**
- 11. Returns to Be Submitted.**
- 12. Acquisition of Business.**
- 13. Mergers/Amalgamations.**
- 14. Winding up of Banking Companies.**



DEFINITION OF BANKING

Banking:

Sec 5 (b) of the Act defines Banking as,

“Accepting for the purpose of lending or investment, of deposits of money from the public, repayable on demand or other wise, and withdrawable by cheque , draft, order or otherwise.”

Banking Company:

Sec 5 (c) of the Act defines Banking as,

“A company which transacts the business of banking in India.”

FORMS OF BUSINESS

Banks can only do the business which is mentioned u/s 5 (c) and 6 of the Act.

It consist of :-



Main Functions/Business.

1. The borrowing , raising or taking up money.
2. The lending of money with or without security.
3. The granting and issuing of letters of credit of various kinds, travellers cheque etc.
4. Drawing, making, accepting, discounting, buying, selling, collecting, and dealing in bills of exchange, promissory notes, coupons etc.
5. Buying, selling, and dealing in bullion.
6. The buying and selling of foreign exchange including foreign bank notes.
7. The acquiring, holding, issuing on commission , underwriting and dealing in stock, funds, shares, debentures, bonds, securities, and investment of all kinds.

KINDS OF BUSINESS CANNOT BE DONE

1. A bank **cannot carrying on trading activities.** (Sec 8)



PROVISION FOR CAPITAL

Capital:

The capital of the company consist of only ordinary shares. It can pay dividend only after all its capitalized expenses are completely written off.

Reserve Fund:

According to Sec 17 of the Act every banking company must, Before declaring dividend, transfer a sum not less than 20% of its net profit to a reserve fund until the amount of the reserve fund is equal to the paid up capital of the company.

MANAGEMENT OF BANKING COMPANY

Management:

According to Sec 10 A, it has to constitute the board of directors in such a way that not less than 51 % of the total number of members consist of,

a) have special knowledge or practical experience in Accountancy, agriculture , rural economy, banking, economics and law.

b) they shall not have any substantial interest or connection with anyone of any company or firm.

Any director of the company can hold the office continuously for the period not exceeding 8 years.

Chairman:

It should have a Director as its whole time or part time chairman of the banking company. He can hold the office for a period not exceeding 5 years.

POWERS OF THE RESERVE BANK

- 1. Election of New Directors.**
- 2. Maintaining Cash Reserves.**
- 3. Power to issue license to new banks.**
- 4. Power to cancel license.**
- 5. Power to give permission for starting new branches.**
- 6. Power of inspection.**
- 7. Power to issue directions.**
- 8. Power to control management.**
- 9. Power to advice banks.**
- 10. Power to call for information.**
- 11. Power to grant moratorium.**
- 12. Power to control advances.**

LICENSING OF BANKS

- ❑ Every banking company in India should obtain a license from the RBI before commencing the business. It will grant license only after the detailed inspection considering so many factors.
- ❑ It should obtain prior permission from Reserve Bank of India for opening new place of business either in or abroad and also for changing the location.

RETURN FILING

Banking Companies should submit returns to the RBI in prescribed form and manner as at the close of business on the **last Friday of every month** or just preceding day if that day is a public holiday.

ACQUISITION OF BUSINESS

Sec 36 AE to 36 AJ provide for acquisition of **private banking companies by the central government** on the recommendation of RBI. Before acquiring the banking company, the central government shall give a reasonable opportunity to the bank to explain their stand.

MERGERS AND AMALGAMATION

The scheme of Merging and Amalgamation is approved by the requisite majority of shareholders in accordance with the provisions of Section 44 A.

WINDING UP OF BUSINESS

A banking company can be wound up like any other company. Reserve bank will act as a liquidator of the banking company.



**SEBI head
quatered in
popular
business
district of
bandra-kurla
complex in
mumbai**



ESTABLISHMENT



- In 1988 the securities and exchange board of India was established by government of India through an executive resolution and was subsequently upgraded as a fully autonomous body (a statutory body) in the year 1992 with the passing of securities and exchange board of India act (SEBI act) on 30th January 1992

Salient features of SEBI act 1992



- HQ will be in Mumbai and may establish offices at other places in India.
- Chairman and members of board will be appointed by the central government.
- Primary duties of the board is to protect the interest of the investors.

Objectives of SEBI



The primary objective of SEBI is to regulate the working of stock exchange and promote healthy and orderly growth of the securities market and secure investor protection. The objective of SEBI are as follows:-

- To protect the interest of investors, so that , there is a steady flow of savings into to the capital market.
- To regulate the securities market and ensure fair practices.
- To promote efficient services by brokers , merchant bankers and financial intermediaries, so that, they become competitive and professional.

Functions of SEBI



The SEBI act 1992 has entrusted with two functions they are

1. Regulatory functions and
2. Developmental functions

Regulatory functions



- Regulation of stock exchanges .
- Registration and regulation of stock brokers , sub-brokers , registrars of all issues, merchant bankers, underwriters, portfolio managers..etc
- Prohibition of fraudulent and unfair trade practices relating to securities market.
- Prohibiting of insider trading.

Developmental functions



- Promoting investors education.
- Training of intermediaries.
- Conducting research and publishing information useful to all market participants.

Powers of SEBI



- Power to call periodical returns from recognized stock exchanges .
- Power to call information or explanation from recognized stock exchanges or their members.
- Power to control and regulate stock exchanges.

Structure of SEBI



- the board shall consists of following members:-
 1. Chairman
 2. Two members, one from amongst the officials of the central government dealing with finance and another from the administration of companies act of 1956.
 3. One members from amongst the officials of the reserve bank of india.
 4. five other members of whom atleast three shall be the whole-time members to be appointed by the central government.

Limitation of SEBI



- Lack of professional experience official.
- Limited transparency
- Procedure are complex and mechanical
- Gap to create fraud
- Minimum accountability
- Legislation are weak



HISTORY OF IRDA

- The IRDA Act, 1999 was passed as per the major recommendation of the Malhotra Committee report (1994) which recommended establishment of an independent regulatory authority for insurance sector in India.
- Later, it was incorporated as a statutory body in April, 2000.
- The IRDA Act, 1999 also allows private players to enter the insurance sector in India besides a maximum foreign equity of 26 per cent in a private insurance company having operations in India.

Insurance Regulatory and Development Authority (IRDA)

- Insurance Regulatory and Development Authority (IRDA) is an autonomous apex statutory body which regulates and develops the insurance industry both (Life and Non-Life Insurance Companies) in India.
- It was constituted by a Parliament of India act called *Insurance Regulatory and Development Authority Act, 1999* and duly passed by the Government of India and was amended in 2002 to incorporate some emerging requirements as well as to overcome some deficiencies in the entire process.
- The agency operates from its headquarters at Hyderabad, Telengana where it shifted from Delhi 2001 .

Major Objectives Of The IRDA :



- To promote orderly growth of insurance industry in the country, including registration of the insurance companies
- To administer the provisions of the insurance act
- To protect interests of policy holders and investors
- To device control activities needed for smooth functioning of the insurance companies including investment of funds and the solvency requirements to be maintained by insurance companies
- To adjudicate (act as an judge) on disputes

COMPOSITION OF AUTHORITY

As per the section 4 of IRDAI Act' 1999, Insurance Regulatory and Development Authority of India (IRDAI, which was constituted by an act of parliament) specify the composition of Authority

The authority shall consist of followings :

a. A Chairperson :

- having Knowledge in Life , general Insurance
- Shall hold an office for the term of 5 yrs.
- the age of retirement is 65 years.

b . Not more than five whole time Members :

- having Knowledge in Life , general Insurance
- Shall hold an office for the term of 5 yrs.
- the age of retirement is 62 yrs.

c. Not more than four -part time members :

These persons shall be appointed by the Central Govt.



Functions of IRDA:



As defined by the IRDA act,1999,IRDA performs the following broad functions:

- Ensure orderly growth of the insurance industry
- Protect interest of policy holder
- Issue consumer protection guidelines to insurance companies
- Grant modify, and suspend license for insurance companies
- Lay down procedures for accounting polices to be adopted by the insurance companies
- Inspect and audit of insurance companies and other related agencies
- Re-insurance limit monitoring

Function continues:

- Screening of accounting standards, transparency requirements in reporting
- Ensure the health of the industry by preventing sickness through appropriate action
- Publish information about the industry
- Prescribe qualification and training needs of agents
- Monitor the charges for various services by insurance company
- Monitor investment

Advantages of Indian Financial system



- 1. Provides Payment System:** The [financial system](#) provides a payment mechanism for the smooth flow of funds among peoples in an economy. Buyers and sellers of goods or services are able to perform transactions with each other due to the presence of a financial system.
- 2. Links Savers and Investors:** The financial system serves as a means of bridging the gap between savings and investment. It acquires money from those with whom it is lying idle and transfers it to those who need it for investing in productive ventures.
- 3. Minimizes Risk:** It aims at reducing the risk by diversifying it among a large number of individuals. The financial system distributes funds among a large number of peoples due to which risk is shared by many peoples.
- 4. Helps in Capital Formation:** The [financial system has an efficient role](#) in capital formation of the country. It enables big corporates and industries to acquire the required funds for performing or expanding their operations thereby leading to capital formation in the nation.



5. Raises Standard of living: It raises the standard of living of peoples by promoting regional and rural development of the country. The financial system promotes the development of weaker sections of society through cooperative societies and rural development banks.

6. Enhance liquidity: Maintaining optimum liquidity in an economy is another important role played by the financial system. It facilitates free movement of funds from households (savers) to corporates (investors) which ensures sufficient availability of funds in the economy.

7. Promotes Economic Development: The financial system influence the pace of economic growth or development of an economy. It aims at optimum utilization of all financial resources by investing all idle lying resources into useful means which leads to the creation of wealth.

Disadvantages of Indian Financial system



- 1. Lack of Co-ordination among financial institutions:** The financial system faces a lack of coordination among various financial institutions. The presence of a large number of financial institutions and government roles in controlling authorities of these institutions leads to a lack of coordination.
- 2. Monopolistic Market Structure:** Many institutions in the Indian financial system occupy a monopolistic position in the market. LIC and UTI are two institutions that have grabbed a large part of the life insurance business and the mutual fund industry. These large structures could lead to mismanagement or inefficiency of funds.
- 3. High Rate of Interest:** There is a possibility of the high-interest rate charged by several financial institutions in the financial system of our country. Various institutions due to their monopolistic structure in the market may charge high or unfair interest rates.



4.Inactive Capital Market: Our country's financial system faces the problem of the inactive capital market. All corporates in India are mostly able to acquire funds through development banks and do not need to go to the capital market.

5.Imprudent Financial Practice: The financial system of India has developed imprudent financial practices due to the dominance of development banks. Development banks provide funds to corporates in the form of term loans which makes the capital structure of borrowed concerns uneven. These banks even permit the use of unwarranted debts which is against the sound capital structure.

Global financial system



- The **global financial system** is the worldwide framework of legal agreements, institutions, and both formal and informal economic actors that together facilitate international flows of financial capital for purposes of investment and trade financing.



- Global Financial market
- Global Financial Instrument
- Global financial institutions

WHAT ARE INTERNATIONAL FINANCIAL INSTITUTIONS (IFI'S)?

World Bank Group (WBG):

- International Bank for Reconstruction and Development (IBRD)
- International Development Association (IDA)
- International Finance Corporation (IFC)
- Multilateral Investment Guarantee Agency (MIGA)
- International Centre for Settlement of Investment Disputes (ICSID)

International Monetary Fund (IMF)

Regional development banks, such as:

- African Development Bank (AFDB)
- Asian Development Bank (ADB)

CONTINUED.....

- Inter-American Development Bank (IADB)
- Bank of the South
- European Bank for Reconstruction and Development (EBRD)

Other regional financial institutions e.g. European Investment Bank (EIB)

Export Credit Agencies of individual country governments, such as:

- US Export Import Bank (EXIM)
- Japan External Trade Organization
- Hermes Kreditversicherungs (Germany)

INTERNATIONAL FINANCIAL INSTITUTIONS:

Their common goal.....

- to reduce global poverty and improve people's living conditions and standards;
- to support sustainable economic, social and institutional development; and
- to promote regional cooperation and integration.

International money market

- The **market** in which participants from around the world are able to buy, sell, exchange and speculate on different currencies. **International currency markets** are made up of banks, commercial companies, central banks, investment management firms, hedge funds, retail forex brokers and investors.

International Money market

Instruments

- 
- 1 • Eurocurrency
 - 2 • Euro credits
 - 3 • Euro certificate of deposits
 - 4 • Banker's acceptance
 - 5 • Floating rate notes
 - 6 • Euro commercial papers

International capital market

- Capital markets are markets for buying and selling equity and debt instruments.
- Capital markets channel savings and investment between suppliers of capital such as retail investors and institutional investors, and users of capital like businesses, government and individual.
- Consists of primary and secondary market.

Structure





Banks in India



- **On The Basis Of Domicile:** (1) Domestic Bank
(2) Foreign Banks
- **On The Basis of Second Schedule of RBI Act:**
(1) Scheduled Bank (2) Non-Scheduled Bank
- **On The Basis of Ownership:** (1) Public Sector
Banks (2) Private Sector Banks
(3) Co-operative Banks (4) Regional Rural Banks

Classification of banks

Scheduled banks :- Banks which have been included in the Second Schedule of RBI Act . They are categorized as follows:

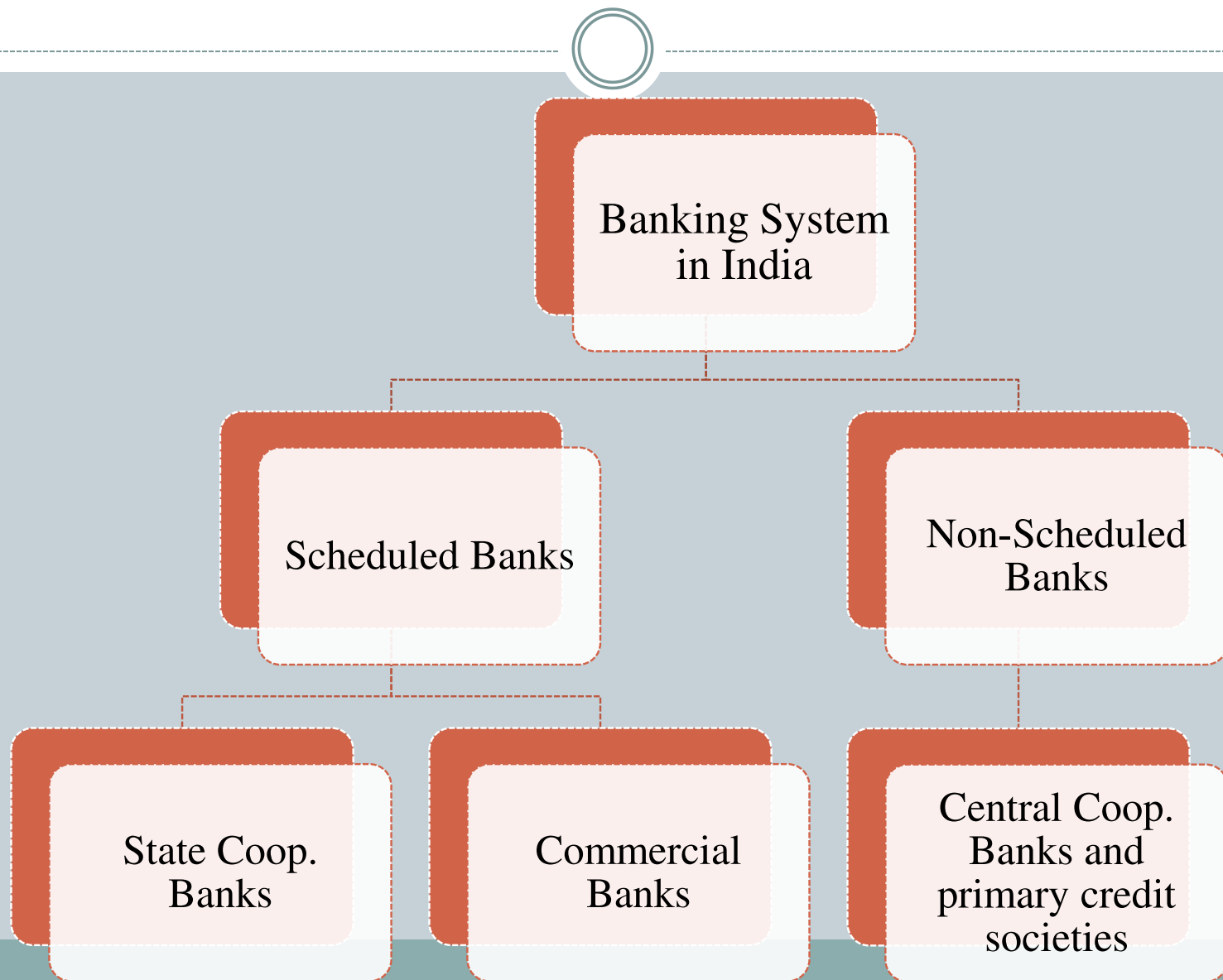
- **Public Sector Banks :-** E.g.. SBI, PNB, Syndicate Bank, Union Bank of India etc.
- **Private Sector Banks :-** E.g.. ICICI Bank, IDBI Bank, HDFC Bank, AXIS Bank etc.
- **Foreign Banks :-** E.g.. Citi Bank, Standard Chartered Bank, Bank of Tokyo Ltd. etc.

Non scheduled banks :- Banks which are not included in the Second Schedule of RBI Act .

Capital local area bank-punjab

Subhadra local area bank-Maharashtra

Structure of Banking System in India

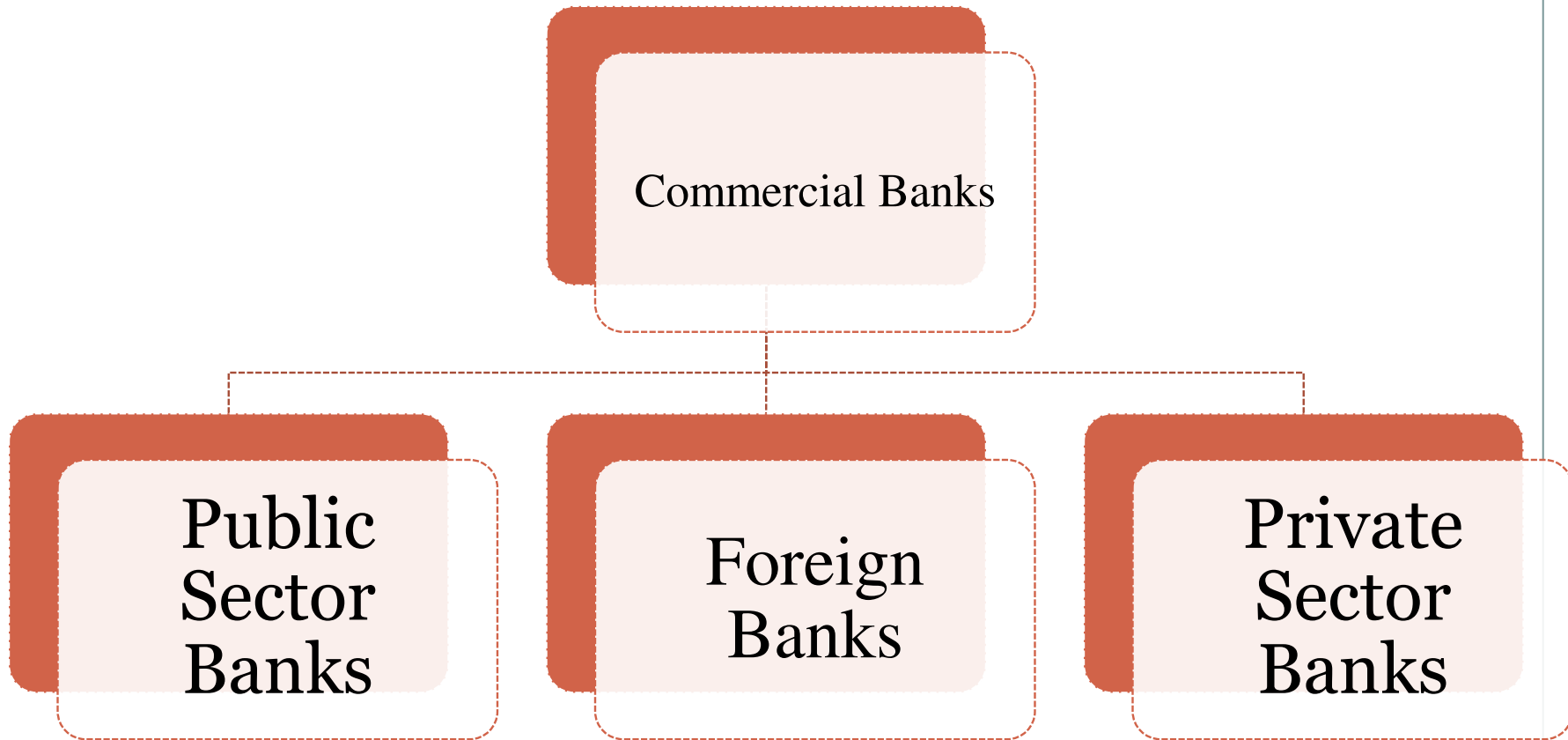


INTRODUCTION



- Commercial Banks are those profit seeking institutions which accept deposits from general public and advance money to individuals like household, entrepreneurs, businessmen etc. with the prime objective of earning profit in the form of interest, commission etc.
- Examples of commercial banks – ICICI Bank, State Bank of India, Axis Bank, and HDFC Bank

Commercial Banks



Functions of Commercial Banks



1. Basic Function: **(i) Mobilization of Deposits.**

- ✓ Saving Deposit Account
- ✓ Fixed Deposit Account
- ✓ Recurring Deposit Account
- ✓ Current Deposit Account

Functions of Commercial Banks



- **Credit Deployment:**
 - ✓ Cash Credit
 - ✓ Overdraft
 - ✓ Discounting Bills of Exchange
 - ✓ Term Loan

Agency Functions



- ✓ Remittance of Funds
- ✓ Collection & Payment of Credit Instruments
- ✓ Execution of standing orders
- ✓ Sale and Purchase of securities
- ✓ Collection of Dividend on Shares and Interest on Debentures

General Utility Functions



- ✓ Locker Facility
- ✓ Traveller's Cheque Facility
- ✓ Merchant Banking Service
- ✓ Acting as Underwriters
- ✓ Acting an Information Provider
- ✓ Acting as a Referee

Development Functions



- ✓ Capital Formation
- ✓ Rural Development
- ✓ Priority Sector Advances
- ✓ Creating Employment
- ✓ Assistance of Money & Capital Market

Modern Functions



- ✓ ATMs
- ✓ Tele-Banking
- ✓ Internet Banking
- ✓ Mobile banking
- ✓ Smart Cards
- ✓ Round the Clock Banking





- It is the export finance institution of the country, set up in 1982 under the Export-Import Bank of India Act 1981.
- Government of India launched the institution with a mandate, not just to enhance exports from India, but to integrate the countries foreign trade and investment with the overall economic growth.





- The primary objective of the Export-Import Bank of India is to provide financial assistance to importers and exporters and function as the top financial institution

organisation



- Exim Bank is managed by a
- Board of Directors, which has representatives from the government ,
- Reserve Bank of India,
- Export Credit Guarantee Corporation of India,
- a financial institution ,
- public sector banks,
- and the business community



Organisation

EXIM
BANK

BOARD OF DIRECTORS (16)

- Chairman and Managing Director
- 5 Directors: Government of India
- 3 Directors: Scheduled Banks
- 4 Directors : Professionals/Experts
- 1 Director nominated by RBI
- 1 Director nominated by IDBI
- 1 Director nominated by ECGC

***Appointed
by
Govt. of India***

OFFICES IN INDIA

HEAD		MUMBAI	
Domestic Offices	9	Mumbai Kolkata, Bangalore Ahmedabad Guwahati	Delhi Chennai Hyderabad Pune

OFFICES OVERSEAS

Overseas Rep. Offices	5	Washington D.C. Singapore Johannesburg	London Budapest
-----------------------	---	--	--------------------

***Men: Women Ratio –
1:1***

Function



- 1. Corporate handling (advise)
- It handles a variety of financing programmes for Export Oriented Units (EOUs), Importers, and overseas investment by Indian companies.
- 2. Project finance
- This Group handles the entire range of export credit services such as supplier's credit, pre-shipment, Agri Business Group, to spear head the initiative to promote and support Agri-exports.
- The Group handles projects and export transactions in the agricultural sector for financing.

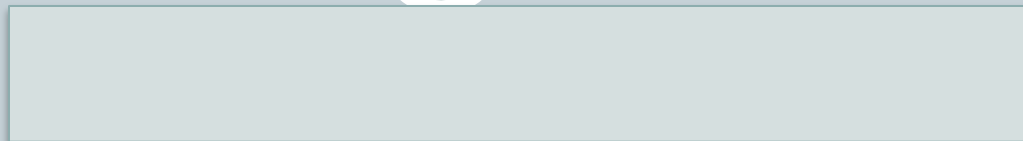




- 3. Export service group
- It offers variety of value-added information services aimed at investment promotion

- 4. Supporting group
- It include: research & planning, Corporate Finance, Loan recovery, Internal Audit, Management Information Services, Information Technology, Legal, Human resources
- Management and Corporate Affairs.
-

Topic



NATIONAL BANK FOR AGRICULTURE AND RURAL DEVELOPMENT

NABARD

NATIONAL BANK FOR AGRICULTURE
AND RURAL DEVELOPMENT



- The committee of Mr. B. Sivaraman recommended the establishment of NABARD, on November 28, 1979.
- The parliament through the act 61 of 81 approved its setting up in July 1982.
- Set up with initial capital of Rs.100 crore, increased to Rs.2,000 crore, fully subscribed by the government of india and the RBI.



- Apex bank for facilitating credit for
 - promotion and development of agriculture,
 - small-scale industries,
 - cottage and village industries,
 - and other rural crafts.
-
- It also support to all other allied economic activities in rural areas and secure prosperity of rural areas.



**Bandra-Kurla Complex ,
Bandra , Mumbai, Maharashtra**



To facilitate sustained access to financial services for the unreached poor in rural areas through various micro Finance innovations in a cost effective and sustainable manner.



By the end of year 2015, we have planned to link nearly 9.2 crore households which would ensure coverage of more than 50% women through SHG (Self-Help Group) Bank linkage program.

Hierarchy of NABARD

Chairman

Managing Director

Board Of Director

Executive Director

**Head Office
Departments**

**Regional
Offices**

**Training
Establishments**

**Sub Office Special
Cell**

**District
Development Offices**

Role of NABARD

- ▶ 1. Providing refinance to lending institutions in rural areas
- ▶ 2. Bringing about or promoting institutional development
- ▶ 3. Evaluating, monitoring and inspecting the client banks
- ▶ 4. Acts as a coordinator in the operations of rural credit institutions.
- ▶ 5. Extends assistance to the government, the Reserve Bank of India and other organizations in matters relating to rural development.
- ▶ 6. Offers training and research facilities for banks, cooperatives and organizations working in the field of rural development.
- ▶ 7. Helps the State Governments in reaching their targets of providing assistance to eligible institutions in agriculture and rural development.
- ▶ 8. Acts as regulator for cooperative banks and RRBs.

National Housing Bank (NHB)

- Established on 9th July 1988 under The Act of. The National Housing Bank Act, 1987
- Provides financial and other support to the Housing Finance Institutions
- Issues directions to housing finance institutions to ensure their growth on sound lines
- Loans and advances and any other form of financial assistance to scheduled banks and housing finance institutions



- To promote a sound, healthy, viable and cost effective housing finance system
- To promote a network of dedicated housing finance
- To make housing credit more affordable.
- To regulate the activities of housing finance companies



Industrial Finance Corporation of India {IFCI}



- The Government of India set up the IFCI under IFCI Act in July 1948.
- It is the first development financial institution in the country to cater to the long-term finance needs of the industrial sectors.
- The main objective of IFCI is to making medium & long term credits more readily available for industrial concerns in India.

Activities

- Direct Financing
- Incidental Activities
- Promotional Activities

Direct Financing



- Rupee loans
- Sub loans in foreign currency

Incidental Activities



- IFCI has been authorized by Industrial Finance Corporation (Amendment) Act, 1982 to undertake incidental activities.
- Undertaking research & surveys for industries like-- techno-economic studies.
- Providing technical & administrative assistance to any industrial concern for the promotion, management or expansion of any industry.

The objective of IFCI in this case has been:

- To provide much needed guidance in
- project identification,
- formulation,
- implementation,
- operation etc.,
- to the new, tiny, small scale and medium scale entrepreneurs.

Industrial Development Bank of India (IDBI)

Origin:

- IDBI was set up in July 1964 under the Industrial Development Bank of India Act.
- It was established as a wholly owned subsidiary of the RBI.
- From 16th Feb. 1976, it was been delinked from the RBI and made an autonomous corporation owned by the Govt. of India.
- It's head office at Mumbai.
- It has regional office at Ahmadabad, Kolkata, Chennai & New Delhi and 11 branch office.

Resources:

The principal sources of funds of IDBI are:

- Share capital and reserves.
- Borrowing from Government of India and RBI.
- Market borrowing by way of bonds.
- Foreign currency borrowings from World Bank, Asian Development Bank and International Markets.
- Deposits and other borrowings.
- Repayment of fast assistance by borrowers.

DIRECT FINANCE

The Expression Direct Finance refers to the provision of Finance to an industrial unit without the involvement of an intermediary financial institution.

1. Equipment finance and asset credit.
2. Equipment leasing.
3. Direct discounting of bills.
4. Underwriting and direct subscription.
5. Energy conservation.
6. Venture capital
7. Working capital.

INDIRECT FINANCE

- The expression Indirect Finance refers to the provision of finance to industrial concerns through State Financial Corporation (SFC's).
- State Industrial Development Corporation (SIDC's) and banks. Indirect Finance, the responsibility for repayment to IDBI rests with the relevant intermediary institution or bank.

INDUSTRIAL CREDIT AND INVESTMENT CORPORATION OF INDIA (ICICI)

- ICICI was incorporated on January, 5th 1995 with its headquarters at Mumbai, for the specific purpose of assisting the industrial enterprises within the private sector.
- The original idea of forming the corporation sprang from the conversation between the Indian Government, World Bank and certain American financiers.

Objectives:

- (i) Assisting in the creation, expansion and modernization of such enterprises.
- (ii) Encouraging and promoting the participation of private capital both internal and external, in such enterprises.
- (iii) Encouraging and promoting private ownership of industrial investments and the expansion of investment markets.

Resources:

- The initial resources of ICICI was Rs. 17.5 crores - Rs.12.5 crores in rupees and \$ 10 million in foreign currencies, being loan from World Bank, by March, 1985, the paid up capital of the corporation amounted to Rs.45 croers.
- While reserves and surplus amounted to Rs.92 crores, borrowings of the corporation aggregated to Rs. 1,617 crores.

Facilities of ICICI

1. Assistance to Industries.
2. Development of New Industries in Backward Regions.
3. Provision of Foreign Currency Loans.
4. Merchant Banking.
5. Facilities for Non-resident Indians.
6. Letter of Credit.
7. Project Promotion.
8. Leasing Operations.
9. Housing Loans.
10. Other Institutions Promoted.

The State Finance Corporations (SFCs)



- The State Finance Corporations (SFCs) are an integral part of institutional finance structure of a country. Where SEC promotes small and medium industries of the states.
- A Board of ten directors manages the State Finance Corporations. The State Government appoints the managing director generally in consultation with the RBI and nominates the name of three other directors.
- All insurance companies, scheduled banks, investment trusts, co-operative banks, and other financial institutions elect three directors.



- **Functions of State Finance Corporations**

- The various important functions of State Finance Corporations are:
 - (i) The SFCs provides loans mainly for the acquisition of fixed assets like land, building, plant, and machinery.
 - (ii) The SFCs help financial assistance to industrial units whose paid-up capital and reserves do not exceed Rs. 3 crore (or such higher limit up to Rs. 30 crores as may be notified by the central government).



- **Problems of State Financial Corporations**
- **No Independent Organization**
- All SFCs are dependent upon the rules and regulations made by the state government.
- SFCs' problem is that all decision of these institutions is dependent on the political environment of the state.
- Due to this, the loan is not available at the right time for the right person.

The National Small Industries Corporation Ltd. (NSIC)



- The National Small Industries Corporation Ltd. (NSIC), an ISO9000 certified company, since its establishment in 1955, has been working to fulfill its mission of promoting, aiding and fostering the growth of small-scale industries and industry related small-scale services/businesses in the country.
- □
- Over a period of six decades of transition, growth and development, the NSIC has proved its strength within the country and abroad by promoting modernization, up gradation of technology, quality consciousness, strengthening linkages with large and medium enterprises and enhancing export projects and products from small-scale enterprises.
- □
- At present, the NSIC operates through 6 Zonal Offices, 26 Branch Offices, 15 Sub-offices, 5 Technical Services Centres, 3 Extension Centres and 2 Software Technology Parks supported by a team of over 5000 professionals spread across the country

OBJECTIVES



- To enhance reach of the Corporation resulting in growth in its business.
- To achieve operational efficiency and self-sustenance by attaining better productivity and profitability.
- To upgrade the professional skills of all employees keeping in pace with business needs.
- To provide safe, clean, hygienic & congenial work environment for effective contribution by every employee.



- **FUNCTIONS**
- **Its main functions are to:**
- Provide machinery on hire-purchase scheme to small-scale industries.
- Help in export marketing of the products of small-scale industries.
- Participate in bulk purchase programme of the Government.
- Develop prototype of machines and equipments to pass on to small-scale industries for commercial production.
- Set up small-scale industries in other developing countries on turn-key basis.
- Undertake the construction of industrial estates.

Insurance



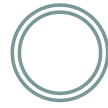
Defining Insurance

- Insurance in broad terms may be described as a method of sharing financial losses of few from a common fund who are equally exposed to the same loss.
- Insurance is defined as the equitable transfer of the risk of a loss, from one entity to another, in exchange for a premium, and can be thought of a guaranteed small loss to prevent a large, possibly devastating loss.
- An **insurer** is a company selling the insurance. The insurance rate is a factor used to determine the amount, called the **premium**, to be charged for a certain amount of insurance coverage.

LIC



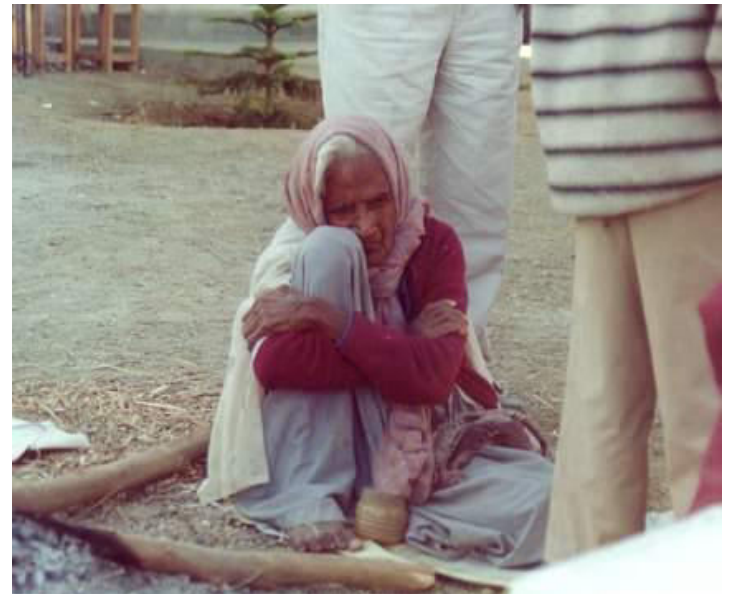
- LIC is one of the financial institutions to be established in India after independence. The full form of LIC is life insurance corporation and it was established in 1956. The main aim behind the establishment was to spread the message of life insurance in the country.



Concept of risk



Massive risk with high magnitude



Day to day risk of lesser magnitude

Defining Risk

- A variation in the possible outcome
- The degree of uncertainty associated with a particular loss
- Greater the accuracy with which the outcome can be predicted the lower is the risk.
- Risk is the possibility of an unfortunate occurrence
- Risk is the possibility of loss
- The combination of hazards
- Uncertainty of loss
- The tendency that actual results may differ from predicted results

Basic Terminology

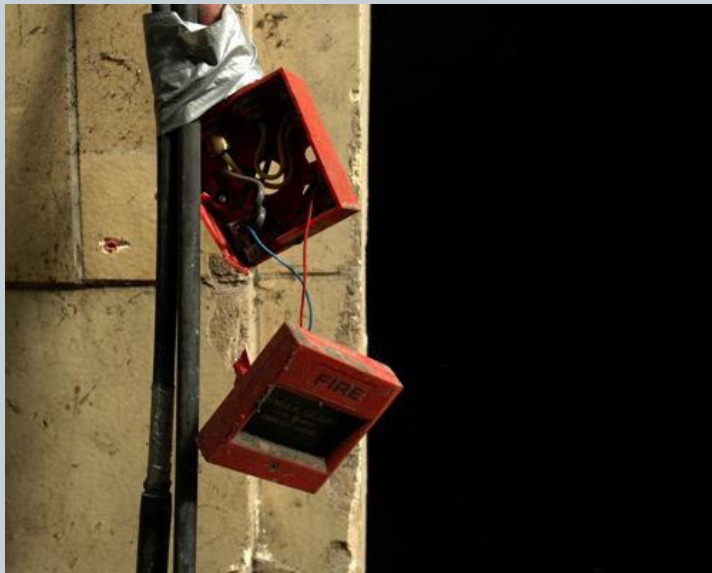
- **Peril** : Cause of a risk and losses. E.g. Earthquake, flood , fire, criminal activities etc.



The bane of Bangladesh. Government attempts to deal with disease-carrying mosquitoes have been criticized as ill-conceived and inappropriate.

Basic Terminology

- **Hazard** : Condition that increases the frequency or severity of loss. E.g. absence of proper security or fencing , poorly maintained fire alarm system etc.



Requirements of Insurable Risk

- Should be a Pure risk
 - Involves a chance of loss or no loss
- Large number of exposure units
 - to predict average loss
- Determinable and measurable loss
 - to facilitate loss adjustment

Basic Characteristics of Insurance

- Pooling of losses
 - Spreading losses incurred by the few over the entire group
 - Risk reduction based on the Law of Large Numbers
- Payment of fortuitous losses
 - Insurance pays for losses that are unforeseen, unexpected, and occur as a result of chance
- Risk transfer
 - A pure risk is transferred from the insured to the insurer, who typically is in a stronger financial position
- Indemnification
 - The insured is restored to his or her approximate financial position prior to the occurrence of the loss

Basic terms

- **Insurer** : The party to an insurance arrangement who undertakes to indemnify for losses.
- **Insured**: A person whose interests are protected by an insurance policy.
- **Premium**: Financial cost of obtaining an insurance cover, paid as a lump sum or in installments during the duration of the policy.
- **Policy**: Written contract or certificate of insurance
- **Exposure to Loss**: In insurance, areas in which the risk of loss exists. Four loss risk areas are: (1) property; (2) income; (3) legal vulnerability; and (4) key personnel in an organization

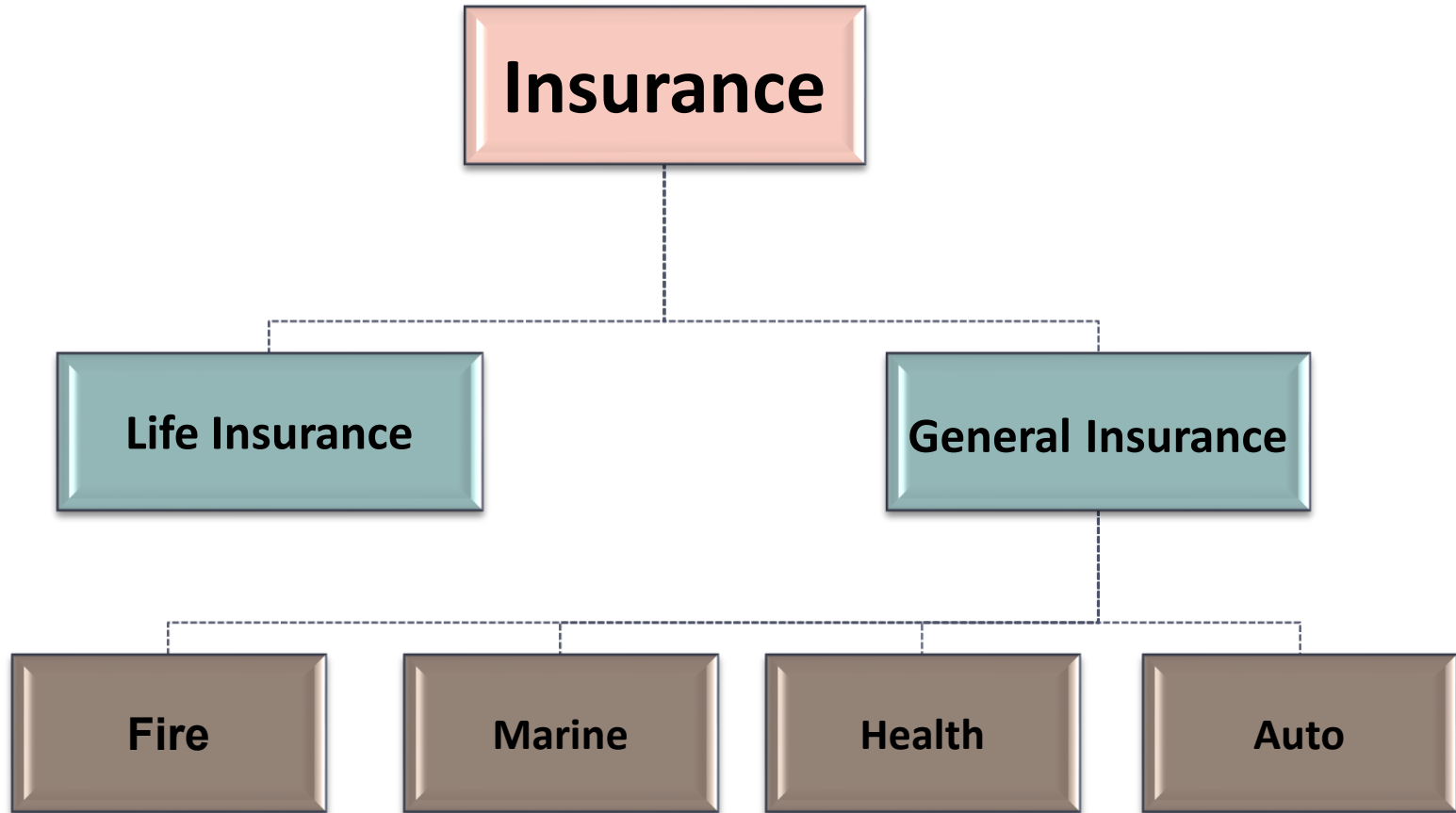


The Insurance Regulatory and Development Authority (IRDA) is a national agency of the Government of India, based in Hyderabad. It was formed by an act of Indian Parliament known as IRDA Act 1999, which was amended in 2002 to incorporate some emerging requirements.

Mission

"to protect the interests of the policyholders, to regulate, promote and ensure orderly growth of the insurance industry and for matters connected therewith or incidental thereto."

Insurance Classification



Players in the Industry

Life Insurance	General Insurance
Life Insurance Corporation of India.	General Insurance Corporation of India. 1. Oriental Insurance Company Ltd. 2. New India Assurance Company Ltd. 3. National Insurance Company Ltd. 4. United India Insurance Company Ltd.
New Entrants	
ICICI Prudential Life Insurance Ltd.	Bajaj Allianz General Insurance Company Ltd.
Tata AIG Life Insurance Corporation Ltd.	Reliance General Insurance Company Ltd.
ING Vysya Life Insurance Corporation Ltd.	Tata AIG General Insurance Company Ltd.
Kotak Mahindra Life Insurance Corporation Ltd.	Royal Sundaram Alliance Insurance Company Ltd.

Defining General Insurance

- General insurance or non-life insurance policies, including automobile and homeowners policies, provide payments depending on the loss from a particular financial event.
- General insurance typically comprises any insurance that is not determined to be life insurance.

Types of General Insurance

Main types of general insurance are:

- Fire
- Health
- Marine
- Motor Vehicle

Fire Insurance

Fire insurance is a form of property insurance which protects people from the costs incurred by fires. When a structure is covered by fire insurance, the insurance policy will pay out in the event that the structure is damaged or destroyed by fire.



What is Health Insurance?

Health insurance, like other forms of insurance, is a form of collectivism by means of which people collectively pool their risk, in this case the risk of incurring medical expenses.



Unit-linked health plan (ULHP)

- All ULHPs offer one or more combination of the other benefits (for which risk premium is deducted from fund value). Also, charges such as premium allocation charge and policy administration charge are deducted from the fund value.
- LIC has launched Health Plus plan, a unique long term health insurance plan that combines health insurance covers for the entire family (husband, wife and the children) – Hospital Cash Benefit (HCB) and Major Surgical Benefit (MSB) along with a ULIP component (investment in the form of Units) that is specifically designed to meet special treatment related expenses for the insured members.

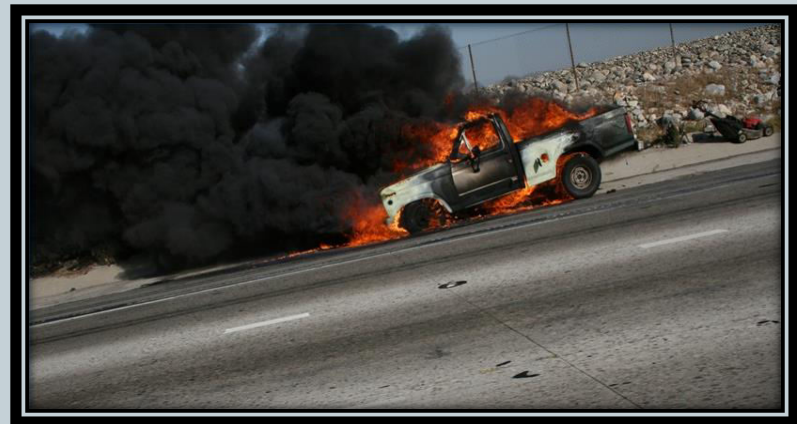
Defining Marine Insurance

Marine Insurance covers the loss or damage of ships, cargo, terminals, and any transport or cargo by which property is transferred, acquired, or held between the points of origin and final destination.



Defining Auto Insurance

Auto insurance (also known as vehicle insurance, car insurance, or motor insurance) is insurance purchased for cars, trucks, and other vehicles. Its primary use is to provide protection against losses incurred as a result of traffic accidents and against liability that could be incurred in an accident.



Unit Trust of India



- **Unit Trust of India** was first Set up in 1st February 1964 under the Unit Trust of [India](#) Act, 1963. It is a statutory public sector investment institution having the main objective to encourage and mobilize the savings of the community and canalize them into productive [corporate](#) investment.

Primary Objectives of UTI



- to promote and pool the small savings from the lower and middle-income persons who cannot have direct access to the [stock](#) exchange, and
- to provide them with an opportunity to share the benefits of prosperity resulting from rapid industrialization in India.

Functions of UTI



- Mobilize the saving of the relatively small investors.
- Channelize these small savings into productive investments.
- Distribute the large scale economies among small income groups.
- Encourage savings of lower and middle-class people.
- Sell nits to investors in different parts of the country.
- Convert the small savings into industrial finance.

Credit Rating

- The process of assigning a symbol with specific reference to the instrument being rated.
-

Credit Rating Process

- Contract Between Rater and Client
- Sending Expert Team to Client's Place
- Data Collection
- Data Analysis
- Discussion
- Credit Report Preparation
- Submission to 'Grading Committee'
- Grade Communication to client

International Rating agencies

- Moody's Investors Service (Moody's)
- Standard & Poor's corporation (S&P)
- Duff and Phelps Credit Rating Co. (DCR)
- Japan Credit Rating Agency (JCR)

CRISIL

- Credit Rating and Information Services of India Ltd.
- Jointly promoted by ICICI, Nationalized and foreign banks, and Insurance Companies in 1987.
- Services Offered are : Rating, Information Services and consultancy.

ICRA

- Investment Information and Credit Rating Agency of India Ltd.
- Promoted in 1991 by IFCI & 21 other shareholders comprising nationalized banks.
- Services offered are: Rating Services, Advisory services and investment information services.

CARE

- Credit Analysis & Research
- Incorporated in 1992 with the combined efforts of IDBI, and several other banks & insurance companies.

Ratings

- ICRA: (Debentures, Bonds & Preference Shares)
- LAAA (highest safety), LAA+, LAA, LAA- (High safety), LA+, LA, LA- (Adequate safety), LBBB+, LBBB, LBBB- (Moderate Safety), LBB+, LBB, LBB- (Inadequate safety), LB+, LB, LB- (Risk Prone), LC+, LC, LC- (Substantial Risk), LD (Default extremely speculative)

Ratings by CRISIL

- AAA (Highest Safety)
- AA (High Safety)
- A (Adequate Safety)
- BBB (Moderate Safety)
- BB (Inadequate Safety)
- B (High Risk)
- C (Substantial Risk)
- D (Default)

Benefits of Ratings

➤ **Regulatory Authorities**

- Investor protection
- Market discipline

Benefits of Ratings (contd.)

➤ Intermediaries

- Fixing coupon rates
- Second opinion to supplement own assessment

➤ Investors

- Eases risk identification and diversification
- Improves liquidity of security

MERGERS



What Is Merger

- Arrangement where by two or more existing companies combine in to one company.

Advantages of Merger

- Does not require cash.
- Accomplished tax-free for both parties.
- Allows shareholders of smaller entities to own a smaller piece of a larger pie, increasing their overall net worth.

Disadvantages of Merger

- Diseconomies of scale if business become too large, which leads to higher unit costs.
- Clashes of culture between different types of businesses can occur, reducing the effectiveness of the integration.
- May be a conflict of objectives between different businesses, meaning decisions are more difficult to make and causing disruption in the running of the business.

Procedure for Merger

Stage I – Application to the court

- Parties
- A Company and its creditors
- A Company and its members
- Application to the court can be made by the Company/creditor/member
- The Application must be accompanied by a scheme of compromise/arrangement.

Procedure for Merger contd.

Stage II - Direction by the court

- The court shall give direction for holding the meeting only if it is satisfied that the scheme of arrangement is workable and reasonable. Meeting shall be conducted in manner as directed by court..

Procedure for Merger contd.

Stage III - Notice of compromise and arrangement

- The notice shall be given by the court.
- Notice calling the meeting shall be sent to the members or creditors

Procedure for Merger contd.

Stage IV – Approval of the scheme by creditors/members- conditions

- The scheme must be approved by a *majority in number* of creditors or members (any class of them) who are present and voting.
- The creditors or members (or any class of them) approving the scheme must represent $\frac{3}{4}$ *in value* of creditors/members who are present and voting.
- The Scheme must be approved by equity shareholder as well as preference shareholders. Such approval may be received in a meeting of Equity and preference shareholders or in a separate meeting as per order of the court.

Procedure for Merger contd.

Stage V – Court to be satisfied that scheme is bonafide

- Scheme is based on commercial consideration, workable, feasible, financially viable and in public interest
- Scheme is in interest of company, members or creditors.

Procedure for Merger contd.

Stage VI – Sanction of the Scheme

- It is discretion of the court to sanction or reject the scheme.

Stage VII – Filing of the order of the court with the Registrar

- The Scheme becomes binding only on the filing of the court's order with the Registrar.

Types Of Mergers

Horizontal Mergers

- Occurs when two companies sell similar products to the same markets.

Vertical Mergers

- It joins two companies that may not compete with each other, but exist in the same supply chain.

Market Extension Mergers

- To help two organizations that may provide similar products and services grow into markets where they are currently weak.

Product Extension Mergers

- May merge when they sell products into different niches of the same markets. (diversify)

Types Of Mergers

contd.

Conglomerate Mergers

- Occur when two organizations sell products in completely different markets.
- Diversity in business portfolio is one of the key benefits.

Case Study of HDFC Bank and Centurion Bank of Punjab 2009



- The largest merger and perhaps the beginning of the consolidation wave in the BFSI sector.
- Bank's main task was to harmonize the accounting policies and, as a result, HDFC Bank took a hit of Rs. 70 Crs to streamline the policies of erstwhile CBOP itself.
- Of this 70% went toward the harmonization of accounting policies relating to loan- loss provisioning and depreciation of assets,
- And the balance 30% reserves write-offs were toward the merger- related restructuring costs like stamp duty, HR and IT integration expenses.

Case Study of HDFC Bank and Centurion Bank of Punjab Contd.....

- The cost/income ratio of the merged entity has increased to around 56% from 50% levels for standalone HDFC Bank
- HDFC Bank has retained almost all the employees of CBOP and expects to achieve full synergies and efficiencies, in terms of the restructured HR and IT processes, in the next 2-3 quarters
- This merger with CBOP would result in the combined entity having 1148 branches at present, which is the largest branch distribution network for a private bank in India This apart, HDFC Bank would gain dominance in states like Punjab, Haryana, Delhi, Maharashtra and Kerala.

Case Study of HDFC Bank and Centurion Bank of Punjab Contd.....

- The merger will add close to 394 branches to HDFC Bank's network of 750 branches, almost 50% increase in the existing network, while adding close to 19% to its asset base
- On the product portfolio side, both the banks have a strong foothold in vehicle financing, which is a natural synergy
- CBOP has a strong and experienced management team. The management has demonstrated its capability to integrate diverse organizations by successfully reaping synergies of the merger with Bank of Punjab. CBOP team has strengthen HDFC Bank's management bandwidth and consequently the latter added international banking to its services kitty.

CHAPTER 7

THE FOREIGN EXCHANGE MARKET

PART I. INTRODUCTION

I. Foreign exchange market

It is a market in which currencies are brought and sold against each other. it is the largest market

It is a market where currencies of different countries are traded.

INTRODUCTION



Foreign currency market is OTC market. this means there is no physical or electronic market or organized market where trader meet and exchange currencies.

it is a world wide network of inter bank trades consisting of banks connected by telephone lines and computers

INTRODUCTION



Five major centers

London

Newyork

Tokyo

Zurich

Frankfurt

Purchase and sale

- Two fee transaction
- Conversion of rupee into foreign currency-purchase of foreign currency and sale of rupee.
- **Vise versa**

PART II. ORGANIZATION OF THE FOREIGN EXCHANGE MARKET

I . PARTICIPANTS IN THE FOREIGN EXCHANGE MARKET

A. Participants at 2 Levels

1. Wholesale Level (95%)

- major banks**

2. Retail Level/tourist

- business
customers.**

ORGANIZATION OF THE FOREIGN EXCHANGE MARKET

Five financial instruments

1. Spot Market:

- A spot transaction is a two-day delivery transaction (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.


ORGANIZATION OF THE FOREIGN EXCHANGE MARKET

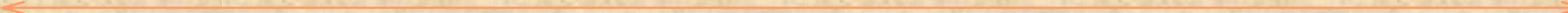
2. Forward Market:

- 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.

Other financial transaction

- **3.Swap** -The most common type of forward transaction is the 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.Future** [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.]

-
- 
- **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.

ORGANIZATION OF THE FOREIGN EXCHANGE MARKET

II. CLEARING SYSTEMS

A. Clearing House Interbank Payments System (CHIPS)

- used in U.S. for electronic
fund transfers.**

ORGANIZATION OF THE FOREIGN EXCHANGE MARKET

III. ELECTRONIC TRADING

Automated Trading

- genuine screen-based market**

Exchange rate quotation

- **USD-US Dollar**
- **GBP-British Pound**
- **JPY-Japanese Yen**
- **CAD-Canadian Dollar**
- **DEM-Deutsche Mark**
- **FFR- French Franc**
- **INR-Indian Rupee**
- **AUD-Australian Dollar**

Instrument of advance and credit trade

- **TT-Telegraphic Transfer**
- **A TT transfer of money by telegram or cable or fax from one centre to another in foreign currency. buyer (importer) pays the seller in advance. it is very high risk method for importer.**



Open account

This is least secure method but most attractive to the buyer. the buyer has to make the payment in future date. hence it should be done only if you have faith in importer

Advance payment

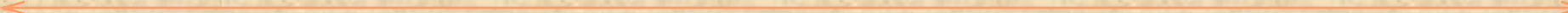
- A most secure method of trading for exporter is advance payment.

Leter of credit

- It is a bank to bank commitment of payment in favour of exporter, guaranteeing that payment will be made against certain documents that on presentation are found to be in compliance with the terms set by the buyer.

exchange rate

- an **exchange rate** between two currencies is the rate at which one currency will be exchanged for another. It is also regarded as the value of one country's currency in terms of another currency.

-
- 
- **Direct method**
 - **The price of one foreign currency in terms of domestic currency would be direct quote. eg in india following is quoted for USD**
 - **US-1\$=Rs 65**

Indirect method

- The price of one domestic currency in terms of foreign currency would be an indirect quote.
- $\text{Rs } 100 = 1.5 \$$

Cross rate



- **The price of one foreign currency could also be expressed in terms of another foreign currency and referred to as cross rate.**
- **GAB2=US \$1**

Determinants of Foreign Exchange Market

```
graph TD; A[ ] --> B[Long – term Factors]; A --> C[Short-term Factors];
```

Long – term
Factors

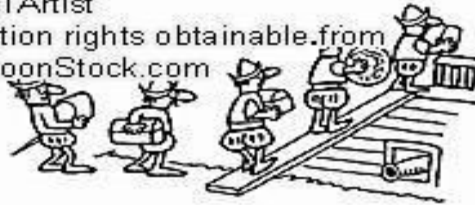
Short-term
Factors

Long-term Factors

■ Balance of Payments

© Original Artist

Reproduction rights obtainable from
www.CartoonStock.com



"We've got a balance of payments deficit."

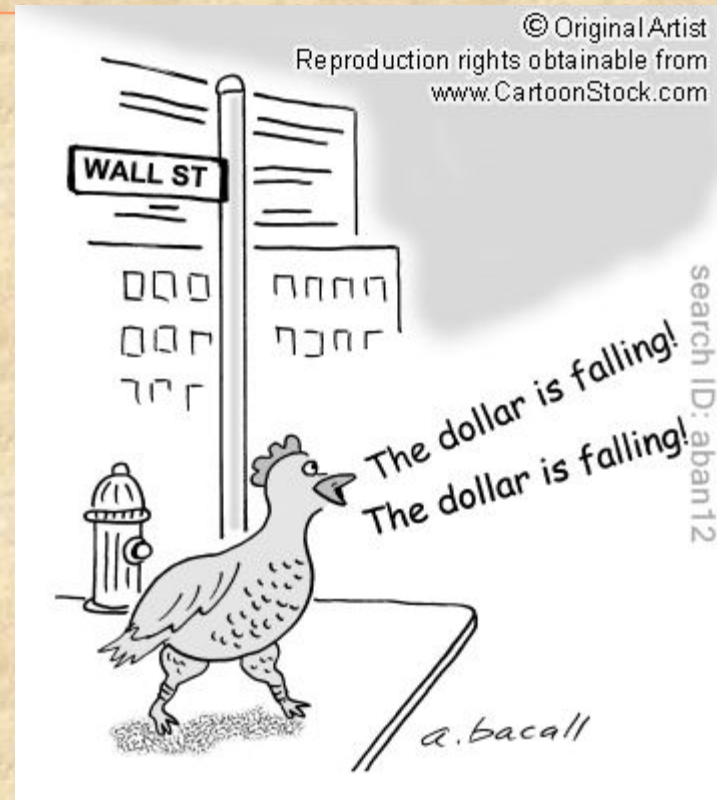
search ID: nb0269



■ Strength of economy

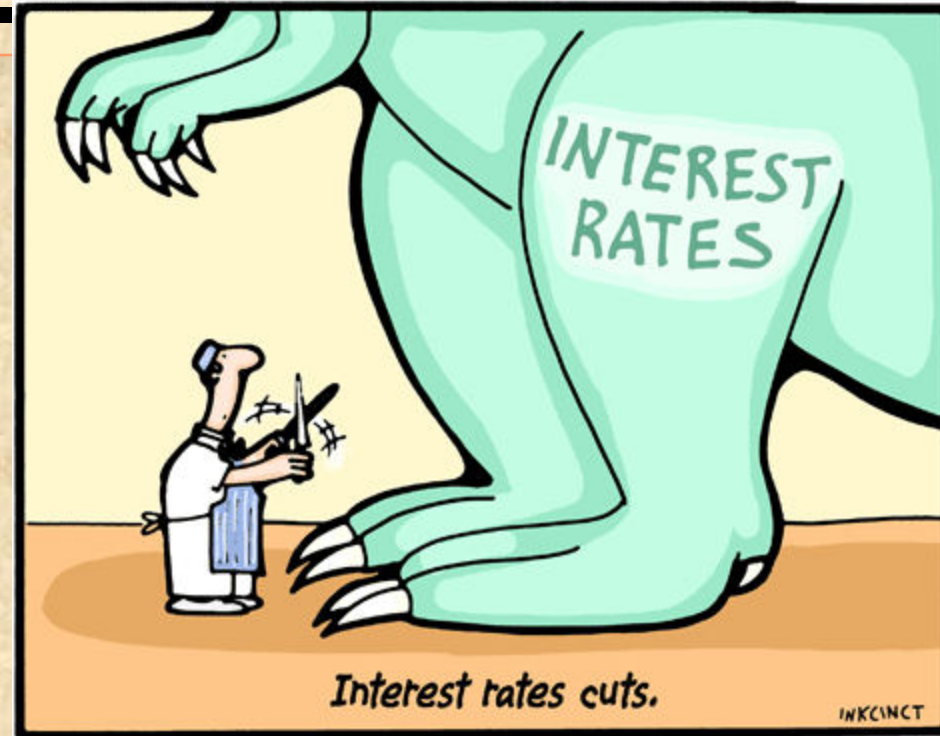
The relative strength of an economy has effect on demand and supply of foreign currencies.

If an economy is growing at a faster rate, in the long-run, it is generally expected to have a better performance on Balance of Trade .



■ Interest rate

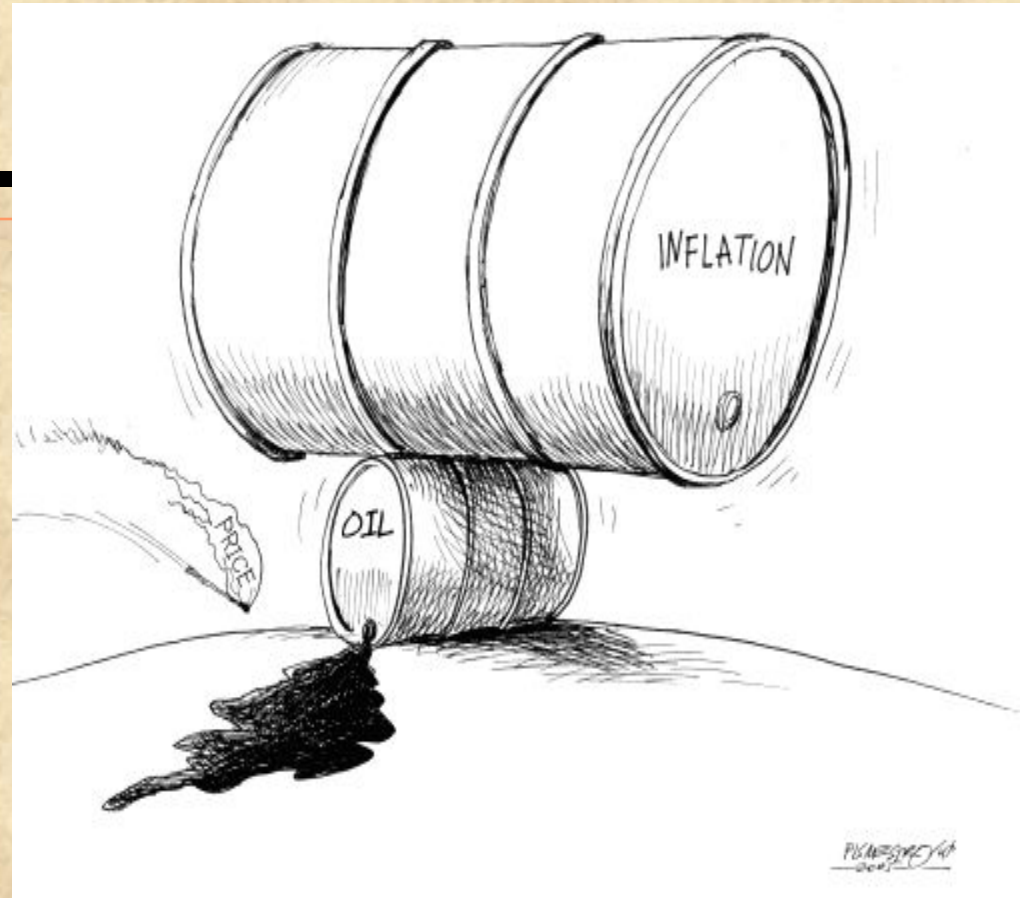
The capital is attracted towards currencies yielding higher interest rates, provided there is full currency convertibility in capital account.



■ Inflation

A higher rate of inflation will make a country's currency less attractive because of the loss of real value with inflation.

- Hence, that currency would depreciate against major currencies.



■ Money Supply

An increase in money supply will affect the exchange rate through causing inflation in the country. It can also affect the exchange rate directly in the short run.



■ National Income

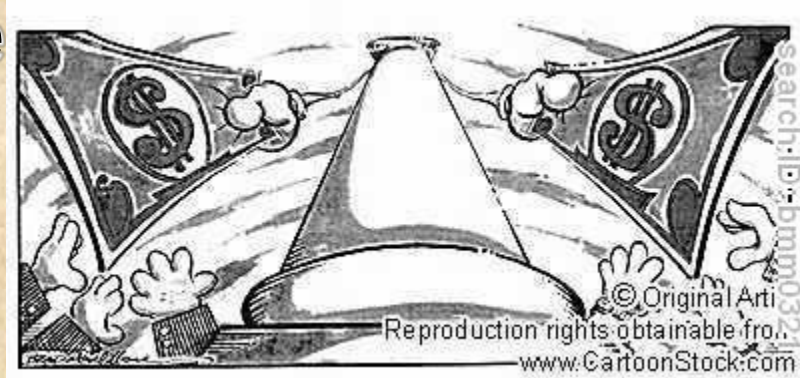
An increase in the national income will lead to an increase in investment or in consumption and accordingly, its effect on the exchange rate will change.



Short term factors

■ Central bank interve

Buying and selling of foreign currency in the market by the Central Bank with a view to increasing the supply or demand, there by affecting the exchange rate, is known as intervention.



■ Export receipts and import payments

The difference between the total receipts from export bill realizations and import payments on a given day in a country determines the exchange rate to some extent.



■ Foreign investment flows

Both foreign direct and portfolio investment inflows and outflows affect the exchange rates.



■ Political factors

Factors like war.
Announcement of
election results, oil
price increase etc
will cause
exchange rate
fluctuations.



■ Speculation

If a few big speculators start buying a currency in an aggressive manner, others may follow suit. Thus, the demand of the currency may increase.



FEMA

- **The Foreign Exchange Management Act or in short FEMA has been introduced as a replacement for earlier Foreign Exchange Regulation Act (FERA). FEMA came into act on the 1st day of June, 2000.**

The main objective behind the Foreign Exchange Management Act (1999) is to consolidate and amend the law relating to foreign exchange with objective of facilitating external trade and payments and for promoting the orderly development and maintenance of foreign exchange market in India.

FEMA is applicable to the all parts of India. The act is also applicable to all branches, offices and agencies outside India owned or controlled by a person who is resident of India.

FEMA head-office also known as Enforcement Directorate is situated in New Delhi and is headed by a Director. The Directorate is further divided into 5 zonal offices at Delhi, Bombay, Calcutta, Madras and Jalandhar and each office is headed by a Deputy Directors. Each zone is further divided into 7 sub-zonal offices headed by the Assistant Directors and 5 field units headed by the Chief Enforcement Officers

MODULE 5

PRIMARY MARKET

Primary market is concerned with issue of new shares. Primary market provides opportunity to issuers of securities; Government as well as corporate, to **Raise Capital** to meet their requirements.

LIC

- ✘ Life Insurance Corporation of India (LIC) has filed its draft share sale prospectus with the capital markets regulator SEBI, paving the way for India's largest initial public offering (IPO). There is also a possibility that LIC will become India's most valuable listed company, toppling Reliance Industries Ltd, after listing on the stock exchanges.
- ✘ Currently, the most valuable firm in India is Reliance Industries Ltd with a market capitalisation of Rs 16.1 lakh crore.
- ✘ LIC plans to sell 316.25 million shares, which is about 5 per cent of its total equity base,

-
- ✘ LIC plans to sell 316.25 million shares, which is about 5 per cent of its total equity base.
 - ✘ The 65-year-old LIC has a total equity base of 6.32 billion shares.
 - ✘ It also added that policyholders and employees may get a discount compared to the price offered to the public at large. A minimum 35 per cent of issue will be reserved for retail investors.

-
- ✘ One-third of the anchor investor portion will be reserved for domestic mutual funds. Kotak, Goldman Sachs, Axis Capital, ICICI Securities, BofA Securities, JM Financial, Citigroup, JP Morgan, Nomura and SBI Capital Markets are the merchant bankers to the issue. The IPO is expected to be concluded before the end of the fiscal year ending March 2022.

SHARES

The capital (long term) that is required by the company is divided into small units of fixed equal amount. These units are called 'Shares'.

Company required Capital

No of Shares

Face value

=

+



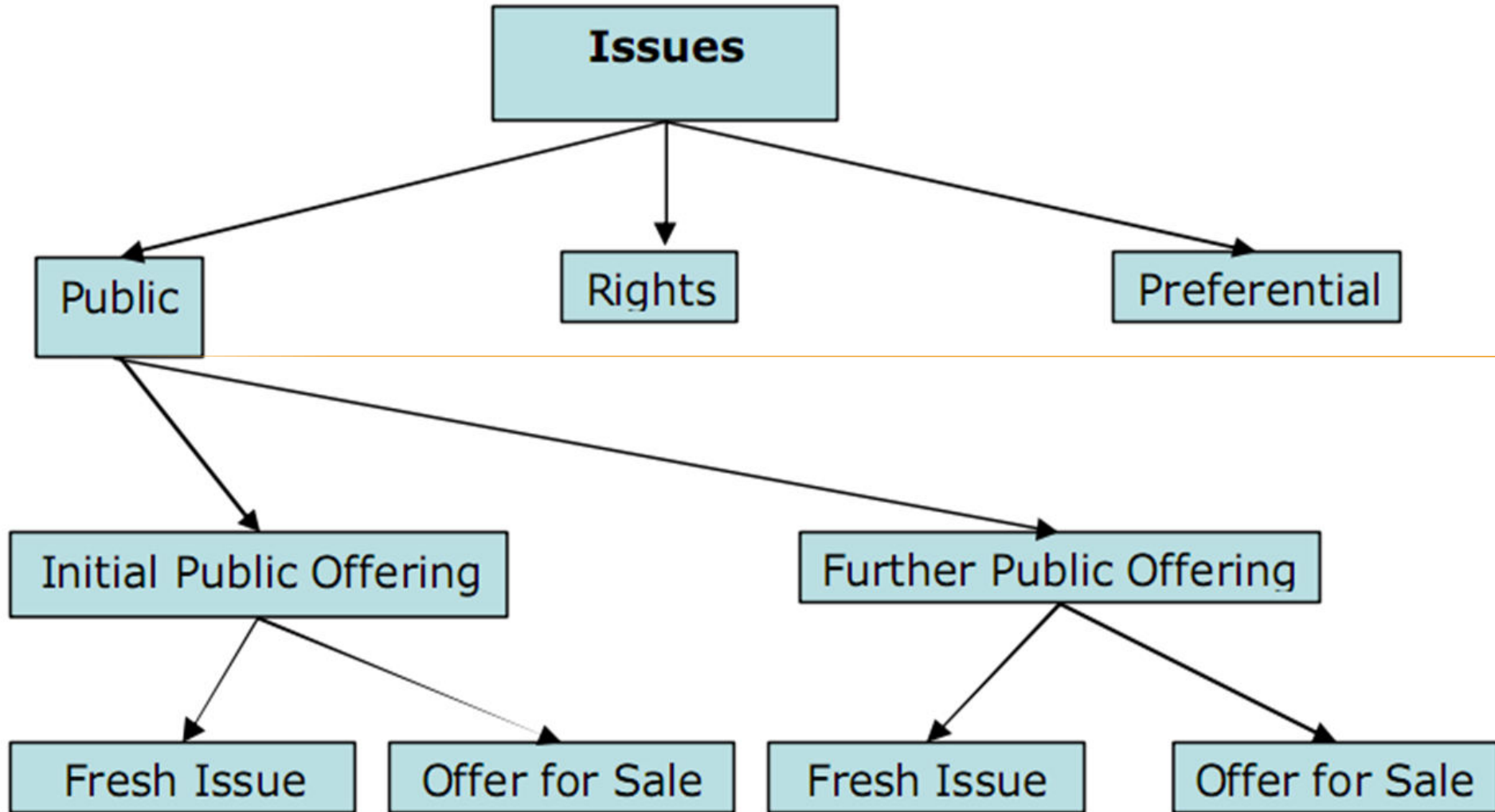
PREMIUM

-



DISCOUNT

CLASSIFICATION OF ISSUE OF SHARES



PUBLIC OFFERING OF SHARES

a) INITIAL PUBLIC OFFERING

- It involves direct sale of securities from an **Unlisted Company** to the **public** for fixed price.
- The company gives a notice or advertisement inviting the public to subscribe for the shares.
- The circular or **Notice or Advertisement** is a legal document called '**prospectus**'.
- No intermediaries are involved. This method is expensive.

b) FUTURE ISSUE

It is when an already **listed company** makes either a fresh issue of securities to the **public** or an offer for sale to the public, through an offer document.

OFFER FOR SALE

Under this method, shares are allocated to an **intermediary** such as '**Issue house**'. This 'Issue house', in turn, sells the shares to the public at a higher price.

c) RIGHT ISSUE

It is when a listed company which proposes to issue fresh securities to its **existing shareholders** as on a record date. The rights are normally offered in a particular ratio to the number of securities held prior to the issue. This route is best suited for companies who would like to raise capital without diluting stake of its existing shareholders.

a) PREFERENTIAL ISSUE

It is an issue of shares or of convertible securities by listed companies to a select group of persons under Section 81 of the Companies Act, 1956 which is neither a rights issue nor a public issue. This is a faster way for a company to raise equity capital. The issuer company has to comply with the Companies Act and the requirements contained in the Chapter pertaining to preferential allotment in SEBI guidelines which inter-alia include pricing, disclosures in notice etc.

ISSUE PRICE DISCOVERY



BOOK BUILDING

- Book Building is basically a process used in IPOs for **efficient price discovery**.
- During the process the IPO is open, **bids are collected from investors** at various prices, which are above or equal to the **Floor price**.
- **Floor price** is the minimum price at which bids can be made.
- The spread between the **floor price** and the **cap** of the **price band** shall not be more than 20%.
- The actual discovered issue price can be any price in the **price band** or any price **above the floor price**. This issue price is called "**Cut-Off Price**".

PROSPECTUS

This disclosure includes information like the reason for raising the money, the way money is proposed to be spent, the return expected on the money etc. This information is in the form of 'Prospectus'. 'Prospectus' is submitted to SEBI for its approval.

Content of Prospectus

- The size of the issue
- The current status of the company, its equity capital
- Its current and past performance
- The promoters, the project, cost of the project, means of financing, product and capacity etc.

Contd...

Abridged Prospectus

‘Abridged Prospectus’ is a shorter version of the Prospectus and contains all the salient features of a Prospectus. It accompanies the application form of public issues.

Draft Offer Document

‘Offer document’ means Prospectus in case of a public issue or offer for sale ‘Draft Offer document’ means the offer document in draft stage.

Functions of Securities and Exchange Board of India (SEBI)

- Regulates Capital Market.
- Checks Trading of securities.
- Checks the malpractices in securities market. In Mumbai
- It enhances investor's knowledge on market by providing education.
- It regulates the stockbrokers and sub-brokers.

PROCEDURE REGARDING NEW ISSUES

The background of the slide features several stacks of silver coins, likely Indian Rupees, arranged in a scattered pattern. The coins are stacked in various heights, with some stacks being taller than others. The lighting is soft, creating a warm, golden-brown glow over the scene, which makes the silver coins appear slightly more yellowish. The overall composition is centered and balanced, with the text overlaid on the upper portion of the image.

- Issue of Prospectus
- Application
- Application for listing of securities
- Allotment of shares
- Allotment / Regret letter

BASIC ARCHITECTURE OF CAPITAL MARKET



Individuals want to invest in business



PRIMARY MARKET



Company



IPO



Individuals apply to get shares of the company

Companies share ownership by issuing shares



Company



Owners

Companies allocate shares to individuals and those who get the shares become part owners of the company

SECONDARY MARKET



Company



Sharekhan

Broker

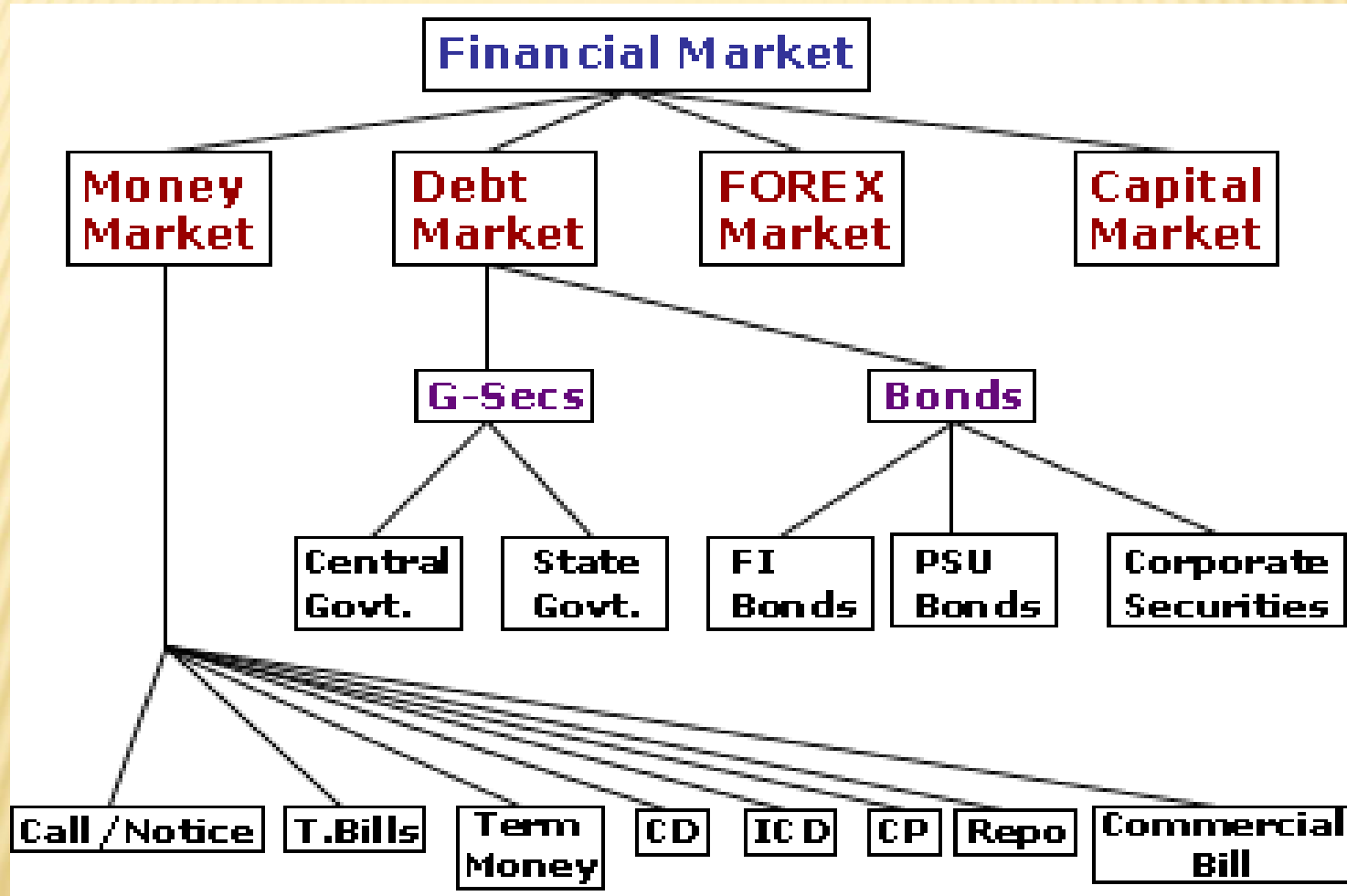


Individual Investors

Companies get themselves listed on popular stock exchanges like BSE and NSE

THE FUNDAMENTALS OF MONEY MARKET IN INDIA

OVERVIEW OF FINANCIAL MARKETS



THE DEFINITION (CONT'D)

- ✘ Money market refers to the market for short term assets that are close substitutes of money, usually with maturities of less than a year.
- ✘ A well functioning money market provides a relatively safe and steady income-yielding avenue.

THE PLAYERS

- ✘ Reserve Bank of India
- ✘ SBI DFHI Ltd (Amalgamation of Discount & Finance House in India and SBI Gilts in 2004)
- ✘ Commercial Banks, Co-operative Banks and Primary Dealers are allowed to borrow and lend.
- ✘ Specified All-India Financial Institutions, Mutual Funds, and certain specified entities are allowed to access to Call/Notice money market only as lenders
- ✘ Individuals, firms, companies, corporate bodies, trusts and institutions can purchase the treasury bills, CPs and CDs.

THE PRODUCTS & PROCESS

- ✘ Certificate of Deposit (CD)
- ✘ Commercial Paper (C.P)
- ✘ Inter Bank Participation Certificates
- ✘ Inter Bank term Money
- ✘ Treasury Bills
- ✘ Call Money

CERTIFICATE OF DEPOSIT

- ✘ CDs are short-term borrowings in the form of Usance Promissory Notes having a maturity of not less than 15 days up to a maximum of one year.
- ✘ CD is subject to payment of Stamp Duty under Indian Stamp Act, 1899 (Central Act)
- ✘ They are like bank term deposits accounts. Unlike traditional time deposits these are freely negotiable instruments and are often referred to as Negotiable Certificate of Deposits

FEATURES OF CD

- ✘ CDs can be issued by all scheduled commercial banks except RRBs
- ✘ Minimum period 15 days
- ✘ Maximum period 1 year
- ✘ Minimum Amount Rs 1 lac and in multiples of Rs. 1 lac
- ✘ CDs are transferable by endorsement

COMMERCIAL PAPER

- ✘ Commercial Paper (CP) is an unsecured money market instrument issued in the form of a promissory note.
- ✘ **Who can issue Commercial Paper (CP)**
Highly rated corporate borrowers, primary dealers (PDs) and satellite dealers (SDs) and all-India financial institutions (FIs)

ELIGIBILITY FOR ISSUE OF CP

- a) the tangible net worth of the company, as per the latest audited balance sheet, is not less than Rs. 4 crore;

RATING REQUIREMENT

- ✘ All eligible participants should obtain the credit rating for issuance of Commercial Paper
- ✘ Credit Rating Information Services of India Ltd. (CRISIL)
- ✘ Investment Information and Credit Rating Agency of India Ltd. (ICRA)
- ✘ Credit Analysis and Research Ltd. (CARE)
- ✘ Duff & Phelps Credit Rating India Pvt. Ltd. (DCR India)
- ✘ The minimum credit rating shall be P-2 of CRISIL or such equivalent rating by other agencies

MATURITY

- ✘ CP can be issued for maturities between a minimum of 15 days and a maximum upto one year from the date of issue.
- ✘ If the maturity date is a holiday, the company would be liable to make payment on the immediate preceding working day.

TO WHOM ISSUED

CP is issued to and held by individuals, banking companies, other corporate bodies registered or incorporated in India and unincorporated bodies, Non-Resident Indians (NRIs) and Foreign Institutional Investors (FIIs).

CALL MONEY MARKET

The call money market is an integral part of the Indian Money Market, where the day-to-day surplus funds (mostly of banks) are traded. The loans are of short-term duration varying from 1 to 14 days.

The money that is lent for one day in this market is known as "Call Money", and if it exceeds one day (but less than 15 days) it is referred to as "Notice Money".

CALL MONEY MARKET

Banks borrow in this market for the following purpose

- ✘ To fill the gaps or temporary mismatches in funds
- ✘ To meet the CRR & SLR mandatory requirements as stipulated by the Central bank
- ✘ To meet sudden demand for funds arising out of large outflows.

GILT EDGED SECURITIES

The term government securities encompass all Bonds & T-bills issued by the Central Government, and state governments. These securities are normally referred to, as "gilt-edged" as repayments of principal as well as interest are totally secured .

TREASURY BILLS

Treasury bills, commonly referred to as T-Bills are issued by Government of India against their short term borrowing requirements with maturities ranging between 14 to 364 days.

WHO CAN INVEST IN T-BILL

Banks, Primary Dealers, State Governments, Provident Funds, Financial Institutions, Insurance Companies, NBFCs, FIIs (as per prescribed norms)

PART I. INTRODUCTION

I. Foreign exchange market

It is a market in which currencies are brought and sold against each other. it is the largest market

It is a market where currencies of different countries are traded.

INTRODUCTION

Foreign currency market is OTC market. this means there is no physical or electronic market or organized market where trader meet and exchange currencies. it is a world wide network of inter bank trades consisting of banks connected by telephone lines and computers

INTRODUCTION

Five major centers

London

Newyork

Tokyo

Zurich

Frankfurt

PURCHASE AND SALE

- ✘ Conversion of rupee into foreign currency-
purchase of foreign currency and sale of rupee.

PART II. ORGANIZATION OF THE FOREIGN EXCHANGE MARKET

I . PARTICIPANTS IN THE FOREIGN EXCHANGE MARKET

A. Participants at 2 Levels

1. Wholesale Level (95%)
 - major banks
2. Retail Level/tourist
 - business customers.

ORGANIZATION OF THE FOREIGN EXCHANGE MARKET

II. CLEARING SYSTEMS

A. Clearing House Interbank Payments System (CHIPS)

- used in U.S. for electronic fund transfers.

ORGANIZATION OF THE FOREIGN EXCHANGE MARKET

III. ELECTRONIC TRADING

Automated Trading

- genuine screen-based market

EXCHANGE RATE QUOTATION

- ✘ USD-US Dollar
- ✘ GBP-British Pound
- ✘ JPY-Japanese Yen
- ✘ CAD-Canadian Dollar
- ✘ DEM-Deutsche Mark
- ✘ FFR- French Franc
- ✘ INR-Indian Rupee
- ✘ AUD-Australian Dollar

EXCHANGE RATE

- ✘ an exchange rate between two currencies is the rate at which one currency will be exchanged for another. It is also regarded as the value of one country's currency in terms of another currency.

-
- ✘ Direct method
 - ✘ The price of one foreign currency in terms of domestic currency would be direct quote. eg in india following is quoted for USD
 - ✘ $US-1\$ = Rs\ 75$

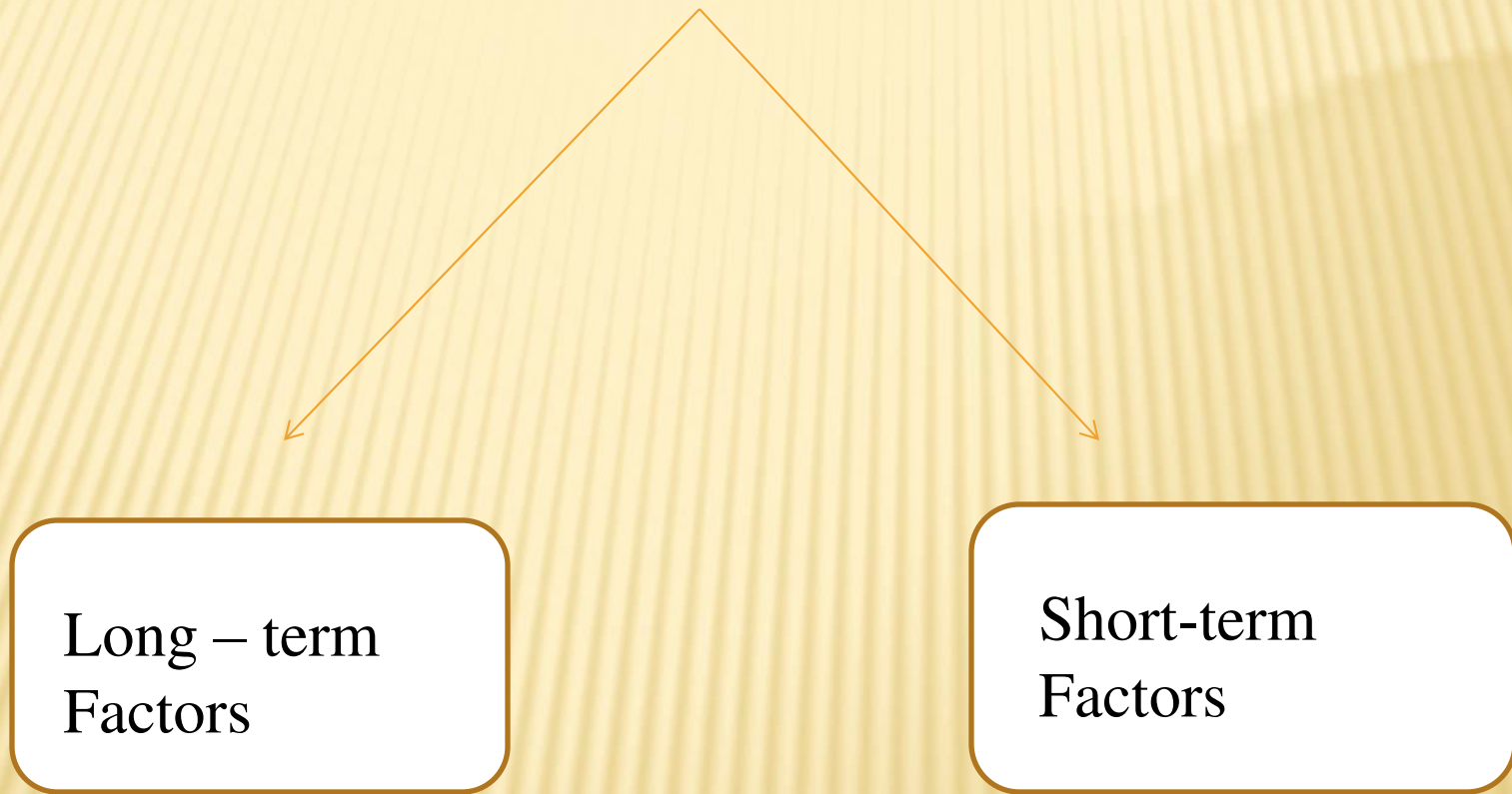
INDIRECT METHOD

- ✘ The price of one domestic currency in terms of foreign currency would be an indirect quote.
- ✘ Rs 100 = 1.5 \$

CROSS RATE

- ✘ The price of one foreign currency could also be expressed in terms of another foreign currency and referred to as cross rate.

DETERMINANTS OF FOREIGN EXCHANGE MARKET

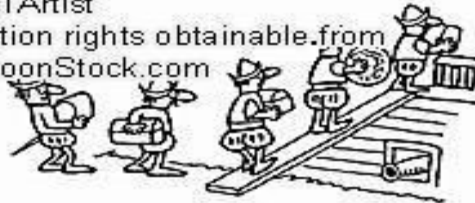


LONG-TERM FACTORS

✘ Balance of Payments

© Original Artist

Reproduction rights obtainable from
www.CartoonStock.com



"We've got a balance of payments deficit."

search ID: nb0269



✘ Strength of economy

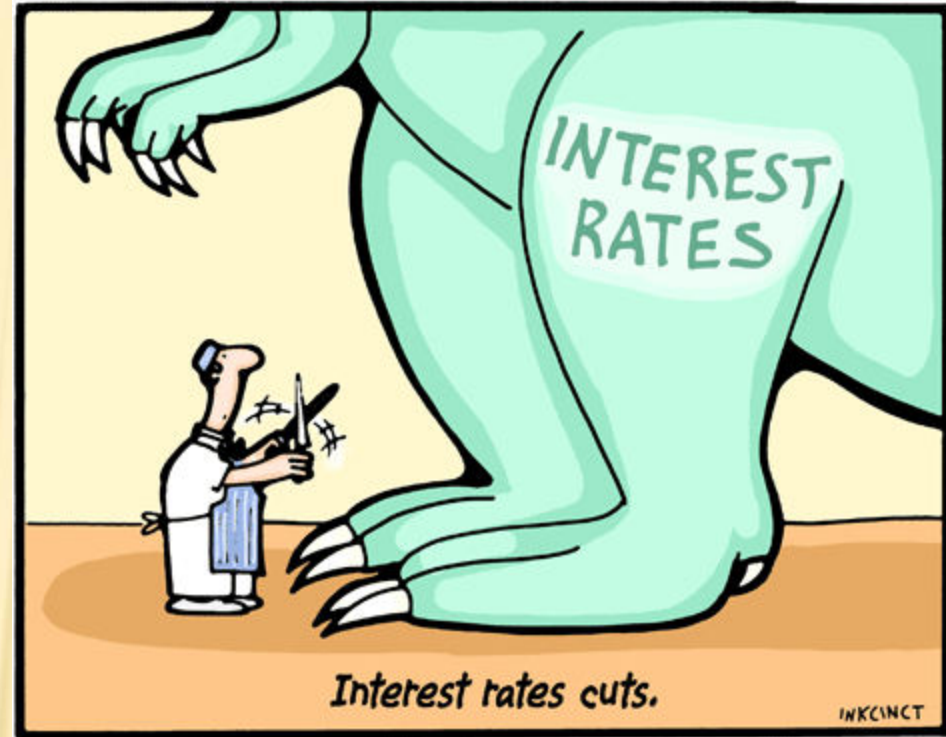
The relative strength of an economy has a direct effect on the demand and supply of foreign currencies.

If an economy is growing at a faster rate, in the long-run it is generally expected to have a better performance on Balance of Trade.



✘ Interest rate

The dip in the exchange rate towards the end of the 1980s, higher interest rates provided by the US, full currency convertibility and capital account.



✘ Inflation

A high inflation rate can lead to a country's currency losing value because of the loss of confidence in inflation.

- New national currencies may depreciate against major currencies.



✘ Money Supply

An increase in money supply will affect the exchange rate through causing inflation in the country. It can also affect the exchange rate directly in the short run.



✘ National Income

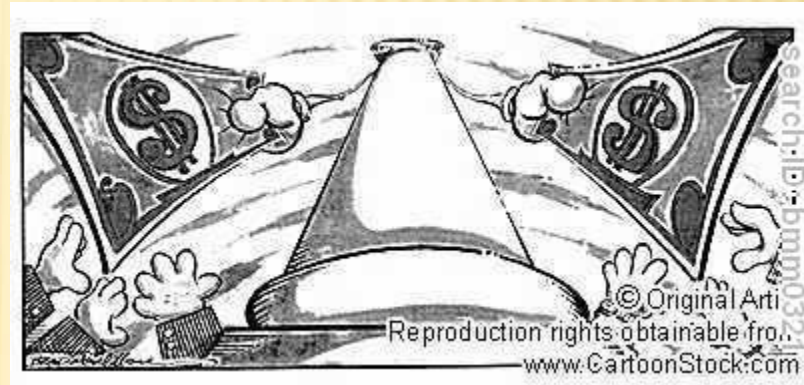
An increase in the national income will lead to an increase in investment or in consumption and accordingly, its effect on the exchange rate will change.



SHORT TERM FACTORS

✘ Central bank intervention

Buying and selling of foreign currency in the market by the Central Bank with a view to increasing the supply or demand, thereby affecting the exchange rate, is known as intervention.



✘ Export receipts and import payments

The difference between the receipts from export on realizations and import payments on gross value added country determine, to some extent, the exchange rate.



✘ Foreign investment flows

Both the
and profit
investment
inflow and outflow
affect the exchange
rates.



✘ Political factors

Factors that
Affect the
election results
price increase etc
with cause
exchange rate
fluctuations.



✘ Speculation

Speculation is a high-risk activity in an asset market. Speculators may follow supply and demand curves. Thus, the demand of the currency may increase.



✘ Capital Movements

Movements in the exchange rate caused by external borrowing and assistance. Large scale external borrowing will have favorable effect on the exchange rate of the country's currency



FEMA

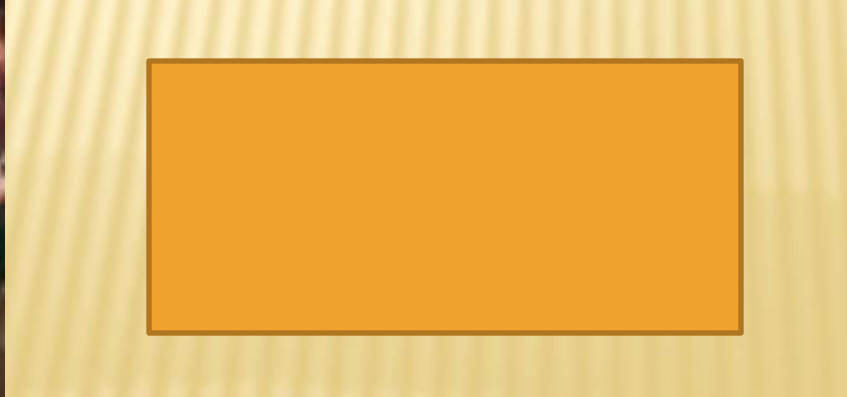
- ✘ The Foreign Exchange Management Act or in short FEMA has been introduced as a replacement for earlier Foreign Exchange Regulation Act (FERA). FEMA came into act on the 1st day of June, 2000.

The main objective behind the Foreign Exchange Management Act (1999) is to **consolidate and amend the law relating to foreign exchange** with objective of facilitating external trade and payments and for promoting the orderly development and maintenance of foreign exchange market in India.

FEMA is applicable to the all parts of India. The act is also applicable to all branches, offices and agencies outside India owned or controlled by a person who is resident of India.

FEMA head-office also known as Enforcement Directorate is situated in New Delhi and is headed by a Director. The Directorate is further divided into 5 zonal offices at Delhi, Bombay, Calcutta, Madras and Jalandhar and each office is headed by a Deputy Directors. Each zone is further divided into 7 sub-zonal offices headed by the Assistant Directors and 5 field units headed by the Chief Enforcement Officers

FINANCIAL DERIVATIVES



OBJECTIVES OF THE LEARNING

- ✘ **Candidates should be able to:**
- i) **Demonstrate a knowledge of the regulatory framework for financial derivatives;**
- ii) **Demonstrate knowledge of the operations of derivatives exchanges, and be able to compare and contrast Exchange Traded and Over The Counter (OTC) instruments;**
- iii) **Demonstrate a detailed knowledge of the different types of forwards, futures, swaps, Options and other financial derivatives, the principal differences between them, and where and how they are traded;**
- iv) **Demonstrate a detailed understanding of the variables (inputs) which influence the value of such derivatives, and the relationship of financial derivatives to their Underlying assets;**
- v) **Present the alternative derivatives strategies that would be appropriate for different market circumstances, and describe the advantages and disadvantages of each;**

DERIVATIVES - (MEANING)

Derivatives: derivatives are instruments which include

- a) Security derived from a debt instrument share, loan, risk instrument or contract for differences of any other form of security and ,
- b) a contract that derives its value from the price/index of prices of underlying securities.

DERIVATIVES (DEFINITION)

A financial instrument whose characteristics and value depend upon the characteristics and value of an underlier, typically a commodity, bond, equity or currency.

Examples of derivatives include futures and options. Advanced investors sometimes purchase or sell derivatives to manage the risk associated with the underlying security, to protect against fluctuations in value, or to profit from periods of inactivity or decline. These techniques can be quite complicated and quite risky.

ADVANTAGES OF DERIVATIVE MARKETS

1. Diversion of speculative instinct from the cash market to the derivatives.
2. Increased hedge for investors in cash market.
3. Reduced risk of holding underlying assets.
4. Lower transactions costs.
5. Enhance price discovery process.
6. Increase liquidity for investors and growth of savings flowing into these markets.
7. It increase the volume of transactions.

TYPES OF DERIVATIVES

There are two types of derivatives

1. Financial derivatives &
2. Commodity Derivatives

- ✘ Commodity derivatives the underlying instruments are a commodity which may be sugar, cotton, copper, gold, silver.
- ✘ Financial Derivatives the underlying instruments is stock, bond, foreign exchange.

Financial Derivatives further divided into 2 types

1. basic
2. Complex.

CONTINUE....,

Basics Four Parts:

1. Forward
2. Future
3. Option
4. Warrants & Convertibles.

Complex

1. Swap
2. Exotics

FORWARD CONTRACT

A forward contract is an agreement to buy or sell an asset on a specified date for a specified price. One of the parties to the contract assumes a long position and agrees to buy the underlying asset on a certain specified future date, for a certain specified price.

THE SALIENT FEATURES OF FORWARD CONTRACTS ARE AS FOLLOWS:

- ✘ They are bilateral contracts and hence, exposed to counterparty risk.
- ✘ Each contract is customer designed, and hence is unique in terms of contract size, expiration date and the asset type and quality.
- ✘ The contract price is generally not available in public domain.
- ✘ On the expiration date, the contract has to be settled by delivery of the asset and
- ✘ If party wishes to reverse the contract.

LIMITATIONS OF FORWARD CONTRACT

1. Forward markets are afflicted by several problems:
 2. Lack of centralization of trading,
 3. Liquidity and Counterparty risk.
- ✘ The basic problem in the first two is that they have too much flexibility and generality.
 - ✘ Counterparty risk arises from the possibility of default by any one party to the transaction. When one of the two sides to the transaction declares bankruptcy, the other suffers

FUTURE CONTRACT

Future contract

Future contract is an agreement between two parties to buy or sell an asset at a certain time in the future, at a certain price. But unlike forward contract, future contract are standardized and stock ex-changed traded.

CONTINUE,,,,,,,,,

The standardized items in a futures contract are:

1. Quantity of the underlying,
2. Quality of the underlying,
3. The date/month of delivery,
4. The units of price quotation and minimum price change and
5. Location of settlement.

DISTINCTION BETWEEN FUTURES AND FORWARD

S.no	Future Contract	S.no	Forward Contract
1	Traded on an organized stock exchange	1	Over the Counter (OTC) in nature
2	Standardized contract terms, hence, more liquid.	2	Customized contract terms, hence, less liquid
3	Requires margin payments	3	No margin payment
4	Follows daily settlement	4	Settlement happens at the end of the period

OVER THE COUNTER(OTC) TRADING

- ✘ In general, the reason for which a stock is traded over-the-counter is usually because the company is small, making it unable to meet exchange listing requirements.

Also known as "unlisted stock", these securities are traded by broker-dealers who negotiate directly with one another over computer networks and by phone.

OTC stocks are generally unlisted stocks which trade on the Over the Counter Bulletin Board (OTCBB)

IMPORTANT TERMS IN FUTURE CONTRACT

- ✘ Spot price: The price at which an instrument/asset trades in the spot market.
- ✘ Future Price: The price at which the futures contract trade in the future market.
- ✘ Contract cycle: The period over which a contract trades. The index futures contract typically have one month, two months and three months expiry cycles that expire on the last Thursday of the month.

CONTINUE.....

- × Expiry date: It is the date specified in the futures contract. This is the last day on which the contract will be traded, at the end of which it will cease to exist.
- × Contract size: The amount of asset that has to be delivered under one contract.
- × Basis: Basis is defined as the future price minus the spot price. There will be different basis for each delivery month for each contract. In the a normal market, basis will be positive. This reflects that futures prices normally exceed spot prices.

CONTINUE...,

- × Cost of Carry: The relationship between futures prices and spot prices can be summarised in terms of the cost of carry.
- × Initial Margin: The amount that must be deposited in the margin account at the time a futures contract is first entered into is the initial margin.

PAY OFF FOR FUTURES

A pay off is the likely profit/loss that would accrue to a market participant with change in the price of the underlying asset. Futures contracts have linear pay off.

Linear pay off:

“ losses as well as profits for both the buyer and the seller of futures are unlimited”

PAY OFF FOR BUYER OF FUTURES: (LONG FUTURE)

The pay offs for a person who buys a futures contract is similar to the pay off for a person who holds an asset. He has a potentially unlimited upside as well as downside.

e.g. Take the case of a speculator who sells a two month Nifty index futures contract when the Nifty stands at 1220. the underlying asset in this case is the nifty portfolio. When the index moves down the short futures position starts making profits and when the index moves up it starts making losses.

PAY OFF FOR SELLER FUTURES (SHORT FUTURE)

- ✘ The pay off for a person who sells a futures contract is similar to the pay off for a person who shorts an asset. he has potentially unlimited upside as well as downside.**

OPTIONS

Meaning of options:

An option is the right, but not the obligation to buy or sell something on a specified date at a specified price. In the securities market, an option is a contract between two parties to buy or sell specified number of shares at a later date for an agreed price.

CONTINUE.....,

There are three parties involved in the option trading, the option seller, buyer and the broker.

1. The option seller or writer is a person who grants someone else the option to buy or sell. He receives premium on its price.
2. The option buyer pays a price to the option writer to induce him to write the option.
3. The securities broker acts as an agent to find the option buyer and the seller, and receives a commission or fee for it.

OPTIONS

An option to buy anything is known as a **CALL** while an option to sell a thing is called a **PUT**. Options trade in an organized market but, large percentage of it is traded over the counter (i.e. privately).

Note that this is just an option. That means it is a right and not an obligation.

Strike price: Price specified in the options contract is known as the strike price or exercise price.

TYPES OF OPTIONS

1. Call option: A call option is a contract giving the right to buy the shares.
2. Put option is a contract giving the right to sell the shares.

Call option that gives the right to buy in its contract gives the particulars of

- ✗ The name of the company whose shares are to be bought.
- ✗ The number of shares to be purchased.
- ✗ The purchase price or the exercise price or the strike price of the shares to be bought.
- ✗ The expiration date, the date on which the contract or the option expires.

PUT OPTION

- ✘ Put option gives its owner the right to sell (or put) an asset or security to someone else.

Put option contract contains:

1. The name of the company shares to be sold.
2. The number of shares to be sold.
3. The selling price or the striking price.
4. The expiration date of the option.

DISTINCTION BETWEEN FUTURES AND OPTIONS

Futures

- ✘ Exchange traded, with novation
- ✘ Exchange defines the product
- ✘ Price is zero, strike price moves
- ✘ Price is zero
- ✘ Linear payoff
- ✘ Both long and short at risk

Options

- Same as futures
- ✘ Same as futures
- ✘ Strike price is fixed, price moves
- ✘ Price is always positive
- ✘ Non linear payoff
- ✘ Only short at risk

NOVATION

1. The substitution of a new contract for an old one; or the substitution of one party in a contract with another party.
2. The replacement of existing debt or obligation with a new one.

- ✘ An agreement between two parties to exchange one set of cash flows for another. In essence it is a portfolio of forward contracts. While a forward contract involves one exchange at a specific future date, a swap contract entitles multiple exchanges over a period of time.

SWAPS (MEANING)

- ✘ **Swaps:** Swaps are private agreements between two parties to exchange cash flows in the future according to a prearranged formula. They can be regarded as portfolios of forward contracts.

COMMONLY TWO KIND OF SWAPS

- ✘ Interest rate swaps: These entail swapping only the interest related cash flows between the parties in the same currency.
- ✘ Currency swaps: These entail swapping both principal and interest between the parties, with the cash flows in one direction being in a different currency than those in the opposite direction.

TYPES OF SWAPS

There are four types of swaps.

(1).Interest Rate Swaps.

(2).Currency Swaps.

(3).Commodity Swaps.

(4).Equity Swaps.

UNIT-II

UNIT-II
FUTURES

FUTURES

Future contract is an agreement between two parties to buy or sell an asset at a certain time in the future, at a certain price. But unlike forward contract, futures contract are standardized and stock ex-changed traded.

CONTINUE....

Future is a financial contract which derives its value from the underlying asset.

For example:

Sugar cane or wheat or cotton farmers may wish to have contracts to sell their harvest at a future date to eliminate the risk of change in price by that date.

There are commodity futures and financial futures.

CONTINUE.....,

- ✘ In the financial futures, there are foreign currencies, interest rate and market index futures.
- ✘ Market index futures directly related with the stock market.

CONTINUE.....,

The standardized items in a futures contract are:

1. Quantity of the underlying,
2. Quality of the underlying,
3. The date/month of delivery,
4. The units of price quotation and minimum price change and
5. Location of settlement.

CONTINUE.....

- ✘ Futures markets are designed to solve the problems of trading, liquidity and counterparty risk. Basically, futures markets resemble the forward market

Three distinct features of the futures markets are:

- standardized contracts
- centralized trading
- Settlement through clearing houses to avoid counterparty risk.

Note: (i) The repayment of loan as well as payment of lease rental is made in the beginning of the years. So, at the end of year 10, there will not be any payment in either option, but the tax benefit of depreciation for the year 10 as well as of lease rentals paid in the beginning of year 10, will be available only at the end of year 10.

(ii) Students may also calculate depreciation after subtracting the amount of subsidy from original cost, however, even in this situation, lease alternative is preferable.

Question 11

Agrani Ltd. is in the business of manufacturing bearings. Some more product lines are being planned to be added to the existing system. The machinery required may be bought or may be taken on lease. The cost of machine is ₹ 40,00,000 having a useful life of 5 years with the salvage value of ₹ 8,00,000. The full purchase value of machine can be financed by 20% loan repayable in five equal instalments falling due at the end of each year. Alternatively, the machine can be procured on a 5 years lease, year-end lease rentals being ₹ 12,00,000 per annum. The Company follows the written down value method of depreciation at the rate of 25%. Company's tax rate is 35 per cent and cost of capital is 16 per cent:

(i) Advise the company which option it should choose – lease or borrow.

(ii) Assess the proposal from the lessor's point of view examining whether leasing the machine is financially viable at 14% cost of capital (Detailed working notes should be given. Calculations can be rounded off to lakhs).

Answer

(i) **P.V. of Cash outflow under lease option**

(in ₹)

Year	Lease Rental after tax	PVIFA @ 13%	Total P.V.
1 – 5	12,00,000 (1 - T) = 7,80,000	20% (1 - T) 3.517	27,43,260

Cash Outflow under borrowing option

5 equal instalments

₹ 40,00,000 ÷ 2.991 (PVIFA 20%) = 13,37,345

Tax Advantage

Year	Loan Instalments	On Interest	On Depreciation	Net Cash Outflow	PVIF 13%	Total PV
1	13,37,345	2,80,000	3,50,000	7,07,345	.885	6,26,000
2	13,37,345	2,48,386	2,62,500	8,26,459	.783	6,47,117
3	13,37,345	1,97,249	1,96,875	9,43,221	.693	6,53,652
4	13,37,345	1,43,085	1,47,656	10,46,604	.613	6,41,568
5	13,37,345	77,635	1,10,742	11,48,968	.543	6,23,890
						<u>31,92,227</u>
Total PV						31,92,227
Less: PV Salvage value adjusted for Tax savings on loss of sale of machinery (₹ 8,00,000 × .543 = ₹ 4,34,400) + (₹ 28,359) (See Working Note on Depreciation) 9,49,219 - 8,00,000 = 1,49,219 × .35 × .543 = 28,359						4,62,759
Total present value of cash outflow						<u>27,29,468</u>

Decision: PV of cash outflow of lease option is greater than borrow option and hence borrow option is recommended.

Working Notes:

1. Debt and Interest Payments

Year	Loan Instalments	Loan at the beginning of the year	Interest	Principal	Balance at the end of year
1	13,37,345	40,00,000	8,00,000	5,37,345	34,62,655
2	13,37,345	34,62,655	6,92,531	6,44,814	28,17,841
3	13,37,345	28,17,841	5,63,568	7,73,777	20,44,064
4	13,37,345	20,44,064	4,08,813	9,28,532	11,15,532
5	13,37,345	11,15,532	2,21,813*	11,15,532	-

* Balancing Figure

2. Year		Depreciation
1	40,00,000 × .25	10,00,000
2	30,00,000 × .25	7,50,000
3	22,50,000 × .25	5,62,500
4	16,87,500 × .25	4,21,875
5	12,65,625 × .25	3,16,406

B.V. of machine = 12,65,625 - 3,16,406 = 9,49,219.

(ii) Proposal from the View Point of Lessor

Lessor's Cash Flow

	1	2	3	4	5
Lease Rentals	12,00,000	12,00,000	12,00,000	12,00,000	12,00,000
Less: Dep. (A)	<u>10,00,000</u>	<u>7,50,000</u>	<u>5,62,500</u>	<u>4,21,875</u>	<u>Nil</u>
EBT	2,00,000	4,50,000	6,37,500	7,78,125	12,00,000
Less: Tax @ 35%	<u>70,000</u>	<u>1,57,500</u>	<u>2,23,125</u>	<u>2,72,344</u>	<u>4,20,000</u>
EAT (B)	<u>1,30,000</u>	<u>2,92,500</u>	<u>4,14,375</u>	<u>5,05,781</u>	<u>7,80,000</u>
CFAT	11,30,000	10,42,500	9,76,875	9,27,656	7,80,000
PV factor @ 14%	.877	.769	.675	.592	.519
PV	9,91,010	8,01,683	6,59,391	5,49,172	4,04,820

PV of Lease Rent 34,06,076

Add: PV of Salvage Value 4,15,200

Add: PV of Tax Saving on loss of sale of asset 84,581

Total PV of cash inflow 39,05,857

Cost of Machine 40,00,000

NPV (94,143)

Decision: Lease rate is not financially viable. Hence, not recommended.

Question 12

Your company is considering acquiring an additional computer to supplement its time-share computer services to its clients. It has two options:

- (i) To purchase the computer for ₹ 22 lakhs.
- (ii) To lease the computer for three years from a leasing company for ₹ 5 lakhs as annual lease rent plus 10% of gross time-share service revenue. The agreement also requires an additional payment of ₹ 6 lakhs at the end of the third year. Lease rents are payable at the year-end, and the computer reverts to the lessor after the contract period.

The company estimates that the computer under review will be worth ₹ 10 lakhs at the end of third year.

Forecast Revenues are:

Year	1	2	3
Amount (₹ in lakhs)	22.5	25	27.5

Annual operating costs excluding depreciation/lease rent of computer are estimated at ₹ 9 lakhs with an additional ₹ 1 lakh for start up and training costs at the beginning of the first year. These costs are to be borne by the lessee. Your company will borrow at 16% interest to finance the acquisition of the computer. Repayments are to be made according to the following schedule:

Year end	1	2	3
Principal (₹'000)	500	850	850
Interest (₹'000)	352	272	136

The company uses straight line method (SLM) to depreciate its assets and pays 50% tax on its income. The management approaches you to advice. Which alternative would be recommended and why?

Note: The PV factor at 8% and 16% rates of discount are:

Year	1	2	3
8%	0.926	0.857	0.794
16%	0.862	0.743	0.641

Answer Working Notes:

- (a) Depreciation: ₹ 22,00,000 - 10,00,000/3 = ₹ 4,00,000 p.a.
- (b) Effective rate of interest after tax shield: $.16 \times (1 - .50) = .08$ or 8%.
- (c) Operating and training costs are common in both alternatives hence not considered while calculating NPV of cash flows.

Calculation of NPV

1. Alternative I: Purchase of Computer

Particulars	Year 1	Year 2	Year 3
Instalment Payment			
Principal	5,00,000	8,50,000	8,50,000
Interest	<u>3,52,000</u>	<u>2,72,000</u>	<u>1,36,000</u>
Total (A)	<u>8,52,000</u>	<u>11,22,000</u>	<u>9,86,000</u>
Tax shield @ 50%;			
Interest payment	1,76,000	1,36,000	68,000
Depreciation	<u>2,00,000</u>	<u>2,00,000</u>	<u>2,00,000</u>
Total (B)	<u>3,76,000</u>	<u>3,36,000</u>	<u>2,68,000</u>
Net Cash outflows (A - B)	4,76,000	7,86,000	7,18,000

PV factor at 8%	0.926	0.857	0.794
PV of Cash outflows	<u>4,40,776</u>	<u>6,73,602</u>	<u>5,70,092</u>
Total PV of Cash outflows:			16,84,470
Less: PV of salvage value ($\text{₹ } 10 \text{ lakhs} \times 0.794$)			<u>7,94,000</u>
Net PV of cash outflows			<u>8,90,470</u>

2. Alternative II: Lease of the Computer

<i>Particulars</i>	<i>Year 1</i>	<i>Year 2</i>	<i>Year 3</i>
Lease rent	5,00,000	5,00,000	5,00,000
10% of gross revenue	2,25,000	2,50,000	2,75,000
Lump sum payment	—	—	<u>6,00,000</u>
Total Payment	7,25,000	7,50,000	13,75,000
Less: Tax shield @ 50%	<u>3,62,500</u>	<u>3,75,000</u>	<u>6,87,500</u>
Net Cash outflows	<u>3,62,500</u>	<u>3,75,000</u>	<u>6,87,500</u>
PV of Cash outflows @ 8%	<u>3,35,675</u>	<u>3,21,375</u>	<u>5,45,875</u>
Total PV of cash outflows			12,02,925

Recommendation: Since the Present Value (PV) of net cash outflow of Alternative I is lower, the company should purchase the computer.

Question 13

ABC Ltd. sells computer services to its clients. The company has recently completed a feasibility study and decided to acquire an additional computer, the details of which are as follows:

- (1) The purchase price of the computer is ` 2,30,000; maintenance, property taxes and insurance will be ` 20,000 per year. The additional expenses to operate the computer are estimated at ` 80,000. If the computer is rented from the owner, the annual rent will be ` 85,000, plus 5% of annual billings. The rent is due on the last day of each year.
- (2) Due to competitive conditions, the company feels that it will be necessary to replace the computer at the end of three years with a more advanced model. Its resale value is estimated at ` 1,10,000.
- (3) The corporate income tax rate is 50% and the straight line method of depreciation is followed.
- (4) The estimated annual billing for the services of the new computer will be ` 2,20,000 during the first year, and ` 2,60,000 during the subsequent two years.
- (5) If the computer is purchased, the company will borrow to finance the purchase from a bank with interest at 16% per annum. The interest will be paid regularly, and the principal will be returned in one lump sum at the end of the year 3.

Should the company purchase the computer or lease it? Assume (i) straight line method of depreciation, (ii) salvage value of ` 1,10,000 and evaluate the proposal from the point of view of lessor if its cost of capital is also 12%.

Answer

Evaluation from the point of view of Lessee: The lessee has two alternatives: (i) To acquire the computer out of borrowed funds, and (ii) To acquire the computer on lease basis. The financial implications of these two options can be evaluated as follows:

Option I: To acquire computer out of borrowed funds. In this case, the company has to pay interest @ 16% annually and repayment of loan at the end of 3rd year. However, the salvage value of ` 1,10,000 will be available to it. The information can be presented as follows:

Year	Interest	Depreciation	Expenses	Tax Shield (5)=50% of (2+3+4)	Cash outflows	PVF (8%)	PV (')
(1)	(2)	(3)	(4)	(5)	6=(2+4-5)		
1	` 36,800	` 40,000	` 20,000	` 48,400	` 8,400	.926	7,778
2	36,800	40,000	20,000	48,400	8,400	.857	7,199
3	36,800	40,000	20,000	48,400	8,400	.794	6,670
4	Repayment - Salvage (2,30,000 -1,10,000)				` 1,20,000	.794	<u>95,280</u>
	Present Value of Outflows						1,16,927

Option II: To acquire the Computer on lease basis: In this case, the Company will be required to pay an annual lease rent of ` 85,000 + 5% of annual billing at the end of year. The financial implications can be evaluated as follows:

Year	Rental	5% of Billing	Tax Shield	Cash Outflow	PV (8%)	(PV)
	(1)	(2)	(3)= (50% of 1+2)	(4)= (1+2+3)		
1	` 85,000	` 11,000	` 48,000	` 48,000	.926	` 44,448
2	85,000	13,000	49,000	49,000	.857	41,993
3	85,000	13,000	49,000	49,000	.794	38,906
	Present Value of Outflows					1,25,347

As the PV of outflows is less in case of buying option, the Company should borrow funds to buyout the computer.

Note: 1. It may be noted that the additional expenses of ` 80,000 to operate the computer have not been considered in the above calculation. These expenses are required in both the options and are considered to be irrelevant to decide between lease or buy.

2. Alternatively, above analysis can also be carried out at 12% (Cost of Capital) instead of 8% as the final decision shall remain the same.

Evaluation from the point of view of lessor:

	Year 1	Year 2	Year 3
Lease Rental	85,000	85,000	85,000
5% of Billing	11,000	13,000	13,000
Total Income	96,000	98,000	98,000
Less: Maintenance Expenses	20,000	20,000	20,000
Depreciation	40,000	40,000	40,000
Income before tax	36,000	38,000	38,000
Tax @ 50%	18,000	19,000	19,000
Net Income after Tax	18,000	19,000	19,000
Depreciation added back	40,000	40,000	40,000
Cash Inflow (Annual)	58,000	59,000	59,000
Scrap Value	-	-	1,10,000
	58,000	59,000	1,69,000
PVF (12%)	0.893	0.797	0.712
Present Value	51,794	47,023	1,20,328
Total Present Value			2,19,145
Less: Initial Cost			<u>2,30,000</u>
Net Present Value			<u>-10,855</u>

As the NPV for the lessor is negative, he may not accept the proposal.

Question 14

A Company is planning to acquire a machine costing ` 5,00,000. Effective life of the machine is 5 years. The Company is considering two options. One is to purchase the machine by lease and the other is to borrow ` 5,00,000 from its bankers at 10% interest p.a. The Principal amount of loan will be paid in 5 equal instalments to be paid annually. The machine will be sold at ` 50,000 at the end of 5th year. Following further informations are given:

- Principal, interest, lease rentals are payable on the last day of each year.
- The machine will be fully depreciated over its effective life.
- Tax rate is 30% and after tax. Cost of Capital is 8%.

Compute the lease rentals payable which will make the firm indifferent to the loan option.

Answer

- (a) Borrowing option:

Annual Instalment = `5,00,000/- / 5 = `1,00,000/- Annual

depreciation = `5,00,000/- / 5 = `1,00,000/- **Computation of net cash**

outflow:

Year	Principal (`)	Interest (`)	Total (`)	Tax Saving Depn. & Interest (`)	Net cash Outflow (`)	PV @ 8% ^t	Total PV (`)
1	1,00,000	50,000	1,50,000	45,000	1,05,000	0.926	97,230
2	1,00,000	40,000	1,40,000	42,000	98,000	0.857	83,986
3	1,00,000	30,000	1,30,000	39,000	91,000	0.794	72,254
4	1,00,000	20,000	1,20,000	36,000	84,000	0.735	61,740
5	1,00,000	10,000	1,10,000	33,000	77,000	0.681	52,437
							3,67,647
Less: Present value of Inflows at the end of 5 th year							

(`50,000/- x 0.7) or `35,000 x 0.681 =	23,835
PV of Net Cash outflows	3,43,812

Calculation of lease rentals:

$$\begin{aligned} \text{Therefore, Required Annual after tax outflow} &= 3,43,812/3.993 = `86,104/- * \text{Therefore, Annual} \\ \text{lease rental} &= 86,104/0.70 = `1,23,006/- \end{aligned}$$

* If it is assumed that installment is payable in the beginning of the year then lease rent shall be computed as follows:

$$\begin{aligned} \text{Required Annual after tax outflow} &= 3,43,812/4.312 = `79,734/- \text{Therefore, Annual} \\ \text{lease rental} &= 79,734/0.70 = `1,13,906/- \end{aligned}$$

Further, if it is assumed that the lease rent is payable in the beginning of the year and tax benefit accrue in arrears then lease rent shall be computed as follows:

Let 'R' be the lease rent

$$\text{PV of Lease Rent} = 4.312R$$

$$\text{PV of Tax Benefits} = 3.933 \times 0.30R = 1.1979R$$

Accordingly

$$3,43,812 = 4.312R - 1.1979R \quad R = 1,10,405$$

Thus, lease rent at which lessor will be Break Even = ` 1,10,405

† Alternatively, it can also be discounted at post tax cost of debt i.e. 10.00% (1 - 0.30) = 7.00%.

Question 15

The Finance manager of ABC Corporation is analyzing firms policy regarding computers which are now being leased on yearly basis on rental amounting to ` 1,00,000 per year. The computers can be bought for ` 5,00,000. The purchase would be financed by 16% and the loan is repayable in 4 equal annual installments.

On account of rapid technological progress in the computer industry, it is suggested that a 4- year economic life should be used instead of a 10-year physical life. It is estimated that the computers would be sold for ` 2,00,000 at the end of 4 years.

The company uses the straight line method of depreciation. Corporate tax rate is 35%.

- (i) *Whether the equipment be bought or be taken on lease?*
- (ii) *Analyze the financial viability from the point of view of the lessor, assuming 14% cost of capital.*
- (iii) *Determine the minimum lease rent at which lessor would break even.*

Answer

- (i) The loan amount is repayable together with the interest at the rate of 16% on loan amount and is repayable in equal installments at the end of each year. The PVAF at the rate of 16% for 4 years is 2.798, the amount payable will be

$$\text{Annual Payment} = \frac{`5,00,000}{2.798} = `1,78,699 \text{ (rounded)}$$

(ii) Break Even Lease Rent

Cost of Computer	5,00,000
Less: PV of Salvage Value (` 2,00,000 x 0.592)	1,18,400
	3,81,600
PVIAF (14%,4)	2.914
CFAT Desired	1,30,954
Less: Depreciation	75,000
EAT	55,954
Add: Taxes	30,129
EBT	86,083
Add: Depreciation	75,000
Lease Rental (Desired)	1,61,083

Question 16

Armada Leasing Company is considering a proposal to lease out a school bus. The bus can be purchased for ` 5,00,000 and, in turn, be leased out at ` 1,25,000 per year for 8 years with payments occurring at the end of each year:

- (i) Estimate the internal rate of return for the company assuming tax is ignored.
- (ii) What should be the yearly lease payment charged by the company in order to earn 20 per cent annual compounded rate of return before expenses and taxes?
- (iii) Calculate the annual lease rent to be charged so as to amount to 20% after tax annual compound rate of return, based on the following assumptions:
 - (i) Tax rate is 40%;
 - (ii) Straight line depreciation;
 - (iii) Annual expenses of ` 50,000; and
 - (iv) Resale value ` 1,00,000 after the turn.

Answer

(i) Payback period = $\frac{5,00,000}{1,25,000} = 4.00$

PV factor closest to 4.00 in 8 years is 4.078 at 18%

Thus IRR = 18%

Note: Students may also arrive at the answer of 18.63% instead of 18% if exact calculation are made as follows:-

PV factor in 8 years at 19% is 3.9544

Interpolating for 4.00

$$\text{IRR} = 18\% + \frac{4.0776 - 4.000}{4.0776 - 3.9544} = 18.63\%$$

- (ii) Desired lease rent to earn 20% IRR before expenses and taxes:

$$\text{Lease Rent} = \frac{5,00,000}{\text{PVIFA } 8 \text{ yr, } 20\%} = \frac{5,00,000}{3.837} = ` 1,30,310.14 \text{ p.a.}$$

- (iii) Revised lease rental on school bus to earn 20% return based on the given conditions.

$$\text{PV factor } [(X - E - D) (1 - T) + D] + (\text{PV factor} \times \text{S.V.}) = \text{Co}$$

$$3.837 [(x - 50,000 - 50,000) (1 - .4) + 50,000] + (.233 \times 1,00,000^*) = 5,00,000$$

$$3.837 [.6x - 60,000 + 50,000] + 23,300 = 5,00,000$$

$$2.3022x = 5,15,070$$

$$x = 2,23,729.47$$

This may be confirmed as lease rental	2,23,729.47
Less: Expenses + Depreciation	<u>1,00,000.00</u>
EBT	1,23,729.47
Less tax 40%	<u>49,491.79</u>
PAT	74,237.68
Add: Depreciation	<u>50,000.00</u>
CFAT	<u>1,24,237.68</u>
$\frac{\text{Co - PV of SV}}{\text{CFAT}} = \frac{5,00,000 - 23,300}{1,24,237.68} = 3.837 \text{ or } 20\%$	

* **Note:** Alternatively, STCG can also be considered as net of tax.

Question 17

ABC Leasing Ltd. has been approached by a client to write a five years lease on an asset costing ₹10,00,000 and having estimated salvage value of ₹1,00,000 thereafter. The company has a after tax required rate of return of 10% and its tax rate is 50%. It provides depreciation @33 1/3 % on written down value of the asset. What lease rental will provide the company its after tax required rate of return?

Answer

In order to find out the annual lease rent, the cash flows from the asset must be evaluated as follows:

Year	Depreciation (₹)	Tax Shield (₹)	Cash flow (₹)	PVF(10%)	PV (₹)
1	3,33,333	1,66,667	1,66,666	.909	1,51,500
2	2,22,222	1,11,111	1,11,111	.826	91,778
3	1,48,148	74,074	74,074	.751	55,630
4	98,766	49,383	49,383	.683	33,728
5	65,844	32,922	32,922	.621	20,444
5	31,687*	15,843	15,843	.621	9,838
5	Salvage Value		1,00,000	.621	<u>62,100</u>
			Present Value of Inflows		4,25,018
			Outflow		<u>10,00,000</u>
			Net Present value		<u>5,74,982</u>

* Short Term Capital Loss

The firm therefore, should have total recovery of ₹5,74,982 through the lease rentals. The annual lease rental after tax may be calculated as follows:

$$\begin{aligned} \text{Lease rental (after tax)} &= \text{Total recovery required} \div \text{PVAF}_{(10\%,n)} \\ &= ₹5,74,982 \div 3.791 = ₹1,51,670 \\ \text{Now, the lease rental before tax} &= ₹1,51,670 \div 0.5 \\ &= ₹3,03,340 \end{aligned}$$

Therefore, the firm should charge a lease rental of ₹3,03,340 in order to earn a required rate of return of 10% after tax.

Question 18

Fair finance, a leasing company, has been approached by a prospective customer intending to acquire a machine whose Cash Down price is ₹3 crores. The customer, in order to leverage his tax position, has requested a quote for a three year lease with rentals payable at the end of each year but in a diminishing manner such that they are in the ratio of 3 : 2 : 1.

Depreciation can be assumed to be on straight line basis and Fair Finance's marginal tax rate is 35%. The target rate of return for Fair Finance on the transaction is 10%.

Required:

Calculate the lease rents to be quoted for the lease for three years.

Answer

Capital sum to be placed under Lease

		in lakhs
Cash Down price of machine		300.00
Less: Present value of depreciation		
Tax Shield		
	$100 \times .35 \times \frac{1}{(1.10)}$	31.82
	$100 \times .35 \times \frac{1}{(1.10)^2}$	28.93
	$100 \times .35 \times \frac{1}{(1.10)^3}$	<u>26.30</u>
		<u>87.05</u>
		<u>212.95</u>

If the normal annual lease rent per annum is x, then cash flow will be:

Year	Post-tax cash flow	P.V. of post-tax cash flow
1	$3x \times (1 - .35) = 1.95x$	$1.95 \times (1/1.10) = 1.7727x$
2	$2x \times (1 - .35) = 1.3x$	$1.30 \times [(1/(1.10)^2)] = 1.0743x$
3	$x \times (1 - .35) = 0.65x$	$0.65 \times [1/(1.10)^3] = 0.4884x$
		<u>$= 3.3354x$</u>

Therefore $3.3354 x = 212.95$ or $x = ₹ 63.8454$ lakhs
Year-wise lease rentals:

		₹ in lakhs
Year 1	3×63.8454 lakhs	= 191.54
2	2×63.8454 lakhs	= 127.69
3	1×63.8454 lakhs	= 63.85

Question 19

Classic Finance, a Leasing Company, has been approached by a prospective customer intending to acquire a machine whose cash down price is ₹ 6 crores. The customer, in order to leverage his tax position, has requested a quote for a three year lease with rentals payable at the end of each year but in a diminishing manner such that they are in the ratio of 3 : 2 : 1. Depreciation can be assumed to be on WDV basis at 25% and Classic Finance's marginal tax rate is 35%. The target rate of return for Classic Finance on the transaction is 10%. You are required to calculate the lease rents to be quoted for the lease for three years.

Answer

Calculation of depreciation tax shield

Year	Cost / WDV	Dep. @ 25 %	Tax shield @ 0.35	PVF	PV of dep. tax shield
1	600.00	150.00	52.50	0.909	47.72
2	450.00	112.50	39.38	0.826	32.53
3	337.50	84.38	29.53	0.751	<u>22.18</u>
					<u>102.43</u>

(₹ Lakhs)

Capital sum to be placed on lease (₹ Lakhs)

Cash down price	600.00
Less: PV of depreciation tax shield	<u>102.43</u>
To be placed on lease	<u>497.57</u>

Let the normal annual lease rent were to be "x" then

Year	Post tax	PVF	PV of cash flow
1	$3x (1-0.35)$ or $1.95x$	0.909	$1.773x$
2	$2x (1-0.35)$ or $1.30x$	0.826	$1.074x$
3	$1x (1-0.35)$ or $0.65x$	0.751	<u>$0.488x$</u>
			<u>3.335x</u>

Value of $x = ₹ 497.57$ lakhs / 3.335 i.e

₹ 149.196 lakhs Year wise lease

rental will be

₹ lakhs

Year 1	3 × 149.196	447.59
Year 2	2 × 149.196	298.39
Year 3	1 × 149.196	149.20

Question 20

Front Leasing Ltd. is in the business of providing automobiles on wet lease to Corporate Clients. The company is considering a new model of battery run Tesla car for which a good number of enquiries is received. The cost of the vehicle is ₹ 25 lakhs. Its operating, maintenance and insurance costs are expected to be ₹ 5 lakh in the first year. Thereafter it will be subject to inflation annually @ 6 percent in the second and third year and @ 4 percent during fourth to sixth year. The useful life of the vehicle is six years. The net salvage value of the vehicle at the end of six year will be ₹ 10 lakh. Depreciation for Tax purposes will be 40 percent under Written Down Value (WDV) method. Marginal tax rate applicable is 35 percent. Its cost of capital 8 percent.

You are required to calculate the minimum annual lease rental that the company should quote. Assume that the cost of negotiation and lease administration is nil.

PVIF @ 8 percent is 0.926, 0.857, 0.794, 0.735, 0.681 and 0.630

Answer

In order to find out the annual rent, the cash flow from the asset must be evaluated as follows:

Year	Depreciation	Insurance (1)	Total	Tax Shield (2)	Net Outflow (1) – (2)
1	10,00,000	5,00,000	15,00,000	5,25,000	(25,000)
2	6,00,000	5,30,000	11,30,000	3,95,500	1,34,500
3	3,60,000	5,61,800	9,21,800	3,22,630	2,39,170
4	2,16,000	5,84,272	8,00,272	2,80,095	3,04,177
5	1,29,600	6,07,643	7,37,243	2,58,035	3,49,608
6	77,760	6,31,949	7,09,709	2,48,398	3,83,551

Computation of NPV

Year	Cash Flow	PVF@8%	PV
0	25,00,000	1	25,00,000
1	(25,000)	0.926	(23,150)
2	1,34,500	0.857	1,15,267
3	2,39,170	0.794	1,89,901
4	3,04,177	0.735	2,23,570

5	3,49,608	0.681	2,38,083
6	3,83,551	0.630	2,41,637
6	6,90,824*	0.630	(4,35,219)
		NPV	30,50,089

* 10,00,000 - [10,00,000 - 1,16,640] X 0.35

The firm should have a total recovery of ₹ 30,50,089 through lease rentals. The annual lease rental after tax may be calculated as follows:

Lease Rental (after tax) = Total Recovery Amount/PVAF (8%,6)

= ₹ 30,50,089/4.623 = ₹ 6,59,764

Now, lease rental before tax = ` 6,59,764/0.65 = ` 10,15,022

Question 21

M/s ABC Ltd. is to acquire a personal computer with modem and a printer. Its price is ` 60,000. ABC Ltd. can borrow ` 60,000 from a commercial bank at 12% interest per annum to finance the purchase. The principal sum is to be repaid in 5 equal year-end instalments.

ABC Ltd. can also have the computer on lease for 5 years.

The firm seeks your advise to know the maximum lease rent payable at each year end. Consider the following additional information:

- (i) Interest on bank loan is payable at each year end.
- (ii) The full cost of the computer will be written off over the effective life of computer on a straight-line basis. This is allowed for tax purposes.
- (iii) At the end of year 5, the computer may be sold for ` 1,500 through a second-hand dealer, who will charge 8% commission on the sale proceeds.
- (iv) The company's effective tax rate is 30%.
- (v) The cost of capital is 11%.

Suggest the maximum annual lease rental for ABC Ltd. : PV Factor at 11%

Year	PVF
1	0.901
2	0.812
3	0.731
4	0.659
5	0.593

Answer Workings

(i) Annual loan repayment: ` 60,000 / 5 = ` 12,000

(ii) Residual sale value at year 5 ` 1,500
 (-) Commission at 8% 120
 Profit on sale 1380
 (-) Tax @ 30% 414
 Net cash flow (` 1,380 - ` 414) ` 966

(iii) Net cash outflow under loan option -

Year	1 (`)	2 (`)	3 (`)	4 (`)	5 (`)	Total (`)
Principal repayment	12,000	12,000	12,000	12,000	12,000	60,000
Payment of Interest	7,200	5,760	4,320	2,880	1,440	21,600
(-) Tax Savings @ 30% on depreciation	(3,600)	(3,600)	(3,600)	(3,600)	(3,600)	(18,000)
Tax savings on Interest	<u>(2,160)</u>	<u>(1,728)</u>	<u>(1,296)</u>	<u>(864)</u>	<u>(432)</u>	<u>(6,480)</u>
Net out flow	13,440	12,432	11,424	10,416	9,408	57,120
Discount factor at 11%	0.901	0.812	0.731	0.659	0.593	3.696
PV of cash outflow	12,109	10,095	8,351	6,864	5,579	42,998
Less: PV of Post tax						

inflow at the end of year 5 (` 966×0.593)					(573)
				PV of net Cash outflows in 5 years	42,425

Computation of Annual Lease Rentals:

PV of post tax Annual Lease Rentals in 5 years should not exceed ` 42,425. Or say, PV of Post-tax Lease Rental for one year. Should not exceed

$$\sqrt[5]{42,425} = \frac{11,479}{3.696}$$

$$\text{`11479 post-tax} = [\text{` 11,479}/(1-t)] \text{ pretax}$$

$$= \text{` 11,479}/(1 - 0.30) = \text{`16,398}$$

Therefore, maximum pre-tax annual rental should be `16,398

Question 22

P Ltd. has decided to acquire a machine costing ` 50 lakhs through leasing. Quotations from 2 leasing companies have been obtained which are summarised below:

	Quote A	Quote B
Lease term	3 years	4 years
Initial lease rent (` lakhs)	5.00	1.00
Annual lease rent (payable in arrears) (` lakhs)	21.06	19.66

P Ltd. evaluates investment proposals at 10% cost of capital and its effective tax rate is 30%. Terminal payment in both cases is negligible and may be ignored.

Make calculations and show which quote is beneficial to P Ltd. Present value factors at 10% rate for years 1-4 are respectively 0.91, 0.83, 0.75 and 0.68. Calculations may be rounded off to 2 decimals in lakhs.

Answer

(in lakhs)

	Quote A	Quote B
Calculation of Present Value (PV) of cash payments:		
Initial lease rent (PV)	5.00	1.00
Less: PV of tax benefit on initial payment of lease rent		
` 5.00 lakh x 0.30 x 0.91	(1.365)	-
` 1.00 lakh x 0.30 x 0.91	-	(0.273)
PV of Annual lease rents		
` 21.06 lakh x 0.7 x 2.49	36.71	-
` 19.66 lakh x 0.7 x 3.17	-	43.63
Total payments in PV	40.345	44.357
Capital Recovery Factor (reciprocal of Annuity Factor)		
1/2.49	0.402	-
1/3.17	-	0.315
Equated Annual Payment or cash outflow (` lakhs)	16.20	13.979

Conclusion: Since Quote B implies lesser equated annual cash outflow, it is better.

Question 23

X Ltd. had only one water pollution control machine in this type of block of asset with no book value under the provisions of the Income Tax Act, 1961 as it was subject to rate of depreciation of 100% in the very first year of installation.

Due to funds crunch, X Ltd. decided to sell the machine which can be sold in the market to anyone for ₹ 5,00,000 easily.

Understanding this from a reliable source, Y Ltd. came forward to buy the machine for ₹ 5,00,000 and lease it to X Ltd. for lease rental of ₹ 90,000 p.a. for 5 years. X Ltd. decided to invest the net sale proceed in a risk free deposit, fetching yearly interest of 8.75% to generate some cash flow. It also decided to relook the entire issue afresh after the said period of 5 years.

Another company, Z Ltd. also approached X Ltd. proposing to sell a similar machine for ₹ 4,00,000 to the latter and undertook to buy it back at the end of 5 years for ₹ 1,00,000 provided the maintenance were entrusted to Z Ltd. for yearly charge of ₹ 15,000. X Ltd. would utilise the net sale proceeds of the old machine to fund this machine also should it accept this offer.

The marginal rate of tax of X Ltd. is 34% and its weighted average cost of capital is 12%. Which Alternative would you recommend?

Discounting Factors @ 12%

Year	1	2	3	4	5
	0.893	0.797	0.712	0.636	0.567

Answer First Option

Sale Proceeds	5,00,000
Tax @ 34%	<u>1,70,000</u>
Net Proceed	<u>3,30,000</u>
Interest @ 8.75% p.a.	= ₹ 28,875 NPV of this Option

	Year					
	0	1	2	3	4	5
Int. on Net Proceeds (₹)		28,875	28,875	28,875	28,875	28,875
Tax @ 34% (₹)		-9,818	-9,818	-9,818	-9,818	-9,818
Lease Rent (₹)		-90,000	-90,000	-90,000	-90,000	-90,000
Tax @34%(₹)		30,600	30,600	30,600	30,600	30,600
Terminal Cash Flow (₹)						3,30,000

Cash flow (₹)		-40,343	-40,343	-40,343	-40,343	2,89,657
PV Factor		0.893	0.797	0.712	0.636	0.567
PV of Cash Flows (₹)		-36,026	-32,153	-28,724	-25,658	1,64,236

NPV = ₹ 41,675

Second Option

Cost of New Machine	4,00,000
Net sale proceeds of old machine	<u>3,30,000</u>
Investment in Cash	<u>70,000</u>

NPV of this Option

	Year					
	0	1	2	3	4	5
Payment for new Machine (₹)	-70,000					
Tax saving ₹ 4,00,000 x 34%		1,36,000				
Maintenance (₹)		-15,000	-15,000	-15,000	-15,000	-15,000
Tax saving on above @ 34% (₹)		5,100	5,100	5,100	5,100	5,100
Terminal Cash Flow (₹)						1,00,000
Tax on above @ 34% (₹)						-34,000
Cash Flow (₹)	-70,000	1,26,100	-9,900	-9,900	-9,900	56,100
PV Factor	1	0.893	0.797	0.712	0.636	0.567
PV of Cash Flows (₹)	-70,000	1,12,607	-7,890	-7,049	-6,296	31,809

NPV = ₹ 53,181

The second alternative is recommended.

Alternative Solution

Sale of Old Machine	5,00,000
Cost of New Machine	4,00,000
Short Term Capital Gain	1,00,000
Tax on STCG	34,000
Net Proceeds	66,000

NPV of this Option

	Year					
	0	1	2	3	4	5
Sale of Old Machine (₹)	66,000					
Tax saving ₹ 4,00,000 x 34%		1,36,000				
Maintenance (₹)		-15,000	-15,000	-15,000	-15,000	-15,000
Tax saving on above @ 34% (₹)		5,100	5,100	5,100	5,100	5,100
Terminal Cash Flow (₹)						1,00,000
Tax on above @ 34% (₹)						-34,000
Cash Flow (₹)	66,000	1,26,100	-9,900	-9,900	-9,900	56,100
PV Factor	1.000	0.893	0.797	0.712	0.636	0.567
PV of Cash Flows (₹)	66,000	1,12,607	-7,890	-7,049	-6,296	31,809

NPV = ₹ 1,89,161

The second alternative is recommended.

Question 24

Alfa Ltd. desires to acquire a diesel generating set costing ₹ 20 lakh which will be used for a period of 5 years. It is considering two alternatives (i) taking the generating set on lease or (ii) purchasing the asset outright by raising a loan. The company has been offered a lease contract with a lease payment of ₹ 5.2 lakh per annum for five years payable in advance. Company's banker requires the loan to be repaid @ 12% p.a. in 5 equal annual instalments,

each installment being due at the beginning of the each year. Tax relevant depreciation of the generator is 20% as per WDV method. At the end of 5th year the generator can be sold at ₹ 2,00,000. Marginal Tax rate of Alfa Ltd. is 30% and its post tax cost of capital is 10%. Determine:

- (a) The Net Advantage of Leasing to Alfa Ltd. and recommend whether leasing is financially viable.
 (b) Break Even Lease Rental.

Answer Workings:

- (1) Calculation of annual installment

$$\text{₹ } 20 \text{ lakh} / 4.038 = \text{₹ } 4.95 \text{ lakh}$$

$$3.038^* + 1 = 4.038$$

* PVIAF @ 12% for 4 years

- (2) Calculation of tax shield or tax benefit on interest on debt : -

Yr.	Installment (₹ lakh)	Opening value (₹ lakh)	Closing value (₹ lakh)	Principal payment (₹ lakh)	Interest 12% (₹ lakh)	Tax shield (₹ lakh)
0	4.95	20.00	15.05	4.95	-	-
1	4.95	15.05	11.90	3.14	1.80	0.54
2	4.95	11.91	8.38	3.52	1.43	0.43
3	4.95	8.39	4.45	3.94	1.00	0.30
4	4.95	4.45*	-	4.45	0.52	0.16

* Balancing Figure

- (3) Calculation of tax shield or tax benefit on depreciation: -

Year	Opening value (₹ lakh)	Closing value (₹ lakh)	Depreciation (₹ lakh)	Tax Saving @ 30% (₹ lakh)
1	20	16	4.00	1.20
2	16	12.80	3.20	0.96
3	12.80	10.24	2.56	0.77
4	10.24	8.19	2.05	0.62
5	8.19	-	1.64	0.49

- (4) Calculation of PV of Cash Outflow under borrowing and buying option

Year	Installment (₹ lakh)	Tax Shield on Interest (₹ lakh)	Tax Shield on Dep. (₹ lakh)	Net	PVF @ 8.4%	PV (₹ lakh)
0	4.95	-	-	4.95	1	4.95
1	4.95	0.54	1.20	3.21	0.922	2.96
2	4.95	0.43	0.96	3.56	0.851	3.03
3	4.95	0.30	0.77	3.88	0.785	3.05
4	4.95	0.16	0.62	4.17	0.724	3.02
5	-	-	0.49	(0.49)	0.668	(0.33)
5	-	-	-	(2.00)	0.668	(1.336)
						15.344

- (5) Calculation of Present Value (PV) of lease decision : -

Particulars	Years	Amount (` lakh)	PVF @ 8.4%	PV (` lakh)
Lease Rent	0 -4	5.2	4.282	(-) 22.27
Tax relief on lease	1 -5	1.56	3.95	6.16
				(-) 16.11

(a) **Calculation of Net Advantage of Leasing (NAL):**

Particulars	(` lakh)
Present Value of buying decision	15.344
Less: Present Value of lease decision	- 16.110
Net Advantage of Leasing	- 0.766

Recommendation: Since Net Advantage of Leasing is negative the lease is financially not viable.

(b) **Computation of Break Even Lease Rental (BELR)**

Let L be the BELR then

Present Value of lease rentals	4.282 L	Present Value of Tax shield on Lease Payment	$3.95 \times 0.30 \times L$
			<u>3.097 L</u>

Accordingly, BELR will be

$$3.097 L = \text{Rs. } 15.344 \text{ Lakh}$$

$$L = \text{Rs. } 4.954 \text{ Lakh i.e. Break Even Lease Rent Note: Short Term}$$

Capital Loss on Salvage Value can also be considered. **Question 25**

R Ltd., requires a machine for 5 years. There are two alternatives either to take it on lease or buy. The company is reluctant to invest initial amount for the project and approaches their bankers. Bankers are ready to finance 100% of its initial required amount at 15% rate of interest for any of the alternatives.

Under lease option, upfront Security deposit of ` 5,00,000/- is payable to lessor which is equal to cost of machine. Out of which, 40% shall be adjusted equally against annual lease rent. At the end of life of the machine, expected scrap value will be at book value after providing, depreciation @ 20% on written down value basis.

Under buying option, loan repayment is in equal annual installments of principal amount, which is equal to annual lease rent charges. However in case of bank finance for lease option, repayment of principal amount equal to lease rent is adjusted every year, and the balance at the end of 5th year.

Assume Income tax rate is 30%, interest is payable at the end of every year and discount rate is @ 15% p.a. The following discounting factors are given:

Year	1	2	3	4	5
Factor	0.8696	0.7562	0.6576	0.5718	0.4972

Which option would you suggest on the basis of net present values?

Answer

Cash outflow under borrow and buy option Working Notes:

1. Calculation of Interest Amount

Year	Repayment of Principal (`)	Principal Outstanding (`)	Interest (`)	Closing Balance (`)
1	1,00,000	5,00,000	75,000	4,00,000

2	1,00,000	4,00,000	60,000	3,00,000
3	1,00,000	3,00,000	45,000	2,00,000
4	1,00,000	2,00,000	30,000	1,00,000
5	1,00,000	1,00,000	15,000	-

2. Depreciation Schedule

Year	Opening Balance (₹)	Depreciation (₹)	Closing Balance (₹)
1	5,00,000	1,00,000	4,00,000
2	4,00,000	80,000	3,20,000
3	3,20,000	64,000	2,56,000
4	2,56,000	51,200	2,04,800
5	2,04,800	40,960	1,63,840

3. Tax Benefit on Depreciation and Interest

Year	Interest (₹)	Depreciation (₹)	Total (₹)	Tax Benefit @ 30% (₹)
1	75,000	1,00,000	1,75,000	52,500
2	60,000	80,000	1,40,000	42,000
3	45,000	64,000	1,09,000	32,700
4	30,000	51,200	81,200	24,360
5	15,000	40,960	55,960	16,788

PV of Cash Outflow in Borrow and Buying Option

Year	Cash outflow (₹)	Tax Benefit (₹)	Net Cash Outflow (₹)	PVF@15%	PV (₹)
1	1,75,000	52,500	1,22,500	0.8696	1,06,526
2	1,60,000	42,000	1,18,000	0.7562	89,232
3	1,45,000	32,700	1,12,300	0.6576	73,848
4	1,30,000	24,360	1,05,640	0.5718	60,405
5	1,15,000	16,788	98,212	0.4972	48,831
5	(1,63,840)		(1,63,840)	0.4972	(81,461)
					2,97,381

Cash outflow under borrow and lease option

Cash payment to Lessor/Tax Benefits on Lease Payment (Annual Lease Rent = ₹ 1,00,000)

Year	Net Lease Rent (₹)	Security Deposit (₹)	Tax Benefit on Gross Lease Rent (₹)	Net Cash Outflow (₹)
1	60,000*		30,000	30,000
2	60,000		30,000	30,000
3	60,000		30,000	30,000
4	60,000		30,000	30,000
5	60,000	(3,00,000)	30,000	(2,70,000)

* ₹ 1,00,000 - ₹ 40,000 = ₹ 60,000

Cash payment to Bank/ Tax Benefits on Interest Payment

Year	Principal Payment (₹)	Interest (₹)	Total (₹)	Tax Benefit on Interest (₹)	Net Outflow (₹)
1	40,000	75,000	1,15,000	22,500	92,500
2	40,000	69,000	1,09,000	20,700	88,300
3	40,000	63,000	1,03,000	18,900	84,100
4	40,000	57,000	97,000	17,100	79,900
5	3,40,000	51,000	3,91,000	15,300	3,75,700

PV of Cash Outflow in Borrow and Leasing Option

Year	Cash outflow to Bank (₹)	Cash Outflow under Lease (₹)	Total (₹)	PVF@15%	PV (₹)
1	92,500	30,000	1,22,500	0.8696	1,06,526
2	88,300	30,000	1,18,300	0.7562	89,458
3	84,100	30,000	1,14,100	0.6576	75,032
4	79,900	30,000	1,09,900	0.5718	62,841
5	3,75,700	(2,70,000)	1,05,700	0.4972	52,554
					3,86,411

Since PV of cash outflow is least in case of borrow and buying option it should be opted for.