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Strategic Financial Management

SFM Theory - Part 1

New Syllabus

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CHAPTER 1

FINANCIAL POLICY & CORPORATE STRATEGY

Question 1

Functions of Strategic Financial Management

Solution

Strategic Financial Management is the portfolio constituent of the corporate strategic plan that embraces the optimum investment and financing decisions required to attain the overall specified objectives. In this connection, it is necessary to distinguish between strategic, tactical and operational financial planning. While strategy is a long -term course of action, tactics are intermediate plan, while operations are short-term functions. Senior management decides strategy, middle level decides tactics and operational are looked after line management.

Irrespective of the time horizon, the investment and financial decisions functions involve the following functions:

Continual search for best investment opportunities;

- Selection of the best profitable opportunities;
- Determination of optimal mix of funds for the opportunities;
- Establishment of systems for internal controls; and
- Analysis of results for future decision-making.

Since capital is the limiting factor, the strategic problem for financial management is how limited funds are allocated between alternative uses. This dilemma of corporate management is resolved by the pioneering work of Jenson and Meckling (1976)2, which is popularly known as 'agency theory' which you have already studied at your Intermediate (IPC) level. According to this theory, strategic financial management is the function of four major components based on the mathematical concept of expected NPV (net present value) maximization,- Financing decisions; Investment decisions; Dividend decisions; and Portfolio decisions.

The key decisions falling within the scope of financial strategy include the following:

1. Financing decisions: These decisions deal with the mode of financing or mix of equity capital and debt capital.
2. Investment decisions: These decisions involve the profitable utilization of firm's funds especially in long-term projects (capital projects). Since the future benefits associated with such projects are not known with certainty,

investment decisions necessarily involve risk. The projects are therefore evaluated in relation to their expected return and risk.

3. Dividend decisions: These decisions determine the division of earnings between payments to shareholders and reinvestment in the company.
4. Portfolio decisions: These decisions involve evaluation of investments based on their contribution to the aggregate performance of the entire corporation rather than on the isolated characteristics of the investments themselves. You have already, learnt about the Financing and Investment decisions in your Intermediate (IPC) curriculum, while Dividend and Portfolio decisions would be taken in detail later in this Study Material.

Question 2

Strategy at Different Hierarchy Levels

Solution

Strategies at different levels are the outcomes of different planning needs. There are three levels of Strategy – Corporate level; Business unit level; and Functional or departmental level.

1. Corporate Level Strategy:

Corporate level strategy fundamentally is concerned with selection of businesses in which a company should compete and also with the development and coordination of that portfolio of businesses

Corporate level strategy should be able to answer three basic questions:	
Suitability	Whether the strategy would work for the accomplishment of common objective of the company
Feasibility	Determines the kind and number of resources required to formulate and implement the strategy.
Acceptability	It is concerned with the stakeholders' satisfaction and can be financial and non-financial.

2. Business Unit Level Strategy:

Strategic business unit (SBO) may be any profit centre that can be planned independently from the other business units of a corporation. At the business unit level, the strategic issues are about practical coordination of operating units and developing and sustaining a competitive advantage for the products and services that are produced.

3. Functional Level Strategy:

The functional level is the level of the operating divisions and departments. The strategic issues at this level are related to functional business processes and value chain. Functional level strategies in R&D, operations, manufacturing, marketing, finance, and human resources involve the development and coordination of resources through which business unit level strategies can be executed effectively and efficiently. Functional units of an organization are involved in higher level strategies by providing input to the business unit level and corporate level strategy, such as providing information on customer feedback or on resources and capabilities on which the higher level strategies can be based. Once the higher level strategy is developed, the functional units translate them into discrete action plans that each department or division must accomplish for the strategy to succeed.

Among the different functional activities viz production, marketing, finance, human resources and research and development, finance assumes highest importance during the top down and bottom up interaction of planning. Corporate strategy deals with deployment of resources and financial strategy is mainly concerned with mobilization and effective utilization of money, the most critical resource that a business firm likes to have under its command. Truly speaking, other resources can be easily mobilized if the firm has adequate monetary base. To go into the details of this interface between financial strategy and corporate strategy and financial planning and corporate planning let us examine the basic issues addressed under financial planning.

Question 3

Financial Planning

Solution

Financial planning is the backbone of the business planning and corporate planning. It helps in defining the feasible area of operation for all types of activities and thereby defines the overall planning framework. Financial planning is a systematic approach whereby the financial planner helps the customer to maximize his existing financial resources by utilizing financial tools to achieve his financial goals.

There are 3 major components of financial planning:

- Financial Resources (FR)
- Financial Tools (FT)
- Financial Goals (FG)

Financial Planning: FR + FT = F

For an individual, financial planning is the process of meeting one's life goals through proper management of the finances. These goals may include buying a house, saving for children's education or planning for retirement. It is a process that consists of specific steps that helps in taking a big-picture look at where you financially are. Using these steps you can work out where you are now, what you may need in the future and what you must do to reach your goals.

Outcomes of the financial planning are the financial objectives, financial decision-making and financial measures for the evaluation of the corporate performance. Financial objectives are to be decided at the very outset so that rest of the decisions can be taken accordingly. The objectives need to be consistent with the corporate mission and corporate objectives. Financial decision making helps in analyzing the financial problems that are being faced by the corporate and accordingly deciding the course of action to be taken by it. The financial measures like ratio analysis, analysis of cash flow statement are used to evaluate the performance of the Company. The selection of these measures again depends upon the corporate objectives.

Question 4

Interface of Financial Policy and Strategic Management

Solution

The interface of strategic management and financial policy will be clearly understood if we appreciate the fact that the starting point of an organization is money and the end point of that organization is also money. No organization can run an existing business and promote a new expansion project without a suitable internally mobilized financial base or both i.e. internally and externally mobilized financial base.

Sources of finance and capital structure are the most important dimensions of a strategic plan. The need for fund mobilization to support the expansion activity of firm is very vital for any organization. The generation of funds may arise out of ownership capital and or borrowed capital. A company may issue equity shares and/or preference shares for mobilizing ownership capital and debentures to raise borrowed capital. Public deposits, for a fixed time period, have also become a major source of short and medium term finance. Organizations may offer higher rates of interest than banking institutions to attract investors and raise fund. The overdraft, cash credits, bill discounting, bank loan and trade credit are the other sources of short term finance.

Along with the mobilization of funds, policy makers should decide on the capital structure to indicate the desired mix of equity capital and debt capital. There are some norms for debt equity ratio which need to be followed for minimizing the risks of excessive loans. For instance, in case of public sector organizations, the norm is 1:1 ratio and for private sector firms, the norm is 2:1 ratio. However this ratio in its ideal form varies from industry to industry. It also depends on the planning mode of the organization. For capital intensive industries, the proportion of debt to equity is much higher. Similar is the case for high cost projects in priority sectors and for projects in under developed regions.

Another important dimension of strategic management and financial policy interface is the investment and fund allocation decisions. A planner has to frame policies for regulating investments in fixed assets and for restraining of current assets. Investment proposals mooted by different business units may be divided into three groups. One type of proposal will be for addition of a new product by the firm. Another type of proposal will be to increase the level of operation of an existing product through either an increase in capacity in the existing plant or setting up of another plant for meeting additional capacity requirement. The last is for cost reduction and efficient utilization of resources through a new approach and/or closer monitoring of the different critical activities. Now, given these three types of proposals a planner should evaluate each one of them by making within group comparison in the light of capital budgeting exercise. In fact, project evaluation and project selection are the two most important jobs under fund allocation. Planner's task is to make the best possible allocation under resource constraints.

Dividend policy is yet another area for making financial policy decisions affecting the strategic performance of the company. A close interface is needed to frame the policy to be beneficial for all. Dividend policy decision deals with the extent of earnings to be distributed as dividend and the extent of earnings to be retained for future expansion scheme of the firm. From the point of view of long term funding of business growth, dividend can be considered as that part of total earnings, which cannot be profitably utilized by the company. Stability of the dividend payment is a desirable consideration that can have a positive impact on share prices. The alternative policy of paying a constant percentage of the net earnings may be preferable from the point of view of both flexibility of the firm and ability of the firm. It also gives a message of lesser risk for the investors. Yet some other companies follow a different alternative. They pay a minimum dividend per share and additional dividend when earnings are higher than the normal earnings. In actual practice, investment opportunities and financial needs of the firm and the shareholders preference for dividend against capital gains resulting out of share are to be taken into consideration for arriving at the right dividend policy. Alternatives like cash dividend and stock dividend are also to be examined while working out an ideal dividend policy that supports and promotes the corporate strategy of the company.

Thus, the financial policy of a company cannot be worked out in isolation of other functional policies. It has a wider appeal and closer link with the overall organizational performance and direction of growth. These policies being related to external awareness about the firm, especially the awareness of the investors about the firm, in respect of its internal performance. There is always a process of evaluation active in the minds of the current and future stake holders of the company. As a result preference and patronage for the company depends significantly on the financial policy framework. Hence, attention of the corporate planners must be drawn while framing the financial policies not at a later stage but during the stage of corporate planning itself. The nature of interdependence is the crucial factor to be studied and modelled by using an in depth analytical approach. This is a very difficult task compared to usual cause and effect study because corporate strategy is the cause and financial policy is the effect and sometimes financial policy is the cause and corporate strategy is the effect.

Question 5

Balancing Financial Goals Vis-A-Vis Sustainable Growth

Solution

The concept of sustainable growth can be helpful for planning healthy corporate growth. This concept forces managers to consider the financial consequences of sales increases and to set sales growth goals that are consistent with the operating and financial policies of the firm. Often, a conflict can arise if growth objectives are not consistent with the value of the organization's sustainable growth. Question concerning right distribution of resources may take a difficult shape if we take into consideration the rightness not for the current stakeholders but for the future stakeholders also. To take an illustration, let us refer to fuel industry where resources are limited in quantity and a judicial use of resources is needed to cater to the need of the future customers along with the need of the present customers. One may have noticed the save fuel campaign, a demarketing campaign that deviates from the usual approach of sales growth strategy and preaches for conservation of fuel for their use across generation. This is an example of stable growth strategy adopted by the oil industry as a whole under resource constraints and the long run objective of survival over years. Incremental growth strategy, profit strategy and pause strategy are other variants of stable growth strategy.

Sustainable growth is important to enterprise long-term development. Too fast or too slow growth will go against enterprise growth and development, so financial should play important role in enterprise development, adopt suitable financial policy initiative to make sure enterprise growth speed close to sustainable growth ratio and have sustainable healthy development.

What makes an organization financially sustainable?
To be financially sustainable, an organization must: ➢ have more than one source of income; ➢ have more than one way of generating income; ➢ do strategic, action and financial planning regularly; ➢ have adequate financial systems; ➢ have a good public image ➢ be clear about its values (value clarity); and ➢ Have financial autonomy.

The sustainable growth rate (SGR), concept by Robert C. Higgins, of a firm is the maximum rate of growth in sales that can be achieved, given the firm's profitability, asset utilization, and desired dividend payout and debt (financial leverage) ratios. The sustainable growth rate is a measure of how much a firm can grow without borrowing more money. After the firm has passed this rate, it must borrow funds from another source to facilitate growth. Variables typically include the net profit margin on new and existing revenues; the asset turnover ratio, which is the ratio of sales revenues to total assets; the assets to beginning of period equity ratio; and the retention rate, which is defined as the fraction of earnings retained in the business.

SGR = ROE x (1- Dividend payment ratio)

Sustainable growth models assume that the business wants to: 1) maintain a target capital structure without issuing new equity; 2) maintain a target dividend payment ratio; and 3) increase sales as rapidly as market conditions allow. Since the asset to beginning of period equity ratio is constant and the firm's only source of new equity is retained earnings, sales and assets cannot grow any faster than the retained earnings plus the additional debt that the retained earnings can support. The sustainable growth rate is consistent with the observed evidence that most corporations are reluctant to issue new equity. If, however, the firm is willing to issue additional equity, there is in principle no financial constraint on its growth rate. Indeed, the sustainable growth rate formula is directly predicted on return on equity.

Economists and business researchers contend that achieving sustainable growth is not possible without paying heed to twin cornerstones: growth strategy and growth capability. Companies that pay inadequate attention to one aspect or the other are doomed to fail in their efforts to establish practices of sustainable growth (though short- term gains may be realized). After all, if a company has an excellent growth strategy in place, but has not put the necessary infrastructure in place to execute that strategy, long-term growth is impossible. The reverse is also true.

The very weak idea of sustainability requires that the overall stock of capital assets should remain constant. The weak version of sustainability refers to preservation of critical resources to ensure support for all, over a long time horizon. The strong concept of sustainability is concerned with the preservation of resources under the primacy of ecosystem functioning. These are in line with the definition provided by the economists in the context of sustainable development at macro level.

What makes an organization sustainable?
➢ In order to be sustainable, an organization must: ➢ have a clear strategic direction; ➢ be able to scan its environment or context to identify opportunities for its work; ➢ be able to attract, manage and retain competent staff; ➢ have an adequate administrative and financial infrastructure; ➢ be able to demonstrate its effectiveness and impact in order to leverage further resources; and ➢ get community support for, and involvement in its work

The sustainable growth model is particularly helpful in situations in which a borrower requests additional financing. The need for additional loans creates a potentially risky situation of too much debt and too little equity. Either additional equity must be raised or the borrower will have to reduce the rate of expansion to a level that can be sustained without an increase in financial leverage.

Mature firms often have actual growth rates that are less than the sustainable growth rate. In these cases, management's principal objective is finding productive uses for the cash flows that exist in excess of their needs. Options

available to business owners and executives in such cases includes returning the money to shareholders through increased dividends or common stock repurchases, reducing the firm's debt load, or increasing possession of lower earning liquid assets. These actions serve to decrease the sustainable growth rate. Alternatively, these firms can attempt to enhance their actual growth rates through the acquisition of rapidly growing companies.

Growth can come from two sources: increased volume and inflation. The inflationary increase in assets must be financed as though it were real growth. Inflation increases the amount of external financing required and increases the debt -to-equity ratio when this ratio is measured on a historical cost basis. Thus, if creditors require that a firm's historical cost debt-to-equity ratio stay constant, inflation lowers the firm's sustainable growth rate.

THANKS.....

CHAPTER 2

INDIAN FINANCIAL SYSTEM

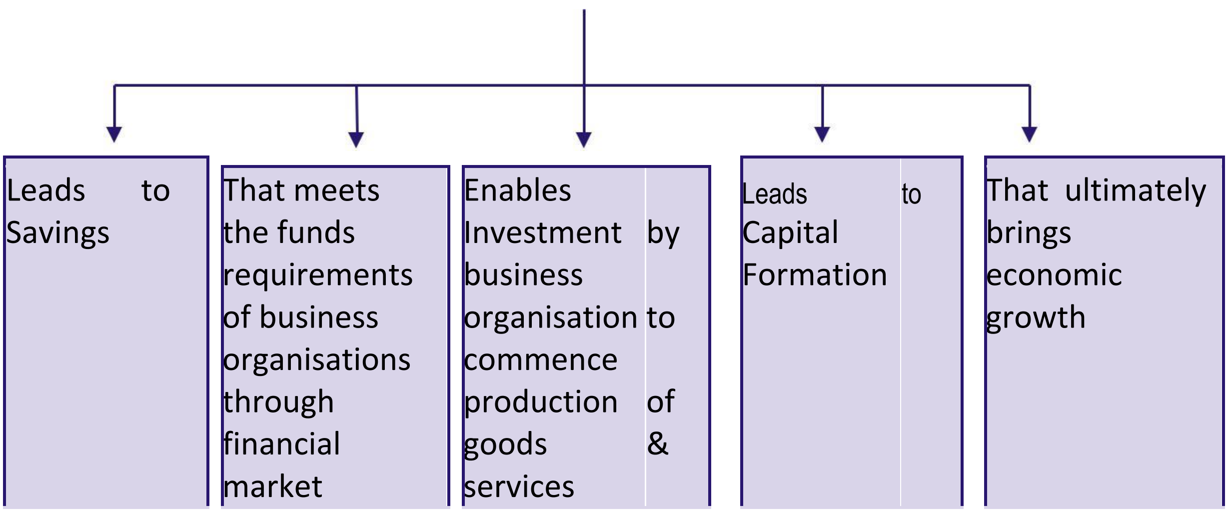
Question 1
Significance and Definition

Solution
Financial system is a system of interrelated activities that work together to achieve a predetermined goal. It includes financial market, financial institutions, financial services and financial instrument which influence the generation of savings, investment, capital formation and growth.

Van Horne defined the financial system as the purpose of financial markets to allocate savings efficiently in an economy to ultimate users either for investment in real assets or for consumption. *Christy* has opined that the objective of the financial system is to "supply funds to various sectors and activities of the economy in ways that promote the fullest possible utilization of resources without the destabilizing consequence of price level changes or unnecessary interference with individual desires." According to *Robinson*, the primary function of the system is "to provide a link between savings and investment for the creation of new wealth and to permit portfolio adjustment in the composition of the existing wealth."

From the above definitions, it may be said that the primary function of the financial system is the mobilization of savings, their effective utilization for investment in various sectors of the economy and stimulating capital formation to accelerate the process of economic growth. The significance of financial system as explained above can be graphically depicted in the following diagram.

Significance of Financial System

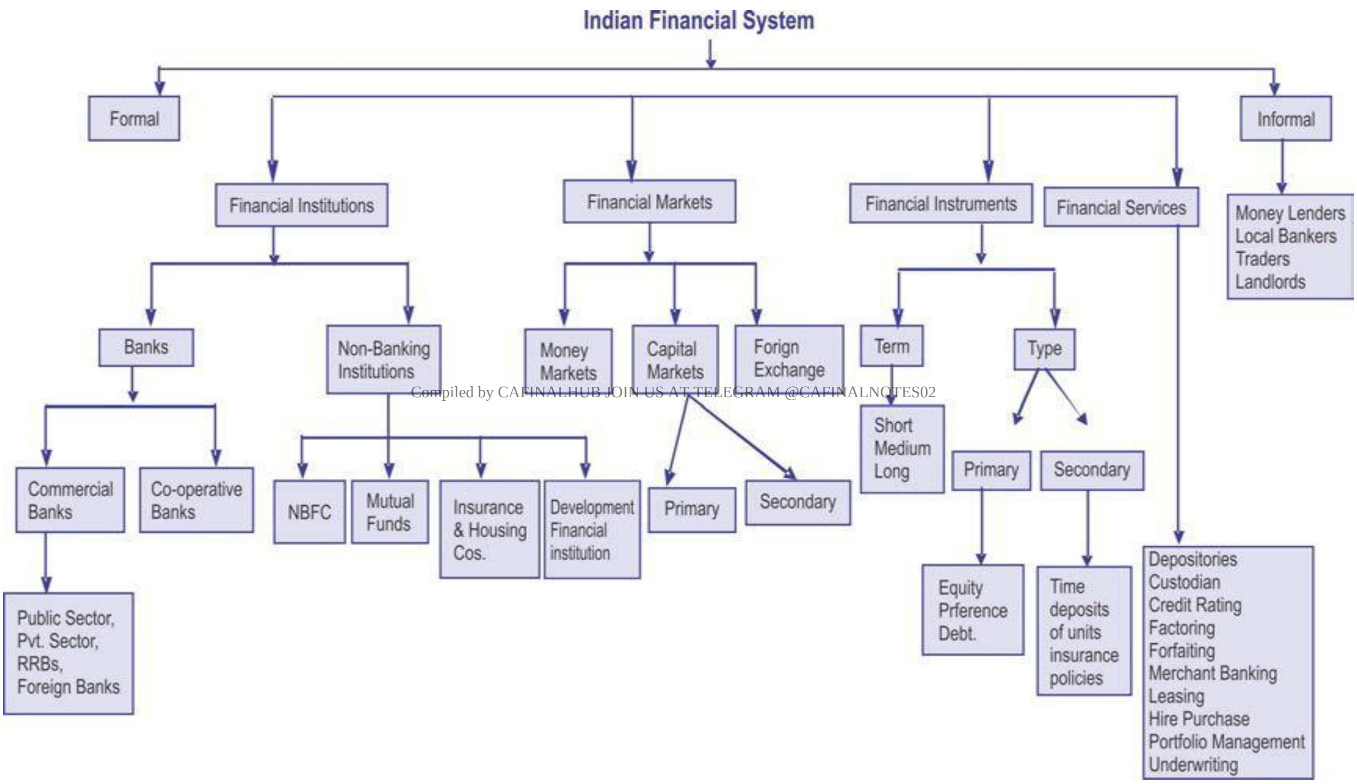


Question 2

Liberalization of the Financial System

Solution

A profound overhaul of the economic system consisting of industrial deregulation, liberalization of policies relating to foreign direct investment, public enterprise reforms, reforms of taxation system, trade liberalization and financial sector reforms have been initiated in 1992-93. Financial sector reforms in the area of commercial banking, capital markets and non-banking finance companies have also been initiated.



The focus of reforms in the financial markets has been on removing the fundamental weaknesses and developing the financial markets on sound lines. The money and foreign exchange market reforms have attempted to broaden and deepen them. Reforms in the government securities market sought to smoothen the maturity structure of debt, raising of debt at close-to-market rates and improving the liquidity of government securities by developing an active secondary market. In the capital market the focus of reforms has been on strengthening the disclosure standards, developing the market infrastructure and strengthening the risk management systems at stock exchanges to protect the integrity and safety of the stock market. Elements of the structural reforms in various market segments are introduction of free pricing of financial assets such as interest rate on government securities, pricing of capital issues and exchange rate, the enlargement of the number of participants and introduction of new instruments.

Improvement in the financial soundness and credibility of banks is a part of banking reforms undertaken by the RBI, a regulatory and supervisory agency over commercial banks under the Banking Companies Regulation Act 1949. The improvement of financial health of banks is sought to be achieved by capital adequacy norms in relation to the risks to which banks are exposed, prudential norms for income recognition and provision of bad debts. There is a need to further improve financial soundness and to measure up to the increasing competition that a fast liberalizing and globalizing economy would bring to the Indian banking system.

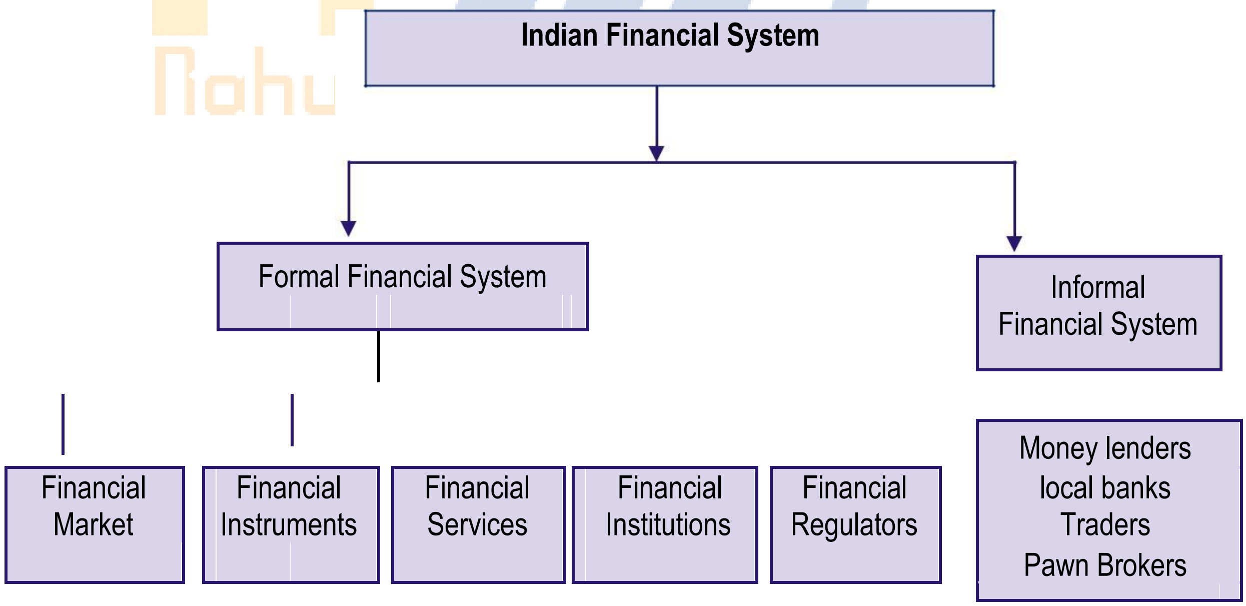
In the area of capital market, the Securities and Exchange Board of India (SEBI) was set up in 1992 to protect the interests of investors in securities and to promote development and regulation of the securities market. SEBI has issued guidelines for primary markets, ensuring safe and easy access to capital market to improve the quality of public issues, allotment of shares, private placement, book building, takeover of companies and venture capital. In the area of secondary markets, measures to control volatility and transparency in dealings by prohibiting the badla system, laying down insider regulations to protect integrity of markets, rolling settlement by introduction of T + 2, custodians, introduction of screen-based online trading, dematerialization of shares by setting up depositories and trading in derivative securities (stock index futures) and enable an efficient and safe clearing and payment system. There is a sea change in the institutional and regulatory environment in the capital market area.

In regard to Non-Bank Finance Companies (NBFCs), the Reserve Bank of India has issued several measures aimed at encouraging disciplined NBFCs which run on sound business principles. The measures seek to protect the interests of depositors and provide more effective supervision, particularly over those which accept public deposits. The regulations stipulate an upper limit for public deposits which NBFCs can accept. This limit is linked to credit rating by an approved rating agency. An upper limit is also placed on the rate of interest on deposits in order to restrain NBFCs from offering incentives and mobilizing excessive deposits which they'" may not be able to service. The heterogeneous nature, number, size, functions (deployment of funds) and level of managerial competence of the NBFCs affect their effective regulation.

Since the liberalization of the economy in 1992-93 and the initiation of reform measures, the financial system is getting market-oriented. Market efficiency would be reflected in the wide dissemination of information, reduction of transaction costs and allocation of capital to the most productive users. Further, freeing the financial system from government interference has been an important element of economic reforms. The economic reforms also aim at improved financial viability and institutional strengthening. To improve the effective implementation of the monetary policy, money market and foreign exchange markets have been linked.

Question 3
Types of financial system

Solution
The Indian financial system consists of formal and informal financial system which is depicted in the following figure:



(i) Informal Financial System

From the above diagram, it can be easily understood that the Indian Financial System can be categorized into formal and informal financial system. The Informal financial system consists of moneylenders; Associations, funds, clubs, committees etc. These people have a system and they have their own rules on how they should function in their day to day activities.

Moreover, informal financial system responds quickly to short term financing opportunities and allowed low income people access to service not available to them through the formal channel. Another advantage is that in informal financial system, loans were given quickly to the lenders. Also, informal financial markets are not subject to interest rate regulation. They do not incur legal expenses and their cost of lending and deposit taking tends to be lower than that of formal financial institutions. However, the formal financial system is always preferable because it is systematic and transparent and offers numerous benefits.

(ii) Formal Financial System

The formal financial system consists of financial institutions, financial markets, financial instrument, and financial services

Question 4

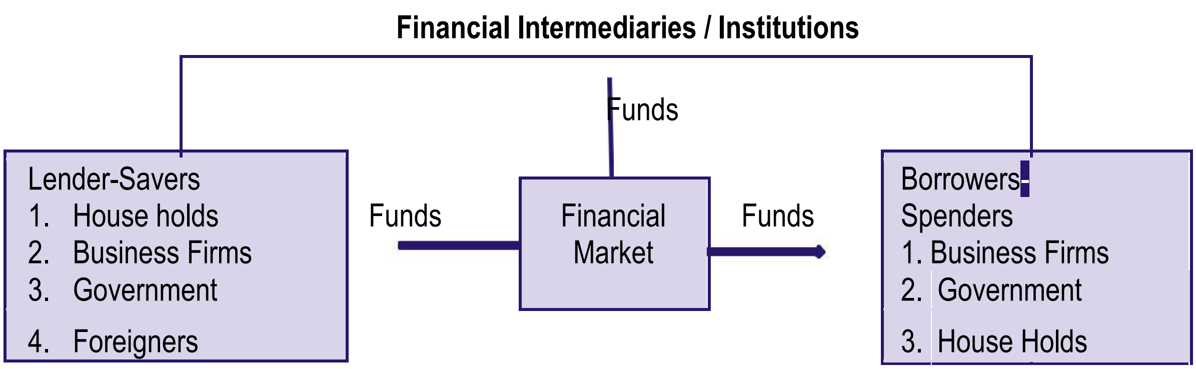
Segregation of Formal Financial System

Solution

The formal financial system can be segregated into following sub-systems:

(i) Financial Institutions

First of all let us get some idea about the concept of financial institutions by going through following diagram:



Flow of Funds through the Financial Intermediaries Source: 'Indian Financial System'

Financial Institutions can be classified as banking and non-banking financial institutions. Banks are creators and providers of credit. While non-banking financial companies are only providers of credit. Financial institutions can be specialized financial institutions like Export Import Bank of India (EXIM), Tourism Finance Corporation of India (TFCI), the Infrastructure Development Finance Company (IDFC) etc. They can also be sector based such as National Bank for Agriculture and Rural Development (NABARD) and the National Housing Bank (NHB). Further, Unit Trust of India (UTI) which is in the business of mutual fund, Life Insurance Corporation (LIC) and General Insurance Corporation (GIC) and its subsidiaries are also classified as financial institutions. Therefore, the financial institutions can be categorized into banking institutions and non-banking institutions.

(a) Banking Financial Institutions

Banking institutions are those institutions, which participate in the country's payment system, i.e. they provide transaction services. They play an important role in the mobilization of deposits and distribution of credit to various sectors of the economy. A sound banking system ensures that deposits accumulated from people are productively utilized. Banking sector is dominant in India as it accounts for nearly half of the total financial assets in the financial sector.

(b) Non-Banking Financial Institutions

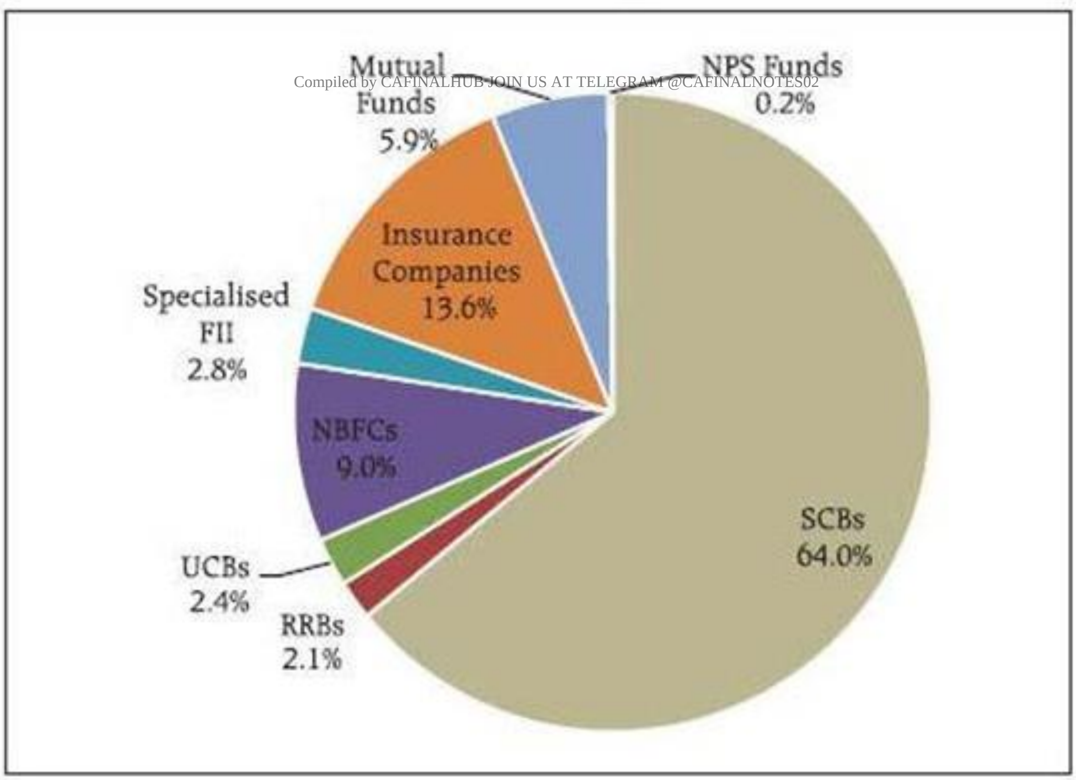
Non-banking financial institutions are those institutions which act as mere providers of credit and they do not create credit, e.g., LIC, UTI, and IDBI.

COMPARISON BETWEEN BANKING AND NON-BANKING INSTITUTIONS

Basis for comparison	Banking Institutions	Non-Banking Institutions
Meaning	Bank is a financial intermediary which provides banking services to general people. And it requires a bank license for that.	Non-Banking institutions are basically company form of organization that provides banking services to people without holding a banking license.
Transaction Services	Banks provide transaction services like providing overdraft facility, cheque books travelers cheque, demand draft, transfer of funds, etc	The non-banking institutions do not provide any transaction services.

Money supply	Bank deposits constitute a major part of the national money supply	The money supply of the non-banking institutions is small.
Credit Creation	Bank creates credit	Non-banking institutions do not create credit.
Compliance	Banks are required to comply with some of the legal requirements like Cash Reserve Ratio (CRR), Statutory Liquid Ratio and Capital Adequacy Ratio (CAR).	Non-banking institutions are not required to comply with these legal requirements.
Demand Deposit	They are not accepted	They are accepted
Payment and settlement system	Contains an integral part of the system.	Not a part of the system.

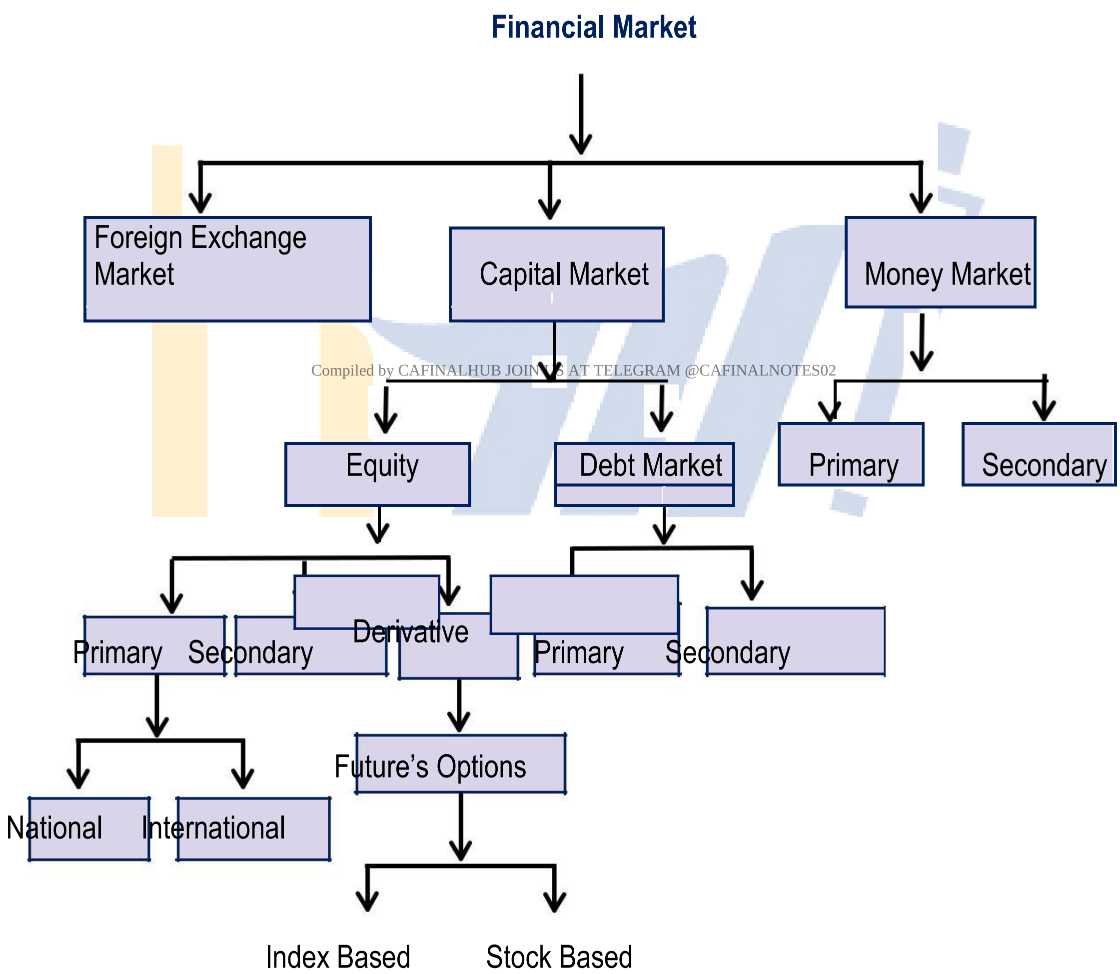
Share of different sectors in total assets of the Indian financial system



Source: RBI, SEBI, IRDA and PFRDA.

(ii) Financial Markets

The financial market is a market where trading of securities including equities, bonds, currencies and derivatives takes place. Financial market can be divided into money market and capital market. Money market is a market for short term securities having a maturity period of less than one year. Capital Market is a market for long term securities having a maturity period of more than one year. Further, capital market can be divided into primary market and secondary market. In primary market, securities (shares, bonds, debentures) are issued to the public for the first time. While in secondary market, trading (purchase and sale) takes place in those securities are already issued to the public.



Functions of Financial Markets:

The main functions of financial markets are enumerated as below:

1. To facilitate creation and allocation of credit and liquidity.
2. To serve as intermediaries for mobilization of savings.
3. To help in the process of balanced economic growth.
4. To provide financial convenience.
5. To provide information and facilitate transactions at low cost.
6. To cater to the various credits needs of the business organizations.

(iii) Financial Instruments

Financial instruments are those instruments which have a monetary value. These instruments can be classified into debt based securities and equity based securities. Equity based securities consist of equity share capital which is ownership based securities and represents risk capital. Debt based securities consists of bonds and debentures. Debenture is an acknowledgement of debt which has to be repaid in full in certain number of years mentioned at the time of issue of debenture itself. On the other hand, bonds are financial instruments issued by companies which are basically a financial contract between a company (borrower) and investors (lenders). Bonds are generally used by companies, municipalities, states and sovereign governments to raise money and finance a variety of projects and activities. Owners of bonds are debt holders or creditors of the issue.

Short-term debt-based financial instruments are issued for one year or less. Securities of this kind come in the form of T-bills and commercial paper. Long-term debt-based financial instruments are issued for more than one year. These are bonds, debentures and loans.

Characteristics of Financial Instruments

The important characteristics of financial instruments are enumerated as below:

a) **Liquidity**: Financial instruments provide liquidity. These can be easily and quickly converted into cash.
b) **Marketing**: Financial instruments facilitate easy trading on the market. They have a ready market.
c) **Collateral value**: Financial instruments can be pledged for getting loans.
d) **Transferability**: Financial instruments can be transferred from one person to another.
e) **Maturity period**: The maturity period of financial instruments may be short term, medium term or long term.

f) **Transaction cost**: Financial instruments involve buying and selling cost. The buying and selling costs are called transaction costs.

g) **Risk**: Financial instruments carry risk. Equity based instruments are riskier in comparison to debt based instruments because the payment of dividend is uncertain. A company may not declare dividend in a particular year. However, payment of principle or interest is more or less certain unless the company gets insolvent.

h) **Future trading**: Financial instruments facilitate future trading so as to cover risks arising out of price fluctuations, interest rate fluctuations etc.

(iv) Financial Services

Financial services are services which involves investment, lending, and management of money and assets. Financial services are needed for the following activities:

i. Borrowing and lending
ii. Investing
iii. Buying and selling securities
iv. Making and enabling payments and settlements
v. Managing risk

Liquidity is required for the good functioning of the financial system. Financial liquidity is enhanced through trading in securities. Liquidity is provided by brokers who assist the buyers and sellers of securities in arriving at a trade agreement. Also, market makers help in increasing liquidity by providing buy and sell quotes.

The producers of financial services are financial intermediaries or institutions such as banks, insurance companies, mutual funds and stock exchanges. These financial institutions provide financial services such as merchant banking, leasing, hire purchase, factoring and credit rating. Financial services rendered by financial institutions bridge the gap between lack of knowledge on the part of investors and latest trends in the financial instruments and markets. These financial services are essential for the creation of new business, expansion of existing industries and economic growth.

The various types of financial services are briefly explained as below:

(a) Investment Banking

Companies need cash in order to grow and expand their businesses; Investment banks sell securities to public investors in order to raise the cash. These securities come in the form of stocks or bonds. Thus, Investment banks are essentially financial intermediaries, who assist their clients in raising capital either by underwriting their shares or bonds or by acting as an agent (merchant banker) in the issuance of securities.

(b) Credit Rating

Credit Rating means an assessment made from credit-risk evaluation, translated into a current opinion as on a specific date on the quality of a specific debt security issued or on obligation undertaken by an enterprise in terms of the ability and willingness of the obligator to meet principal and interest payments on the rated debt instrument in a timely manner.

Thus, Credit Rating is:

1) An expression of opinion of a rating agency.
2) The opinion is in regard to a debt instrument.
3) The opinion is as on a specific date.
4) The opinion is dependent on risk evaluation.
5) The opinion depends on the probability of interest and principal obligations being met timely.

Such opinions are relevant to investors due to the increase in the number of issues and in the presence of newer financial products viz. asset backed securities and credit derivatives.

(c) Consumer finance

Consumer credit provides short term/medium term loans to finance purchase of goods or services for personal use. There are four important sources of consumer finance viz manufacturers/sellers/dealers, finance companies, banks and credit card companies. In the past, banks provided finance to manufacturing organizations. The consumers borrowed money from the sellers/dealers directly. Finance companies too entered this arena while credit card entitles with the support from banks started operating with substantial success. Both nationalized and private sector banks have started marketing aggressively for a large slice of the market share in this consumer finance segment. Employers also provide loan facilities to salary earners as a part of welfare scheme for their employees. In big concerns, employees organize themselves into co-operative credit societies and funds raised by its members through periodical contributions are used as loan assistance at low rate of interest.

(d) Factoring

This concept has not been fully developed in our country and most of their work is done by companies themselves. All units' particularly small or medium size units have to make considerable efforts to realize the sale proceeds without much success creating functional difficulties for such units.

Many a units under small -scale sector have become sick only because of delay/non-realisation of their dues from large units. Introduction of factoring services will, therefore, prove very beneficial for such units as it will free the units from hassles of collecting receivables to enable them to concentrate on product development and marketing.

(e) Housing Finance

The volume and growth rate across time periods are in housing loans are viewed as one of the important barometers of measuring growth in an economy. The demand for Housing Finance comes from:

1. Salary earners and self-employed professionals with their basic need of a roof over their head.
2. Nonresidents having an eye on capital appreciation of the asset or with an eye to their possible resettlement in India for NRIs.

The supply of loans comes from:

(a) LIC, National Housing Bank in the government sector.

(b) Private Sector housing companies viz. HDFC, Commercial Banks etc.

(c) Non Banking Finance Companies, Nidhis and Chit funds, Co-operative and Credit Societies, employers extending staff loans for housing, beside private money lenders.

(f) Asset Restructuring/Management Company

Asset reconstruction company's (ARC) first task is to manage and convert the sick companies or those companies whose NPA's rose to a significant level into profitable ones. But, the ARC's face the risk of suffering loss if the company they are trying to manage may land itself into insolvency. However, if properly managed, the ARC's may be able to recover them from financial distress, convert them into profitable ones and transfer them to worthy candidates. ARC's charge a commission or fee from the distressed company for their services.

Asset Management Companies (AMC's) pool large amount of funds from various source of investors and invest these pooled resources in diverse securities by paying out proportional returns to the investors. Simply put, they help their client to invest money and buy securities. They decide what to buy by relying on in-house research and data analytics. AMC's charges a small fee for this sort of work.

(g) Depository Services

Depository system is concerned with conversion of securities from physical to electronic form, settlement of trades in electronic segment, electronic transfer of ownership of shares and electronic custody of securities. All securities in the depositories are identical in all respects and are thus fungible. The ownership and transfer of securities take place by means of book entries, avoiding the risks associated with paper.

(h) Debit Cards

Debit cards are also known as cheque cards. A debit card is a plastic card that provides the cardholder electronic access to his or her bank account(s) at a financial institution. Debit cards look like credit cards or ATM (automated teller machine) cards, but operate like cash or a personal cheque. Debit cards are different from credit cards. While a credit card is to "pay later," a debit card is to "pay now." When one uses a debit card his money is immediately deducted from his cheque or savings account.

(i) Online Share Trading

Online stock trading is an internet based stock trading facility where investor can trade shares through a website without any manual intervention from the broker.

It also provides investors with rich, interactive information in real time including market updates, investment research and robust analysis.

Question 5

Functions of a Financial System

Solution

1. **Mobilization of savings.** Savings are done by millions of people. But amount saved are of no use unless they are mobilized into financial assets, whether currency, bank deposits, post office savings deposits, life insurance policies, mutual funds, bonds or equity shares.

2. **Allocations of savings.** Amount of savings mobilized through millions of people will then be allocated among the needy sectors. Direct lending by the general public has been made possible through corporate bonds and equities. Besides, there are banks, insurance companies, and other financial institutions. They serve as financial intermediaries between the ultimate lender and the ultimate borrower. They mobilize savings of the lender by selling their own liabilities which are deposits, insurance premium amount

etc. and make these funds available to needy borrowers at their own risk. So, many savers find the secondary securities (indirect lending) of financial institutions much more acceptable than the primary securities (direct lending) of all sorts of borrowers.

3. **A financial system provides a payment system for the exchange of goods and services.** For exchange or sale of goods and services, payment in cash is the most preferred mode. However, large scale businesses deal mostly in credit transactions. After a certain date, payments are made either through cheque or online payment.

4. **A financial system provides a mechanism for the pooling of funds to invest in large-scale enterprises.** Large corporates raises funds through bonds, debentures and public deposits to invest in large scale business enterprises.

5. **Provide payment and settlement system.** Banks provide this mechanism by means of a payment facility based upon cheques, promissory notes, credit and debit cards. The payment mechanism is now being increasingly made through electronic means. The clearing and settlement mechanism of the stock market is done through depositories and clearing corporations

6. **Monitor corporate performance**. A financial system not only helps in selecting the projects to be funded but also motivates the various stakeholders of the financial system to monitor the performance of the investment. Financial markets and institutions help to monitor corporate performance and exert pressure on the corporates to continuously improve their performance.

7. **Helps in risk reduction** – The financial system helps in reduction of risk in the financial system by laying down rules for e.g. SEBI which lays down rules, regulations and guidelines from time to time for efficient and transparent conduct of operations in the capital market. Risk reduction is achieved by diversification of portfolios and screening of borrowers. Market participants also protect themselves from unexpected contingencies by buying insurance services. Risk is traded in the financial market through financial instruments such as derivatives. The derivatives shift risk from those who have it but don’t want it to those who are willing to take it.

8. **Provide price related information** – Financial markets provide information which enables the investors to make an informed decision about whether to

buy, sell or hold a financial asset. This information dissemination facilitates valuation of financial assets. Further, this process of valuation influences the market price of equity and debt instruments and guides the management as to whether their actions are consistent with the objective of wealth maximization of shareholders.

Question 6

Key elements of a well-functioning Financial System

Solution

Key elements of a well-functioning financial system are explained as below:

1. **A strong legal and regulatory environment** – Capital market is regulated by SEBI which acts a watchdog of the securities market. This has been ensured through the passing of SEBI Act, Securities Contract Regulation Act and numerous SEBI rules, regulations and guidelines. Likewise money market and foreign exchange market is regulated by RBI and this has been ensured through various provisions of the RBI Act, Foreign Exchange Management Act etc. Thus, a strong legal system protects the rights and interests of investors and acts as a most important element of a sound financial system.

2. **Stable money** – Money is an important part of an economy. Frequent fluctuations and depreciations in the value of money lead to financial crises and restrict the economic growth.

3. **Sound public finances and public debt management** – Sound public finances means setting and controlling public expenditures and increase revenues to fund these expenditures efficiently. Public debt management is the process of establishing and executing a strategy for managing the government's debt in order to raise the required amount of funding. It also includes developing and maintaining an efficient market for government securities.

4. **A central bank** – A central bank supervises and regulates the operations of the banking system. It acts as a banker to the banks and government, manager of money market and foreign exchange market and also lender of the last resort. The monetary policy of the Central Bank is used to keep the pace of economic growth on a higher path.

5. **Sound banking system** – A well-functioning financial system must have large variety of banks both in the private and public sector having both domestic and international operations with an ability to withstand adverse national and international events. They perform varied functions such as operating the payment and clearing system, and foreign exchange market. Banks also undertake credit risk analysis and assess the expected risk and return of a project before giving any loan for a proposed project.

6. **Information System** – All the participants in the financial system requires information at some stage or the other. Proper information disclosure practices form basis of a sound financial system for e.g. the corporates has to disclose their financial performance in the financial statements. Similarly, at the time of initial public offering, the companies have to disclose a host of information disclosing their financial health and efficiency.

7. **Well-functioning securities market** – A securities market facilitates the issuance of both equity and debt. An efficient securities market helps in the deployment of funds raised through the capital market to the required sections of the economy, lowering the cost of capital for the firms, enhancing liquidity and attracting foreign investment.

Question 7

Financial System Design

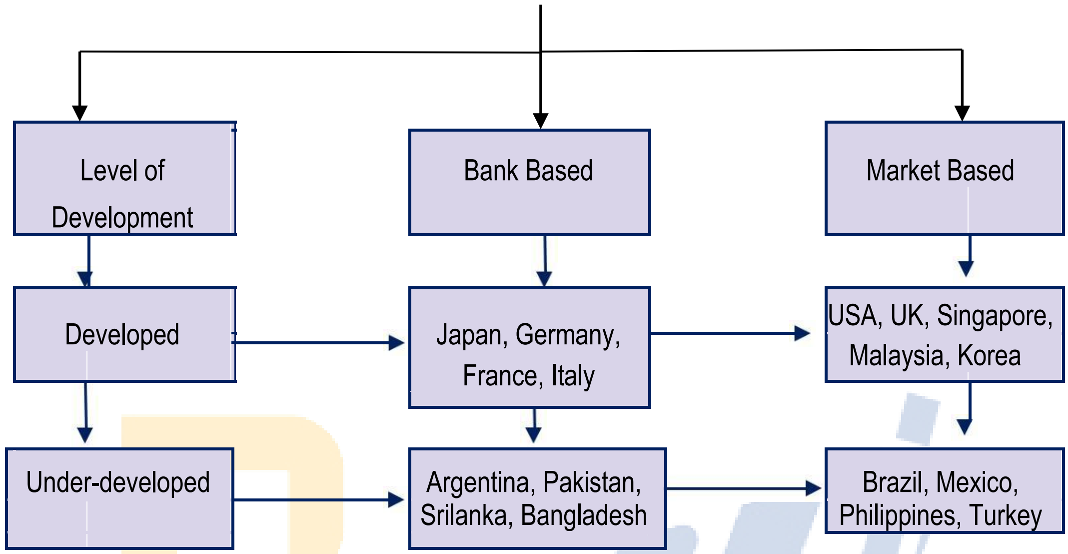
Solution

A financial integration is a well-integrated chain of financial markets and institutions that provide financial services. Different design of financial markets is found in different countries. Financial system design can be demarcated into **bank based** and **market based**.

The bank dominated system which is prevalent in Germany is one extreme where banks play a dominant role and stock market is not that relevant. On the other hand, there is market based system, which is prevalent in USA, where banks plays a much lesser role and the economy is largely controlled by the financial markets.

Demirguc Kunt and Levine (1999) have provided explanations of bank based and market based financial systems. In bank based financial systems, banks play a pivotal role in mobilizing savings, allocating capital, overseeing the investment decisions of corporate managers, and providing risk-management facilities. In market based financial systems, the securities markets share centre stage with banks in mobilizing the society's savings for firms, exerting corporate control, and easing risk management.

Financial System Design



Advantages of market based system

I. Stock markets facilitate diversification of securities to enable the investors to reduce risks.
II. In furtherance of the above point, it can be reiterated that it helps the investors to reduce their risks.
III. Market based system provides an information system which enables investor to make an informed decision which is reflected in the stock prices, and in turn leads to efficient allocation of investment.
IV. Another advantage of market based system is that they facilitate financing of new technologies.

Therefore, in case of emerging companies with significant financial and technological risks, a market based system is preferable.

Disadvantages of market based system

I. Market based system is prone to instability as market may be fluctuating in turbulent times.
II. Consequently, investors are exposed to market risk.
III. There is a free rider problem.

Advantages of bank-based financial system

i. Close relationship with parties.
ii. Provide tailor made contracts.
iii. Efficient risk sharing.
iv. No free rider problem.

Disadvantages of bank-based financial system

i. Retards innovation and growth as banks may have preference for low risk, low return projects.
ii. Impedes competition and entry of new firms because banks may collude with business managers against investors.

Difference between bank based financial system and market based financial system

i. In a market based financial system, the majority of the financial power is held by the stock market and the economy is dependent on how well or poorly the stock market is performing. On the other hand, in bank based financial system, the economy is dependent on how well or poorly the banking system is doing.

ii. In a market based system, banks are less dependent on interest from loans for their revenue enhancements and focuses on fee based services such as checking of accounts. However, in a bank based system, they focus their attention more on loans and are more dependent on interest from loans for their revenue increase.

iii. In a market-based financial economy, the wealth is spread more unevenly while in a bank-based financial system, the economy's wealth is more evenly spread.

iv. Market based financial system constantly changes and each individual within the society has the opportunity to gain or lose on any given day. But, in bank based financial system only a few are given the opportunity to maximize their gain.

v. In a market based financial system, laws are basically set forth and carried out by the government and are basically based on civil law rather than common law. Bank based financial system is prevalent where common law legal system is mostly there.

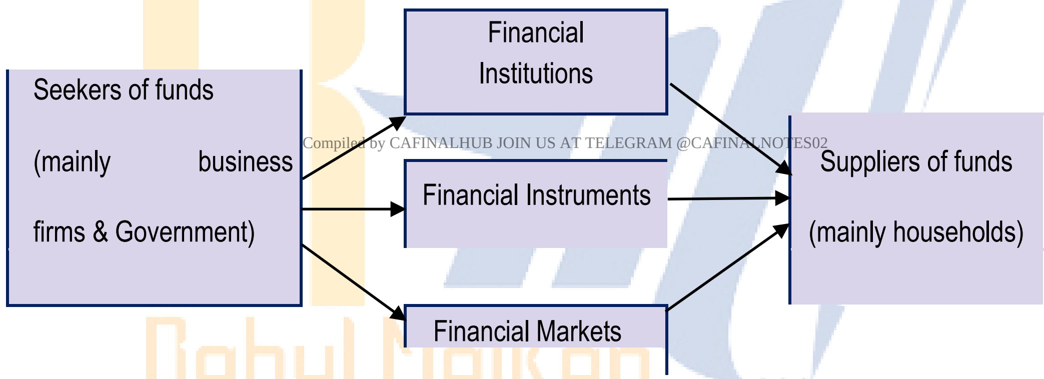
Question 8

Contribution of various types of financial market in economic development

Solution

Efficient and sound financial market of a country plays an important role in the nation's economic development. The economic development of a country depends upon the mobilization of savings and the flow of these savings to the corporates. The corporates acquires funds by issuing securities in the financial market by influencing the investors to invest their savings or borrowing from financial institutions. The savings of individuals, corporate sector and government should be mobilized by the financial institution, through financial markets by creating financial instruments with the help of the watchful eyes of financial regulators.

Flow of funds from Savers to borrowers in financial market which contributes to economic development



The contribution of various types of financial markets in economic development has been discussed as below:

(i) Capital Market

Capital market has an important role in India's industrial growth. Capital market is the market where long term debt and equity funds are traded. Industries which require capital on a large scale may tap the capital market. Therefore, the capital market provides the much needed liquidity into the economy and it gives a big boost to the GDP of an economy as it serves as an effective source of allocation of capital to the Industry and Government.

The primary role of capital market is to transfer surplus funds to deficit sectors which are in dire need of money. The capital market performs the crucial function of facilitating capital formation in the economy. Capital market can be divided into primary market and secondary market. Primary market is utilized by companies for the purpose of setting up new businesses or for expanding or modernizing the existing business. Secondary market provides an opportunity to the company to raise the market price of their shares, thereby enabling them to attract more capital from investors and loans from banks. It also helps the shareholders to increase their wealth.

However, the contribution of **Medium and Small Scale (MSME)** in India's GDP cannot be denied. As per details provided by the Press Information Bureau dated 22nd July, 2014, the estimated contribution of manufacturing sector Micro, Small and Medium Enterprises (MSME) to GDP, during 2012-13, is approximately 7.04%. However, taking into account the contribution of services sector MSME, which is estimated at 30.50% during 2012-13, the share of MSME sector in GDP of the country, during 2012-13, is 37.54%. It has also been observed that MSME sector that provides the highest number of employment opportunities has been hit by severe capital crunch. So, this is an area where immediate measures are required so that necessary capital can be infused to provide much needed liquidity. This is urgent because unless the MSME sector will get the much needed capital they deserve, they cannot boost up their production. If production doesn't

get increased, employment generation will not take place. Low employment generation will not raise the standard of living of the people. This will slow the rate of economic growth and development of an economy. The SME Exchange is a welcome move for the Small and Medium Scale Enterprises, but it is alone not enough to revive MSME.

(ii) Money Market

Money market is the market where short-term funds are traded. In simple term, it means that all the financial assets or instruments which can be easily converted into money are traded in this market. The short-term money requirement of the borrowers can be easily met with the funds provided by the money market.

Money markets play a key role in banks' liquidity management and the monetary policy of RBI which are discussed as below:

(a) Banks' liquidity management

Banks have to maintain Statutory Liquidity Ratio (SLR) and Cash Reserve Ratio (CRR). CRR is the reserve which the Banks have to keep with Reserve Bank of India (RBI). On the other hand, SLR is the amount which the banks have to keep with themselves. Banks are often evaluated on the basis of their liquidity.

SLR requirements help banks to do that. Whenever the RBI issues treasury bills on behalf of the Government, CRR and SLR requirements of banks are automatically met.

(b) Monetary policy

Monetary policy affects rates of interest, inflation and business cycle. Through the introduction of repos and reverse repos, the government adjusts the rate of interest, thus, reducing or increasing money supply by impacting inflation, thereby effecting changes in business cycles. Also, by introducing treasury bills and other money market instruments, it affects money supply and consequently inflation and business cycles.

In normal times, money markets are among the most liquid in the financial sector. By providing the appropriate instruments for liquidity trading, the money market allows the refinancing of short and medium-term positions and facilitates the mitigation of one's business liquidity risk with the help of commercial papers, commercial bills and certificate of deposits.

(iii) Foreign Exchange Market

Foreign exchange earned through foreign direct investment in India can be used to remove the poverty and for other productive purposes. Inflow of foreign exchange increases the scale of production and national income of the country. With the rise in the demand of domestic goods, resources of a country are fully utilized and it helps in reducing the unemployment of a country.

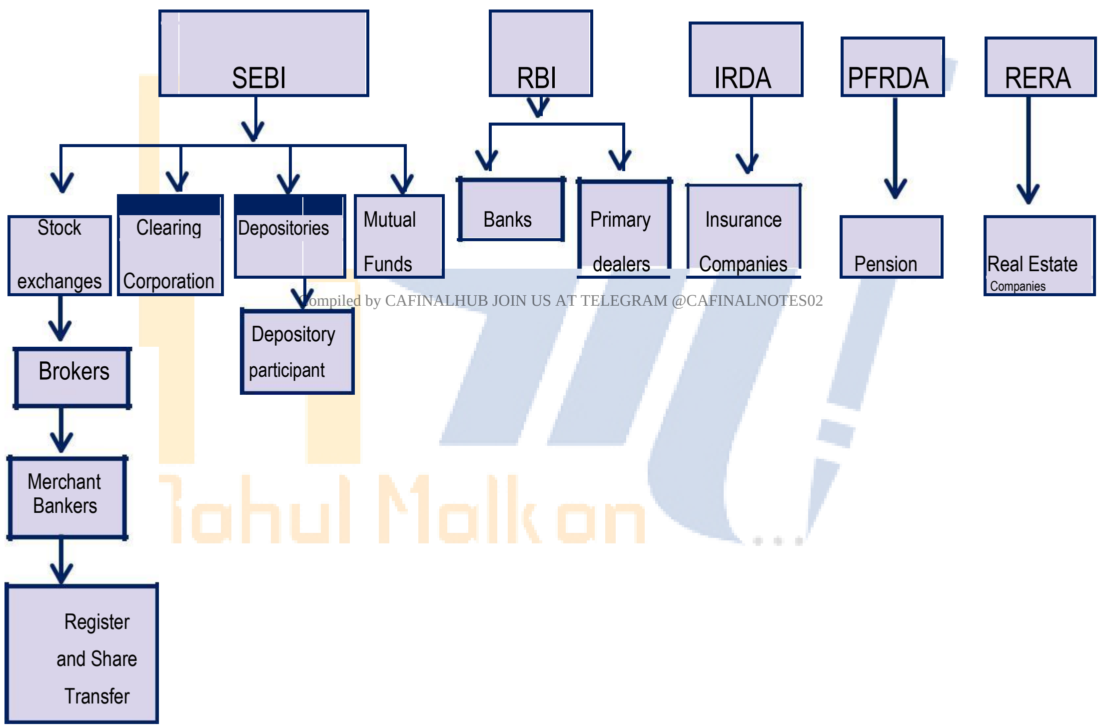
Foreign exchange (forex) markets provide traders with a lot of flexibility. This is because there is no restriction on the amount of money that can be used for trading. Forex markets provide traders with a wide variety of trading options. They have the choice of entering into spot trade or they could enter into a future agreement. Futures agreements are also available in different sizes and with different maturities to meet the needs of the Forex traders. Therefore, Forex market provides an option for every budget and every investor with a different appetite for risk taking. Further, the Forex market is transparent in comparison to other financial market as it is huge in size and operates across several time zones. Information regarding Forex markets is easily available. Also, no country or Central Bank has the ability to single handedly corner the market or rig prices for an extended period of time.

(iv) Derivative Market

The derivatives market is the financial market for derivatives i.e. financial instruments like futures and options, which are derived from other forms of assets. Since all transactions related to derivatives take place in future, it provides individuals with better opportunities because an individual who want to short (sell) some stock for long time can do it only in futures or options hence the biggest benefit of this is that it gives numerous options to an investor or trader to execute all sorts of strategies.

Regulators in Financial Market

Regulatory structure of Indian Financial System



Question 9

Securities and Exchange Board of India (SEBI)

Solution

SEBI was born in 1992. The basic objective was to protect the interest of investors in securities and promotes the development of securities market. The important objectives of SEBI are:

1. Protect the interest of investors in securities.

2. Promotes the development of securities market.
3. Regulating the securities market.

Functions of SEBI as per SEBI Act, 1992

a. regulating the business in stock exchanges and any other securities markets;
b. i. registering and regulating the working of stock brokers, sub-brokers, share transfer agents, bankers to an issue, trustees of trust deeds, registrars to an issue, merchant bankers, underwriters, portfolio managers, investment advisers and such other intermediaries who may be associated with securities markets in any manner;

   ii. registering and regulating the working of the depositories, [participants,] custodians of securities, foreign institutional investors, credit rating agencies and such other intermediaries as the Board may, by notification, specify in this behalf;]

c. registering and regulating the working of [venture capital funds and collective investment schemes],including mutual funds;

d. promoting and regulating self-regulatory organisations;

e. prohibiting fraudulent and unfair trade practices relating to securities markets;

f. promoting investors' education and training of intermediaries of securities markets;

g. prohibiting insider trading in securities;

h. regulating substantial acquisition of shares and take-over of companies;

i. i. calling for information from, undertaking inspection, conducting inquiries and audits of the stock exchanges, mutual funds, other persons associated with the securities market intermediaries and self- regulatory organizations in the securities market;

   ii. calling for information and record from any bank or any other authority or board or corporation established or constituted by or under any Central, State or Provincial Act in respect of any transaction in securities which is under investigation or inquiry by the Board;

j. performing such functions and exercising such powers under the provisions of the Securities Contracts (Regulation) Act, 1956(42 of 1956), as may be delegated to it by the Central Government;

k. levying fees or other charges for carrying out the purposes of this section;

l. i. conducting research for the above purposes;

   ii. calling from or furnishing to any such agencies, as may be specified by the Board, such information as may be considered necessary by it for the efficient discharge of its functions;

m. Performing such other functions as may be prescribed.

Question 10
Reserve Bank of India (RBI)

Solution

The Reserve Bank of India was established in 1935 with the provision of Reserve Bank of India Act, 1934. Though privately owned initially, in 1949 it was nationalized and since then fully owned by Government of India (GoI). The preamble of the Reserve Bank of India describes its main functions as to regulate the issue of Bank Notes and keeping of reserves with a view to securing monetary stability in India and generally to operate the currency and credit system of the country to its advantage.

As per the RBI Act, 1934, RBI performs three types of functions:

(i) Banking Functions -

- **Issuer of Bank Notes** - Under section 22 of the Reserve Bank of India Act, the bank has the sole right to issue bank notes of all denominations. The distribution of one rupee notes and coins and small coins all over the country is undertaken by the Reserve Bank as agent of the Government.
- **To act as government banker, agent and adviser** - The second important function of the Reserve Bank of India is to act as Government banker, agent and adviser. The Reserve Bank is agent of Central Government and of all State Governments in India except the State of Jammu and Kashmir.

- **Bankers' Bank and Lender of the Last Resort** – The commercial banks always look up to RBI in case of any need for funds. Therefore, they are called bankers' bank and lender of the last resort.
- **Controller of Credit** - The Reserve Bank of India is the controller of credit i.e. it has the power to influence the volume of credit created by banks in India. It can do so through changing the Bank rate or through open market operations. RBI is also the selective controller of credit. It can direct the banks not to lend to certain people or group of people on the basis of certain types of securities. RBI also has the power to control the money market in India. Further, on every weekly Friday which is called the reporting Friday, the commercial banks have to report to the RBI that they are complying with CRR (presently 4%) and SLR (presently 20.5%) requirements.
- **Custodian of Foreign Reserve -** The foreign exchange regulations under the law required that all foreign exchange receipts whether on account of export earnings, investment earnings, or capital receipts, whether on private account or on government account, must be sold to the RBI either directly or through authorized dealers (mostly commercial banks). This resulted in centralization of country's foreign exchange reserves with the RBI and facilitated planned utilization of these reserves, because all payments in foreign exchange were also controlled by the authorities.

(ii) Supervisory Functions –

The Reserve Bank Act, 1934, and the Banking Regulation Act, 1949 have given the RBI wide powers of supervision and control over commercial and co-operative banks, relating to licensing and establishments, branch expansion, liquidity of their assets, management and methods of working, amalgamation, reconstruction and liquidation. Further, the RBI is authorized to carry out periodical inspection of the banks and to call for returns and necessary information from them. Therefore, the supervisory functions of RBI have forced the banks to do their job on sound lines and to improve the methods of their operation.

(iii) Promotional Functions –

The Central Bank (RBI) now performs a variety of developmental and promotional functions, which, at one time, were regarded as outside the normal scope of central banking. So, the Reserve Bank was asked to promote banking habit amongst the people. People are encouraged to open Jan Dhan Account in urban and rural areas on the basis of their Aadhar Card. Now, people are asked to resort to online banking as the Government is promoting cashless economy. Banks are also gearing up to this challenge as they will need the required infrastructure to enable the customers to transact through online banking only. The reason is that recent trends indicate that transactions through ATM will reduce in the future.

Earlier, the Reserve Bank has helped in the setting up of the Industrial Finance Corporation of India and the State Financial Corporations; it set up the Deposit Insurance Corporation in 1962, the Unit Trust of India in 1964, the Industrial Development Bank of India also in 1964, the Agricultural Refinance Corporation of India in 1963 and the Industrial Reconstruction Corporation of India in 1972.

It also helps in the setting up of various sector specific development financial institutions, for instance, NABARD which provides agricultural credit and also supervises Regional Rural Banks (RRB's). Further, EXIM Bank was created which provides necessary credit to exporters and importers.

Question 11

Insurance Regulatory and Development Authority of India (IRDAI)

Solution

IRDA Act was passed in 1999. The main aim of the Insurance Regulatory and Development Authority of India is to protect the interest of holders of Insurance policies to regulate, promote and ensure orderly growth of Insurance industry & for matters connected therewith or incidental thereto. Under this Act, Controller of Insurance under Insurance Act 1938 was replaced by newly established authority called Insurance Regulatory and Development Authority (IRDA).

Features of Authority:

i. The authority consists of chairman, whole time members & part time members and they act as a group of members and work jointly.
ii. The authority has a perpetual succession. In case, if any member resigns or die, the authority still continues to work.
iii. The authority has a common seal with power to enter into a contract by affixing stamp on the documents.
iv. The authority can sue or be sued means the authority can file a case against any person or organization and vice versa.

Duties, Powers & Functions of Authority:

i. Subject to the provisions of this Act and any other law for the time being in force, the Authority shall have the duty to regulate, promote and ensure orderly growth of the insurance business and re-insurance business.

ii. Without prejudice to the generality of the provisions contained in sub-section (1), the powers and functions of the Authority shall include, -

(a) issue to the applicant a certificate of registration, renew, modify, withdraw, suspend or cancel such registration;
(b) protection of the interests of the policy holders in matters concerning assigning of policy, nomination by policy holders, insurable interest, settlement of insurance claim, surrender value of policy and other terms and conditions of contracts of insurance;
(c) specifying requisite qualifications, code of conduct and practical training for intermediary or insurance intermediaries and agents;
(d) specifying the code of conduct for surveyors and loss assessors;
(e) promoting efficiency in the conduct of insurance business;
(f) promoting and regulating professional organisations connected with the insurance and re-insurance business;
(g) levying fees and other charges for carrying out the purposes of this Act;
(h) calling for information from, undertaking inspection of, conducting enquiries and investigations including audit of the insurers, intermediaries, insurance intermediaries and other organizations connected with the insurance business;

(i) control and regulation of the rates, advantages, terms and conditions that may be offered by insurers in respect of general insurance business not so controlled and regulated by the Tariff Advisory Committee under section 64U of the Insurance Act, 1938 (4 of 1938);
(j) specifying the form and manner in which books of account shall be maintained and statement of accounts shall be rendered by insurers and other insurance intermediaries;
(k) regulating investment of funds by insurance companies;
(l) regulating maintenance of margin of solvency;
(m) adjudication of disputes between insurers and intermediaries or insurance intermediaries;
(n) supervising the functioning of the Tariff Advisory Committee;
(o) specifying the percentage of premium income of the insurer to finance schemes for promoting and regulating professional organisations referred to in clause (f);
(p) specifying the percentage of life insurance business and general insurance business to be undertaken by the insurer in the rural or social sector; and [Source : www.irdai.gov.in]

Importance of Insurance Regulatory and Development Authority (IRDA)

(i) Regulation of Insurance Sector

IRDA has a significant effect on the overall regulation of Indian Insurance Sector. In order to keep the proper protection of the policy holder's interests, Insurance Regulatory and Development Authority (IRDA) closely observe the different activities of insurance sector in India.

(ii) Protection of Policyholders Interests

The core objective or purpose of the Insurance Regulatory and Development Authority is to protect the interests of policyholders and IRDA is doing that with aplomb.

(iii) Awareness to Insurance

In order to increase the awareness of insurance in the society, IRDA is trying to convince the prospective investors about the transparency of the system and the effort being put by the regulator to put this into practice.

(iv) Insurance Market

Insurance sector has grown leap and bounds due to the concerted efforts of Insurance Regulatory and Development Authority with respect to marketing of insurance products, competition & customer awareness

(v) Development of Insurance Product

Insurance Regulatory and Development Authority (IRDA) has brought a revolution in the development of insurance products. The development of ULIPs (Unit-Linked Insurance Plans) is the result of privatization of the insurance sector.

(vi) Competition in the Insurance Sector

After the advent of privatization in the insurance sector by inviting private players, competition in the insurance sector has increased significantly leading to comparatively cheaper services and greater customer satisfaction.

(vii) Saving and Investment of Individual

Insurance Regulatory and Development Authority has made insurance a popular & profitable mode of investment and inculcate saving habits among various sections of the society.

(viii) Government Responsibility

Insurance Regulatory and Development Authority (IRDA) has make it sure that uniformity in the insurance sector is being ensured by helping in constant increase in the number of insurers, increasing competition, number of diversified products and diversification in the activities of the insurers.

(ix) Banks and Post Offices

Insurance sector is now giving security against any kind of uncertainty or risk, so the insurance sector has now become a popular medium for savings &

investments and is gradually diverting the flow of funds from banks & post offices to insurance industry.

(x) Individual Life’s

Insurance Regulatory and Development Authority has helped in developing an understanding of insurance by putting across a great impression over the life of a common man of the society.

(xi) Stock Market

Private players in the insurance have developed ULIPs (Unit-Linked Insurance plans) in order to attract more customers. ULIP is a byproduct of modern insurance market. Therefore, insurance products have made it simple for the companies to raise funds and have also attracted various sections of the society to invest in the stock market indirectly.

(xii) Indian Economy

Insurance Regulatory and Development Authority has an impact over the economic development of the country because money invested by investors or individuals in various types of insurance products has channelized the funds of a country for a non-economic activity to economic activity & has made available to the governments of a country in order to implement the various developmental activities in the country.

Question 12

Pension Fund Regulatory and Development Authority (PFRDA)

Solution

The aim of PFRDA is to be a model Regulator for promotion and development of an organized pension system to serve the old age income needs of people on a sustainable basis. Pension systems throughout the world have been under close scrutiny over the last couple of decades. Numerous reforms have been carried out to tackle the sustainability and adequacy of pension arrangements in the face of the rising global demographic challenge.

For the next two decades, India has the potential to reap demographic benefits. The country’s population pyramid is expected to “bulge” across the 15–64 age brackets over the next decade. Around 64% of India’s population is expected to be in the age bracket of 15–59 years by 2026, with 13% of the total aged above 60 years. However, India's demographic dividend is expected to level off around 2040. In 2050, the old age dependency ratio is likely to increase to 18.7 % of the total population from 8.6 % in 2011. With the shift to nuclear families, intergenerational support cannot be the sole source of old age security. So, it is necessary to be prepared for the future challenge of old age income security of our people in their old age.

The pension landscape in India can be broadly categorized under four pillars. Pillar 0 constitutes means tested pension schemes like IGNOAPS, Annapurna etc. Pillar - 1 constitutes tax financed, defined benefit pension system under which the employees of central and state governments and their autonomous bodies, joined prior to January 1, 2004 or the date of adoption of the respective state governments, respectively are covered. While Pillar 2 covers mandatory defined contribution retirement schemes like NPS (for government subscribers), EPF etc., Pillar 3 covers voluntary subscribers of NPS like corporate subscribers and subscribers from unorganised sector.

During FY 2014-15, the coverage under mandatory NPS, comprising central and state government employees has witnessed a decent growth of 23.65% with total number of government subscribers at around 41.42 lakh at end of March 2015. 488 Central Autonomous bodies and 438 State Autonomous Bodies have joined NPS. The coverage under voluntary NPS has witnessed an impressive growth of 45.93 % taking count of private and unorganised sector subscribers to around 46 lakh at the end of March 2015.

The major challenge faced by PFRDA is to extend pension coverage to the people from informal sector characterized by low financial literacy, financial affordability, and financial savings.

Normally, saving for retirement requires regular disciplined contributions, preserved until retirement.

The incomes of workers in the informal sector are frequently seasonal and volatile which prevents regular periodic contributions. Also, households living at or below subsistence are unlikely to be able to afford to pay for pension for long term.

To address this, it is important to build trust and confidence of people in the institutional framework in which the retirement savings are made, especially, in cases where informal sector workers are dealing with them for the first time and do not have an employer to negotiate arrangements on their behalf. Also some form of incentive needs to be given to the prospective subscribers to part with their money for a long time.

Towards this end a new scheme, Atal Pension Yojana (APY) has been launched by the government with effect from June 1, 2015 which provides the strategic direction for shaping the pension landscape in the country to convert the society from “pension less” to “pensioned” one in the largely uncovered informal sector. As pension involves a long term commitment, there is a need to create awareness and financial literacy to encourage informal sector worker to save for their retirement.

Under APY, the Central Government co -contributes 50% of the subscriber’s contribution or Rs. 1000 per annum, whichever is lower, to each eligible subscriber account, for a period of 5 years, i.e., from 2015-16 to 2019-20, who join the NPS before December 31, 2015 and who are not income tax payers. State Governments can also co-contribute under APY to their underlying workers like Anganwadi, ASHA, and Construction Labour etc. to encourage the subscribers to join the scheme and secure their old age. The subscribers of APY would receive minimum pension of Rs. 1000 to Rs. 5000 per month, at the age of 60 years, depending on their contributions, which itself would vary depending on the age of joining the APY. APY has low costs and has access in rural areas via existing networks of post offices and banks.

Additionally, there is flexibility to contribute on monthly, quarterly and half yearly basis. Subscriber of APY are updated periodically with the information regarding activation of PRAN, balance in the account, contribution credits etc. by way of SMS alerts. The subscribers have the option to change the non– financial details like nominee’s name, address, phone number etc. whenever required.

Question 13
Real Estate Regulatory Authority (RERA)

Solution
India has a vast population with needs regarding food, house and jobs on an ever-increase mode. The housing among these fields is one of the major ones. Thousands of people have grown to be rich and as many of them have made loss in real estate business. It is the one of the leading revenue generators for the government. Even though it has such strong presence in the country, it never had a regulating body. Due to the failure of the government to observe this, many people have become the victims of some scheming people doing the real estate business. The buyers who come from a middle-class background have time and again fallen prey to such petty real estate developers. There was a growing need to bring a transparent government body which can check the developers.

Finally, the government delivered by making an authority known as RERA which stands for Real Estate Regulatory Authority. It was passed in March 2016 by the parliament. This promises to bring a justice to the buyer through making strict policies that have to be fulfilled by the developers to sell their projects. The major problem that real estate in India is facing is that of the delayed possession given to the home seeker by the rich and the cunning builders. Thus, RERA will help people by bringing in a high level of transparency and discipline that these builders must have to follow.

Following are some of the risks that people face through developers:

- Selling of flats multiple times to different parties.
- Delay in giving possession to the buyer which happens due to various reasons and malpractices such as funding crisis, demanding additional charges in the name of facilities, reducing carpet area, changing the plans of the societies etc.

Question 14

Association of Mutual funds of India (AMFI)

Solution

The Association of Mutual Funds in India (AMFI) is dedicated to developing the Indian Mutual Fund Industry on professional, healthy and ethical lines and to enhance and maintain standards in all areas with a view to protecting and promoting the interests of mutual funds and their unit holders.

AMFI, the association of SEBI registered mutual funds in India of all the registered Asset Management Companies, was incorporated on August 22, 1995, as a non-profit organization. As of now, all the 42 Asset Management Companies that are registered with SEBI are its members.

Objectives of AMFI

i. To define and maintain high professional and ethical standards in all areas of operation of mutual fund industry.

ii. To recommend and promote best business practices and code of conduct to be followed by members and others engaged in the activities of mutual fund and asset management including agencies connected or involved in the field of capital markets and financial services.

iii. To interact with the Securities and Exchange Board of India (SEBI) and to represent to SEBI on all matters concerning the mutual fund industry.

iv. To represent to the Government, Reserve Bank of India and other bodies on all matters relating to the Mutual Fund Industry.

v. To undertake nationwide investor awareness programme so as to promote proper understanding of the concept and working of mutual funds.

vi. To disseminate information on Mutual Fund Industry and to undertake studies and research directly and/or in association with other bodies.

vii. To regulate conduct of distributors including disciplinary actions (cancellation of ARN) for violations of Code of Conduct.

viii. To protect the interest of investors/unit holders.

Question 15
The AMFI Code of Ethics

Solution
One of the objects of the Association of Mutual Funds in India (AMFI) is to promote the investors' interest by defining and maintaining high ethical and professional standards in the mutual fund industry. In pursuance of this objective, AMFI had constituted a Committee under the Chairmanship of Shri A. P. Pradhan with Shri S. V. Joshi, Shri C. G. Parekh and Shri M. Laxman Kumar as members. This Committee, working in close co-operation with Price Waterhouse–LLP under the FIRE Project of USAID, has drafted the Code, which has been approved and recommended by the Board of AMFI for implementation by its members.

The AMFI Code of Ethics, "The ACE" for short, sets out the standards of good practices to be followed by the Asset Management Companies in their operations and in their dealings with investors, intermediaries and the public. SEBI (Mutual Funds) Regulation 1996 requires all Asset Management Companies and Trustees to abide by the Code of conduct as specified in the Fifth Schedule to the Regulation. The AMFI Code has been drawn up to supplement that schedule, to encourage standards higher than those prescribed by the Regulations for the benefit of investors in the mutual fund industry.

Question 16
Foreign Exchange Dealers Association of India (FEDAI)

Solution
Foreign Exchange Dealers Association of India (FEDAI) was set up in 1958 as an Association of banks dealing in foreign exchange (forex) in India (typically called Authorised Dealers - ADs) as a self-regulatory body and is incorporated under Section 25 of The Companies Act, 1956. It's major activities include framing of rules governing the conduct of inter-bank foreign exchange business among banks vis-à-vis public and liaison with RBI for reforms and development of forex market.

Functions:
Presently, some of the functions of FEDAI are as follows:

I. Guidelines and Rules for Forex Business.
II. Training of Bank Personnel in the areas of Foreign Exchange Business.
III. Accreditation of Forex Brokers.
IV. Advising/Assisting member banks in settling issues/matters in their dealings.
V. Represent member banks on Government/Reserve Bank of India/Other Bodies.
VI. Announcement of daily and periodical rates to member banks.

Due to continuing integration of the global financial markets and increased pace of de-regulation, the role of self-regulatory organizations like FEDAI has also transformed. In such an environment, FEDAI plays a catalytic role for smooth functioning of the markets through closer co-ordination with the RBI, other organizations like FIMMDA, the Forex Association of India and various market participants. FEDAI also maximizes the benefits derived from synergies of member banks through innovation in areas like new customized products, bench marking against international standards on accounting, market practices, risk management systems, etc.

THANKS…..

CHAPTER 3

RISK MANAGEMENT

Introduction

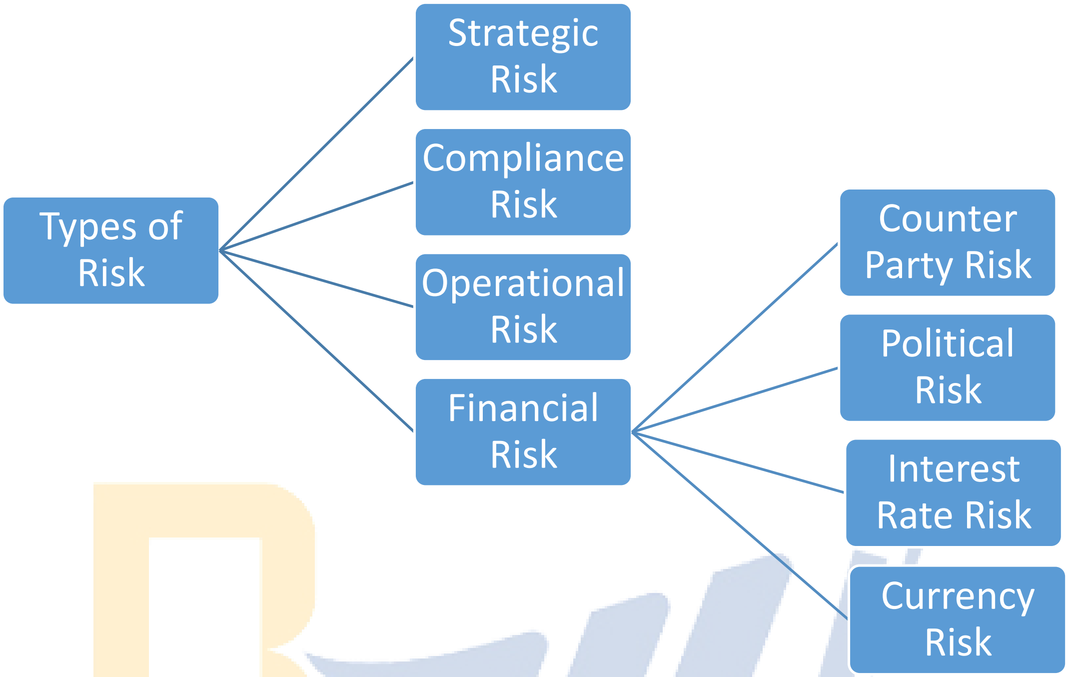
Risk management is:

'A process of understanding and managing the risks that the entity is inevitably subject to in attempting to achieve its corporate objectives. For management purposes, risks are usually divided into categories such as operational, financial, legal compliance, information and personnel. One example of an integrated solution to risk management is enterprise risk management.'

Learning objectives

1. **Types of Risks**
2. **Evaluation of Financial Risks**
3. **Value at Risk (VAR)**
4. **Evaluation of appropriate method for the identification and management of Financial Risk**

Types of risks



1. Strategic Risk

A successful business always needs a comprehensive and detailed business plan. Everyone knows that a successful business needs a comprehensive, well-thought-out business plan. But it's also a fact of life that, if things changes, even the best-laid plans can become outdated if it cannot keep pace with the latest trends. This is what is called as strategic risk. So, strategic risk is a risk in which a company's strategy becomes less effective and it struggles to achieve its goal. It could be due to technological changes, a new competitor entering the market, shifts in customer demand, increase in the costs of raw materials, or any number of other large-scale changes.

We can take an example of "KODAK" the leader in the market for cameras. They were able to develop digital cameras by 1975. But it considered this development as a threat to the core business and therefore it did not develop it. However the technology involved with digital camera was finally found by others and was developed – which actually pushed "Kodak" out of the business.

I also remember – the speech by CEO of Nokia – when it was taken over by Microsoft – he said – "The problem with nokia was not that we did anything wrong – the problem was we didn't do anything". Nokia ruled the market for mobile phone manufacturing, but I feel they were so much engrossed in manufacturing and increasing the sales number that they never thought of bringing anything new. Finally Smart phone were discovered by that left High and Dry.

However, another example – a positive one – is that of Xerox – the company which invented photocopier. When lazer printer were developed, Xerox was quick to lap up this opportunity and made necessary changes. Infact they were ready for strategic Risk and they not only survived but also increased the profits.

2. Compliance Risk

Compliance Risk is also known as Integrity Risk. Every business needs to comply with rules and regulations. For example with the advent of Companies Act, 2013, and continuous updating of SEBI guidelines, each business organization has to comply with plethora of rules, regulations and guidelines. Non-compliance leads to penalties in the form of fine and imprisonment.

However, when a company ventures into a new business line or a new geographical area, the real problem then occurs. For example, a company pursuing cement business likely to venture into sugar business in a different state. But laws applicable to the sugar mills in that state are different. So, that poses a compliance risk. If the company fails to comply with laws related to a new area or industry or sector, it will pose a serious threat to its survival.

For example : The Reserve Bank of India has imposed a monetary penalty aggregating Rs. 3 crore on Union Bank of India for non-compliance with the regulatory direction on 'know-your-customer' (KYC) norms.

3. Operational Risk

This type of risk relates to internal risk. It also relates to failure on the part of the company to cope with day to day operational problems. Operational risk relates to 'people' as well as 'process'. We will take an example to illustrate this. For example, an employee paying out Rs 1,00,000 from the account of the company instead of Rs 10,000.

This is a people as well as a process risk. An organization can employ another person to check the work of that person who has mistakenly paid Rs 1,00,000 or it can install an electronic system that can flag off an unusual amount.

4. Financial Risk

Financial Risk is referred as the unexpected changes in financial conditions such as prices, exchange rate, Credit rating, and interest rate etc. Though political risk is not a financial risk in direct sense but same can be included as any unexpected political change in any foreign country may lead to country risk which may ultimately result in financial loss.

Accordingly, the broadly Financial Risk can be divided into following categories.

A. Counter Party Risk

This risk occurs due to non-honoring of obligations by the counter party which can be failure to deliver the goods for the payment already made or vice-versa or repayment of borrowings and interest etc. Thus, this risk also covers the credit risk i.e. default by the counter party.

B. Political Risk

Generally this type of risk is faced by and overseas investors, as the adverse action by the government of host country may lead to huge loses. This can be on any of the following form.

Confiscation or destruction of overseas properties.

Rationing of remittance to home country.

Restriction on conversion of local currency of host country into foreign currency.

Restriction as borrowings.

Invalidation of Patents

Price control of products

C. Interest Rate Risk

This risk occurs due to change in interest rate resulting in change in asset and liabilities. This risk is more important for banking companies as their balance sheet's items are more interest sensitive and their base of earning is spread between borrowing and lending rates.

As we know that the interest rates are two types i.e. fixed and floating. The risk in both of these types is inherent. If any company has borrowed money at floating rate then with increase in floating the liability under fixed rate shall remain the same. This fixed rate, with falling floating rate the liability of company to pay interest under fixed rate shall comparatively be higher.

D. Currency Risk

This risk mainly affects the organization dealing with foreign exchange as their cash flows changes with the movement in the currency exchange rates. This risk can be affected by cash flow adversely or favorably. For example, if rupee depreciates vis-à-vis US$ receivables will stand to gain vis-à-vis to the importer who has the liability to pay bill in US$. The best case we can quote Infosys (Exporter) and Indian Oil Corporation Ltd. (Importer).

Evaluation of Financial Risks

The financial risk can be evaluated from different point of views as follows:

A. From stakeholder's point of view: Major stakeholders of a business are equity shareholders and they view financial gearing i.e. ratio of debt in capital structure of company as risk since in event of winding up of a company they will be least prioritized.

   Even for a lender, existing gearing is also a risk since company having high gearing faces more risk in default of payment of interest and principal repayment.

B. From Company's point of view: From company's point of view if a company borrows excessively or lend to someone who defaults, then it can be forced to go into liquidation.

C. From Government's point of view: From Government's point of view, the financial risk can be viewed as failure of any bank or (like Lehman Brothers) down grading of any financial institution leading to spread of distrust among society at large. Even this risk also includes willful defaulters. This can also be extended to sovereign debt crisis.

Value at Risk (VAR)

NORMAL DISTRIBUTION

Features

1. Bell shaped curve
2. Symmetrical to Mean
3. Extends from – to + infinity
4. The area under the curve is 1

STANDARD NORMAL DISTRIBUTION

Additional Features

1. Mean = 0
2. SD = 1
3. Area to the Left = 50% and to the right = 50%

Points to Remember

1. Area in the center is larger and keeps decreases as we go away from the mean, i.e the probability of the return closer to the mean is greater this probability keeps on decreasing as we move from the mean

2. Area to the left and the right to mean = 0 at SD = 1 is 34.13% respectively. This will make total area at +/- 1 SD under the curve at 68.26%

3. Area to the left and the right of the mean from 1 SD to 2 SD is 13.59%, taking the total to 47.72% from Mean = 0 to SD = 2 to the left and the right respectively. The total area under the curve from -2 SD to 2 SD will be 95.44%

   Note: At SD +/- 1.96 area under the curve will be 95%

4. Area to the left and the right of the mean from 2 SD to 3 SD is 2.14%, taking the total to 49.86% from Mean = 0 to SD = 3 to the left and the right respectively. The total area under the curve from -3 SD to 3 SD will be curve%

   Note: At SD +/- 2.58 area under the curve will be 99%

Identification and management of financial risk

As we have classified financial risk in 4 categories, we shall discuss identification and management of each risk separately under same category.

1. Counter Party Risk

The various hints that may provide counter party risk are as follows:

(a) Failure to obtain necessary resources to complete the project or transaction undertaken.
(b) Any regulatory restrictions from the Government.
(c) Hostile action of foreign government.
(d) Let down by third party.
(e) Have become insolvent.

The various techniques to manage this type of risk are as follows:

(1) Carrying out Due Diligence before dealing with any third party.
(2) Do not over commit to a single entity or group or connected entities.
(3) Know your exposure limits.

(4) Review the limits and procedure for credit approval regularly.
(5) Rapid action in the event of any likelihood of defaults.
(6) Use of performance guarantee, insurance or other instruments.

2. Political Risk

Since this risk mainly relates to investments in foreign country, company should assess country

(1) By referring political ranking published by different business magazines.
(2) By evaluating country's macro-economic conditions.
(3) By analyzing the popularity of current government and assess their stability.
(4) By taking advises from the embassies of the home country in the host countries.
(5) Further, following techniques can be used to mitigate this risk.
(i) Local sourcing of raw materials and labour.
(ii) Entering into joint ventures
(iii) Local financing
(iv) Prior negotiations

From the following actions by the Governments of the host country this risk can be identified:
1. Insistence on resident investors or labour.

2. Restriction on conversion of currency.
3. Repatriation of foreign assets of the local govt.
4. Price fixation of the products.

3. Interest Rate Risk

Generally, interest rate Risk is mainly identified from the following:

1. Monetary Policy of the Government.
2. Any action by Government such as demonetization etc.
3. Economic Growth
4. Release of Industrial Data
5. Investment by foreign investors
6. Stock market changes

4. Currency Risk

Just like interest rate risk the currency risk is dependent on the Government action and economic development. Some of the parameters to identity the currency risk are as follows:

(1) Government Action: The Government action of any country has visual impact in its currency.

For example, the UK Govt. decision to divorce from European Union i.e. Brexit brought the pound to its lowest since 1980's.

(2) Nominal Interest Rate: As per interest rate parity (IRP) the currency exchange rate depends on the nominal interest of that country.

(3) Inflation Rate: Purchasing power parity theory discussed in later chapters impact the value of currency.

(4) Natural Calamities: Any natural calamity can have negative impact.

(5) War, Coup, Rebellion etc.: All these actions can have far reaching impact on currency's exchange rates.

(6) Change of Government: The change of government and its attitude towards foreign investment also helps to identify the currency risk.

Management of Currency Risk is covered under the chapter of FOREX.

THANKS…..

CHAPTER 4

FUNDAMENTAL & TECHNICAL ANALYSIS

Fundamental analysis

INTRODUCTION

Investment decision depends on securities to be bought, held or sold. Buying security is based on highest return per unit of risk or lowest risk per unit of return. Selling security does not depend on any such requirement. A security considered for buying today may not be attractive tomorrow due to management policy changes in the company or economic policy changes adopted by the government. The reverse is also true. Therefore, analysis of the security on a continuous basis is a must.

Security Analysis involves a systematic analysis of the risk return profiles of various securities which is to help a rational investor to estimate a value for a company from all the price sensitive information/data so that he can make purchases when the market under-prices some of them and thereby earn a reasonable rate of return.

Two approaches viz. fundamental analysis and technical analysis are in vogue for carrying out Security Analysis. In fundamental analysis, factors affecting risk-return characteristics of securities are looked into while in technical analysis, demand/ supply position of the securities along with prevalent share price trends are examined.

LEARNING OBJECTIVES

1. **FUNDAMENTAL ANALYSIS – BASIS OF PRINCING**
2. **FUNDAMANTAL ANALYSIS – KEY VARIABLES**
3. **ECONOMIC ANALYSIS**
4. **INDUSTRIAL ANALYSIS**
5. **COMPANY ANALYSIS**

FUNDAMENTAL ANALYSIS – PRINCING

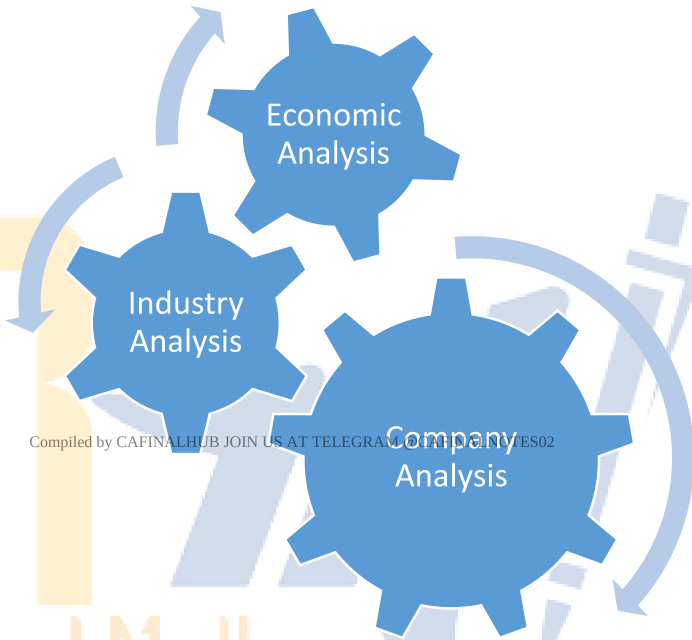
Fundamental analysis is based on the assumption that the share prices depend upon the future dividends expected by the shareholders. The present value of the future dividends can be calculated by discounting the cash flows at an appropriate discount rate and is known as the *'intrinsic value of the share'*. The intrinsic value of a share, according to a fundamental analyst, depicts the true value of a share. A share that is priced below the intrinsic value must be bought, while a share quoting above the intrinsic value must be sold.

Thus, it can be said that the price the shareholders are prepared to pay for a share is nothing but the present value of the dividends they expect to receive on the share and this is the price at which they expect to sell it in the future.

The pricing is discussed in detail in the next chapter.

FUNDAMENTAL ANALYSIS – KEY VARIABLES

The key variables that an investor must monitor in order to carry out his fundamental analysis are economy wide factors, industry wide factors and company specific factors. In other words, fundamental analysis encompasses economic, industrial and company analyses. They are depicted by three concentric circles and constitute the different stages in an investment decision making process.



ECONOMIC ANALYSIS

Macro- economic factors e. g. historical performance of the economy in the past/ present and expectations in future, growth of different sectors of the economy in future with signs of stagnation/degradation at present to be assessed while analyzing the overall economy. Trends in peoples' income and expenditure reflect the growth of a particular industry/company in future. Consumption affects corporate profits, dividends and share prices in the market.

Factors Affecting Economic Analysis

Some of the economy wide factors are discussed as under:

1. Growth Rates of National Income and Related Measures*:* For most purposes, what is important is the difference between the nominal growth rate quoted by GDP and the 'real' growth after taking inflation into account. The estimated growth rate of the economy would be a pointer to the prospects for the industrial sector, and therefore to the returns investors can expect from investment in shares.

2. Growth Rates of Industrial Sector*:* This can be further broken down into growth rates of various industries or groups of industries if required. The growth rates in various industries are estimated based on the estimated demand for its products.

3. Inflation*:* Inflation is measured in terms of either wholesale prices (the Wholesale Price Index or WPI) or retail prices (Consumer Price Index or CPI). The demand in some industries, particularly the consumer products industries, is significantly influenced by the inflation rate. Therefore, firms in these industries make continuous assessment about inflation rates likely to prevail in the near future so as to fine-tune their pricing, distribution and promotion policies to the anticipated impact of inflation on demand for their products.

4. Monsoon*:* Because of the strong forward and backward linkages, monsoon is of great concern to investors in the stock market too.

Techniques Used in Economic Analysis

Economic analysis is used to forecast national income with its various components that have a bearing on the concerned industry and the company in particular. Gross national product (GNP) is used to measure national income as it reflects the growth rate in economic activities and has been regarded as a forecasting tool for analyzing the overall economy along with its various components during a particular period.

Some of the techniques used for economic analysis are:

1. **Anticipatory Surveys***:* They help investors to form an opinion about the future state of the economy. It incorporates expert opinion on construction activities, expenditure on plant and machinery, levels of inventory – all having a definite bearing on economic activities. Also future spending habits of consumers are taken into account.

In spite of valuable inputs available through this method, it has certain drawbacks:

A. Survey results do not guarantee that intentions surveyed would materialize.

B. They are not regarded as forecasts per se, as there can be a consensus approach by the investor for exercising his opinion.

Continuous monitoring of this practice is called for to make this technique popular.

2. **Barometer/Indicator Approach***:* Various indicators are used to find out how the economy shall perform in the future. The indicators have been classified as under:

A. Leading Indicators: They lead the economic activity in terms of their outcome. They relate to the time series data of the variables that reach high/low points in advance of economic activity.

B. Roughly Coincidental Indicators: They reach their peaks and troughs at approximately the same in the economy.

C. Lagging Indicators: They are time series data of variables that lag behind in their consequences vis-a- vis the economy. They reach their turning points after the economy has reached its own already.

All these approaches suggest direction of change in the aggregate economic activity but nothing about its magnitude. The various measures obtained form such indicators may give conflicting signals about the future direction of the economy. To avoid this limitation, use of diffusion/composite index is suggested whereby combining several indicators into one index to measure the strength/weaknesses in the movement of a particular set of indicators. Computation of diffusion indices is no doubt difficult notwithstanding the fact it does not eliminate irregular movements.

Money supply in the economy also affects investment decisions. Rate of change in money supply in the economy affects GNP, corporate profits, interest rates and stock prices. Increase in money supply fuels inflation. As investment in stocks is considered as a hedge against inflation, stock prices go up during inflationary period.

3. **Economic Model Building Approach***:* In this approach, a precise and clear

relationship between dependent and independent variables is determined. GNP model building or sectoral analysis is used in practice through the use of national accounting framework. The steps used are as follows:

A. Hypothesize total economic demand by measuring total income (GNP) based on political stability, rate of inflation, changes in economic levels.

B. Forecasting the GNP by estimating levels of various components viz. consumption expenditure, gross private domestic investment, government purchases of goods/services, net exports.

C. After forecasting individual components of GNP, add them up to obtain the forecasted GNP.

D. Comparison is made of total GNP thus arrived at with that from an independent agency for the forecast of GNP and then the overall forecast is tested for consistency. This is carried out for ensuring that both the total forecast and the component wise forecast fit together in a reasonable manner.

INDUSTRY ANALYSIS

When an economy grows, it is very unlikely that all industries in the economy would grow at the same rate. So it is necessary to examine industry specific factors, in addition to economy-wide factors.

First of all, an assessment has to be made regarding all the conditions and factors relating to demand of the particular product, cost structure of the industry and other economic and Government constraints on the same. Since the basic profitability of any company depends upon the economic prospects of the industry to which it belongs, an appraisal of the particular industry's prospects is essential.

Factors Affecting Industry Analysis

The following factors may particularly be kept in mind while assessing the factors relating to an industry.

A. **Product Life-Cycle*:*** An industry usually exhibits high profitability in the initial and growth stages, medium but steady profitability in the maturity stage and a sharp decline in stage of profitability in the last growth.

B. **Demand Supply Gap*:*** Excess supply reduces the profitability of the industry because of the decline in the unit price realization, while insufficient supply tends to improve the profitability because of higher unit price realization.

C. **Barriers to Entry*:*** Any industry with high profitability would attract fresh investments. The potential entrants to the industry, however, face different types of barriers to entry. Some of these barriers are innate to the product and the technology of production, while other barriers are created by existing firms in the industry.

D. **Government Attitude*:*** The attitude of the government towards an industry is a crucial determinant of its prospects.

E. **State of Competition in the Industry*:*** Factors to be noted are- firms with leadership capability and the nature of competition amongst them in foreign and domestic market, type of products manufactured viz. homogeneous or highly differentiated, demand prospects through classification viz customer-wise/area-wise, changes in demand patterns in the long/immediate/ short run, type of industry the firm is placed viz. growth, cyclical, defensive or decline.

F. **Cost Conditions and Profitability*:*** The price of a share depends on its return, which in turn depends on profitability of the firm. Profitability depends on the state of competition in the industry, cost control measures adopted by its units and growth in demand for its products.

Factors to be considered are:

a. Cost allocation among various heads e.g. raw material, labors and overheads and their controllability. Overhead cost for some may be higher while for others labour may be so. Labour cost which depends on wage level and productivity needs close scrutiny.
b. Product price.
c. Production capacity in terms of installation, idle and operating.
d. Level of capital expenditure required for maintenance / increase in productive efficiency.
Investors are required to make a through analysis of profitability. This is carried out by the study of certain ratios such as G.P. Ratio, Operating Profit Margin Ratio, R.O.E., Return on Total Capital etc.

e. Technology and Research*:* They play a vital role in the growth and survival of a particular industry. Technology is subject to change very fast leading to obsolescence. Industries which update themselves have a competitive advantage over others in terms of quality, price etc.

Things to be probed in this regard are:

a. Nature and type of technology used.
b. Expected changes in technology for new products leading to increase in sales.
c. Relationship of capital expenditure and sales over time. More capital expenditure means increase in sales.
d. Money spent in research and development. Whether this amount relates to redundancy or not?
e. Assessment of industry in terms of sales and profitability in short, immediate and long run.

Techniques Used in Industry Analysis

The techniques used for analyzing the industry wide factors are:

A. **Regression Analysis*:*** Investor diagnoses the factors determining the demand for output of the industry through product demand analysis. Factors to be considered are GNP, disposable income, per capita consumption / income, price elasticity of demand. For identifying factors affecting demand, statistical techniques like regression analysis and correlation are used.

B. **Input – Output Analysis***:* It reflects the flow of goods and services through the economy, intermediate steps in production process as goods proceed from raw material stage through final consumption. This is carried out to detect changing patterns/trends indicating growth/decline of industries.

COMPANY ANALYSIS

Economic and industry framework provides the investor with proper background against which shares of a particular company are purchased. This requires careful examination of the company's quantitative and qualitative fundamentals.

A. **Net Worth and Book Value** ***:*** Net Worth is sum of equity share capital, preference share capital and free reserves less intangible assets and any carry forward of losses. The total net worth divided by the number of shares is the much talked about book value of a share. Though the book value is often seen as an indication of the intrinsic worth of the share, this may not be so for two major reasons. First, the market price of the share reflects the future earnings potential of the firm which may have no relationship with the value of its assets. Second, the book value is based upon the historical costs of the assets of the firm and these may be gross underestimates of the cost of the replacement or resale values of these assets.

B. **Sources and Uses of Funds*****:*** The identification of sources and uses of funds is known as Funds Flow Analysis. One of the major uses of funds flow analysis is to find out whether the firm has used short-term sources of funds to finance long-term investments. Such methods of financing increases the risk of liquidity crunch for the firm, as long-term investments, because of the gestation period involved may not generate enough surpluses in time to meet the short-term liabilities incurred by the firm. Many a firm has come to grief because of this mismatch between the maturity periods of sources and uses of funds.

C. **Cross-Sectional and Time Series Analysis*****:*** One of the main purposes of examining financial statements is to compare two firms, compare a firm against some benchmark figures for its industry and to analyze the performance of a firm over time. The techniques that are used to do such proper comparative analysis are: common-sized statement, and financial ratio analysis.

D. **Size and Ranking*****:*** A rough idea regarding the size and ranking of the company within the economy, in general, and the industry, in particular, would help the investment manager in assessing the risk associated with the company. In this regard the net capital employed, the net profits, the return on investment and the sales figures of the company under consideration may be compared with similar data of other companies in the same industry group. It may also be useful to assess the position of the company in terms of technical know-how, research and development activity and price leadership.

E. **Growth Record*:*** The growth in sales, net income, net capital employed and earnings per share of the company in the past few years should be examined. The following three growth indicators may be particularly looked into: (a) Price earnings ratio, (b) Percentage growth rate of earnings per annum, and (c) Percentage growth rate of net block.

The price earnings ratio is an important indicator for the investment manager since it shows the number of times the earnings per share are covered by the market price of a share. Theoretically, this ratio should be the same for two companies with similar features. However, this is not so in practice due to many factors. Hence, by a comparison of this ratio pertaining to different companies the investment manager can have an idea about the image of the company and can determine whether the share is under-priced or over-priced.

Consider the following example:

		Company A	***Company B***
(a)	Market price of share of Rs. 100	150	250
(b)	Earnings per share	25	25
(c)	Price earnings ratio [(a) ÷ (b)]	6	10

It is obvious that the purchaser of company A's shares pays 6 times its annual earnings while the purchaser of company B's shares pays 10 times. If other factors (intrinsic value of share, growth potential, etc.) are quite similar, it is obvious that the shares of company A are preferable. In practice, however, the other factors are never similar in the case of two companies. The investment manager must try to ascertain why the EPS in company B is comparatively low – may be some factors are not apparent. EPS calculation cannot be the sole basis of deciding about an investment. Yet it is one of the most important factors on the basis of which the investment manager takes a decision to purchase the shares. This is because it relates the market price of the shares and the earnings per share.

The percentage growth rate of net blocks shows how the company has been developing its capacity levels. Obviously, a dynamic company will keep on expanding its capacities and diversify its business. This will enable it to enter new and profitable lines and avoid stagnation in its growth.

In this context, an evaluation of future growth prospects of the company should be carefully made. This requires an analysis of existing capacities and their utilisation, proposed expansion and diversification plans and the nature of the company's technology. The existing capacity utilisation levels can be known from the quantitative information given in the published profit and loss accounts of the company. The plans of the company, in terms of expansion or diversification, can be known from the Directors' Reports, the Chairman's statements and from the future capital commitments as shown by way of notes in the balance sheets. The nature of technology of a company should be seen with reference to technological developments in the concerned fields, the possibility of its product being superseded or the possibility of emergence of a more effective method of manufacturing.

Growth is the single most important factor in company analysis for the purpose of investment management. A company may have a good record of profits and performance in the past; but if it does not have growth potential, its shares cannot be rated high from the investment point of view.

F. Financial Analysis*:* An analysis of its financial statements for the past few years would help the investment manager in understanding the financial solvency and liquidity, the efficiency with which the funds are used, the profitability, the operating efficiency and the financial and operating leverages of the company. For this purpose, certain fundamental ratios have to be calculated.

From the investment point of view, the most important figures are earnings per share, price earning ratios, yield, book value and the intrinsic value of the share. These five elements may be calculated for the past 10 years or so and compared with similar ratios computed from the financial accounts of other companies in the industry and with the average ratios for the industry as a whole. The yield and the asset backing of a share are important considerations in a decision regarding whether the particular market price of the share is proper or not.

Various other ratios to measure profitability, operating efficiency and turnover efficiency of the company may also be calculated. The return on owners' investment, capital turnover ratio and the cost structure ratios may also be worked out.

To examine the financial solvency or liquidity of the company, the investment manager may work out current ratio, liquidity ratio, debt-equity ratio, etc. These ratios will provide an overall view of the company to the investment analyst. He can analyse its strengths and weaknesses and see whether it is worth the risk or not.

G. **Competitive Advantage:** Another business consideration for investors is competitive advantage. A company's long-term success is driven largely by its ability to maintain its competitive advantage. Powerful competitive advantages, such as Apple's brand name and Samsung's domination of the mobile market, create a shield around a business that allows it to keep competitors at a distance.

H. **Quality of Management*:*** This is an intangible factor. Yet it has a very important bearing on the value of the shares. Every investment manager knows that the shares of certain business houses command a higher premium than those of similar companies managed by other business houses. This is because of the quality of management, the confidence that investors have in a particular business house, its policy vis-a-vis its relationship with the investors, dividend and financial performance record of other companies in the same group, etc. This is perhaps the reason that an investment manager always gives a close look to the management of a company in whose shares he is to invest. Quality of management has to be seen with reference to the experience, skills and integrity of the persons at the helm of affairs of the company. The policy of the management regarding relationship with the shareholders is an important factor since certain business houses believe in very generous dividend and bonus distributions while others are rather conservative.

However, an average investor is at a disadvantage when compared with a large investor. They do not get the facility to meet the top executives of the company. But, the fund managers interested in investing huge amount of money generally get to meet the top brasses of an organization.

It is true that every listed company give detailed information about its management. But, the information they give is always positive. This is because; no company will host any negative information about its company.

So, the question is how to find the dirt inside the management. The remedy is to have a look out for the conference calls hosted by the company's CEO and CFO. After reading the company's financial results, they take question and answers session from the investors. That's where one can pick something that can indicate about the true position about the company.

Some other ways to judge the management of the company is to read the Management Discussion and Analysis Report. Further, it helps when top management people are also the shareholders. If the large scale unloading of their shares are taking place and something else is communicated to the media, then it is a sign that something is wrong. Another way to judge the effectiveness of the management is to see the past performance of the executives, say, for five years.

I. **Corporate Governance:** Following factors are to be kept in mind while judging the effectiveness of corporate governance of an organization:

- Whether company is complying with all aspects of clause 49.
- How well corporate governance policies serve stakeholders?

- Quality and timeliness of company financial disclosures.
- Whether quality independent directors are inducted.

J. **Regulation:** Regulations plays an important role in maintaining the sanctity of the corporate form of organization. In Indian listed companies, Companies Act, Securities Contract and Regulation Act and SEBI Act basically look after regulatory aspects of a company. A listed company is also continuously monitored by SEBI which through its guidelines and regulations protect the interest of investors.
Further, a company which is dealing with companies outside India, needs to comply with Foreign Exchange Management Act (FEMA) also. In this scenario, the Reserve Bank of India (RBI) does a continuous monitoring.

K. **Location and Labour-Management Relations*:*** The locations of the company's manufacturing facilities determines its economic viability which depends on the availability of crucial inputs like power, skilled labour and raw-materials, etc. Nearness to markets is also a factor to be considered.

In the past few years, the investment manager has begun looking into the state of labour-management relations in the company under consideration and the area where it is located.

L. Pattern of Existing Stock Holding: An analysis of the pattern of existing stock holdings of the company would also be relevant. This would show the stake of various parties in the company. An interesting case in this regard is that of the Punjab National Bank in which the Life Insurance Corporation and other financial institutions had substantial holdings. When the bank was nationalised, the residual company proposed a scheme whereby those shareholders, who wish to opt out, could receive a certain amount as compensation in cash. It was only at the instance and the bargaining strength, of institutional investors that the compensation offered to the shareholders, who wished to opt out of the company, was raised considerably.

M. Marketability of the Shares: Another important consideration for an investment manager is the marketability of the shares of the company. Mere listing of a share on the stock exchange does not automatically mean that the share can be sold or purchased at will. There are many shares which remain inactive for long periods with no transactions being effected. To purchase or sell such scrips is a difficult task. In this regard, dispersal of shareholding with special reference to the extent of public holding should be seen. The other relevant factors are the speculative interest in the particular scrip, the particular stock exchange where it is traded and the volume of trading.

Techniques Used in Company Analysis

Through the use of statistical techniques the company wide factors can be analyzed. Some of the techniques are discussed as under:

A. **Correlation & Regression Analysis***:* Simple regression is used when inter relationship covers two variables. For more than two variables, multiple regression analysis is followed. Here the inter relationship between variables belonging to economy, industry and company are found out. The main advantage in such analysis is the determination of the forecasted values along with testing the reliability of the estimates.

B. **Trend Analysis***:* The relationship of one variable is tested over time using regression analysis. It gives an insight to the historical behavior of the variable.

C. **Decision Tree Analysis:** Information relating to the probability of occurrence of the forecasted value is considered useful. A range of values of the variable with probabilities of occurrence of each value is taken up. The limitations are reduced through decision tree analysis and use of simulation techniques.

In decision tree analysis, the decision is taken sequentially with probabilities attached to each sequence. To obtain the probability of final outcome, various sequential decisions given along with probabilities, the probabilities of each sequence is to be multiplied and them summed up.

Thus, fundamental analysis is basically an examination of the economic and financial aspects of a company with the aim of estimating future earnings and dividend prospects. It includes an analysis of the macro-economic and political factors which will have an impact on the performance of the company. After having analysed all the relevant information about the company and its relative strength vis-a-vis other companies in the industry, the investor is expected to decide whether he should buy or sell the securities.

Apart from these, the Group Analysis has also become an important factor. SEBI, in particular, emphasizes the need for disclosure, in public offer documents, of all relevant parameters – especially the financial health and promise versus performance of the group companies. RBI has also been focusing more and more on the Group Exposure Norms of commercial Banks.

Technical analysis

INTRODUCTION

An investor is always interested to know the movement in the price of share in future. His only interest is growth of portfolio. This will help him to form beliefs regarding the price movement and will allow him to take decisions regarding investments.

There are two types of security analysis.

1. Fundamental Analysis
2. Technical Analysis

Technical Analysis is a study of market data in terms of factors affecting demand and supply of stock, such as price, movement, volume of trading and so on. It is simple and quick method of forecasting behavior of share prices. The financial data and past behavior of share prices of a company are presented on charts and graphs in order to find out the history of price movements.

LEARNING OBJECTIVES

1. **MEANING**
2. **ASSUMPTIONS**
3. **PRINCIPLES OF TECHNICAL ANALYSIS**
4. **THEORIES OF TECHNICAL ANALYSIS**
5. **CHARTING TECHNIQUES**
6. **MARKET INDICATORS**
7. **SUPPORT AND RESISTANCE LEVELS**
8. **INTERPRETING PRICE PATTERNS**
9. **DECISIONS USING DATA ANALYSIS**
10. **EVALUATION OF TECHINCAL ANALYSIS**
11. **EFFICIENT MARKET THEORY**
    a. **SEARCH FOR THEORY**
    b. **MISCONCEPTION**
    c. **LEVEL OF MARKET EFFICIENCY**
    d. **EMPIRICAL EVIDENCE ON WEAK FORM OF EFFICIENT MARKET THEORY**
    e. **EMPIRICAL EVIDENCE ON SEMI-STRONG EFFIIENT MARKET THEORY**
    f. **EMPIRICAL EVIDENCE ON STRONG FORM OF EFFICIENT MARKET THEORY**
    g. **CHALLENGES TO THE EFFICIENT MARKET THEORY**

MEANING

Technical Analysis is a method to predict share price movements based on a study of price graphs or charts on the assumption that share price trends are repetitive, that since investor psychology follows a certain pattern, what is seen to have happened before is likely to be repeated. The technical analyst is n o t concerned with the fundamental strength or weakness of a company or an industry; he only studies investor and price behavior.

A technical analyst attempts precisely that. The two basic questions that he seeks to answer are:

(i) Is there a discernible trend in the prices?

(ii) If there is, then are there indications that the trend would reverse?

The methods used to answer these questions are visual and statistical. The visual methods are based on examination of a variety of charts to make out patterns, while the statistical procedures analyze price and return data to make trading decisions.

ASSUMPTIONS

Technical Analysis is based on the following assumptions:

(i) The market value of stock is actually depending on the supply and demand for a stock.

(ii) The supply and demand is actually governed by several factors. For instance, recent initiatives taken by the Government to reduce the Non-Performing Assets (NPA) burden of banks may actually increase the demand for banking stocks.

(iii) Stock prices generally move in trends which continue for a substantial period of time. Therefore, if there is a bull market going on, there is every possibility that there will soon be a substantial correction which will provide an opportunity to the investors to buy shares at that time.

(iv) Technical analysis relies upon chart analysis which shows the past trends in stock prices rather than the information in the financial statements like balance sheet or profit and loss account.

PRINCIPALS OF TECHNICAL ANALYSIS

Technical Analysis is based on following three principals

a. The market discounts everything.
b. Price moves in trends.
c. History tends to repeat itself.

a. The Market Discounts Everything

Many experts criticize technical analysis because it only considers price movements and ignores fundamental factors. The argument against such criticism is based on the Efficient Market Hypothesis, which states that a company's share price already reflects everything that has or could affect a company. And it includes fundamental factors. So, technical analysts generally have the view that a company's share price includes everything including the fundamentals of a company.

b. Price Moves in Trends

Technical analysts believe that prices move in trends. In other words, a stock price is more likely to continue a past trend than move in a different direction.

c. History Tends to Repeat Itself

Technical analysts believe that history tends to repeat itself. Technical analysis uses chart patterns to analyze subsequent market movements to understand trends. While many form of technical analysis have been used for many years, they are still are considered to be significant because they illustrate patterns in price movements that often repeat themselves.

THEORIES OF TECHNICAL ANALYSIS

1. THE DOW THEORY

The Dow Theory is one of the oldest and most famous technical theories. It was originated by Charles Dow, the founder of Dow Jones Company in late nineteenth century. It is a helpful tool for determining the relative strength of the stock market. It can also be used as a barometer of business.

The Dow Theory is based upon the movements of two indices, constructed by Charles Dow, Dow Jones Industrial Average (DJIA) and Dow Jones Transportation Average (DJTA). These averages reflect the aggregate impact of all kinds of information on the market. The movements of the market are divided into three classifications, all going at the same time; the primary movement, the secondary movement, and the daily fluctuations. The primary movement is the main trend of the market, which lasts from one year to 36 months or longer. This trend is commonly called bear or bull market. The secondary movement of the market is shorter in duration than the primary movement, and is opposite in direction. It lasts from two weeks to a month or more. The daily fluctuations are the narrow movements from day-to-day. These fluctuations are not part of the Dow Theory interpretation of the stock market. However, daily movements must be carefully studied, along with primary and secondary movements, as they go to make up the longer movement in the market.

Thus, the Dow Theory's purpose is to determine where the market is and where is it going, although not how far or high. The theory, in practice, states that if the cyclical swings of the stock market averages are successively higher and the successive lows are higher, then the market trend is up and a bullish market exists. Contrarily, if the successive highs and successive lows are lower, then the direction of the market is down and a bearish market exists.

Charles Dow proposed that the primary uptrend would have three moves up, the first one being caused by accumulation of shares by the far-sighted, knowledgeable investors, the second move would be caused by the arrival of the first reports of good earnings by corporations, and the last move up would be caused by widespread report of financial well-being of corporations. The third stage would also see rampant speculation in the market. Towards the end of the third stage, the far-sighted investors, realizing that the high earnings levels may not be sustained, would start selling, starting the first move down of a downtrend, and as the non-sustainability of high earnings is confirmed, the second move down would be initiated and then the third move down would result from distress selling in the market.

2. ELLIOT WAVE THEORY

Inspired by the Dow Theory and by observations found throughout nature, Ralph Elliot formulated Elliot Wave Theory in 1934. This theory was based on analysis of 75 years stock price movements and charts. From his studies, he defined price movements in terms of waves. Accordingly, this theory was named Elliot Wave Theory. Elliot found that the markets exhibited certain repeated patterns or waves. As per this theory wave is a movement of the market price from one change in the direction to the next change in the same direction. These waves are resulted from buying and selling impulses emerging from the demand and supply pressures on the market. Depending on the demand and supply pressures, waves are generated in the prices.

As per this theory, waves can be classified into two parts:-

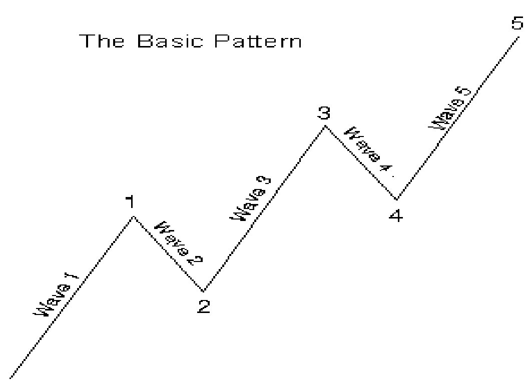
- Impulsive patterns
- Corrective patters

Let us discuss each of these patterns.

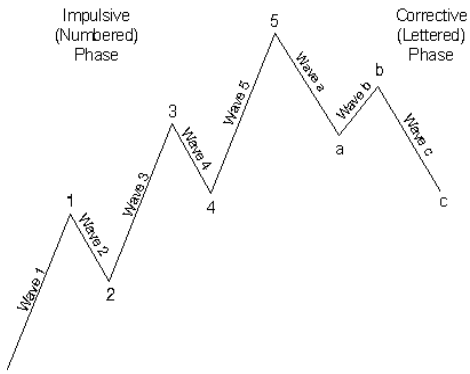
(a) Impulsive Patterns-(Basic Waves) - In this pattern there will be 3 or 5 waves in a given direction (going upward or downward). These waves shall move in the direction of the basic movement. This movement can indicate bull phase or bear phase.

(b) Corrective Patterns- (Reaction Waves) - These 3 waves are against the basic direction of the basic movement. Correction involves correcting the earlier rise in case of bull market and fall in case of bear market.

As shown in the following diagram waves 1, 3 and 5 are directional movements, which are separated or corrected by wave 2 & 4, termed as corrective movements.



Complete Cycle -As shown in following figure five-wave impulses is following by a three-wave correction (a,b & c) to form a complete cycle of eight waves.



One complete cycle consists of waves made up of two distinct phases, bullish and bearish. On completion of full one cycle i.e. termination of 8 waves movement, the fresh cycle starts with similar impulses arising out of market trading

3. RAMDOM WALK THEORY

While discussing the Dow Jones theory, we have seen that the theory is based on the assumption that the behavior of stock market itself contains trends which give clues to the future behavior of stock market prices. Thus supporters of the theory argue that market prices can be predicted if their patterns can be properly understood. *Such analysis of stock market patterns is called technical analysis.* Apart from this theory there are many approaches to technical analysis. Most of them, however, involve a good deal of subjective judgment.

Many investment managers and stock market analysts believe that stock market prices can never be predicted because they are not a result of any underlying factors but are mere statistical ups and downs. This hypothesis is known as Random Walk hypothesis which states that the behavior of stock market prices is unpredictable and that there is no relationship between the present prices of the shares and their future prices. Proponents of this hypothesis argue that stock market prices are independent. A British statistician, M. G. Kendell, found that changes in security prices behave nearly as if they are generated by a suitably designed roulette wheel for which each outcome is statistically independent of the past history. In other words, the fact that there are peaks and troughs in stock exchange prices is a mere statistical happening – successive peaks and troughs are unconnected. In the layman's language it may be said that prices on the stock exchange behave exactly the way a drunk would behave while walking in a blind lane, i.e., up and down, with an unsteady way going in any direction he likes, bending on the side once and on the other side the second time.

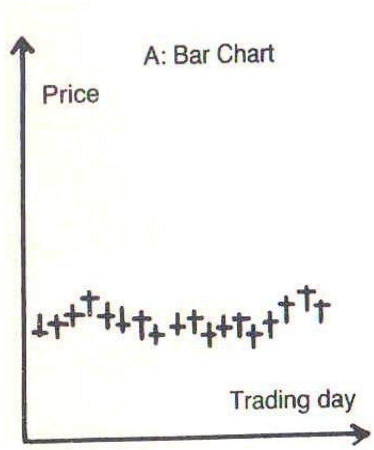
The supporters of this theory put out a simple argument.
It follows that:

a) Prices of shares in stock market can never be predicted.
b) The reason is that the price trends are not the result of any underlying factors, but that they represent a statistical expression of past data.
c) There may be periodical ups or downs in share prices, but no connection can be established between two successive peaks (high price of stocks) and troughs (low price of stocks).

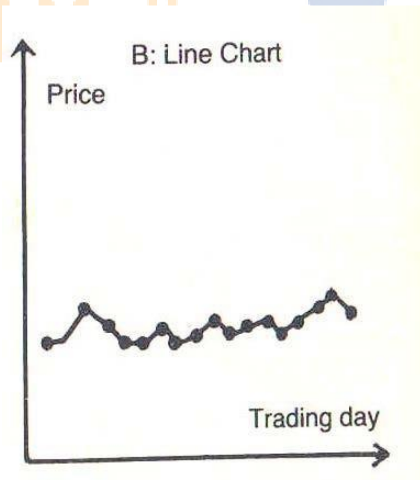
CHARTING TECHNIQUES

Technical analysts use three types of charts for analyzing data. They are:

(i) Bar Chart : In a bar chart, a vertical line (bar) represents the lowest to the highest price, with a short horizontal line protruding from the bar representing the closing price for the period. Since volume and price data are often interpreted together, it is a common practice to plot the volume traded, immediately below the line and the bar charts.



(ii) Line Chart: In a line chart, lines are used to connect successive day's prices. The closing price for each period is plotted as a point. These points are joined by a line to form the chart. The period may be a day, a week or a month



(iii) Point and Figure Chart: Point and Figure charts are more complex than line or bar charts. They are used to detect reversals in a trend. For plotting a point and figure chart, we have to first decide the box size and the reversal criterion. The box size is the value of each box on the chart, for example each box could be Re.1, Re 2 or Re 0.50. The smaller the box size, the more sensitive would the chart be to price change. The reversal criterion is the number of boxes required to be retraced to record prices in the next column in the opposite direction.

MARKET INDICATORS

(i) Breadth Index: It is an index that covers all securities traded. It is computed by dividing the net advances or declines in the market by the number of issues traded. The breadth index either supports or contradicts the movement of the Dow Jones Averages. If it supports the movement of the Dow Jones Averages, this is considered sign of technical strength and if it does not support the averages, it is a sign of technical weakness i.e. a sign that the market will move in a direction opposite to the Dow Jones Averages. The breadth index is an addition to the Dow Theory and the movement of the Dow Jones Averages.

(ii) Volume of Transactions: The volume of shares traded in the market provides useful clues on how the market would behave in the near future. A rising index/price with increasing volume would signal buy behavior because the situation reflects an unsatisfied demand in the market. Similarly, a falling market with increasing volume signals a bear market and the prices would be expected to fall further. A rising market with decreasing volume indicates a bull market while a falling market with dwindling volume indicates a bear market. Thus, the volume concept is best used with another market indicator, such as the Dow Theory.

(iii) Confidence Index*:* It is supposed to reveal how willing the investors are to take a chance in the market. It is the ratio of high-grade bond yields to low-grade bond yields. It is used by market analysts as a method of trading or timing the purchase and sale of stock, and also, as a forecasting device to determine the turning points of the market. A rising confidence index is expected to precede a rising stock market, and a fall in the index is expected to precede a drop in stock prices. A fall in the confidence index represents the fact that low-grade bond yields are rising faster or falling more slowly than high grade yields. The confidence index is usually, but not always a leading indicator of the market. Therefore, it should be used in conjunction with other market indicators.

(iv) Relative Strength Analysis: The relative strength concept suggests that the prices of some securities rise relatively faster in a bull market or decline more slowly in a bear market than other securities i.e. some securities exhibit relative strength. Investors will earn higher returns by investing in securities which have demonstrated relative strength in the past because the relative strength of a security tends to remain undiminished over time.

Relative strength can be measured in several ways. Calculating rates of return and classifying those securities with historically high average returns as securities with high relative strength is one of them. Even ratios like security relative to its industry and security relative to the entire market can also be used to detect relative strength in a security or an industry.

(v) Odd - Lot Theory*:* This theory is a contrary - opinion theory. It assumes that the average person is usually wrong and that a wise course of action is to pursue strategies contrary to popular opinion. The odd-lot theory is used primarily to predict tops in bull markets, but also to predict reversals in individual securities.

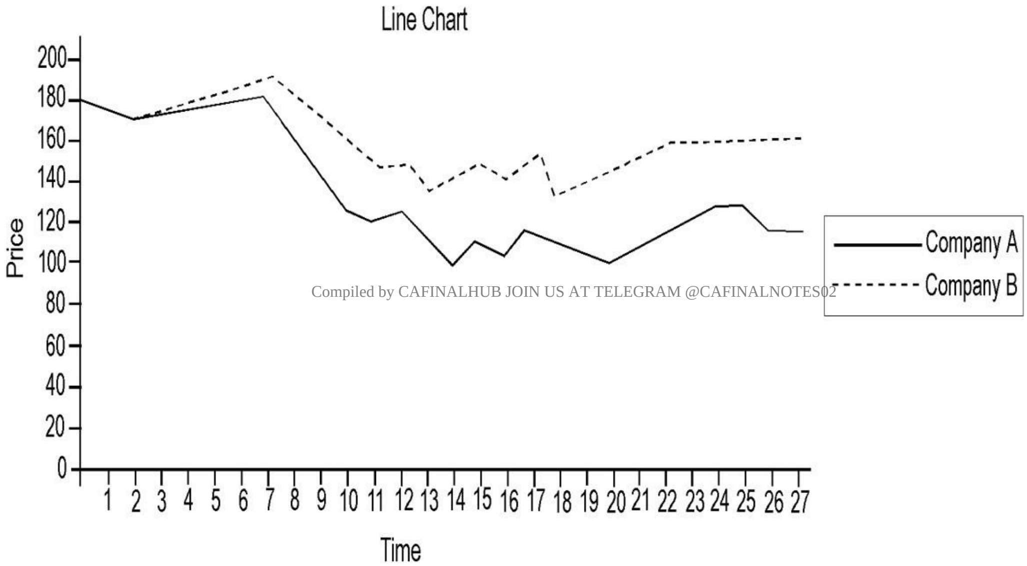
SUPPORT AND RESISTANCE LEVELS

When the index/price goes down from a peak, the peak becomes the resistance level. When the index/price rebounds after reaching a trough subsequently, the lowest value reached becomes the support level. The price is then expected to move between these two levels. Whenever the price approaches the resistance level, there is a selling pressure because all investors who failed to sell at the high would be keen to liquidate, while whenever the price approaches the support level, there is a buying pressure as all those investors who failed to buy at the lowest price would like to purchase the share. A breach of these levels indicates a distinct departure from status quo, and an attempt to set newer levels. Let us get a better understanding about these levels by using price data for about two months for shares of companies A and B given in the following Table:

Date	A	B
Dec. 1, 2005	177	177
5	171	171.5
7	172	175.5
12	174	177
13	177.5	181
14	181	184
15	180	186.5
18	163	176
19	142	162.5
20	127	156
22	123	147
25	124	147
Jan. 3, 2006	107.5	137.5
4	97.5	140
8	105	145
10	102.5	143.75
12	108.75	150
15	100	142.5
25	95	135
26	91.25	133.75

Feb. 1	97.5	138.75
2	106.25	147.5
5	113.75	152.5
6	120	155
7	120	152.5
8	113.75	150
9	113.75	147.5

The line charts for Company A and Company B shares are shown in the graph below. From the charts, it appears that the support level and resistance level for Company A at that time were about Rs 100 and Rs 125, while these levels for Company B were Rs 140 and Rs 160.

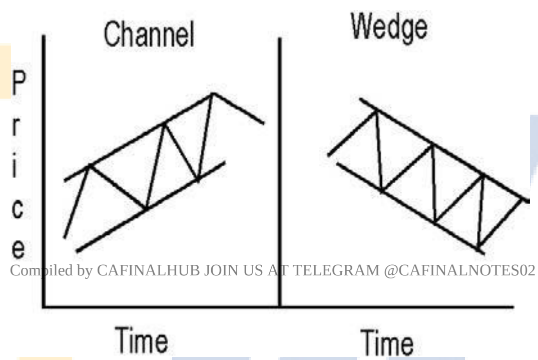


INTERPRETING PRICE PATTERNS

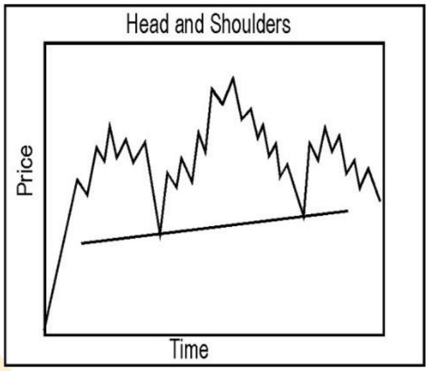
There are numerous price patterns documented by technical analysts but only a few and important of them have been discussed here:

(a) Channel : A series of uniformly changing tops and bottoms gives rise to a channel formation. A downward sloping channel would indicate declining prices and an upward sloping channel would imply rising prices.

(b) Wedge : A wedge is formed when the tops (resistance levels) and bottoms (support levels) change in opposite direction (that is, if the tops, are decreasing then the bottoms are increasing and vice versa), or when they are changing in the same direction at different rates over time.

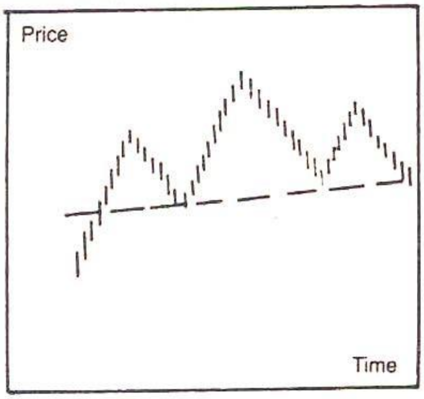


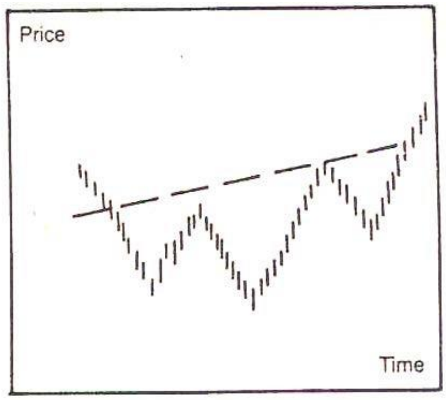
(c) Head and Shoulders : It is a distorted drawing of a human form, with a large lump (for head) in the middle of two smaller humps (for shoulders). This is perhaps the single most important pattern to indicate a reversal of price trend. The neckline of the pattern is formed by joining points where the head and the shoulders meet. The price movement after the formation of the second shoulder is crucial. If the price goes below the neckline, then a drop in price is indicated, with the drop expected to be equal to the distance between the top of the head and the neckline.



(i) Head and Shoulder Top Pattern: This has a left shoulder, a head and a right shoulder. Such formation represents bearish development. If the price falls below the neck line (line drawn tangentially to the left and right shoulders) a price decline is expected. Hence it's a signal to sell.

(ii) Inverse Head and Shoulder Pattern: As the name indicates this formation, it is an inverse of head and shoulder top formation. Hence it reflects a bullish development. The price rise to above the neck line suggests price rise is imminent and a signal to purchase.

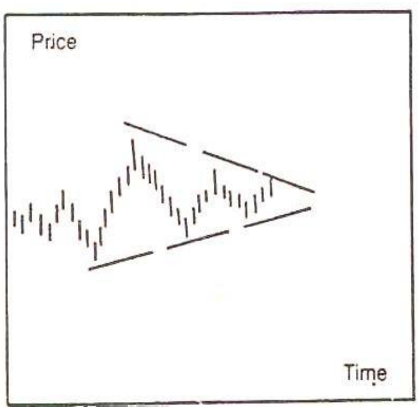


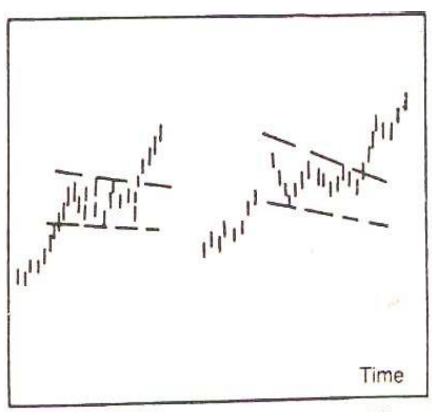


HEAD & SHOULDERS **INVERSE HEAD & SHOULDERS**

(d) Triangle or Coil Formation*:* This formation represents a pattern of uncertainty and is difficult to predict which way the price will break out.

(e) Flags and Pennants Form*:* This form signifies a phase after which the previous price trend is likely to continue.

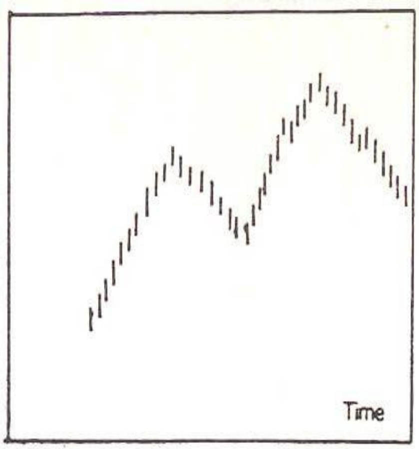


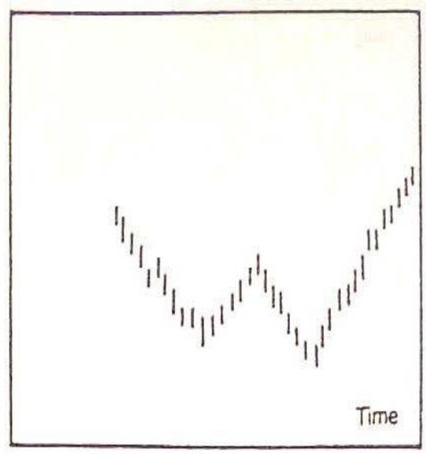


TRIANGLE OR COIL **FLAG & PENNANT**

(f) Double Top Form: This form represents a bearish development, signals that price is expected to fall.

(g) Double Bottom Form: This form represents bullish development signaling price is expected to rise.





DOUBLE TOP **DOUBLE BOTTOM**

(h) Gap *:* A gap is the difference between the opening price on a trading day and the closing price of the previous trading day. The wider the gap the stronger the signal for a continuation of the observed trend. On a rising market, if the opening price is considerably higher than the previous closing price, it indicates that investors are willing to pay a much higher price to acquire the scrip. Similarly, a gap in a falling market is an indicator of extreme selling pressure.

DECISION USING DATA ANALYSIS

Technical analysts have developed rules based on simple statistical analysis of price data. Moving
Averages is one of the more popular methods of data analysis for decision making.

Moving Averages: Moving averages are frequently plotted with prices to make buy and sell decisions. The two types of moving averages used by chartists are the Arithmetic Moving Average (AMA) and the Exponential Moving Average (EMA). An *n*-period AMA, at period *t*, is nothing but the simple average of the last *n* period prices.

$AMA_{n,t} = 1/n[P_t + P_{t-1} + \ldots + P_{t-(n-1)}]$

To identify trend, technical analysts use moving average analysis:

(i) A 200 day's moving average of daily prices or a 30 week moving of weekly price for identifying a long term trend.
(ii) A 60 day's moving average of daily price to discern an intermediate term trend.
(iii) A 10 day's moving average of daily price to detect a short term trend.

For example Moving Average is calculated by considering the most recent observation for which the closing price of a stock on '10' successive trading days are taken into account for the calculation of a 5 -day moving average of daily closing prices.

Trading day	Closing prices	Sum of 5 most recent closing price	Two-item Centered Total	Moving Average
1	25.00			
2	26.00			
3	25.50			
4	24.50			
5	26.00	127.00		
6	26.00	128.00	255.00	25.50
7	26.50	128.50	256.50	25.65
8	26.50	129.50	258.00	25.80
9	26.00	131.00	260.50	26.05
10	27.00	132.00	263.00	26.30

Buy and Sell Signals Provided by Moving Average Analysis

Buy Signal	*Sell Signal*
(a) Stock price line rise through the moving average line when graph of the moving average line is flattering out.	(a) Stock price line falls through moving average line when graph of the moving average line is flattering out.
(b) Stock price line falls below moving average line which is rising.	(b) Stock price line rises above moving average line which is falling.
(c) Stock price line which is above moving average line falls but begins to rise again before reaching the moving average line	(c) Stock price line which is slow moving average line rises but begins to fall again before reaching the moving average line.

Exponential Moving Average*:* Unlike the AMA, which assigns equal weight of 1/*n* to each of the n prices used for computing the average, the Exponential Moving Average (EMA) assigns decreasing weights, with the highest weight being assigned to the latest price. The weights decrease exponentially, according to a scheme specified by the exponential smoothing constant, also known as the exponent, a.

EVALUATION OF TECHNICAL ANALYSIS

Technical Analysis has several supporters as well several critics. The advocates of technical analysis offer the following interrelated argument in their favor:

(a) Under influence of crowd psychology trend persist for some time. Tools of technical analysis help in identifying these trends early and help in investment decision making.

(b) Shift in demand and supply are gradual rather then instantaneous. Technical analysis helps in detecting this shift rather early and hence provides clues to future price movements.

(c) Fundamental information about a company is observed and assimilated by the market over a period of time. Hence price movement tends to continue more or less in same direction till the information is fully assimilated in the stock price.

Detractors of technical analysis believe that it is an useless exercise; their arguments are as follows:

(a) Most technical analysts are not able to offer a convincing explanation for the tools employed by them.

(b) Empirical evidence in support of random walk hypothesis cast its shadow over the useful ness of technical analysis.

(c) By the time an up trend and down trend may have been signaled by technical analysis it may already have taken place.

(d) Ultimately technical analysis must be self defeating proposition. With more and more people employing it, the value of such analysis tends to decline.

In a nutshell, it may be concluded that in a rational, well ordered and efficient market, technical analysis may not work very well. However with imperfection, inefficiency and irrationalities that characterizes the real world market, technical analysis may be helpful. If technical analysis is used in conjunction with fundamental analysis, it might be useful in providing proper guidance to investment decision makers.

EFFICIENT MARKET THEORY

Efficient Market Theory was developed by University of Chicago professor Eugen Fama in the 1960s. As per this theory, at any given time, all available price sensitive information is fully reflected in securities' prices. Thus this theory implies that no investor can consistently outperform the market as every stock is appropriately priced based on available information.

Stating otherwise theory states that no none can "beat the market" hence making it impossible for investors to either purchase undervalued stocks or sell stocks for inflated prices as stocks are always traded at their fair value on stock exchanges. Hence it is impossible to outperform the overall market through expert stock selection or market timing and that the only way an investor can possibly obtain higher returns is by purchasing riskier investments.

SEARCH FOR THEORY

When empirical evidence in favour of Random walk hypothesis seemed overwhelming, researchers wanted to know about the Economic processes that produced a Random walk. They concluded that randomness of stock price was a result of efficient market that led to the following viewpoints:

- Information is freely and instantaneously available to all market participants.

- Keen competition among the market participants more or less ensures that market will reflect intrinsic values. This means that they will fully impound all available information.
- Price change only response to new information that is unrelated to previous information and therefore unpredictable.

MISCONCEPTION ABOUT EFFICIENT MARKET THEORY

Efficient Market Theory implies that market prices factor in all available information and as such it is not possible for any investor to earn consistent long term returns from market operations.

Although price tends to fluctuate they cannot reflect fair value. This is because the future is uncertain. The market springs surprises continually and as prices reflect the surprises they fluctuate.

Inability of institutional portfolio managers to achieve superior investment performance implies that they lack competence in an efficient market. It is not possible to achieve superior investment performance since market efficiency exists due to portfolio mangers doing this job well in a competitive setting.

The random movement of stock prices suggests that stock market is irrational. Randomness and irrationality are two different things, if investors are rational and competitive, price changes are bound to be random.

LEVEL OF MARKET EFFICIENCY

That price reflects all available information, the highest order of market efficiency. According to FAMA, there exist three levels of market efficiency:-

(i) *Weak form efficiency* – Price reflect all information found in the record of past prices and volumes.

(ii) *Semi – Strong efficiency* – Price reflect not only all information found in the record of past prices and volumes but also all other publicly available information.

(iii) *Strong form efficiency* – Price reflect all available information public as well as private.

EMPIRICAL EVIDENCE ON WEAK FORM OF EFFICIENT MARKET THEORY

According to the Weak form Efficient Market Theory current price of a stock reflect all information found in the record of past prices and volumes. This means that there is no relationship between the past and future price movements.

Three types of tests have been employed to empirically verify the weak form of Efficient Market
Theory- Serial Correlation Test, Run Test and Filter Rule Test.

(a*) Serial Correlation Test*: To test for randomness in stock price changes, one has to look at serial correlation. For this purpose, price change in one period has to be correlated with price change in some other period. Price changes are considered to be serially independent. Serial correlation studies employing different stocks, different time lags and different time period have been conducted to detect serial correlation but no significant serial correlation could be discovered. These studies were carried on short term trends viz. daily, weekly, fortnightly and monthly and not in long term trends in stock prices as in such cases. Stock prices tend to move upwards.

(b) *Run Test*: Given a series of stock price changes each price change is designated + if it represents an increase and – if it represents a decrease. The resulting series may be -,+, - ,
-, - ,
+, +.

A run occurs when there is no difference between the sign of two changes. When the sign of change differs, the run ends and new run begins.

To test a series of price change for independence, the number of runs in that series is compared with a number of runs in a purely random series of the size and in the process determines whether it is statistically different. By and large, the result of these studies strongly supports the Random Walk Model.

(c*) Filter Rules Test*: If the price of stock increases by at least N% buy and hold it until its price decreases by at least N% from a subsequent high. When the price decreases at least N% or more, sell it. If the behaviour of stock price changes is random, filter rules should not apply in such a buy and hold strategy. By and large, studies suggest that filter rules do not out perform a single buy and hold strategy particular after considering commission on transaction.

EMPIRICAL EVIDENCE ON SEMI-STRONG EFFICIENT MARKET THEORY

Semi-strong form efficient market theory holds that stock prices adjust rapidly to all publicly available information. By using publicly available information, investors will not be able to earn above normal rates of return after considering the risk factor. To test semi-strong form efficient market theory, a number of studies was conducted which lead to the following queries: Whether it was possible to earn on the above normal rate of return after adjustment for risk, using only publicly available information and how rapidly prices adjust to public announcement with regard to earnings, dividends, mergers, acquisitions, stock-splits?

Several studies support the Semi-strong form Efficient Market Theory. Fama, Fisher, Jensen and Roll in their adjustment of stock prices to new information examined the effect of stock split on return of 940 stock splits in New York Stock Exchange during the period 1957-1959 They found that prior to the split, stock earns higher returns than predicted by any market model.

Boll and Brown in an empirical evaluation of accounting income numbers studied the effect of annual earnings announcements. They divided the firms into two groups. First group consisted of firms whose earnings increased in relation to the average corporate earnings while second group consists of firms whose earnings decreased in relation to the average corporate earnings. They found that before the announcement of earnings, stock in the first group earned positive abnormal returns while stock in the second group earned negative abnormal returns after the announcement of earnings. Stock in both the groups earned normal returns.

There have been studies which have been empirically documented showing the following inefficiencies and anomalies:

- Stock price adjust gradually not rapidly to announcements of unanticipated changes in quarterly earnings.
- Small firms' portfolio seemed to outperform large firms' portfolio.
- Low price earning multiple stock tend to outperform large price earning multiple stock.
- Monday's return is lower than return for the other days of the week.

EMPIRICAL EVIDENCE ON STRONG FORM OF EFFICIENT MARKET THEORY

According to the Efficient Market Theory, all available information, public or private, is reflected in the stock prices. This represents an extreme hypothesis.

To test this theory, the researcher analysed returns earned by certain groups viz. corporate insiders, specialists on stock exchanges, mutual fund managers who have access to internal information (not publicly available), or posses greater resource or ability to intensively analyse information in the public domain. They suggested that corporate insiders (having access to internal information) and stock exchange specialists (having monopolistic exposure) earn superior rate of return after adjustment of risk.

Mutual Fund managers do not on an average earn a superior rate of return. No scientific evidence has been formulated to indicate that investment performance of professionally managed portfolios as a group has been any better than that of randomly selected portfolios. This was the finding of Burton Malkiel in his Random Walk Down Wall Street, New York.

CHALLENGES TO THE EFFICIENT MARKET THEORY

Information inadequacy – Information is neither freely available nor rapidly transmitted to all participants in the stock market. There is a calculated attempt by many companies to circulate misinformation.

(a) **Limited information processing capabilities** – Human information processing capabilities are sharply limited. According to Herbert Simon every human organism lives in an environment which generates millions of new bits of information every second but the bottle necks of the perceptual apparatus does not admit more than thousand bits per seconds and possibly much less.

David Dreman maintained that under conditions of anxiety and uncertainty, with a vast interacting information grid, the market can become a giant.

(b) **Irrational Behavior** – It is generally believed that investors' rationality will ensure a close correspondence between market prices and intrinsic values. But in practice this is not true. J. M. Keynes argued that all sorts of consideration enter into the market valuation which is in no way relevant to the prospective yield. This was confirmed by L. C. Gupta who found that the market evaluation processes work haphazardly almost like a blind man firing a gun. The market seems to function largely on hit or miss tactics rather than on the basis of informed beliefs about the long term prospects of individual enterprises.

(c) **Monopolistic Influence** – A market is regarded as highly competitive. No single buyer or seller is supposed to have undue influence over prices. In practice, powerful institutions and big operators wield grate influence over the market. The monopolistic power enjoyed by them diminishes the competitiveness of the market.

THANKS…..

CHAPTER 5

PORTFOLIO MANAGEMENT

Question 1
Activities in Portfolio Management

Solution
The following three major activities are involved in the formation of an Optimal Portfolio suitable for any given investor:
Selection of securities.
Construction of all Feasible Portfolios with the help of the selected securities.
Deciding the weights/proportions of the different constituent securities in the portfolio so that it is an Optimal Portfolio for the concerned investor.
The activities are directed to achieve an Optimal Portfolio of investments commensurate with the risk appetite of the investor.

Question 2
Objectives of Portfolio Management

Solution
Some of the important objectives of portfolio management are:

I. ***Security/Safety of Principal***: Security not only involves keeping the principal sum intact but also its purchasing power

II. ***Stability of Income***: To facilitate planning more accurately and systematically the reinvestment or consumption of income.

III. ***Capital Growth***: It can be attained by reinvesting in growth securities or through purchase of growth securities.

IV. ***Marketability i.e. the case with which a security can be bought or sold***: This is essential for providing flexibility to investment portfolio.

V. ***Liquidity i.e. nearness to money***: It is desirable for the investor so as to take advantage of attractive opportunities upcoming in the market.

VI. ***Diversification***: The basic objective of building a portfolio is to reduce the risk of loss of capital and/or income by investing in various types of securities and over a wide range of industries.

VII. ***Favourable Tax Status***: The effective yield an investor gets from his investment depends on tax to which it is subjected to. By minimising the tax burden, yield can be effectively improved.

Question 3
PHASES OF PORTFOLIO MANAGEMENT

Solution
Portfolio management is a process and broadly it involves following five phases and each phase is an integral part of the whole process and the success of portfolio management depends upon the efficiency in carrying out each of these phases.

Security Analysis
The securities available to an investor for investment are numerous in number and of various types. The securities are normally classified on the basis of ownership of securities such as equity shares, preference shares, debentures and bonds, In recent times a number of new securities with innovative features are available in the market e.g. Convertible Debentures, Deep Discount Bonds, Zero Coupon Bonds, Flexi Bonds, Floating Rate Bonds, Global Depository Receipts, Euro-currency Bonds, etc. are some examples of these new securities. Among this vast group of securities, an investor has to choose those ones which he considers worthwhile to be included in his investment portfolio. This requires a detailed analysis of the all securities available for making investment.

Security analysis constitutes the initial phase of the portfolio formation process and consists in examining the risk-return characteristics of individual securities and also the correlation among them. A simple strategy in securities investment is to buy underpriced securities and sell overpriced securities. But the basic problem is how to identify underpriced and overpriced securities and this is what security analysis is all about.

As discussed in the chapter of Security Analysis, there are two alternative approaches to analyse any security viz. fundamental analysis and technical analysis. They are based on different premises and follow different techniques. Fundamental analysis, the older of the two approaches, concentrates on the fundamental factors affecting the company such as

- the EPS of the company,
- the dividend pay-out ratio,
- the competition faced by the company,
- the market share, quality of management, etc.
- fundamental factors affecting the industry to which the company belongs.

The fundamental analyst compares this intrinsic value (true worth of a security based on its fundamentals) with the current market price. If the current market price is higher than the intrinsic value, the share is said to be overpriced and vice versa. This mispricing of securities gives an opportunity to the investor to acquire the share or sell off the share profitably. An intelligent investor would buy those securities which are underpriced and sell those securities which are overpriced. Thus it can be said that fundamental analysis helps to identify fundamentally strong companies whose shares are worthy to be included in the investor's portfolio.

The second approach to security analysis is 'Technical Analysis'. As per this approach the share price movements are systematic and exhibit certain consistent patterns. Therefore, properly studied past movements in the prices of shares help to identify trends and patterns in security prices and efforts are made to predict the future price movements by looking at the patterns of the immediate past. Thus Technical analyst concentrates more on price movements and ignores the fundamentals of the shares.

In order to construct well diversified portfolios, so that Unsystematic Risk can be eliminated or substantially mitigated, an investor will like to select securities across diverse industry sectors which should not have strong positive correlation among themselves.

The efficient market hypothesis holds that-share price movements are random and not systematic. Consequently, neither fundamental analysis nor technical analysis is of value in generating trading gains on a sustained basis. The EMH thus does not subscribe to the belief that it is possible to book gains in the long term on a sustained basis from trading in the stock market. Markets, though becoming increasingly efficient everywhere with the passage of time, are never perfectly efficient. So, there are opportunities all the time although their durations are decreasing and only the smart investors can look forward to booking gains consistently out of stock market deals.

Portfolio Analysis

Once the securities for investment have been identified, the next step is to combine these to form a suitable portfolio. Each such portfolio has its own specific risk and return characteristics which are not just the aggregates of the characteristics of the individual securities constituting it. The return and risk of each portfolio can be computed mathematically based on the risk-return profiles for the constituent securities and the pair-wise correlations among them.

From any chosen set of securities, an indefinitely large number of portfolios can be constructed by varying the fractions of the total investable resources allocated to each one of them. All such portfolios that can be constructed out of the set of chosen securities are termed as Feasible Portfolios.

Portfolio Selection

The goal of a rational investor is to identify the Efficient Portfolios out of the whole set of Feasible Portfolios mentioned above and then to zero in on the Optimal Portfolio suiting his risk appetite. An Efficient Portfolio has the highest return among all Feasible Portfolios having identical Risk and has the lowest Risk among all Feasible Portfolios having identical Return. Harry Markowitz's portfolio theory (Modern Portfolio Theory) outlines the methodology for locating the Optimal Portfolio for an investor (unlike the CAPM, the Optimal Portfolio as per Markowitz Theory is investor specific).

Portfolio Revision

Once an optimal portfolio has been constructed, it becomes necessary for the investor to constantly monitor the portfolio to ensure that it does not lose it optimality. Since the economy and financial markets are dynamic in nature, changes take place in these variables almost on a daily basis and securities which were once attractive may cease to be so with the passage of time. New securities with expectations of high returns and low risk may emerge. In light of these developments in the market, the investor now has to revise his portfolio. This revision leads to addition (purchase) of some new securities and deletion (sale) of some of the existing securities from the portfolio. The nature of securities and their proportion in the portfolio changes as a result of the revision.

This portfolio revision may also be necessitated by some investor-related changes such as availability of additional funds for investment, change in risk appetite, need of cash for other alternative use, etc.

Portfolio revision is not a casual process to be taken lightly and needs to be carried out with care, scientifically and objectively so as to ensure the optimality of the revised portfolio. Hence, in the entire process of portfolio management, portfolio revision is as important as portfolio analysis and selection.

Portfolio Evaluation

This process is concerned with assessing the performance of the portfolio over a selected period of time in terms of return and risk and it involves quantitative measurement of actual return realized and the risk borne by the portfolio over the period of investment. The objective of constructing a portfolio and revising it periodically is to maintain its optimal risk return characteristics. Various types of alternative measures of performance evaluation have been developed for use by investors and portfolio managers.

This step provides a mechanism for identifying weaknesses in the investment process and for improving these deficient areas.

It should however be noted that the portfolio management process is an ongoing process. It starts with security analysis, proceeds to portfolio construction, and continues with portfolio -revision and end with portfolio evaluation. Superior performance is achieved through continual refinement of portfolio management skill.

Question 4
Traditional Approach

Solution
The traditional approach to portfolio management concerns itself with the investor, definition of portfolio objectives, investment strategy, diversification and selection of individual investment as detailed below:

I. Investor's study includes an insight into his – (a) age, health, responsibilities, other assets, portfolio needs; (b) need for income, capital maintenance, liquidity; (c) attitude towards risk; and (d) taxation status;
II. Portfolio objectives are defined with reference to maximising the investors' wealth which is subject to risk. The higher the level of risk borne, the more the expected returns.
III. Investment strategy covers examining a number of aspects including:

a) Balancing fixed interest securities against equities;
b) Balancing high dividend payout companies against high earning growth companies as required by investor;
c) Finding the income of the growth portfolio;
d) Balancing income tax payable against capital gains tax;
e) Balancing transaction cost against capital gains from rapid switching; and
f) Retaining some liquidity to seize upon bargains.

IV. Diversification reduces volatility of returns and risks and thus adequate equity diversification is sought. Balancing of equities against fixed interest bearing securities is also sought.

V. Selection of individual investments is made on the basis of the following principles:

a) Methods for selecting sound investments by calculating the true or intrinsic value of a share and comparing that value with the current market value (i.e. by following the fundamental analysis) or trying to predict future share prices from past price movements (i.e., following the technical analysis);
b) Expert advice is sought besides study of published accounts to predict intrinsic value;
c) Inside information is sought and relied upon to move to diversified growth companies, switch quickly to winners than loser companies;

d) Newspaper tipsters about good track record of companies are followed closely;
e) Companies with good asset backing, dividend growth, good earning record, high quality management with appropriate dividend paying policies and leverage policies are traced out constantly for making selection of portfolio holdings.

In India, most of the share and stock brokers follow the above traditional approach for selecting a portfolio for their clients.

Question 5

Modern Approach (Markowitz Model or Risk-Return Optimization)

Solution

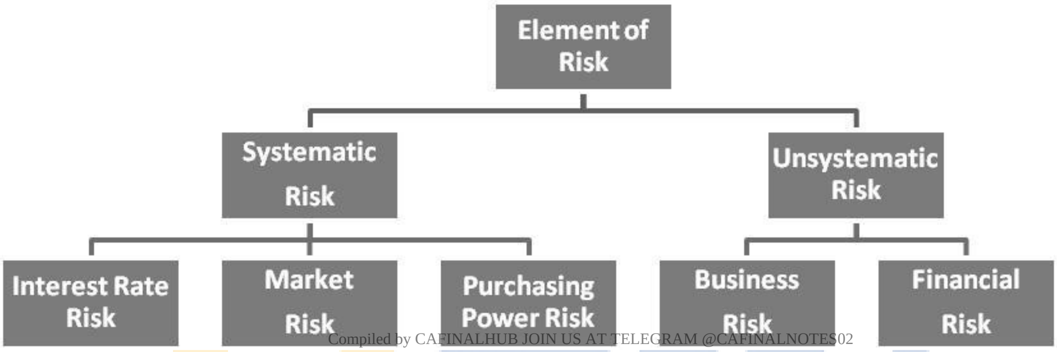
Originally developed by Harry Markowitz in the early 1950's, Portfolio Theory - sometimes referred to as Modern Portfolio Theory - provides a logical/mathematical framework in which investors can optimise their risk and return. The central plank of the theory is that diversification through portfolio formation can reduce risk, and return is a function of expected risk.

Harry Markowitz is regarded as the father of Modern Portfolio Theory. According to him, investors are mainly concerned with two properties of an asset: risk and return. The essence of his theory is that risk of an individual asset hardly matters to an investor. What really matters is the contribution it makes to the investor's overall risk. By turning his principle into a useful technique for selecting the right portfolio from a range of different assets, he developed the 'Mean Variance Analysis' in 1952.

We shall discuss this theory in greater detail later in this chapter.

Question 6
Elements of Risk

Solution
Let us consider the risk in holding securities, such as shares, debentures, etc. The elements of risk may be broadly classified into two groups as shown in the following diagram.



The first group i.e. systematic risk comprises factors that are external to a company (macro in nature) and affect a large number of securities simultaneously. These are mostly uncontrollable in nature. The second group i.e. unsystematic risk includes those factors which are internal to companies (micro in nature) and affect only those particular companies. These are controllable to a great extent.

The total variability in returns of a security is due to the total risk of that security. Hence, Total risk = Systematic risk + Unsystematic risk

Systematic Risk:

Due to dynamic nature of society the changes occur in the economic, political and social systems constantly. These changes have an influence on the performance of companies and thereby on their stock prices but in varying degrees. For example, economic and political instability adversely affects all industries and companies. When an economy moves into recession, corporate profits will shift downwards and stock prices of most companies may decline. Thus, the impact of economic, political and social changes is system-wide and that portion of total variability in security returns caused by such system-wide factors is referred to as systematic risk. Systematic risk can be further subdivided into interest rate risk, market risk and purchasing power risk.

I. **Interest Rate Risk:** This arises due to variability in the interest rates from time to time and particularly affects debts securities like bonds and debentures as they carry fixed coupon rate of interest. A change in the interest rates establishes an inverse relationship in the price of security i.e. price of securities tends to move inversely with change in rate of interest, long term securities show greater variability in the price with respect to interest rate changes than short term securities. While cash equivalents are less vulnerable to interest rate risk the long term bonds are more vulnerable to interest rate risk.

II. **Purchasing Power Risk:** It is also known as inflation risk, as it also emanates from the very fact that inflation affects the purchasing power adversely. Nominal return contains both the real return component and an inflation premium in a transaction involving risk of the above type to compensate for inflation over an investment holding period. Inflation rates vary over time and investors are caught unaware when rate of inflation changes unexpectedly causing erosion in the value of realised rate of return and expected return.

Purchasing power risk is more in inflationary conditions especially in respect of bonds and fixed income securities. It is not desirable to invest in such securities during inflationary periods. Purchasing power risk is however, less in flexible income securities like equity shares or common stock where rise in dividend income off-sets increase in the rate of inflation and provides advantage of capital gains.

III. **Market risk:** This is a type of systematic risk that affects prices of any particular share move up or down consistently for some time periods in line with other shares in the market. A general rise in share prices is referred to as a bullish trend, whereas a general fall in share prices is referred to as a bearish trend. In other words, the share market moves between the bullish phase and the bearish phase. The market movements can be easily seen in the movement of share price indices such as the BSE Sensitive Index, BSE National Index, NSE Index etc.

Unsystematic Risk:
Sometimes the return from a security of any company may vary because of certain factors particular to this company. Variability in returns of the security on account of these factors (micro in nature), it is known as unsystematic risk. It should be noted that this risk is in addition to the systematic risk affecting all the companies. Unsystematic risk can be further subdivided into business risk and financial risk.

I. **Business Risk***:* Business risk emanates from sale and purchase of securities affected by business cycles, technological changes etc. Business cycles affect all types of securities viz. there is cheerful movement in boom due to bullish trend in stock prices whereas bearish trend in depression brings down fall in the prices of all types of securities. Flexible income securities are more affected than fixed rate securities during depression due to decline in their market price.

II. **Financial Risk***:* It arises due to changes in the capital structure of the company. It is also known as leveraged risk and expressed in terms of debt-equity ratio. Excess of debt vis-à-vis equity in the capital structure indicates that the company is highly geared. Although a leveraged company's earnings per share are more but dependence on borrowings exposes it to the risk of winding-up for its inability to honour its commitments towards lenders/creditors. This risk is known as leveraged or financial risk of which investors should be aware of and portfolio managers should be very careful.

Question 7
MARKOWITZ MODEL OF RISK-RETURN OPTIMIZATION

Solution
The portfolio selection problem can be divided into two stages, (1) finding the mean-variance efficient portfolios and (2) selecting one such portfolio. Investors do not like risk and the greater the riskiness of returns on an investment, the greater will be the returns expected by investors. There is a tradeoff between risk and return which must be reflected in the required rates of return on investment opportunities. The standard deviation (or variance) of return measures the total risk of an investment. It is not necessary for an investor to accept the total risk of an individual security. Investors can and do diversify to reduce risk. As number of holdings approach larger, a good deal of total risk is removed by diversification.

Assumptions of the Model

It is a common phenomenon that the diversification of investments in the portfolio leads to reduction in variance of the return, even for the same level of expected return. This model has taken into account risks associated with investments - using variance or standard deviation of the return. This model is based on the following assumptions. :

I. The return on an investment adequately summarises the outcome of the investment.
II. The investors can visualise a probability distribution of rates of return.
III. The investors' risk estimates are proportional to the variance of return they perceive for a security or portfolio.
IV. Investors base their investment decisions on two criteria i.e. expected return and variance of return.
V. All investors are risk averse. For a given expected return he prefers to take minimum risk, for a given level of risk the investor prefers to get maximum expected return.
VI. Investors are assumed to be rational in so far as they would prefer greater returns to lesser ones given equal or smaller risk and are risk averse. Risk aversion in this context means merely that, as between two investments with equal expected returns, the investment with the smaller risk would be preferred.
VII. 'Return' could be any suitable measure of monetary inflows like NPV but yield has been the most commonly used measure of return, so that where the standard deviation of returns is referred to it is meant the standard deviation of yield about its expected value.

Efficient Frontier

Markowitz has formalised the risk return relationship and developed the concept of efficient frontier. For selection of a portfolio, comparison between combinations of portfolios is essential. As a rule, a portfolio is not efficient if there is another portfolio with:

a) A higher expected value of return and a lower standard deviation (risk).
b) A higher expected value of return and the same standard deviation (risk)
c) The same expected value but a lower standard deviation (risk)

Markowitz has defined the diversification as the process of combining assets that are less than perfectly positively correlated in order to reduce portfolio risk without sacrificing any portfolio returns. If an investors' portfolio is not efficient he may:

I. Increase the expected value of return without increasing the risk.
II. Decrease the risk without decreasing the expected value of return, or
III. Obtain some combination of increase of expected return and decrease risk.

This is possible by switching to a portfolio on the efficient frontier.

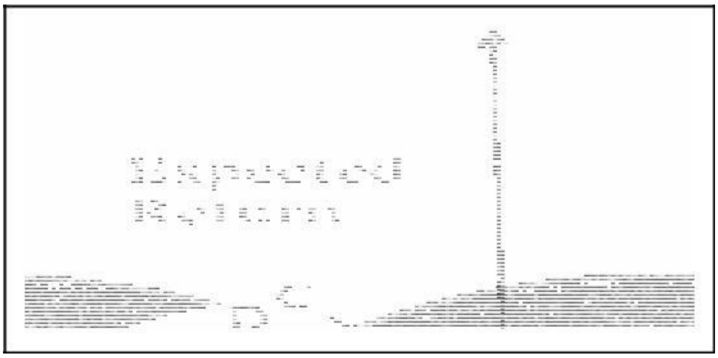


Fig. 1: Markowitz Efficient Frontier

If all the investments are plotted on the risk -return space, individual securities would be dominated by portfolios, and the efficient frontier would be containing all Efficient Portfolios (An Efficient Portfolio has the highest return among all portfolios with identical risk and the lowest risk among all portfolios with identical return). Fig – 1 depicts the boundary of possible investments in securities, A, B, C, D, E and F; and B, C, D, are lying on the efficient frontier.

The best combination of expected value of return and risk (standard deviation) depends upon the investors' utility function. The individual investor will want to hold that portfolio of securities which places him on the highest indifference curve, choosing from the set of available portfolios. The dark line at the top of the set is the line of efficient combinations, or the efficient frontier. The optimal portfolio for an investor lies at the point where the indifference curve for the concerned investor touches the efficient frontier. This point reflects the risk level acceptable to the investor in order to achieve a desired return and provide maximum return for the bearable level of risk. The concept of efficient frontier and the location of the optimal portfolio are explained with help of Fig-2.

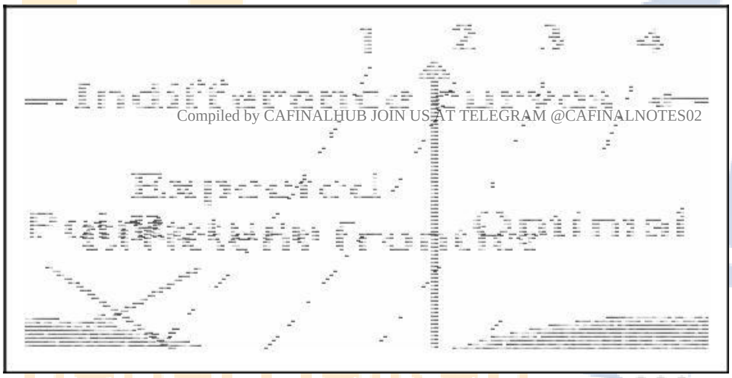


Fig. 2 : Optimal Investment under Markowitz Model

In Fig-2 A, B, C, D, E and F define the boundary of all possible investments out of which investments in B, C and D are the efficient portfolios lying on the efficient frontier. The attractiveness of the investment proposals lying on the efficient frontier depends on the investors' attitude to risk. At point B, the level of risk and return is at optimum level. The returns are highest at point D, but simultaneously it carries higher risk than any other investment.

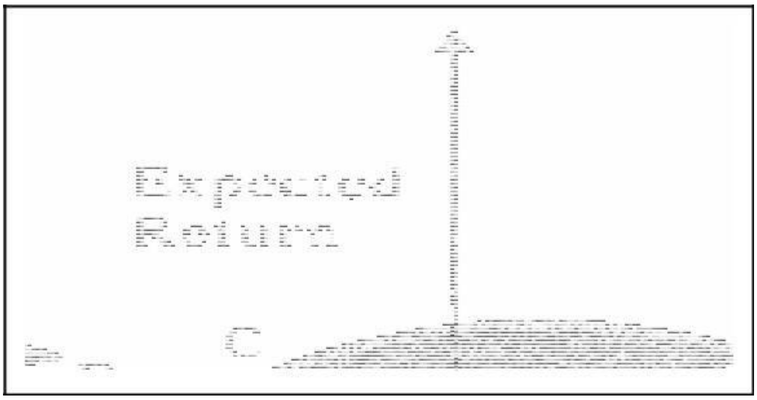


Fig.3 : Selection of Portfolios

The shaded area represents all attainable or feasible portfolios, that is all the combinations of risk and expected return which may be achieved with the available securities. The efficient frontier contains all possible efficient portfolios and any point on the frontier dominates any point to the right of it or below it.

Consider the portfolios represented by points B and E. B and E promise the same expected return

(R1) but the risk associated with B is σ (R1) whereas the associated with E is σ (R2). Investors, therefore, prefer portfolios on the efficient frontier rather than interior portfolios given the assumption of risk aversion; obviously, point A on the frontier represents the portfolio with the least possible risk, whilst D represents the portfolio with the highest possible rate of return with highest risk.

The investor has to select a portfolio from the set of efficient portfolios lying on the efficient frontier. This will depend upon his risk-return preference. As different investors have different preferences, the optimal portfolio of securities will vary from one investor to another.

Question 8

Active Portfolio Strategy (APS)

Solution

An APS is followed by most investment professionals and aggressive investors who strive to earn superior return after adjustment for risk. The vast majority of funds (or schemes) available in India follow an "active" investment approach, wherein fund managers of "active" funds spend a great deal of time on researching individual companies, gathering extensive data about financial performance, business strategies and management characteristics. In other words, "active" fund managers try to identify and invest in stocks of those companies that they think will produce better returns and beat the overall market (or Index).

There are four principles of on active strategy. These are:

a. ***Market Timing*** *:* This involves departing from the normal i.e. strategy for long run asset mix to reflect assessment of the prospect of various assets in the near future. Market timing is based on an explicit or implicit forecast of general market movement. A variety of tools are employed for market timing analysis namely business cycle analysis, moving average analysis, advance-decline analysis, Econometric models. The forecast for the general market movement derived with the help of one or more of these tools is tempted by the subjective judgment of the investors. In most cases investor may go largely by its market sense. Those who reveal the fluctuation in the market may be tempted to play the game of market timing but few will succeed in this game. And an investment manager has to forecast the market correctly, 75% of the time just to break even after taking into account the cost of errors and cost of transactions. According to Fisher Black, the market is just as well as on an average when the investor is out of the market as it does when he is in. So he loses money relative to a single buy and sale strategy by being out of the market part of the time.

b. ***Sector Rotation**:* Sector or group rotation may apply to both stock and bond component of the portfolio. It is used more compulsorily with respect to strategy. The components of the portfolio are used when it involves shifting. The weighting for various industry sectors is based on their asset outlook. If one thinks that steel and pharmaceutical would do well as compared to other sectors in the forthcoming period he may overweigh the sector relative to their position in the market portfolio, with the result that his portfolio will be tilted more towards these sectors in comparison to the market portfolio.

   With respect to bond portfolio sector rotation it implies a shift in the composition of the bond portfolio in terms of quality as reflected in credit rating, coupon rate, term of maturity etc. If one anticipates a rise in the interest rate one may shift for long term bonds to medium and short term. A long term bond is more sensitive to interest rate variation compared to a short term bond.

c. ***Security Selection**:* Security selection involves a search for under price security. If one has to resort to active stock selection he may employ fundamental / technical analysis to identify stocks which seems to promise superior return and concentrate the stock components of portfolio on them. Such stock will be over weighted relative to their position in the market portfolio. Likewise stock which are perceived to be unattractive will be under weighted relative to their position in the market portfolio.

As far as bonds are concerned security selection calls for choosing bonds which offer the highest yields to maturity and at a given level of risk.

d. ***Use of Specialised Investment Concept:*** To achieve superior return, one has to employ a specialised concept/philosophy particularly with respect to investment in stocks. The concept which have been exploited successfully are growth stock, neglected or out of favour stocks, asset stocks, technology stocks and cyclical stocks.

The advantage of cultivating a specialized investment concept is that it helps to:

1. Focus one's effort on a certain kind of investment that reflects one's ability and talent.
2. Avoid the distraction of perusing other alternatives.
3. Master an approach or style through sustained practice and continual self-criticism.

The greatest disadvantage of focusing exclusively on a specialized concept is that it may become obsolete. The changes in the market risk may cast a shadow over the validity of the basic premise underlying the investor philosophy.

Question 9
Passive Portfolio Strategy

Solution
Active strategy was based on the premise that the capital market is characterized by efficiency which can be exploited by resorting to market timing or sector rotation or security selection or use of special concept or some combination of these vectors.

Passive strategy, on the other hand, rests on the tenet that the capital market is fairly efficient with respect to the available information. Hence they search for superior return. Basically, passive strategy involves adhering to two guidelines. They are:

I. Create a well-diversified portfolio at a predetermined level of risk.
II. Hold the portfolio relatively unchanged over time unless it became adequately diversified or inconsistent with the investor risk return preference.

A fund which is *passively* managed are called index funds. An Index fund is a mutual fund scheme that invests in the securities of the target Index in the same proportion or weightage. Though it is designed to provide returns that closely track the benchmark

Index, an Index Fund carries all the risks normally associated with the type of asset the fund holds. So, when the overall stock market rises/falls, you can expect the price of shares in the index fund to rise/fall, too. In short, an index fund does not mitigate market risks. Indexing merely ensures that your returns will not stray far from the returns on the Index that the fund mimics. In other words, an index fund is a fund whose daily returns are the same as the daily returns obtained from an index. Thus, it is passively managed in the sense that an index fund manager invests in a portfolio which is exactly the same as the portfolio which makes up an index. For instance, the NSE-50 index (Nifty) is a market index which is made up of 50 companies. A Nifty index fund has all its money invested in the Nifty fifty companies, held in the same weights of the companies which are held in the index.

CHAPTER 6

SECURITIZATION

INTRODUCTION

Some companies or firms who are involved in sending the money or making credit sale must have a huge balance of receivables in their Balance Sheet. Though they have a huge receivable but still they may face liquidity crunch to run their business. One way may to adopt borrowing route, but this results in change debt equity ratio of the company which may not be acceptable to some stakeholders but also put companies to financial risk which affects the future borrowings by the company. To overcome this problem the term ‘securitization’ was coined.

1. CHAPTER DESIGN

After going through the chapter student shall be able to understand

- Introduction
- Concept and Definition
- Benefits of Securitization
- Participants in Securitization
- Mechanism of Securitization
- Problems in Securitization
- Securitization Instruments
- Pricing of Securitization Instruments
- Securitization in India

2. CONCEPT AND DEFINITION

The process of securitization typically involves the creation of pool of assets from the illiquid financial assets, such as receivables or loans which are marketable. In other words, it is the process of repackaging or rebundling of illiquid assets into marketable securities. These assets can be automobile loans, credit card receivables, residential mortgages or any other form of future receivables.

Features of Securitization

The securitization has the following features:

(i) Creation of Financial Instruments – The process of securities can be viewed as process of creation of additional financial product of securities in market backed by collaterals.

(ii) Bundling and Unbundling – When all the assets are combined in one pool it is bundling and when these are broken into instruments of fixed denomination it is unbundling.

(iii) Tool of Risk Management – In case of assets are securitized on non-recourse basis, then securitization process acts as risk management as the risk of default is shifted.

(iv) Structured Finance – In the process of securitization, financial instruments are tailor structured to meet the risk return trade of profile of investor, and hence, these securitized instruments are considered as best examples of structured finance.

(v) Trenching – Portfolio of different receivable or loan or asset are split into several parts based on risk and return they carry called 'Trenche'. Each Trench carries a different level of risk and return.

(vi) Homogeneity – Under each trenche the securities are issued of homogenous nature and even meant for small investors the who can afford to invest in small amounts.

3. PARTICIPANTS IN SECURITIZATION

Broadly, the participants in the process of securitization can be divided into two categories; one is Primary Participant and the other is Secondary Participant.

3.1 Primary Participants

Primary Participants are main parties to this process. The primary participants in the process of securitization are as follows:

(a) Originator: It is the initiator of deal or can be termed as securitizer. It is an entity which sells the assets lying in its books and receives the funds generated through the sale of such assets. The originator transfers both legal as well as beneficial interest to the Special Purpose Vehicle (discussed later).

(b) Special Purpose Vehicle: Also, called SPV is created for the purpose of executing the deal. Since issuer originator transfers all rights in assets to SPV, it holds the legal title of these assets. It is created especially for the purpose of securitization only and normally could be in form of a company, a firm, a society or a trust.

The main objective of creating SPV to remove the asset from the Balance Sheet of Originator. Since, SPV makes an upfront payment to the originator, it holds the key position in the overall process of securitization. Further, it also issues the securities (called Asset Based Securities) or Mortgage Based Securities) to the investors.

(c) The Investors: Investors are the buyers of securitized papers which may be an individual, an institutional investor such as mutual funds, provident funds, insurance companies, mutual funds, Financial Institutions etc.

Since, they acquire a participating in the total pool of assets/receivable, they receive their money back in the form of interest and principal as per the terms agree.

3.2 Secondary Participants

Besides the primary participants other parties involved into the securitization process are as follows:

(a) Obligors: Actually they are the main source of the whole securitization process. They are the parties who owe money to the firm and are assets in the Balance Sheet of Originator. The amount due from the obligor is transferred to SPV and hence they form the basis of securitization process and their credit standing is of paramount importance in the whole process.

(b) Rating Agency: Since the securitization is based on the pools of assets rather than the originators, the assets have to be assessed in terms of its credit quality and credit support available. Rating agency assesses the following:

- Strength of the Cash Flow.
- Mechanism to ensure timely payment of interest and principle repayment.
- Credit quality of securities.

- Liquidity support.
- Strength of legal framework.

Although rating agency is secondary to the process of securitization but it plays a vital role.

(c) Receiving and Paying agent (RPA): Also, called Servicer or Administrator, it collects the payment due from obligor(s) and passes it to SPV. It also follow up with defaulting borrower and if required initiate appropriate legal action against them. Generally, an originator or its affiliates acts as servicer.

(d) Agent or Trustee: Trustees are appointed to oversee that all parties to the deal perform in the true spirit of terms of agreement. Normally, it takes care of interest of investors who acquires the securities.

(e) Credit Enhancer: Since investors in securitized instruments are directly exposed to performance of the underlying and sometime may have limited or no recourse to the originator, they seek additional comfort in the form of credit enhancement. In other words, they require credit rating of issued securities which also empowers marketability of the securities.

Originator itself or a third party say a bank may provide this additional context called Credit Enhancer. While originator provides his comfort in the form of over collateralization or cash collateral, the third party provides it in form of letter of credit or surety bonds.

(f) Structurer: It brings together the originator, investors, credit enhancers and other parties to the deal of securitization. Normally, these are investment bankers also called arranger of the deal. It ensures that deal meets all legal, regulatory, accounting and tax laws requirements.

4. MECHANISM OF SECURITIZATION

Let us discuss briefly the steps in securitization mechanism:

4.1 Creation of Pool of Assets

The process of securitization begins with creation of pool of assets by segregation of assets backed by similar type of mortgages in terms of interest rate, risk, maturity and concentration units.

4.2 Transfer to SPV

One assets have been pooled, they are transferred to Special Purpose Vehicle (SPV) especially created for this purpose.

4.3 Sale of Securitized Papers

SPV designs the instruments based on nature of interest, risk, tenure etc. based on pool of assets. These instruments can be Pass through Security or Pay through Certificates, (discussed later).

4.4 Administration of assets

The administration of assets in subcontracted back to originator which collects principal and interest from underlying assets and transfer it to SPV, which works as a conduct.

4.5 Recourse to Originator

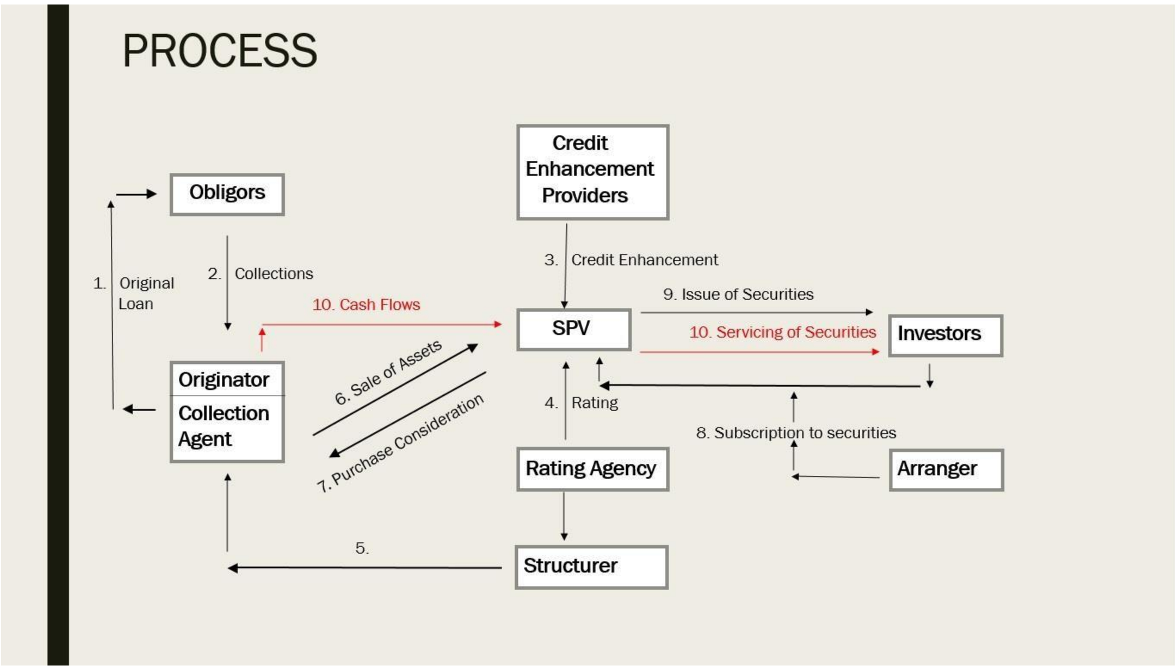
Performance of securitized papers depends on the performance of underlying assets and unless specified in case of default they go back to originator from SPV.

4.6 Repayment of funds

SPV will repay the funds in form of interest and principal that arises from the assets pooled.

4.7 Credit Rating to Instruments

Sometime before the sale of securitized instruments credit rating can be done to assess the risk of the issuer.


PROCESS
Obligors
Credit Enhancement Providers
1. Original Loan
2. Collections
3. Credit Enhancement
10. Cash Flows
9. Issue of Securities
SPV
10. Servicing of Securities
Investors
Originator
Collection Agent
6. Sale of Assets
7. Purchase Consideration
4. Rating
8. Subscription to securities
Rating Agency
Arranger
5.
Structurer

5. BENEFITS OF SECURITIZATION

The benefits of securitization can be viewed from the angle of various parties involved as follows:

5.1 From the angle of originator

Originator (entity which sells assets collectively to Special Purpose Vehicle) achieves the following benefits from securitization.

(i) Off – Balance Sheet Financing: When loan/receivables are securitized it release a portion of capital tied up in these assets resulting in off Balance Sheet financing leading to improved liquidity position which helps expanding the business of the company.

(ii) More specialization in main business: By transferring the assets the entity could concentrate more on core business as servicing of loan is transferred to SPV. Further, in case of non- recourse arrangement even the burden of default is shifted.

(iii) Helps to improve financial ratios: Especially in case of Financial Institutions and Banks, it helps to manage Capital –To-Weighted Asset Ratio effectively.

(iv) Reduced borrowing Cost: Since securitized papers are rated due to credit enhancement even they can also be issued at reduced rate as of debts and hence the originator earns a spread, resulting in reduced cost of borrowings.

5.2 From the angle of investor

Following benefits accrues to the investors of securitized securities.

1. Diversification of Risk: Purchase of securities backed by different types of assets provides the diversification of portfolio resulting in reduction of risk.
2. Regulatory requirement: Acquisition of asset backed belonging to a particular industry say micro industry helps banks to meet regulatory requirement of investment of fund in industry specific.
3. Protection against default: In case of recourse arrangement if there is any default by any third party then originator shall make good the least amount. Moreover, there can be insurance arrangement for compensation for any such default.

6. PROBLEMS IN SECURITIZATION

Following are main problems faced in growth of Securitization of instruments especially in Indian context:

6.1 Stamp Duty

Stamp Duty is one of the obstacle in India. Under Transfer of Property Act, 1882, a mortgage debt stamp duty which even goes upto 12% in some states of India and this impeded the growth of securitization in India. It should be noted that since pass through certificate does not evidence any debt only able to receivable, they are exempted from stamp duty.

Moreover, in India, recognizing the special nature of securitized instruments in some states has reduced the stamp duty on them.

6.2 Taxation

Taxation is another area of concern in India. In the absence of any specific provision relating to securitized instruments in Income Tax Act experts' opinion differ a lot. Some are of opinion that in SPV as a trustee is liable to be taxed in a representative capacity then other are of view that instead of SPV, investors will be taxed on their share of income. Clarity is also required on the issues of capital gain implications on passing payments to the investors.

6.3 Accounting

Accounting and reporting of securitized assets in the books of originator is another area of concern. Although securitization is slated to an off-balance sheet instrument but in true sense receivables are removed from originator's balance sheet. Problem arises especially when assets are transferred without recourse.

6.4 Lack of standardization

Every originator follows own format for documentation and administration have lack of standardization is another obstacle in growth of securitization.

6.5 Inadequate Debt Market

Lack of existence of a well-developed debt market in India is another obstacle that hinders the growth of secondary market of securitized or asset backed securities.

6.6 Ineffective Foreclosure laws

For last many years there are efforts are going on for effective foreclosure but still foreclosure laws are not supportive to lending institutions and this makes securitized instruments especially mortgaged backed securities less attractive as lenders face difficulty in transfer of property in event of default by the borrower.

7. SECURITIZATION INSTRUMENTS

On the basis of different maturity characteristics, the securitized instruments can be divided into following three categories:

7.1 Pass Through Certificates (PTCs)

As the title suggests originator (seller of eh assets) transfers the entire receipt of cash in form of interest or principal repayment from the assets sold. Thus, these securities represent direct claim of the investors on all the assets that has been securitized through SPV.

Since all cash flows are transferred the investors carry proportional beneficial interest in the asset held in the trust by SPV.

It should be noted that since it is a direct route any prepayment of principal is also proportionately distributed among the securities holders. Further, due to these characteristics on completion of securitization by the final payment of assets, all the securities are terminated simultaneously.

Skewness of cash flows occurs in early stage if principals are repaid before the scheduled time.

7.2 Pay Through Security (PTS)

As mentioned earlier, since, in PTCs all cash flows are passed to the performance of the securitized assets. To overcome this limitation and limitation to single mature there is another structure i.e. PTS.

In contrast to PTC in PTS, SPV debt securities backed by the assets and hence it can restructure different tranches from varying maturities of receivables.

In other words, this structure permits desynchronization of servicing of securities issued from cash flow generating from the asset. Further, this structure also permits the SPV to reinvest surplus funds for short term as per their requirement.

Since, in Pass Through, all cash flow immediately in PTS in case of early retirement of receivables plus cash can be used for short term yield. This structure also provides the freedom to issue several debt trances with varying maturities.

7.3 Stripped Securities

Stripped Securities are created by dividing the cash flows associated with underlying securities into two or more new securities. Those two securities are as follows:

(i) Interest Only (IO) Securities
(ii) Principle Only (PO) Securities

As each investor receives a combination of principal and interest, it can be stripped into two portion of Interest and Principle.

Accordingly, the holder of IO securities receives only interest while PO security holder receives only principal. Being highly volatile in nature these securities are less preferred by investors.

In case yield to maturity in market rises, PO price tends to fall as borrower prefers to postpone the payment on cheaper loans. Whereas if interest rate in market falls, the borrower tends to repay the loans as they prefer to borrow fresh at lower rate of interest.
In contrast, value of IO's securities increases when interest rate goes up in the market as more interest is calculated on borrowings.
However, when interest rate due to prepayments of principals, IO's tends to fall.
Thus, from the above, it is clear that it is mainly perception of investors that determines the prices of IOs and POs

8. PRICING OF THE SECURIZED INSTRUMENTS

Pricing of securitized instruments in an important aspect of securitization. While pricing the instruments, it is important that it should be acceptable to both originators as well as to the investors. On the same basis pricing of securities can be divided into following two categories:

8.1 From Originator's Angle

From originator's point of view, the instruments can be priced at a rate at which originator has to incur an outflow and if that outflow can be amortized over a period of time by investing the amount raised through securitization.

8.2 From Investor's Angle

From an investor's angle security price can be determined by discounting best estimate of expected future cash flows using rate of yield to maturity of a security of comparable security with respect to credit quality and average life of the securities. This yield can also be estimated by referring the yield curve available for marketable securities, though some adjustments is needed on account of spread points, because of credit quality of the securitized instruments.

SECURITIZATION IN INDIA

- First securitisation deal in India was between Citibank and GIC Mutual Funds in 1991 for Rs. 160 million
- L & T raised Rs. 4090 million through the securitization of future lease rentals to raise capital for its power plant in 1992
- Securitization of air craft receivable by Jet Airways for Rs. 16000 million in 2001 through off shore SPV.
- India's largest securitization deal by ICICI Bank of Rs. 19299 Million in 2007. The underlying Asset was Auto Loan receivables
- As per report of Crisal securitization transaction in India scored to the highest level of Rs. 70,000 crore in financial year 2016

THANKS…..

CHAPTER 7

MUTUAL FUND

Question 1
Types of Schemes

Solution
Balanced Funds
Balanced funds make strategic allocation to both debt as well as equities. It mainly works on the premise that while the debt portfolio of the scheme provides stability, the equity one provides growth. It can be an ideal option for those who do not like total exposure to equity, but only substantial exposure. Such funds provide moderate returns to the investors as the investors are neither taking too high risk nor too low a risk.

Equity Diversified Funds
A Diversified funds is a fund that contains a wide array of stocks. The fund manager of a diversified fund ensures a high level of diversification in its holdings, thereby reducing the amount of risk in the fund.

a. Flexicap/Multicap Fund: These are by definition, diversified funds. The only difference is that unlike a normal diversified fund, the offer document of a multi-cap/flexi -cap fund generally spells out the limits for minimum and maximum exposure to each of the market caps.

b. Contra fund: A contra fund invests in those out-of-favour companies that have unrecognised value. It is ideally suited for investors who want to invest in a fund that has the potential to perform in all types of market environments as it blends together both growth and value opportunities. Investors who invest in contra funds have an aggressive risk appetite.

c. Index fund: An index fund seeks to track the performance of a benchmark market index like the BSE Sensex or S&P CNX Nifty. Simply put, the fund maintains the portfolio of all the securities in the same proportion as stated in the benchmark index and earns the same return as earned by the market.

d. Dividend Yield fund: A dividend yield fund invests in shares of companies having high dividend yields. Dividend yield is defined as dividend per share dividend by the share's market price. Most of these funds invest in stocks of companies having a dividend yield higher than the dividend yield of a particular index, i.e., Sensex or Nifty. The prices of dividend yielding stocks are generally less volatile than growth stocks. Besides, they also offer the potential to appreciate.

   Among diversified equity funds, dividend yield funds are considered to be a medium-risk proposition. However, it is important to note that dividend yield funds have not always proved resilient in short-term corrective phases. Dividend yield schemes are of two types:

- <u>Dividend Payout Option</u>: Dividends are paid out to the unit holders under this option. However, the NAV of the units falls to the extent of the dividend paid out and applicable statutory levies.

- <u>Dividend Re-investment Option</u>: The dividend that accrues on units under option is re-invested back into the scheme at ex-dividend NAV. Hence investors receive additional units on their investments in lieu of dividends.

Equity Linked Tax Savings Scheme

ELSS is one of the options for investors to save taxes under Section 80 C of the Income Tax Act. They also offer the perfect way to participate in the growth of the capital market, having a lock -in-period of three years. Besides, ELSS has the potential to give better returns than any traditional tax savings instrument.

Moreover, by investing in an ELSS through a Systematic Investment Plan (SIP), one can not only avoid the problem of investing a lump sum towards the end of the year but also take advantage of "averaging".

Sector Funds

These funds are highly focused on a particular industry. The basic objective is to enable investors to take advantage of industry cycles. Since sector funds ride on market cycles, they have the potential to offer good returns if the timing is perfect. However, they are bereft of downside risk protection as available in diversified funds.

Sector funds should constitute only a limited portion of one's portfolio, as they are much riskier than a diversified fund. Besides, only those who have an existing portfolio should consider investing in these funds.

For example, Real Estate Mutual Funds invest in real estate properties and earn income in the form of rentals, capital appreciation from developed properties. Also some part of the fund corpus is invested in equity shares or debentures of companies engaged in real estate assets or developing real estate development projects. REMFs are required to be close-ended in nature and listed on a stock exchange.

Thematic Funds

A Thematic fund focuses on trends that are likely to result in the 'out-performance' by certain sectors or companies.The theme could vary from multi-sector, international exposure, commodity exposure etc. Unlike a sector fund, theme funds have a broader outlook.

However, the downside is that the market may take a longer time to recognize views of the fund house with regards to a particular theme, which forms the basis of launching a fund.

Arbitrage Funds

Typically these funds promise safety of deposits, but better returns, tax benefits and greater liquidity.

Pru-ICICI is the latest to join the list with its equities and derivatives funds.

The open ended equity scheme aims to generate low volatility returns by inverting in a mix of cash equities, equity derivatives and debt markets. The fund seeks to provide better returns than typical debt instruments and lower volatility in comparison to equity.

This fund is aimed at an investor who seeks the return of small savings instruments, safety of bank deposits, tax benefits of RBI relief bonds and liquidity of a mutual fund.

Arbitrage fund finally seeks to capitalize on the price differentials between the spot and the futures market.

The other schemes in the arbitrage universe are Benchmark Derivative, JM Equity and Derivatives, Prudential ICICI Balanced, UTI Spread and Prudential ICICI Equity and Derivatives.

Hedge Fund

A hedge fund (there are no hedge funds in India) is a lightly regulated investment fund that escapes most regulations by being a sort of a private investment vehicle being offered to selected clients.

The big difference between a hedge fund and a mutual fund is that the former does not reveal anything about its operations publicly and charges a performance fee. Typically, if it outperforms a benchmark, it take a cut off the profits. Of course, this is a one way street, any losses are borne by the investors themselves. Hedge funds are aggressively managed portfolio of investments which use advanced investment strategies such as leveraged, long, short and derivative positions in both domestic and international markets with the goal of generating high returns (either in an absolute sense or over a specified market benchmark). It is important to note that hedging is actually the practice of attempting to reduce risk, but the goal of most hedge funds is to maximize return on investment.

Cash Fund

Cash Fund is an open ended liquid scheme that aims to generate returns with lower volatility and higher liquidity through a portfolio of debt and money market instrument.

The fund will have retail institutional and super institutional plans. Each plan will offer growth and dividend options. The minimum initial investment for the institutional plan is Rs. 1 crore and the super institutional is Rs. 25 crore. For the retail plan, the minimum initial investment is Rs. 5,000/ -. The fund has no entry or exit loads. Investors can invest even through the Systematic Investment Planning (SIP) route with a minimum amount of Rs.500 per instalment with the total of all instalments not being less than Rs. 5,000/-.

Exchange Traded Funds

An Exchange Traded Fund (ETF) is a hybrid product that combines the features of an index fund. These funds are listed on the stock exchanges and their prices are linked to the underlying index. The authorized participants act as market makers for ETFs.

ETFs can be bought and sold like any other stock on an exchange. In other words, ETFs can be bought or sold any time during the market hours at prices that are expected to be closer to the NAV at the end of the day. Therefore, one can invest at real time prices as against the end of the day prices as is the case with open-ended schemes.

There is no paper work involved for investing in an ETF. These can be bought like any other stock by just placing an order with a broker. ETFs may be attractive as investments because of their low costs, tax efficiency, and stock-like features. An ETF combines the valuation feature of a mutual fund or unit investment trust, which can be bought or sold at the end of each trading day for its net asset value, with the tradability feature of a closed -end fund, which trades throughout the trading day at prices that may be more or less than its net asset value. Following types of ETF products are available in the market:

- Index ETFs - Most ETFs are index funds that hold securities and attempt to replicate the performance of a stock market index.
- Commodity ETFs - Commodity ETFs invest in commodities, such as precious metals and futures.
- Bond ETFs - Exchange-traded funds that invest in bonds are known as bond ETFs. They thrive during economic recessions because investors pull their money out of the stock market and into bonds (for example, government treasury bonds or those issues by companies regarded as financially stable). Because of this cause and effect relationship, the performance of bond ETFs may be indicative of broader economic conditions.
- Currency ETFs - The funds are total return products where the investor gets access to the FX spot change, local institutional interest rates and a collateral yield.

Question 2
Advantages of Mutual Fund

Solution

a. **Professional Management:** The funds are managed by skilled and professionally experienced managers with a back up of a Research team.

b. **Diversification:** Mutual Funds offer diversification in portfolio which reduces the risk.

c. **Convenient Administration:** There are no administrative risks of share transfer, as many of the Mutual Funds offer services in a demat form which save investor's time and delay.

d. **Higher Returns:** Over a medium to long-term investment, investors always get higher returns in Mutual Funds as compared to other avenues of investment. This is already seen from excellent returns, Mutual Funds have provided in the last few years. However, investors are cautioned that such high returns riding on the IT boom should not be taken as regular returns and therefore one should look at the average returns provided by the Mutual Funds particularly in the equity schemes during the last couple of years.

e. **Low Cost of Management:** No Mutual Fund can increase the cost beyond prescribed limits of 2.5% maximum and any extra cost of management is to be borne by the AMC.

f. **Liquidity:** In all the open ended funds, liquidity is provided by direct sales / repurchase by the Mutual Fund and in case of close ended funds, the liquidity is provided by listing the units on the Stock Exchange.

g. **Transparency:** The SEBI Regulations now compel all the Mutual Funds to disclose their portfolios on a half-yearly basis. However, many Mutual Funds disclose this on a quarterly or monthly basis to their investors. The NAVs are calculated on a daily basis in case of open ended funds and are now published through AMFI in the newspapers.

h. **Other Benefits:** Mutual Funds provide regular withdrawal and systematic investment plans according to the need of the investors. The investors can also switch from one scheme to another without any load.

i. **Highly Regulated:** Mutual Funds all over the world are highly regulated and in India all Mutual Funds are registered with SEBI and are strictly regulated as per the Mutual Fund Regulations which provide excellent investor protection.

j. **Economies of scale:** The way mutual funds are structured gives it a natural advantage. The “pooled” money from a number of investors ensures that mutual funds enjoy economies of scale; it is cheaper compared to investing directly in the capital markets which involves higher charges This also allows retail investors access to high entry level markets like real estate, and also there is a greater control over costs.

k. Flexibility: There are a lot of features in a regular mutual fund scheme, which imparts flexibility to the scheme. An investor can opt for Systematic Investment Plan (SIP), Systematic Withdrawal Plan etc. to plan his cash flow requirements as per his convenience. The wide range of schemes being launched in India by different mutual funds also provides an added flexibility to the investor to plan his portfolio accordingly.

Question 3

Drawbacks of Mutual Fund

Solution

a. **No guarantee of Return** – There are three issues involved:

I. All Mutual Funds cannot be winners. There may be some who may underperform the benchmark index i.e. it may not even perform well as a novice who invests in the stocks constituting the index.

II. A mutual fund may perform better than the stock market but this does not necessarily lead to a gain for the investor. The market may have risen and the mutual fund scheme increased in value but the investor would have got the same increase had he invested in risk free investments than in mutual fund.

III. Investors may forgive if the return is not adequate. But they will not do so if the principal is eroded. Mutual Fund investment may depreciate in value.

b. **Diversification** – A mutual fund helps to create a diversified portfolio. Though diversification minimizes risk, it does not ensure maximizing returns. The returns that mutual funds offer are less than what an investor can achieve. For example, if a single security held by a mutual fund doubles in value, the mutual fund itself would not double in value because that security is only one small part of the fund's holdings. By holding a large number of different investments, mutual funds tend to do neither exceptionally well nor exceptionally poor.

c. **Selection of Proper Fund** – It may be easier to select the right share rather than the right fund. For stocks, one can base his selection on the parameters of economic, industry and company analysis. In case of mutual funds, past performance is the only criteria to fall back upon. But past cannot predict the future.

d. **Cost Factor** – Mutual Funds carry a price tag. Fund Managers are the highest paid executives. While investing, one has to pay for entry load and when leaving he has to pay for exit load. Such costs reduce the return from mutual fund. The fees paid to the Asset Management Company is in no way related to performance.

e. **Unethical Practices** – Mutual Funds may not play a fair game. Each scheme may sell some of the holdings to its sister concerns for substantive notional gains and posting NAVs in a formalized manner.

f. **Taxes –** When making decisions about your money, fund managers do not consider your personal tax situations. For example when a fund manager sells a security, a capital gain tax is triggered, which affects how profitable the individual is from sale. It might have been more profitable for the individual to defer the capital gain liability.

g. **Transfer Difficulties –** Complications arise with mutual funds when a managed portfolio is switched to a different financial firm. Sometimes the mutual fund positions have to be closed out before a transfer can happen. This can be a major problem for investors. Liquidating a mutual fund portfolio may increase risk, increase fees and commissions, and create capital gains taxes.

Strategic Financial Management

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CHAPTER 1

DERIVATIVES ANALYSIS AND VALUATION

Question 1
FORWARD CONTRACT

Solution
Consider a Punjab farmer who grows wheat and has to sell it at a profit. The simplest and the traditional way for him is to harvest the crop in March or April and sell in the spot market then.
However, in this way the farmer is exposing himself to risk of a downward movement in the price of wheat which may occur by the time the crop is ready for sale.

In order to avoid this risk, one way could be that the farmer may sell his crop at an agreed-upon rate now with a promise to deliver the asset, i.e., crop at a pre-determined date in future. This will at least ensure to the farmer the input cost and a reasonable profit.

Thus, the farmer would sell wheat forward to secure himself against a possible loss in future. It is true that by this way he is also foreclosing upon him the possibility of a bumper profit in the event of wheat prices going up steeply. But then, more important is that the farmer has played safe and insured himself against any eventuality of closing down his source of livelihood altogether. The transaction which the farmer has entered into is called a **forward transaction** and the contract which covers such a transaction is called a **forward contract.**

A forward contract is an agreement between a buyer and a seller obligating the seller to deliver a specified asset of specified quality and quantity to the buyer on a specified date at a specified place and the buyer, in turn, is obligated to pay to the seller a pre-negotiated price in exchange of the delivery.

This means that in a forward contract, the contracting parties negotiate on, not only the price at which the commodity is to be delivered on a future date but also on what quality and quantity to be delivered and at what place. No part of the contract is standardized and the two parties sit across and work out each and every detail of the contract before signing it.

For example, in case a gold bullion forward contract is being negotiated between two parties, they would negotiate each of the following features of the contract:

- the weight of the gold bullion to be delivered,

- the fineness of the metal to be delivered,
- the place at which the delivery is to be made,
- the period after which the delivery is to be made, and
- the price which the buyer would pay.

Suppose a buyer L and a seller S agrees to do a trade in 100 tolas of gold on 31 Dec 2013 at Rs. 30,000/tola. Here, Rs. 30,000/tola is the 'forward price of 31 Dec 2013 Gold'. The buyer L is said to be long and the seller S is said to be short. Once the contract has been entered into, L is obligated to pay S Rs. 30 lakhs on 31 Dec 2013, and take delivery of 100 tolas of gold. Similarly, S is obligated to be ready to accept Rs. 30 lakhs on 31 Dec 2013, and give 100 tolas of gold in exchange.

Question 2

FUTURE CONTRACT

Solution

A futures contract is an agreement between two parties that commits one party to buy an underlying financial instrument (bond, stock or currency) or commodity (gold, soybean or natural gas) and one party to sell a financial instrument or commodity at a specific price at a future date. The agreement is completed at a specified expiration date by physical delivery or cash settlement or offset prior to the expiration date. In order to initiate a trade in futures contracts, the buyer and seller must put up "good faith money" in a margin account. Regulators, commodity exchanges and brokers doing business on commodity exchanges determine margin levels.

Suppose A buyer "B" and a Seller "S" enter into a 5,000 kgs corn futures contract at Rs. 5 per kg. Assuming that on the second day of trading the settlement price (settlement price is generally the representative price at which the contracts trade during the closing minutes of the trading period and this price is designated by a stock exchange as the settlement price). In case the price movement during the day is such that the price during the closing minutes is not the representative price, the stock exchange may select a price which it feels is close to being a representative price, e.g., average of the high and low prices which have occurred during a trading day) of March corn is Rs. 5.20 per kg. This price movement has led to a loss of Rs. 1,000 to S while B has gained the corresponding amount.

Thus, the initial margin account of S gets reduced by Rs. 1,000 and that of B is increased by the same amount. While the margin accounts, also called the equity of the buyer and the seller, get adjusted at the end of the day in keeping with the price movement, the futures contract gets replaced with a new one at a price which has been used to make adjustments to the buyer and seller's equity accounts. In this case, the settle price is Rs. 5.20, which is the new price at which next day's trading would start for this particular futures contract. Thus, each future contract is rolled over to the next day at a new price. This is called marking-to-market.

Question 3

Difference between forward and future contract is as follows:

Solution

S.No.	Features	Forward	Futures
1.	Trading	Forward contracts are traded on personal basis or on telephone or otherwise.	Futures Contracts are traded in a competitive arena.
2.	Size of Contract	Forward contracts are individually tailored and have no standardized size	Futures contracts are standardized in terms of quantity or amount as the case may be
3.	Organized exchanges	Forward contracts are traded in an over the counter market.	Futures contracts are traded on organized exchanges with a designated physical location.
4.	Settlement	Forward contracts settlement takes place on the date agreed upon between the parties.	Futures contracts settlements are made daily via. Exchange's clearing house.

5.	Delivery date	Forward contracts may be delivered on the dates agreed upon and in terms of actual delivery.	Futures contracts delivery dates are fixed on cyclical basis and hardly takes place. However, it does not mean that there is no actual delivery.
6.	Transaction costs	Cost of forward contracts is based on bid – ask spread.	Futures contracts entail brokerage fees for buy and sell order
7.	Marking to market	Forward contracts are not subject to marking to market	Futures contracts are subject to marking to market in which the loss on profit is debited or credited in the margin account on daily basis due to change in price.
8.	Margins	Margins are not required in forward contract.	In futures contracts every participants is subject to maintain margin as decided by the exchange authorities
9.	Credit risk	In forward contract, credit risk is born by each party and, therefore, every party has to Bother for the creditworthiness.	In futures contracts the transaction is a two way transaction, hence the parties need not to bother for the risk.

Question 4

Advantages of Futures Trading Vs. Stock Trading

Solution

Stock index futures is most popular financial derivatives over stock futures due to following reasons:

1. It adds flexibility to one's investment portfolio. Institutional investors and other large equity holders prefer the most this instrument in terms of portfolio hedging purpose. The stock systems do not provide this flexibility and hedging.

2. It creates the possibility of speculative gains using leverage. Because a relatively small amount of margin money controls a large amount of capital represented in a stock index contract, a small change in the index level might produce a profitable return on one's investment if one is right about the direction of the market. Speculative gains in stock futures are limited but liabilities are greater.

3. Stock index futures are the most cost efficient hedging device whereas hedging through individual stock futures is costlier.

4. Stock index futures cannot be easily manipulated whereas individual stock price can be exploited more easily.

5. Since, stock index futures consists of many securities, so being an average stock, is much less volatile than individual stock price. Further, it implies much lower capital adequacy and margin requirements in comparison of individual stock futures. Risk diversification is possible under stock index future than in stock futures.

6. One can sell contracts as readily as one buys them and the amount of margin required is the same.

7. In case of individual stocks the outstanding positions are settled normally against physical delivery of shares. In case of stock index futures they are settled in cash all over the world on the premise that index value is safely accepted as the settlement price.

8. It is also seen that regulatory complexity is much less in the case of stock index futures in comparison to stock futures.

9. It provides hedging or insurance protection for a stock portfolio in a falling market.

Question 5
Uses/Advantages of Stock Index Futures

Solution
Investors can use stock index futures to perform myriad tasks. Some common uses are:

1. Investors commonly use stock index futures to change the weightings or risk exposures of their investment portfolios. A good example of this is investors who hold equities from two or more countries. Suppose these investors have portfolios invested in 60 percent U.S. equities and 40 percent Japanese equities and want to increase their systematic risk to the U.S. market and reduce these risks to the Japanese market. They can do this by buying U.S. stock index futures contracts in the indexes underlying their holdings and selling Japanese contracts (in the Nikkei Index).

2. Stock index futures also allow investors to separate market timing from market selection decisions. For instance, investors may want to take advantage of perceived immediate increases in an equity market but are not certain which securities to buy; they can do this by purchasing stock index futures. If the futures contracts are bought and the present value of the money used to buy them is invested in risk-free securities, investors will have a risk exposure equal to that of the market. Similarly, investors can adjust their portfolio holdings at a more leisurely pace. For example, assume the investors see that they have several undesirable stocks but do not know what holdings to buy to replace them. They can sell the unwanted stocks and, at the same time, buy stock index futures to keep their exposure to the market. They can later sell the futures contracts when they have decided which specific stocks they want to purchase.

3. Investors can also make money from stock index futures through index arbitrage, also referred to as program trading. Basically, arbitrage is the purchase of a security or commodity in one market and the simultaneous sale of an equal product in another market to profit from pricing differences. Investors taking part in stock index arbitrage seek to gain profits whenever a futures contract is trading out of line with the fair price of the securities underlying it. Thus, if a stock index futures contract is trading above its fair value, investors could buy a basket of about 100 stocks composing the index in the correct proportion—such as a mutual fund comprised of stocks represented in the index—and then sell the expensively priced futures contract. Once the contract expires, the equities could then be sold and a net profit would result. While the investors can keep their arbitrage position until the futures contract expires, they are not required to. If the futures contract seems to be returning to fair market value before the expiration date, it may be prudent for the investors to sell early.

4. Investors often use stock index futures to hedge the value of their portfolios. Provide hedging or insurance protection for a stock portfolio in a falling market. To implement a hedge, the instruments in the cash and futures markets should have similar price movements. Also, the amount of money invested in the cash and futures markets should be the same. To illustrate, while investors owning well-diversified investment portfolios are generally shielded from unsystematic risk (risk specific to particular firms), they are fully exposed to systematic risk (risk relating to overall market fluctuations). A cost-effective way for investors to reduce the exposure to systematic risk is to hedge with stock index futures, similar to the way that people hedge commodity holdings using commodity futures. Investors often use short hedges when they are in a long position in a stock portfolio and believe that there will be a temporary downturn in the overall stock market. Hedging transfers the price risk of owning the stock from a person unwilling to accept systematic risks to someone willing to take the risk.

To carry out a short hedge, the hedger sells a futures contract; thus, the short hedge is also called a "sell-hedge."

Example

Consider investors who own portfolios of securities valued at $.1.2 million with a dividend of 1 percent. The investors have been very successful with their stock picks. Therefore, while their portfolios' returns move up and down with the market, they consistently outperform the market by 6 percent. Thus, the portfolio would have a beta of 1.00 and an alpha of 6 percent. Say that the investors believe that the market is going to have a 15 percent decline, which would be offset by the 1 percent received from dividends. The net broad market return would be -14 percent but, since they consistently outperform the market by 6 percent, their estimated return would be -8 percent. In this instance, the investors would like to cut their beta in half without necessarily cutting their alpha in half. They can achieve this by selling stock index futures. In this scenario, the S&P 500 index is at 240. The contract multiplier is $500, and therefore each contract represents a value of $120,000. Since the investors want to simulate the sale of half of their $1.2 million portfolios, they must sell five contracts (5 × $120,000 = $600,000). Thus, their portfolios would be affected by only half of the market fluctuation. While the investors could protect their portfolios equally well by selling half of their shares of stock and buying them again at short time later, using a short hedge on stock index futures is much cheaper than paying the capital gains tax plus the broker commissions associated with buying and selling huge blocks of stock.
At the extreme, stock index futures can theoretically eliminate the effects of the broad market on a portfolio. Perfect hedges are very unusual because of the existence of basis risk. The basis is the difference between the existing price in the futures market and the cash price of the underlying securities. Basis risk occurs when changes in the

economy and the financial situation have different impacts on the cash and futures markets.

5. Stock index futures add flexibility to his or her portfolio as a hedging and trading instrument.

6. Create the possibility of speculative gains using leverage. Because a relatively small amount of margin money controls a large amount of capital represented in a stock index contract, a small change in the index level might produce a profitable return on one's investment if he or she is right about the market's direction.

7. Maintain one's stock portfolio during stock market corrections. One may not need "insurance" for all the time, but there are certain times when one would like less exposure to stocks. Yet, one doesn't want to sell off part of a stock portfolio that has taken him or her a long time to put together and looks like a sound, long-term investment program.

8. One of the major advantages of futures markets, in general, is that one can sell contracts as readily as he or she can buy them and the amount of margin required is the same. Mutual funds do not specialize in bear market approaches by short selling stocks but, and also it is not possible for individuals to short sell stocks in a falling market to make money.

9. Transfer risk quickly and efficiently. Whether one is speculating, looking for insurance protection (hedging), or temporarily substituting futures for a later cash transaction, most stock index futures trades can be accomplished quickly and efficiently. Many mutual funds require investors to wait until the end of the day to see at what price they were able to purchase or sell shares. With today's volatility, once-a-day pricing may not give one the maneuverability to take positions at exactly the time he or she wants. Stock index futures give individual the opportunity to get into or out of a position whenever he or she wants.

Question 6

Greeks

Solution

The Greeks are a collection of statistical values (expressed as percentages) that give the investor a better overall view of how a stock has been performing. These statistical values can be helpful in deciding what options strategies are best to use. The investor should remember that statistics show trends based on past performance. It is not guaranteed that the future performance of the stock will behave according to the historical numbers. These trends can change drastically based on new stock performance.

Before we discuss these statistical measures let us discuss the factors that affects the value of option as these statistical measures are related to changes in the in these factors.

Factors Affecting Value of an Option

There are a number of different mathematical formulae, or models, that are designed to compute the fair value of an option. You simply input all the variables (stock price, time, interest rates, dividends and future volatility), and you get an answer that tells you what an option should be worth. Here are the general effects the variables have on an option's price:

a. *Price Movement of the Underlying:* The value of calls and puts are affected by changes in the underlying stock price in a relatively straightforward manner. When the stock price goes up, calls should gain in value and puts should decrease. Put options should increase in value and calls should drop as the stock price falls.

b. *Time till expiry:* The option's future expiry, at which time it may become worthless, is an important and key factor of every option strategy. Ultimately, time can determine whether your option trading decisions are profitable. To make money in options over the long term, you need to understand the impact of time on stock and option positions.

   With stocks, time is a trader's ally as the stocks of quality companies tend to rise over long periods of time. But time is the enemy of the options buyer. If days pass without any significant change in the stock price, there is a decline in the value of the option. Also, the value of an option declines more rapidly as the option approaches the expiration day. That is good news for the option seller, who tries to benefit from time decay, especially during that final month when it occurs most rapidly.

c. ***Volatility in Stock Prices:*** Volatility can be understood via a measure measure called statistical (sometimes called historical) volatility, or SV for short. SV is a statistical measure of the past price movements of the stock; it tells you how volatile the stock has actually been over a given period of time.

   But to give you an accurate fair value for an option, option pricing models require you to put in what the future volatility of the stock will be during the life of the option. Naturally, option traders don't know what that will be, so they have to try to guess. To do this, they work the options pricing model "backwards" (to put it in simple terms). After all, you already know the price at which the option is trading; you can also find the other variables (stock price, interest rates, dividends, and the time left in the option) with just a bit of research. So the only missing number is future volatility, which you can calculate from the equation.

d. ***Interest Rate***- Another feature which affects the value of an Option is the time value of money. The greater the interest rates, the present value of the future exercise price are less.

Now let us discuss these measures.

Delta

A by-product of the Black-Scholes model is the calculation of the delta. It is the degree to which an option price will move given a small change in the underlying stock price. For example, an option with a delta of 0.5 will move half a rupee for every full rupee movement in the underlying stock.

A deeply out-of-the-money call will have a delta very close to zero; a deeply in-the-money call will have a delta very close to 1.
The formula for a delta of a European call on a non-dividend paying stock is:

Delta = N (d1)   (see Black-Scholes formula above for d1)

Call deltas are positive; put deltas are negative, reflecting the fact that the put option price and the underlying stock price are inversely related. The put delta equals the call delta - 1.

The delta is often called the hedge ratio: If you have a portfolio short 'n' options (e.g. you have written n calls) then n multiplied by the delta gives you the number of shares (i.e. units of the underlying) you would need to create a riskless position - i.e. a portfolio which would be worth the same whether the stock price rose by a very small amount or fell by a very small amount. In such a "delta neutral" portfolio any gain in the value of the shares held due to a rise in the share price would be exactly offset by a loss on the value of the calls written, and vice versa.

Note that as the delta changes with the stock price and time to expiration the number of shares would need to be continually adjusted to maintain the hedge. How quickly the delta changes with the stock price are given by gamma.

In addition to delta there are some other "Greeks" which some find useful when constructing option strategies.

Gamma

It measures how fast the delta changes for small changes in the underlying stock price. i.e. the delta of the delta. If you are hedging a portfolio using the delta-hedge technique described under "Delta", then you will want to keep gamma as small as possible, the smaller it is the less often you will have to adjust the hedge to maintain a delta neutral position. If gamma is too large, a small change in stock price could wreck your hedge. Adjusting gamma, however, can be tricky and is generally done using options.

Theta

The change in option price given a one day decrease in time to expiration. Basically it is a measure of time decay. Unless you and your portfolio are travelling at close to the speed of light the passage of time is constant and inexorable. Thus, hedging a portfolio against time decay, the effects of which are completely predictable, would be pointless.

Rho

The change in option price given a one percentage point change in the risk -free interest rate. It is sensitivity of option value to change in interest rate. Rho indicates the absolute change in option value for a one percent change in the interest rate. For example, a Rho of .060 indicates the option's theoretical value will increase by .060 if the interest rate is decreased by 1.0.

Vega

Sensitivity of option value to change in volatility. Vega indicates an absolute change in option value for a one percent change in volatility. For example, a Vega of .090 indicates an absolute change in the option's theoretical value will increase by .090 if the volatility percentage is increased by 1.0 or decreased by .090 if the volatility percentage is decreased by 1.0. Results may not be exact due to rounding. It can also be stated as the change in option price given a one percentage point change in volatility. Like delta and gamma, Vega is also used for hedging.

Question 7

COMMODITY DERIVATIVES

Solution

Trading in commodity derivatives first started to protect farmers from the risk of the value of their crop going below the cost price of their produce. Derivative contracts were offered on various agricultural products like cotton, rice, coffee, wheat, pepper etc.

The first organized exchange, the Chicago Board of Trade (CBOT) -- with standardized contracts on various commodities -- was established in 1848. In 1874, the Chicago Produce Exchange - which is now known as Chicago Mercantile Exchange (CME) was formed.

CBOT and CME are two of the largest commodity derivatives exchanges in the world.

Necessary Conditions to Introduce Commodity Derivatives

The commodity characteristic approach defines feasible commodities for derivatives trading based on an extensive list of required commodity attributes. It focuses on the technical aspects of the underlying commodity. The following attributes are considered crucial for qualifying for the derivatives trade: 1) a commodity should be durable and it should be possible to store it; 2) units must be homogeneous; 3) the commodity must be subject to frequent price fluctuations with wide amplitude; supply and demand must be large; 4) supply must flow naturally to market and there must be breakdowns in an existing pattern of forward contracting.

The first attribute, durability and storability, has received considerable attention in commodity finance, since one of the economic functions often attributed to commodity derivatives markets is the temporal allocation of stocks. The commodity derivatives market is an integral part of this storage scenario because it provides a hedge against price risk for the carrier of stocks.

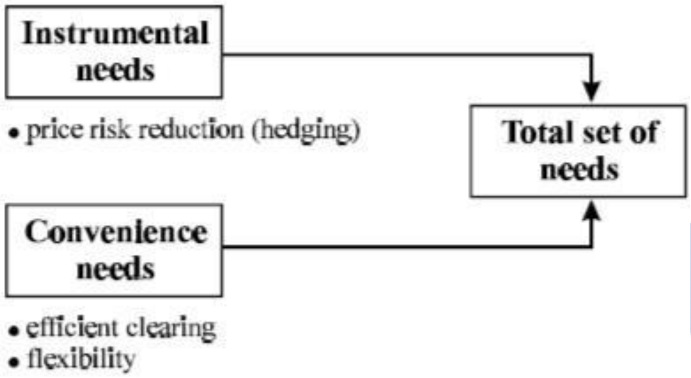
Since commodity derivatives contracts are standardized contracts, this approach requires the underlying product to be homogeneous, the second attribute, so that the underlying commodity as defined in the commodity derivatives contract corresponds with the commodity traded in the cash market. This allows for actual delivery in the commodity derivatives market.

The third attribute, a fluctuating price, is of great importance, since firms will feel little incentive to insure themselves against price risk if price changes are small. A broad cash market is important because a large supply of the commodity will make it difficult to establish dominance in the market place and a broad cash market will tend to provide for a continuous and orderly meeting of supply and demand forces.

The last crucial attribute, breakdowns in an existing pattern of forward trading, indicates that cash market risk will have to be present for a commodity derivatives market to come into existence. Should all parties decide to eliminate each and every price fluctuation by using cash forward contracts for example, a commodity derivatives market would be of little interest.

A commodity derivative must reflect the commercial movement of a commodity both loosely and broadly enough, so that price distortions will not be a result of specifications in the contract. To warrant hedging, the contract must be as close a substitute for the cash commodity as possible. Hedging effectiveness is an important determinant in explaining the success of commodity derivatives and as a result considerable attention has been paid to the hedging effectiveness of commodity derivatives.

The total set of customer needs concerning commodity derivatives is differentiated into instrumental needs and convenience needs (see Figure 1) . Customers will choose that "service-product" (futures, options, cash forwards, etc.) which best satisfy their needs, both instrumental and convenience, at an acceptable price.



I. **FIGURE 1**

Instrumental needs are the hedgers' needs for price risk reduction. Hedgers wish to reduce, or, if possible, eliminate portfolio risks at low cost. The instrumental needs are related to the core service of the commodity derivatives market, which consists of reducing price variability to the customer. Not only do hedgers wish to reduce price risk, they also desire flexibility in doing business, easy access to the market, and an efficient clearing system. These needs are called convenience needs. They deal with the customer's need to be able to use the core service provided by the exchange with relative ease. The extent to which the commodity derivatives exchange is able to satisfy convenience needs determines the process quality. The service offering is not restricted to the core service, but has to be complemented by so-called peripheral services

Investing in Commodity Derivatives

Commodity derivatives, which were traditionally developed for risk management purposes, are now growing in popularity as an investment tool. Most of the trading in the commodity derivatives market is being done by people who have no need for the commodity itself.

They just speculate on the direction of the price of these commodities, hoping to make money if the price moves in their favour.

The commodity derivatives market is a direct way to invest in commodities rather than investing in the companies that trade in those commodities.

For example, an investor can invest directly in a steel derivative rather than investing in the shares of Tata Steel. It is easier to forecast the price of commodities based on their demand and supply forecasts as compared to forecasting the price of the shares of a company which depend on many other factors than just the demand and supply of the products they manufacture and sell or trade in.

Also, derivatives are much cheaper to trade in as only a small sum of money is required to buy a derivative contract.

Let us assume that an investor buys a tonne of soybean for Rs. 8,700 in anticipation that the prices will rise to Rs. 9,000 by June 30, 2013. He will be able to make a profit of Rs. 300 on his investment, which is 3.4%. Compare this to the scenario if the investor had decided to buy soybean futures instead.

Before we look into how investment in a derivative contract works, we must familiarise ourselves with the buyer and the seller of a derivative contract. A buyer of a derivative contract is a person who pays an initial margin to buy the right to buy or sell a commodity at a certain price and a certain date in the future.

On the other hand, the seller accepts the margin and agrees to fulfill the agreed terms of the contract by buying or selling the commodity at the agreed price on the maturity date of the contract.

Now let us say the investor buys soybean futures contract to buy one tonne of soybean for Rs. 8,700 (exercise price) on November 30, 2013. The contract is available by paying an initial margin of 10%, i.e. Rs. 870. Note that the investor needs to invest only Rs. 870 here.

On November 30, 2013, the price of soybean in the market is, say, Rs. 9,000 (known as Spot Price - - Spot Price is the current market price of the commodity at any point in time).

The investor can take the delivery of one tonne of soybean at Rs. 8,700 and immediately sell it in the market for Rs. 9,000, making a profit of Rs. 300. So the return on the investment of Rs. 870 is 34.5%. On the contrary, if the price of soybean drops to Rs. 8,400 the investor will end up making a loss of 34.5%.

If the investor wants, instead of taking the delivery of the commodity upon maturity of the contract, an option to settle the contract in cash also exists. Cash settlement comprises exchange of the difference in the spot price of the commodity and the exercise price as per the futures contract.

At present, the option of cash settlement lies only with the seller of the contract. If the seller decides to make or take delivery upon maturity, the buyer of the contract has to fulfill his obligation by either taking or making delivery of the commodity, depending on the specifications of the contract.

In the above example, if the seller decides to go for cash settlement, the contract can be settled by the seller by paying Rs. 300 to the buyer, which is the difference in the spot price of the commodity and the exercise price. Once again, the return on the investment of Rs. 870 is 34.5%.

The above example shows that with very little investment, the commodity futures market offers scope to make big bucks. However, trading in derivatives is highly risky because just as there are high returns to be earned if prices move in favour of the investors, an unfavourable move results in huge losses.

The most critical function in a commodity derivatives exchange is the settlement and clearing of trades. Commodity derivatives can involve the exchange of funds and goods. The exchanges have a separate body to handle all the settlements, known as the clearing house.

For example, the holder of a futures contract to buy soybean might choose to take delivery of soya bean rather than closing his position before maturity. The function of the clearing house or clearing organisation, in such a case, is to take care of possible problems of default by the other party involved by standardising and simplifying transaction processing between participants and the organisation.

Certain special characteristics/benefits of Commodity derivatives trading are:

- To complement investment in companies that use commodities;
- To invest in a country’s consumption and production;
- No dividends, only returns from price increases.

In spite of the surge in the turnover of the commodity exchanges in recent years, a lot of work in terms of policy liberalisation, setting up the right legal system, creating the necessary infrastructure, large-scale training programs, etc. still needs to be done in order to catch up with the developed commodity derivative markets.

Commodity Market

Commodity markets in a crude early form are believed to have originated in Sumer where small baked clay tokens in the shape of sheep or goats were used in trade. Sealed in clay vessels with a certain number of such tokens, with that number written on the outside, they represented a promise to deliver that number.

In modern times, commodity markets represent markets where raw or primary products are exchanged. These raw commodities are traded on regulated, commodity exchanges in which they are bought and sold in standardized contracts.

- Some of the advantages of commodity markets are:
- Most money managers prefer derivatives to tangible commodities;
- Less hassle (delivery, etc);
- Allows indirect investment in real assets that could provide an additional hedge against inflation risk.

Commodity Futures

Almost all the commodities were allowed to be traded in the futures market from April 2003. To make trading in commodity futures more transparent and successful, multi-commodity exchanges at national level were also conceived and these next generation exchanges were allowed to start futures trading in commodities on-line.

The process of trading commodities is also known as futures trading. Unlike other kinds of investments, such as stocks and bonds, when you trade futures, you do not actually buy anything or own anything. You are speculating on the future direction of the price in the commodity you are trading. This is like a bet on future price direction. The terms "buy" and "sell" merely indicate the direction you expect future prices will take. If, for instance, you were speculating in corn, you would buy a futures contract if you thought the price would be going up in the future. You would sell a futures contract if you thought the price would go down. For every trade, there is always a buyer and a seller. Neither person has to own any corn to participate. He must only deposit sufficient capital with a brokerage firm to insure that he will be able to pay the losses if his trades lose money.

On one side of a transaction may be a producer like a farmer. He has a field full of corn growing on his farm. It won't be ready for harvest for another three months. If he is worried about the price going down during that time, he can sell futures contracts equivalent to the size of his crop and deliver his corn to fulfill his obligation under the contract. Regardless of how the price of corn changes in the three months until his crop will be ready for delivery, he is guaranteed to be paid the current price.

On the other side of the transaction might be a producer such as a cereal manufacturer who needs to buy lots of corn. The manufacturer, such as Kellogg, may be concerned that in the next three months the price of corn will go up, and it will have to pay more than the current price. To protect against this, Kellogg can buy futures contracts at the current price. In three months Kellogg can fulfill its obligation under the contracts by taking delivery of the corn. This guarantees that regardless of how the price moves in the next three months, Kellogg will pay no more than the current price for its commodity.

In addition to agricultural commodities, there are futures for financial instruments and intangibles such as currencies, bonds and stock market indexes. Each futures market has producers and consumers who need to hedge their risk from future price changes. The speculators, who do not actually deal in the physical commodities, are there to provide liquidity. This maintains an orderly market where price changes from one trade to the next are small.

Rather than taking delivery or making delivery, the speculator merely offsets his position at some time before the date set for future delivery. If price has moved in the right direction, he will profit. If not, he will lose.

Advantages of Commodity Futures

Some of the advantages of commodity futures are:

Easiest and cheapest way to invest in commodities

3 Major Categories like Agricultural products (soft commodities) –fibers, grains, food, livestock; Energy – crude oil, heating oil, natural gas; and Metals – copper, aluminum, gold, silver, platinum

Commodity Swaps

Producers need to manage their exposure to fluctuations in the prices for their commodities. They are primarily concerned with fixing prices on contracts to sell their produce. A gold producer wants to hedge his losses attributable to a fall in the price of gold for his current gold inventory. A cattle farmer wants to hedge his exposure to changes in the price of his livestock.

End-users need to hedge the prices at which they can purchase these commodities. A university might want to lock in the price at which it purchases electricity to supply its air conditioning units for the upcoming summer months. An airline wants to lock in the price of the jet fuel it needs to purchase in order to satisfy the peak in seasonal demand for travel.

Speculators are funds or individual investors who can either buy or sell commodities by participating in the global commodities market. While many may argue that their involvement is fundamentally destabilizing, it is the liquidity they provide in normal markets that facilitates the business of the producer and of the end-user.

Why would speculators look at the commodities markets? Traditionally, they may have wanted a hedge against inflation. If the general price level is going up, it is probably attributable to increases in input prices. Or, speculators may see tremendous opportunity in commodity markets. Some analysts argue that commodity markets are more technically-driven or more likely to show a persistent trend.

Types of Commodity Swaps

There are two types of commodity swaps: fixed-floating or commodity-for-interest.

Fixed-Floating Swaps: They are just like the fixed-floating swaps in the interest rate swap market with the exception that both indices are commodity based indices.

General market indices in the international commodities market with which many people would be familiar include the S&P Goldman Sachs Commodities Index (S&PGSCI) and the Commodities Research Board Index (CRB). These two indices place different weights on the various commodities so they will be used according to the swap agent's requirements.

Commodity-for-Interest Swaps: They are similar to the equity swap in which a total return on the commodity in question is exchanged for some money market rate (plus or minus a spread).

Valuing Commodity Swaps

In pricing commodity swaps, we can think of the swap as a strip of forwards, each priced at inception with zero market value (in a present value sense). Thinking of a swap as a strip of at-the-money forwards is also a useful intuitive way of interpreting interest rate swaps or equity swaps.

Commodity swaps are characterized by some peculiarities. These include the following factors for which we must account:

I. The cost of hedging;

II. The institutional structure of the particular commodity market in question;

III. The liquidity of the underlying commodity market;

IV. Seasonality and its effects on the underlying commodity market;

V. The variability of the futures bid/offer spread;

VI. Brokerage fees; and

VII. Credit risk, capital costs and administrative costs.

Some of these factors must be extended to the pricing and hedging of interest rate swaps, currency swaps and equity swaps as well. The idiosyncratic nature of the commodity markets refers more to the often limited number of participants in these markets (naturally begging questions of liquidity and market information), the unique factors driving these markets, the inter-relations with cognate markets and the individual participants in these markets.

Hedging with Commodity Derivatives

Many times when using commodity derivatives to hedge an exposure to a financial price, there is not one exact contract that can be used to hedge the exposure. If you are trying to hedge the value of a particular type of a refined chemical derived from crude oil, you may not find a listed contract for that individual product. You will find an over-the-counter price if you are lucky.

They look at the correlation (or the degree to which prices in the individual chemical trade with respect to some other more liquid object, such as crude oil) for clues as to how to price the OTC product that they offer you. They make assumptions about the stability of the correlation and its volatility and they use that to "shade" the price that they show you.

Correlation is an un-hedgable risk for the OTC market maker, though. There is very little that he can do if the correlation breaks down.

For example, if all of a sudden the price for your individual chemical starts dropping faster than the correlation of the chemical's price with crude oil suggests it should, the OTC dealer has to start dumping more crude oil in order to compensate.

It is a very risky business. The OTC market maker's best hope is to see enough "two-way" business involving end -users and producers so that his exposure is "naturally" hedged by people seeking to benefit from price movement in either direction.

Commodity swaps and commodity derivatives are a useful and important tool employed by most leading energy, chemical and agricultural corporations in today's world.

Note – Please note other forms of swaps such as Currency Swap and Interest Rate Swap have been discussed in the respective chapters.

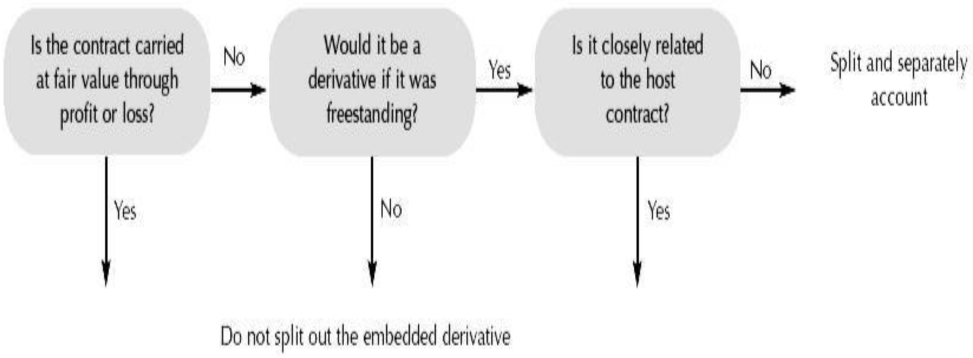
Question 8

EMBEDDED DERIVATIVES

Solution

An embedded derivative is a derivative instrument that is embedded in another contract - the host contract. The host contract might be a debt or equity instrument, a lease, an insurance contract or sale or purchase contract. Derivatives require to be marked-to-market through the income statement, other than qualifying hedging instruments. This requirement on embedded derivatives are designed to ensure that mark-to-market through the income statement cannot be avoided by including - embedding - a derivative in another contract or financial instrument that is not marked-to market through the income statement.

A coal purchase contract may include a clause that links the price of the coal to a pricing formula based on the prevailing electricity price or a related index at the date of delivery. The coal purchase contract, which qualifies for the executory contract exemption, is described as the host contract, and the pricing formula is the embedded derivative. The pricing formula is an embedded derivative because it changes the price risk from the coal price to the electricity price.



An embedded derivative that modifies an instrument's inherent risk (such as a fixed to floating interest rate swap) would be considered closely related. Conversely, an embedded derivative that changes the nature of the risks of a contract is not closely related.

Most equity- or commodity-linked features embedded in a debt instrument will not be closely related. This includes puts that force the issuer to reacquire an instrument based on changes in commodity price or index, equity or commodity indexed interest or principal payments and equity conversion features. Puts or calls on equity instruments at specified prices (that is, not market on date of exercise) are seldom closely related, neither are calls, puts or prepayment penalties on debt instruments. Credit derivatives embedded in a host debt instrument are seldom closely related to it.

The economic characteristics and risks of an embedded derivative are closely related to the economic characteristics and risks of the host contract when the host contract is a debt instrument and the embedded derivative is an interest rate floor or a cap out of the money when the instrument is issued. An entity would not account for the embedded derivative separately from the host contract. The same principle applies to caps and floors in a sale or purchase contract.

Closely related- Examples of embedded derivatives that need not be separated

A derivative embedded in a host lease contract is closely related to the host contract if the embedded derivative comprises contingent rentals based on related sales;

An inflation index term in a debt instrument as long as it is not leveraged and relates to the inflation index in the economic environment in which the instrument is denominated or issued;

Not closely related- Examples of embedded derivatives that must be separated

Equity conversion feature embedded in a debt instrument e.g. investment in convertible bonds;

Option to extend the term of a debt instrument unless there is a concurrent adjustment of the interest rate to reflect market prices;

Equity-indexed interest embedded in a debt instrument

Fair Valuing Embedded Derivatives: Embedded derivatives that are separated from the host contract are accounted for at fair value with changes in fair value taken through the income statement. Published price quotations in an active market are normally the best evidence of fair value.

Valuation techniques are used to determine the fair value of the derivative if there is no active market that matches the exact terms of the embedded derivative.

In the case of option derivatives (e.g. puts & calls), the embedded derivatives should be separated from the host contract and valued based on the stated terms of the option. It is assumed that an option derivative will not normally have a fair value of zero initial recognition. In the case of non-option derivatives, the embedded derivatives should be separated from the host contract based on its stated and implied terms and is assumed to have a fair value of zero at initial recognition.

THANKS.....

CHAPTER 2

INTERNATIONAL FINANCE MANAGEMENT

Chapter Design

1. INTERNATIONAL CAPITAL BUDGETARY

2. INTERNATIONAL SOURCES OF FINANCE

3. INTERNATIONAL WORKING CAPITAL MANAGEMENT

Part 1 – International Capital Budgeting

Question 1 [Warm up]

A company has an investment opportunity costing Rs 40,000 with the following expected net cash flows (i.e after taxes and before depreciation). Cost of Capital is 10%.

Year	Net Cash Flows
1 – 5	Rs 7,000 each year
6	Rs 8,000
7	Rs 10,000
8	Rs 15,000
9	Rs 10,000
10	Rs 4,000

Calculate 1. Payback Period 2.Discounted Payback 3. NPV 4. PI and 5. IRR

Question 2

An Indian firm is planning to set up a project in US. The Expected Cash Flows are

Years	0	1	2	3
Cash Flows (Millions)	(500)	200	200	300

Current Spot rate Rs 50 / $

R(f) Rs ---- 8%,

$ ---- 5%

Required return by the Indian shareholder is 22%. Compute NPV using?

A) Home currency Approach?

B) Foreign Currency Approach?

Question 3

An Indian co is evaluating a project in US -

Years	0	1	2	3
Net CF ($ million)	(800)	500	400	600

Rf = 8% in rupee terms.

Re = 18% in rupee terms.

Rf = 3% in $ terms.

S_0 (current spot rate) = Rs 50/$.

Calculate NPV of the project using both domestic currency approach & foreign currency approach.

Question 4

ABC Ltd. is considering a project in US, which will involve an initial investment of US $ 1,10,00,000. The project will have 5 years of life. Current spot exchange rate is Rs. 48 per US $. The risk free rate in US is 8% and the same in India is 12%. Cash inflow from the project are as follows :

Year	Cash Inflow
1	US $ 20,00,000
2	US $ 25,00,000
3	US $ 30,00,000
4	US $ 40,00,000
5	US $ 50,00,000

Calculate the NPV of the project using foreign currency approach. Required rate of return on this project is 14%.

Question 5

XYZ Ltd. is considering a project in Lexemburg, which will involve an initial investment of € 1,30,00,000. The project will have 5 years of life. Current spot exchange rate is Rs. 58 per €. The risk free rate in Germany is 8% and the same in India is 12%. Cash inflow from the project are as follows :

Year	Cash Inflow
1	€ 20,00,000
2	€ 25,00,000
3	€ 30,00,000
4	€ 40,00,000
5	€ 50,00,000

Calculate the NPV of the project using foreign currency approach. Required rate of return on this project is 14%.

Question 6

OJ Ltd. Is a supplier of leather goods to retailers in the UK and other Western European countries. The company is considering entering into a joint venture with a manufacturer in South America. The two companies will each own 50 per cent of the limited liability company JV(SA) and will share profits equally. £ 450,000 of the initial capital is being provided by OJ Ltd. and the equivalent in South American dollars (SA$) is being provided by the foreign partner. The managers of the joint venture expect the following net operating cash flows, which are in nominal terms:

	SA$ 000	Forward Rates of exchange to the £ Sterling
Year 1	4,250	10
Year 2	6,500	15
Year 3	8,350	21

For tax reasons JV(SV) the company to be formed specifically for the joint venture, will be registered in South America. Ignore taxation in your calculations.

Assuming you are financial adviser retained by OJ Limited to advice on the proposed joint venture.

i) Calculate the NPV of the project under the two assumptions explained below. Use a discount rate of 18 per cent for both assumptions.

Assumption 1 : The South American country has exchange controls which prohibit the payment of dividends above 50 per cent of the annual cash flows for the first three years of the project. The accumulated balance can be repatriated at the end of the third year.

Assumption 2 : The government of the South American country is considering removing exchange controls and restriction on repatriation of profits. If this happens all cash flows will be distributed as dividends to the partner companies at the end of each year.

ii) Comment briefly on whether or not the joint venture should proceed based solely on these calculations.

Question 7

Perfect Inc., a U.S. based Pharmaceutical Company has received an offer from Aidscure Ltd., a company engaged in manufacturing of drugs to cure Dengue, to set up a manufacturing unit in Baddi (H.P.), India in a joint venture.

As per the Joint Venture agreement, Perfect Inc. will receive 55% share of revenues plus a royalty @ US $0.01 per bottle. The initial investment will be Rs200 crores for machinery and factory. The scrap value of machinery and factory is estimated at the end of five (5) year to be Rs5 crores. The machinery is depreciable @ 20% on the value net of salvage value using Straight Line Method. An initial working capital to the tune of Rs50 crores shall be required and thereafter Rs5 crores each year.

As per GOI directions, it is estimated that the price per bottle will be Rs7.50 and production will be 24 crores bottles per year. The price in addition to inflation of respective years shall be increased by Rs1 each year. The production cost shall be 40% of the revenues.

The applicable tax rate in India is 30% and 35% in US and there is Double Taxation Avoidance Agreement between India and US. According to the agreement tax credit shall be given in US for the tax paid in India. In both the countries, taxes shall be paid in the following year in which profit have arisen.

The Spot rate of $ is Rs57. The inflation in India is 6% (expected to decrease by 0.50% every year) and 5% in US.

As per the policy of GOI, only 50% of the share can be remitted in the year in which they are earned and remaining in the following year.

Though WACC of Perfect Inc. is 13% but due to risky nature of the project it expects a return of 15%.

Determine whether Perfect Inc. should invest in the project or not (from home currency point of view).

Question 8

Its Entertainment Ltd., an Indian Amusement Company is happy with the success of its Water Park in India. The company wants to repeat its success in Nepal also where it is planning to establish a Grand Water Park with world class amenities. The company is also encouraged by a marketing research report on which it has just spent Rs 20,00,000 lacs.

The estimated cost of construction would be Nepali Rupee (NPR) 450 crores and it would be completed in one years time. Half of the construction cost will be paid in the beginning and rest at the end of year. In addition, working capital requirement would be NPR 65 crores from the year end one. The after tax realizable value of fixed assets after four years of operation is expected to be NPR 250 crores. Under the Foreign Capital Encouragement Policy of Nepal, company is allowed to claim 20% depreciation allowance per year on reducing balance basis subject to maximum capital limit of NPR 200 crore. The company can raise loan for theme park in Nepal @ 9%.

The water park will have a maximum capacity of 20,000 visitors per day. On an average, it is expected to achieve 70% capacity for first operational four years. The

entry ticket is expected to be NPR 220 per person. In addition to entry tickets revenue, the company could earn revenue from sale of food and beverages and fancy gift items. The average sales expected to be NPR 150 per visitor for food and beverages and NPR 50 per visitor for fancy gift items. The sales margin on food and beverages and fancy gift items is 20% and 50% respectively. The park would open for 360 days a year.
The annual staffing cost would be NPR 65 crores per annum. The annual insurance cost would be NPR 5 crores. The other running and maintenance costs are expected to be NPR 25 crores in the first year of operation which is expected to increase NPR 4 crores every year. The company would apportion existing overheads to the tune of NPR 5 crores to the park.
All costs and receipts (excluding construction costs, assets realizable value and other running and maintenance costs) mentioned above are at current prices (i.e. 0 point of time) which are expected to increase by 5% per year.
The current spot rate is NPR 1.60 per Rs. The tax rate in India is 30% and in Nepal it is 20%.
The current WACC of the company is 12%. The average market return is 11% and interest rate on treasury bond is 8%. The company's current equity beta is 0.45. The company's funding ratio for the Water Park would be 55% equity and 45% debt.
Being a tourist Place, the amusement industry in Nepal is competitive and very different from its Indian counterpart. The company has gathered the relevant information about its nearest competitor in Nepal. The competitor's market value of the equity is NPR 1850 crores and the debt is NPR 510 crores and the equity beta is 1.35.

State whether Its Entertainment Ltd. should undertake Water Park project in Nepal or not.

Question 9

An Indian company is planning to set up a subsidiary in US. The initial project cost is estimated to be US $40 million; Working Capital required is estimated to be $4 million.
The finance manager of company estimated the data as follows :

Variable Cost of Production (Per Unit Sold)	$ 2.50
Fixed cost per annum	$ 3 million
Selling Price	$10
Production capacity	5 million units
Expected life of Plant	5 years
Method of Depreciation	Straight line Method (SLM)
Salvage Value at the end of 5 years	NIL

The subsidiary of the Indian company is subject to 40% corporate tax rate in the US and the required rate of return of such types of project is 12%. The current exchange rate is Rs. 48/US$ and the rupee is expected to depreciate by 3% per annum for next five years. The subsidiary company shall be allowed to repatriate 70% of the CFAT every year along with the accumulated arrears of blocked funds at the end of 5 years, the withholding taxes are 10%. The blocked fund will be invested in the USA money market by the subsidiary, earning 4% (free of taxes) per year.

Determine the feasibility of having a subsidiary company in the USA, assuming no tax liability in India on earnings received by the parent company from the US subsidiary.

Question 10

Opus Technologies Ltd., an Indian IT company is planning to make an investment through a wholly owned subsidiary in a software project in China with a shelf life of two years. The inflation in China is estimated as 8 percent. Operating cash flows are received at the year end.

For the project an initial investment of Chinese Yuan (CN¥) 30,00,000 will be in land. The land will be sold after the completion of project at estimated value of CN¥ 35,00,000. The project also requires an office complex at cost of CN¥ 15,00,000 payable at the beginning of project. The complex will be depreciated on straight-line basis over two years to a zero salvage value. This complex is expected to fetch CN¥ 5,00,000 at the end of project.

The company is planning to raise the required funds through GDR issue in Mauritius. Each GDR will have 5 common equity shares of the company as underlying security which are currently trading at Rs 200 per share (Face Value = Rs10) in the domestic market. The company has currently paid the dividend of 25% which is expected to grow at 10% p.a. The total issue cost is estimated to be 1 percent of issue size.

The annual sales is expected to be 10,000 units at the rate of CN¥ 500 per unit. The price of unit is expected to rise at the rate of inflation. Variable operating costs are 40 percent of sales. Fixed operating costs will be CN¥ 22,00,000 per year and expected to rise at the rate of inflation.

The tax rate applicable in China for income and capital gain is 25 percent and as per GOI Policy no further tax shall be payable in India. The current spot rate of CN¥ 1 is Rs 9.50. The nominal interest rate in India and China is 12% and 10% respectively and the international parity conditions hold

You are required to

Identify expected future cash flows in China and determine NPV of the project in CN¥.

Determine whether Opus Technologies should go for the project or not assuming that there neither there is restriction on the transfer of funds from China to India nor any charges/taxes payable on the transfer of funds.

Question 11

US Co. wants to start a project in HK

Life = 4 years

Investment = 70 M HK $

Year	Price/unit	Quantity
1	20	1 Million
2	25	0.95
3	30	0.90
4	35	0.85

Other Information

1. VC = HK $ 5/unit
2. FC = HK $ 3 Million
3. Dep = 10% on Initial outlay
4. Taxes = HK $ 17%
   = US $ 35% (Gross up system, tax credit allowed)
5. Withholding tax 10%
6. Spot Rate = HK $ / $ = 7 and is expected to remaining constant
7. Savage = 25 Million HK $
8. K = 15 %

Calculate NPV

1. From HK $ point of view
2. From US $

Note : Ignore Capital Gain tax

THANKS.....

CHAPTER 3

MERGERS, ACQUISITIONS & CORPORATE RESTRUCTURING

Question 1
RATIONALE FOR MERGERS AND ACQUISITIONS

Solution
The most common reasons for Mergers and Acquisition (M&A) are:

- **Synergistic operating economics:** Synergy May be defined as follows:

$$V(AB) > V(A) + V(B).$$

In other words the combined value of two firms or companies shall be more than their individual value Synergy is the increase in performance of the combined firm over what the two firms are already expected or required to accomplish as independent firms (Mark L Sirower of Boston Consulting Group, in his book "The Synergy Trap"). This may be result of complimentary services economics of scale or both.
A good example of complimentary activities can a company may have a good networking of branches and other company may have efficient production system. Thus the merged companies will be more efficient than individual companies.
On similar lines, economics of large scale is also one of the reasons for synergy benefits. The main reason is that, the large scale production results in lower average cost of production e.g. reduction in overhead costs on account of sharing of central services such as accounting and finances, office executives, top level management, legal, sales promotion and advertisement etc.
These economics can be "real" arising out of reduction in factor input per unit of output, whereas pecuniary economics are realized from paying lower prices for factor inputs for bulk transactions.

- **Diversification:** In case of merger between two unrelated companies would lead to reduction in business risk, which in turn will increase the market value consequent upon the reduction in discount rate/ required rate of return. Normally, greater the combination of statistically independent or negatively correlated income streams of merged companies, there will be higher reduction in the business risk in comparison to companies having income streams which are positively correlated to each other.

- **Taxation:** The provisions of set off and carry forward of losses as per Income Tax Act may be another strong season for the merger and acquisition. Thus, there will be Tax saving or reduction in tax liability of the merged firm. Similarly, in the case of acquisition the losses of the target company will be allowed to be set off against the profits of the acquiring company.

- **Growth:** Merger and acquisition mode enables the firm to grow at a rate faster than the other mode viz., organic growth. The reason being the shortening of 'Time to Market'. The acquiring company avoids delays associated with purchasing of building, site, setting up of the plant and hiring personnel etc.

- **Consolidation of Production Capacities and increasing market power:** Due to reduced competition, marketing power increases. Further, production capacity is increased by combined of two or more plants.The following table shows the key rationale for some of the well known transactions which took place in India in the recent past.

Rationale for M & A

Instantaneous growth, Snuffing out competition, Increased market share.	• Airtel – Loop Mobile (2014) (Airtel bags top spot in Mumbai Telecom Circle)
Acquisition of a competence or a capability	• Google – Motorola (2011) (Google got access to Motorola's 17,000 issued patents and 7500 applications)
Entry into new markets/product segments	• Airtel – Zain Telecom (2010) (Airtel enters 15 nations of African Continent in one shot)
Access to funds	• Ranbaxy – Sun Pharma (2014) (Daiichi Sankyo sold Ranbaxy to generate funds)
Tax benefits	• Burger King (US) – Tim Hortons(Canada) (2014) (Burger King could save taxes in future)
Instantaneous growth, Snuffing out competition, Increased market share.	• Facebook – Whatsapp (2014) (Facebook acquired its biggest threat in chat space)
Acquisition of a competence or a	• Flipkart – Myntra (2014)

capability	(Flipkart poised to strengthen its competency in apparel e-commerce market)
Entry into new markets/product segments	• Cargill – Wipro (2013) (Cargill acquired Sunflower Vanaspati oil business to enter Western India Market)
Access to funds	• Jaypee – Ultratech (2014) (Jaypee sold its cement unit to raise funds for cutting off its debt)
Tax benefits	• Durga Projects Limited (DPL) – WBPDCL (2014) (DPL's loss could be carry forward and setoff)

As mentioned above amalgamation is effected basically for growth and sometimes for image. But some of the objectives for which amalgamation may be resorted to are:

— Horizontal growth to achieve optimum size, to enlarge the market share, to curb competition or to use unutilised capacity;

— Vertical combination with a view to economising costs and eliminating avoidable sales-tax and/or excise duty;

— Diversification of business;

— Mobilising financial resources by utilising the idle funds lying with another company for the expansion of business. (For example, nationalisation of banks provided this opportunity and the erstwhile banking companies merged with industrial companies);

— Merger of an export, investment or trading company with an industrial company or vice versa with a view to increasing cash flow;

— Merging subsidiary company with the holding company with a view to improving cash flow;

— Taking over a 'shell' company which may have the necessary industrial licences etc., but whose promoters do not wish to proceed with the project.

An amalgamation may also be resorted to for the purpose of nourishing a sick unit in the group and this is normally a merger for keeping up the image of the group.

Question 2
FORMS (TYPES) OF MERGERS

Solution
A merger is generally understood to be a fusion of two companies. The term "merger" means and signifies the dissolution of one or more companies or firms or proprietorships to form or get absorbed into another company. By concept, merger increases the size of the undertakings. Following are major types of mergers:

I. **Horizontal Merger:** The two companies which have merged are in the same industry, normally the market share of the new consolidated company would be larger and it is possible that it may move closer to being a monopoly or a near monopoly to avoid competition.

II. **Vertical Merger:** This merger happens when two companies that have 'buyer-seller' relationship (or potential buyer-seller relationship) come together.

III. **Conglomerate Mergers:** Such mergers involve firms engaged in unrelated type of business operations. In other words, the business activities of acquirer and the target are neither related to each other horizontally (i.e., producing the same or competiting products) nor vertically (having relationship of buyer and supplier).In a pure conglomerate merger, there are no important common factors between the companies in production, marketing, research and development and technology. There may however be some degree of overlapping in one or more of these common factors. Such mergers are in fact, unification of different kinds of businesses under one flagship company. The purpose of merger remains utilization of financial resources, enlarged debt capacity and also synergy of managerial functions.

IV. **Congeneric Merger:** In these mergers, the acquirer and the target companies are related through basic technologies, production processes or markets. The acquired company represents an extension of product-line, market participants or technologies of the acquirer. These mergers represent an outward movement by the acquirer from its current business scenario to other related business activities within the overarching industry structure.

V. **Reverse Merger**: Such mergers involve acquisition of a public (Shell Company) by a private company, as it helps private company to by-pass lengthy and complex process required to be followed in case it is interested in going public.

VI. **Acquisition**: This refers to the purchase of controlling interest by one company in the share capital of an existing company. This may be by:

I. an agreement with majority holder of Interest.

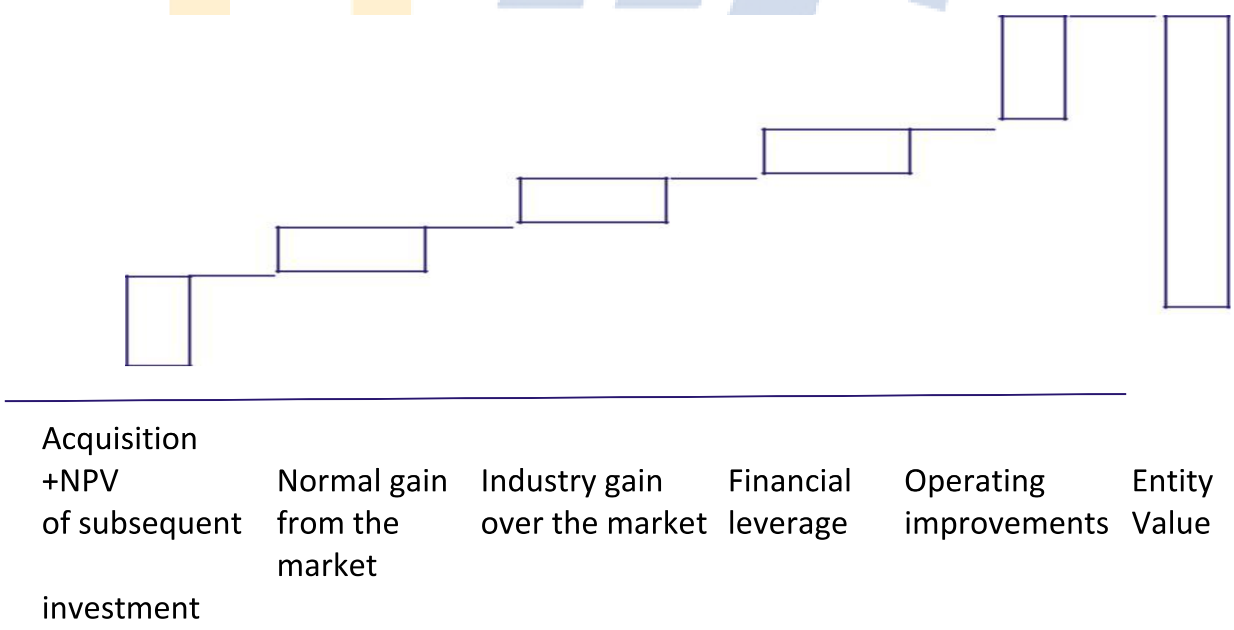
II. Purchase of new shares by private agreement.

III. Purchase of shares in open market (open offer)

IV. Acquisition of share capital of a company by means of cash, issuance of shares.

V. Making a buyout offer to general body of shareholders.

When a company is acquired by another company, the acquiring company has two choices , one, to merge both the companies into one and function as a single entity and, two, to operate the taken-over company as an independent entity with changed management and policies. 'Merger' is the fusion of two independent firms on co- equal terms. 'Acquisition' is buying out a company by another company and the acquired company usually loses its identity. Usually, this process is friendly.



Acquisition of one of the business of a company, as a going concern by an agreement need not necessarily be routed through court, if the transfer of business is to be accomplished without allotting shares in the transferee company to the shareholders of the transferor company. This would tantamount to a simple acquisition. In this case the transferor company continues to exist and no change in shareholding is expected. If the sale takes place for a lumpsum consideration without attributing any individual values to any class of assets, such sales are called slump sales. The capital gains arising on slump sales were being exempt from income tax based on a decision of the Supreme Court of India.

Question 3

REVERSE MERGER

Solution

In ordinary case, the company taken over is the smaller company; in a 'reverse takeover', a smaller company gains control of a larger one. The concept of takeover by reverse bid, or of reverse merger, is thus not the usual case of amalgamation of a sick unit which is non-viable with a healthy or prosperous unit but is a case whereby the entire undertaking of the healthy and prosperous company is to be merged and vested in the sick company which is non-viable. A company becomes a sick industrial company when there is erosion in its net worth. This alternative is also known as taking over by reverse bid.

The three tests should be fulfilled before an arrangement can be termed as a reverse takeover is specified as follows:

i. the assets of the transferor company are greater than the transferee company,

ii. equity capital to be issued by the transferee company pursuant to the acquisition exceeds its original issued capital, and

iii. the change of control in the transferee company through the introduction of a minority holder or group of holders.

This type of merger is also known as 'back door listing'. This kind of merger has been started as an alternative to go for public issue without incurring huge expenses and passing through cumbersome process. Thus, it can be said that reverse merger leads to the following benefits for acquiring company:

- Easy access to capital market.
- Increase in visibility of the company in corporate world.

- Tax benefits on carry forward losses acquired (public) company.

- Cheaper and easier route to become a public company.

Question 4
DIVESTITURE

Solution
It means a company selling one of the portions of its divisions or undertakings to another company or creating an altogether separate company. There are various reasons for divestment or demerger viz.,

I. To pay attention on core areas of business;
II. The Division's/business may not be sufficiently contributing to the revenues;
III. The size of the firm may be too big to handle;
IV. The firm may be requiring cash urgently in view of other investment opportunities.

Seller's Perspective

It is necessary to remember that for every buyer there must be a seller. Although the methods of analysis for selling are the same as for buying, the selling process is termed **divestiture.** The decision to sell a company is at least as important as buying one. But selling generally lacks the kind of planning that goes into buying. Quite often, the decision and the choice of the buyer is arbitrary, resulting in a raw deal for the selling company's shareholders. It is important to understand that selling needs the same set of skills required for buying. At some point of time the executives of a company may have to take the decision to divest a division There is nothing wrong in selling a division if it is worth more to someone else. The decision to sell may be prompted by poor growth prospects for a division or consolidation in the industry. Given the fact that the need to sell may arise any time, it makes sense for executives to be prepared. More specifically, executives need to know their company's worth. Consideration may be given to strengths and weakness in production, marketing, general management, value of synergy to potential buyers, value of brand equity, skill base of the organisation, etc.

To summarise, the following are some of the 'sell-side' imperatives

- Competitor's pressure is increasing.

- Sale of company seems to be inevitable because company is facing serious problems like:

    - No access to new technologies and developments

    - Strong market entry barriers. Geographical presence could not be enhanced
    - Badly positioned on the supply and/or demand side
    - Critical mass could not be realised
    - No efficient utilisation of distribution capabilities
    - New strategic business units for future growth could not be developed
    - Not enough capital to complete the project

- Window of opportunity: Possibility to sell the business at an attractive price

- Focus on core competencies

In the best interest of the shareholders – where a large well known firm brings-up the proposal, the target firm may be more than willing to give-up.

Different Forms
Different ways of divestment or demerger or divestitures are as follows:

Sell off / Partial Sell off
A sell off is the sale of an asset, factory, division, product line or subsidiary by one entity to another for a purchase consideration payable either in cash or in the form of securities. Partial Sell off, is a form of divestiture, wherein the firm sells its business unit or a subsidiary to another because it deemed to be unfit with the company's core business strategy.

Normally, sell-offs are done because the subsidiary doesn't fit into the parent company's core strategy. The market may be undervaluing the combined businesses due to a lack of synergy between the parent and the subsidiary. So the management and the board decide that the subsidiary is better off under a different ownership. Besides getting rid of an unwanted subsidiary, sell-offs also raise cash, which can be used to pay off debts. In the late 1980s and early 1990s, corporate raiders would use debt to finance acquisitions. Then, after making a purchase they would sell-off its subsidiaries to raise cash to service the debt. The raiders' method certainly makes sense if the sum of the parts is greater than the whole. When it isn't, deals are unsuccessful.

Spin-off
In this case, a part of the business is separated and created as a separate firm. The existing shareholders of the firm get proportionate ownership. So there is no change in ownership and the same shareholders continue to own the newly created entity in the same proportion as previously in the original firm. The management of spun-off division is however, parted with. Spin-off does not bring fresh cash. The reasons for spin off may be:

I. Separate identity to a part/division.

II. To avoid the takeover attempt by a predator by making the firm unattractive to him since a valuable division is spun-off.

III. To create separate Regulated and unregulated lines of business.

Example: Kishore Biyani led Future Group spin off its consumer durables business, Ezone, into a separate entity in order to maximise value from it.

Split-up

This involves breaking up of the entire firm into a series of spin off (by creating separate legal entities).The parent firm no longer legally exists and only the newly created entities survive. For instance a corporate firm has 4 divisions namely A, B, C, D. All these 4 division shall be split- up to create 4 new corporate firms with full autonomy and legal status. The original corporate firm is to be wound up. Since de-merged units are relatively smaller in size, they are logistically more convenient and manageable. Therefore, it is understood that spin-off and split-up are likely to enhance shareholders value and bring efficiency and effectiveness.

Example: Philips, the Dutch conglomerate that started life making light bulbs 123 years ago, is splitting off its lighting business in a bold step to expand its higher-margin healthcare and consumer divisions. The new structure should save 100 million euros ($128.5 million) next year and 200 million euros in 2016. It expects restructuring charges of 50 million euros from 2014 to 2016.

Equity Carve outs

This is like spin off, however, some shares of the new company are sold in the market by making a public offer, so this brings cash. More and more companies are using equity carve-outs to boost shareholder value. A parent firm makes a subsidiary public through an initial public offering (IPO) of shares, amounting to a partial sell-off. A new publicly-listed company is created, but the parent keeps a controlling stake in the newly traded subsidiary.

A carve-out is a strategic avenue a parent firm may take when one of its subsidiaries is growing faster and carrying higher valuations than other businesses owned by the parent. A carve-out generates cash because shares in the subsidiary are sold to the public, but the issue also unlocks the value of the subsidiary unit and enhances the parent's shareholder value.

The new legal entity of a carve-out has a separate board, but in most carve-outs, the parent retains some control over it. In these cases, some portion of the parent firm's board of directors may be shared. Since the parent has a controlling stake, meaning that both firms have common shareholders, the connection between the two is likely to be strong. That said, sometimes companies carve-out a subsidiary not because it is doing well, but because it is a burden. Such an intention won't lead to a successful result, especially if a carved-out subsidiary is too loaded with debt or trouble, even when it was a part of the parent and lacks an established track record for growing revenues and profits.

Sale of a Division

In the case of sale of a division, the seller company is demerging its business whereas the buyer company is acquiring a business. For the first time the tax laws in India propose to recognise demergers.

Demerger or Division of Family-Managed Business

Around 80 per cent of private sector companies in India are family-managed companies. The family-owned companies are, under extraordinary pressure to yield control to professional managements, as, in the emerging scenario of a liberalised economy the capital markets are broadening, with attendant incentives for growth. So, many of these companies are arranging to hive off their unprofitable businesses or divisions with a view to meeting a variety of succession problems.

Even otherwise, a group of such family-managed companies may undertake restructuring of its operations with a view also to consolidating its core businesses. For this, the first step that may need to be taken is to identify core and non -core operations within the group. The second step may involve reducing interest burden through debt restructuring along with sale of surplus assets. The proceeds from the sale of assets may be employed for expanding by acquisitions and rejuvenation of its existing operations. The bottom line is that an acquisition must improve economies of scale, lower the cost of production, and generate and promote synergies. Besides acquisitions, therefore, the group may necessarily have to take steps to improve productivity of its existing operations.

Question 5

OWNERSHIP RESTRUCTURING

Solution

Going Private

This refers to the situation wherein a listed company is converted into a private company by buying back all the outstanding shares from the markets.

Example: The Essar group successfully completed Essar Energy Plc delisting process from London Stock Exchange in 2014.

Going private is a transaction or a series of transactions that convert a publicly traded company into a private entity. Once a company goes private, its shareholders are no longer able to trade their stocks in the open market.

A company typically goes private when its stakeholders decide that there are no longer significant benefits to be garnered as a public company. Privatization will usually arise either when a company's management wants to buy out the public shareholders and take the company private (a management buyout), or when a company or individual makes a tender offer to buy most or all of the company's stock. Going private transactions generally involve a significant amount of debt.

Management Buy Outs

Buyouts initiated by the management team of a company are known as a management buyout. In this type of acquisition, the company is bought by its own management team.

MBOs are considered as a useful strategy for exiting those divisions that does not form part of the core business of the entity.

Leveraged Buyout (LBO)

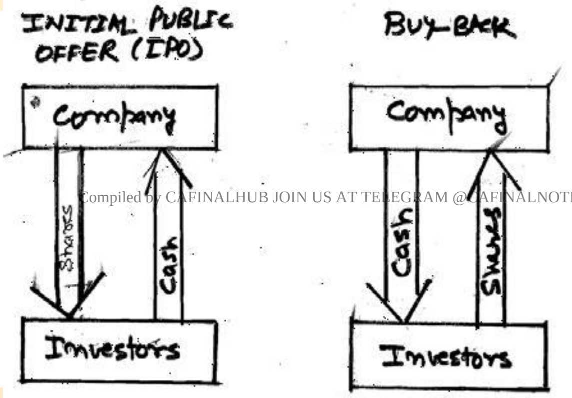
An acquisition of a company or a division of another company which is financed entirely or partially (50% or more) using borrowed funds is termed as a leveraged buyout. The target company no longer remains public after the leveraged buyout; hence the transaction is also known as going private. The deal is usually secured by the acquired firm's physical assets.

The intention behind an LBO transaction is to improve the operational efficiency of a firm and increase the volume of its sales, thereby increasing the cash flow of the firm. This extra cash flow generated will be used to pay back the debt in LBO transaction. After an, LBO the target entity is managed by private investors, which makes it easier to have a close control of its operational activities. The LBOs do not stay permanent. Once the LBO is successful in increasing its profit margin and improving its operational efficiency and the debt is paid back, it will go public again. Companies that are in a leading market position with proven demand for product, have a strong management team, strong relationships with key customers and suppliers and steady growth are likely to become the target for LBOs. In India the first LBO took place in the year 2000 when Tata Tea acquired Tetley in the United Kingdom. The deal value was Rs 2135 crores out of which almost 77% was financed by the company using debt. The intention behind this deal was to get direct access to Tetley's international market. The largest LBO deal in terms of deal value (7.6 Billion) by an Indian company is the buyout of Corus by Tata Steel.

Equity buyback
This refers to the situation wherein a company buys back its own shares back from the market. This results in reduction in the equity capital of the company. This strengthen the promoter's position by increasing his stake in the equity of the company.

The buyback is a process in which a company uses its surplus cash to buy shares from the public. It is almost the opposite of initial public offer in which shares are issued to the public for the first time. In buyback, shares which have already been issued are bought back from the public. And, once the shares are bought back, they get absorbed and cease to exist.

For example, a company has one crore outstanding shares and owing a huge cash pile of Rs. 5 crores. Since, the company has very limited investment options it decides to buyback some of its outstanding shares from the shareholders, by utilizing some portion of its surplus cash. Accordingly, it purchases 10 lakh shares from the existing shareholders by paying Rs. 20 per share. total cash of say, Rs. 2 crore. The process of buyback can be shown with the help of following diagram:



Example Cairn India bought back 3.67 crores shares and spent nearly ` 1230 crores by May 2014.

Effects of Buyback

There are several effects or consequences of buyback some of which are as follows:

I. It increases the proportion of shares owned by controlling shareholders as the number of outstanding shares decreases after the buyback.

II. Earning Per Share (EPS) escalates as the number of shares reduces leading the market price of shares to step up.

III. A share repurchase also effects a company's financial statements as follows:

a. In balance sheet, a share buyback will reduce the company's total assets position as cash holdings will be reduced and consequently as shareholders' equity reduced it results in reduction on the liabilities side by the same amount.
b. Amount spent on share buybacks shall be shown in Statement of Cash Flows in the

c. "Financing Activities" section, as well as from the Statement of Changes in Equity or Statement of Retained Earnings.

IV. Ratios based on performance indicators such as Return on Assets (ROA) and Return on Equity (ROE) typically improve after a share buyback. This can be understood with the help of following Statement showing Buyback Effect of a hypothetical company using Rs. 1.50 crore of cash out of total cash of Rs. 2.00 for buyback.

	Before Buyback	After Buyback (Rs.)
Cash (Rs.)	2,00,00,000	50,00,000
Assets (Rs.)	5,00,00,000	3,50,00,000
Earnings (Rs.)	20,00,000	20,00,000
No. of Shares outstanding (Nos.)	10,00,000	9,00,000
Return on Assets (%)	4.00%	5.71%
Earnings Per Share (EPS) (Rs.)	0.20	0.22

As visible from the above figure, the company's cash pile has been reduced from Rs.2 crore to Rs. 50 lakh after the buyback. Because cash is an asset, this will lower the total assets of the company from Rs. 5 crore to Rs. 3.5 crore. Now, this leads to an increase in the company's ROA, even though earnings have not changed. Prior to the buyback, its ROA was 4% but after the repurchase, ROA increases to 5.71%. A similar effect can be seen in the EPS number, which increases from 0.20 to 0.22.

THANKS.....

CHAPTER 4

INTERNATIONAL FINANCE CENTER

Introduction

International Financial Centre (IFC) is the financial center that caters to the needs of the customers outside their own jurisdiction. Although appears to be similar terms. Broadly, speaking IFC is a hub that deals with flow of funds, financial products and financial services though in own land but with different set of regulation and laws.

Thus, these centers provide flexibility in currency trading, insurance, banking and other financial services. This flexible regime attracts foreign investors which is of potential benefit not only to the stakeholders but as well as for the country hosting IFC itself.

Accordingly, through IFCs, businesses that currently cannot be done in India can be done at IFC.

CHAPTER DESIGN

1. INTRODUCTION
2. CONSTITUENTS OF IFC
3. ISLAMIC FINANCE
    1. INTRODUCTION
    2. SHARIA BOARD
    3. ISLAMIC FINANCE V/S CONVENTIONAL FINANCE
    4. CONCEPT OF RIBA
    5. ISLAMIC FINANCE INSTRUMENTS

ADVANTAGES

1. Opportunity for qualified professionals working outside India come here and practice their profession.
2. A platform for qualified and talented professionals to pursue global opportunities without leaving their homeland.
3. Stops Brain Drain from India.
4. Bringing back those financial services transactions presently carried out abroad by overseas financial institutions/entities or branches or subsidiaries of Indian Financial Market.
5. Trading of complicated financial derivative can be started from India.

Constituents of IFC

Although there are many constituents for IFC but some of the important constituent are as follows:

1. Highly developed Infrastructure: - A leading edge infrastructure is prerequisite for creating a platform to offer internationally completive financial services.
2. Stable Political Environment: - Destabilized political environment brings country risk investment by foreign nationals. Hence, to accelerate foreign participation in growth of financial center, stable political environment is prerequisite.
3. Strategic Location: - The geographical location of the finance center should be strategic such as near to airport, seaport and should have friendly weather.
4. Quality Life: - The quality of life at the center showed be good as center retains highly paid professional from own country as well from outside.
5. Rationale Regulatory Framework: - Rationale legal regulatory framework is another prerequisite of international finance center as it should be fair and transparent.
6. Sustainable Economy: - The economy should be sustainable and should possess capacity to absorb all the shocks as it will boost investors' confidence.

GIFT – INDIA FIRST INTERNATIONAL FINANCE CENTER

- To compete with its rivals Dubai, Hong Kong the idea of setting up an International Financial Center in India was coined in 2007 at Gandhinagar, Gujarat. The main motive of setting up IFC in India was to retain the financial services businesses in India which moves out of India.

- Since foreign investors normally remains hesitant to get registered in India GIFT city provides them a separate jurisdiction where it is easy to do business because of relaxed tax and other laws.

- With the objective of achieving sustainable growth and achieving above cited objective India's honorable Prime Minister in inaugurated India's first International Exchange – India INX, a wholly owned subsidiary of Bombay Stock Exchange on 9/1/2017. The India INX has stated trading in Index, currency, commodity and equity derivatives.

- On 5th June, 2017, National Stock Exchange (NSE) the competitor of Bombay Stock Exchange (BSE) also launched its trading at GIFT. Initially, it started trading in derivative products in equity, currency, interest rate futures and commodities. However, it is planning to trade in more equity instruments of Indian and foreign companies, base metals, energy and interest rates.

- Hence, with all these development more and more financial institutions are setting business units in GIFT as they will pay reduced taxes as valid for special economic zones and also can easily offer foreign currency loans to Indian Companies abroad and foreign firm.

ISLAMIC FINANCE

- Since India is becoming a globalized economy and world where about 1/4th population is of Muslims, the concept of Islamic finance based on Islamic principles and values cannot be ignored.
- While Islamic finance has roots in the past but there is resurgence in past 30 years. Though Islamic finance is different from the conventional finance but it has same objective of providing economic benefits to the society.
- Since under Islamic finance money is considered as only a mean of carrying out transactions any earning on the same in form of interest (Riba)is strictly prohibited.

WHAT IS ISLAMIC FINANCE

According to Wikipedia, Islamic Finance Banking or Sharia Complaint finance is banking or financing activity that complies with Sharia (Islamic law) and its practical application through the development of Islamic economies.

KEY PRINCIPLES OF ISLAMIC FINANCE

1. Prohibition of Interest (RIBA)
2. Prohibition of Uncertainty & Speculation (Gharar)
3. Prohibition of forbidden assets (eg. Alcohol, gambling)
4. Existence of an underlying Asset.
5. Profit sharing and risk sharing.

SHARI'AH- SET OF RULES (PROHIBITIONS, OBLIGATIONS, CLASSIFICATION … SO ON)

Fives main aims of shari'ah
The preservation and Protection of the

1. Religion (Deen)
2. Life (Nafs)
3. Progency/Family (Nasl)
4. The intellect (Aql)
5. Wealth (Maal)

SHARIA BOARD

To ensure that all Islamic finance products and service offered follow principles of Sharia Rules, there is a board called Sharia Board which oversees and reviews all new product offered by financial institutions.

ISLAMIC FINANCE V/S CONVENTIONAL FINANCE

Basis	Islamic Finance	Conventional Finance
Promotion	Islamic Finance promotes just, fair and balanced society. Hence, interest is prohibited.	Based on commercial objectives and interest must be paid irrespective of outcome of business.
Ethical framework	Structured on ethical and moral framework of Sharia. Verses from the holy Quran and tradition from As-Sunnah are two divine guidance.	No such framework.
Speculation	The financial transactions should be free from the element of uncertainty (Gharar) and gambling (Maisir)	No such restrictions.
Unlawful Goods and Services	Islamic Finance must not be involved in any transactions not involve trade not allowed as per Islamic principles such as alcohol, armaments, pork and other socially detrimental products.	There are no such restrictions

CONCEPT OF RIBA

- It literally means excess, increases, expansion or growth
- RIBA means interest or usury.
- In Islamic Finance, the meaning of Riba is interest or usury. As mentioned earlier in Islamic Finance money is considered as medium of exchange, store of value or unit of measurement only, hence Riba is considered haram i.e. unfair reward to the provider of capital for little or no effort or risk undertaken. Due to this reason, Islamic finance models are based on risks and profit/loss sharing contract (as clear from the financial products discussed above).
- Riba is equated with wrongful appropriation of property belonging to others and hence Muslims are asked to accept principal only and forego principal even, if borrower is unable to repay the same.
- In this backdrop in Islamic banking a link must be established between money and profit as an alternative to interest. This is in sharp contrast of conventional banking which is simply based on lender borrower's relationship.
- Since, interest is not allowed in Islamic Finance, depositors are rewarded by a share in the profit from the underlying business (after deduction of management fees) in which the funds of depositors have been channeled.
- Thus, it can be said that money has no intrinsic value i.e. time value of money.

WISDOM BEHIND THE PROHIBITION OF RIBA

1. It goes against mutual co-operation, generosity and spirit of partnership.
2. Acquisition of the property by wrongful needs and harming the needy.
3. Removal of possibility of injustice and exploitation
4. Drives the capital owner away from enterprise and real economic activities that contributes to the welfare of society.
5. Money is meant to be a medium of exchange and standard of value for other goods.
6. RIBA violates the entire rationale behind money and diverts money from economic activities

Question 1.
State whether the following transactions involve RIBA?

1. $ 100 = € 150 spot
2. $ 150 = 5 kgs of gold spot
3. $150 = 5 kgs of gold after a month
4. 1 Kg of Rice = 2 Kgs of Dates spot
5. 1 Kg of Rice = 2 Kgs of Dates after a month
6. 1 kg of salt = 1 kg of salt after 7 days
7. Rs. 1,00,000 = Rs. 1,10,000 after a year

ISLAMIC FINANCE INSTRUMENTS

Although there are number of Islamic Finance products, but some of common products/instruments are as follows:

1. **Musharaka**

It is derived from the word "Shirkah" which means sharing.

It is a kind of
1. Joint business venture or Equity partnership

2. Parties involved provide capital in the agreed ratio
3. Have a right to participate in the business
4. They can share the profits in the ratio of capital or agreed ratio
5. While the loss is strictly shared in the ratio of their capital contribution

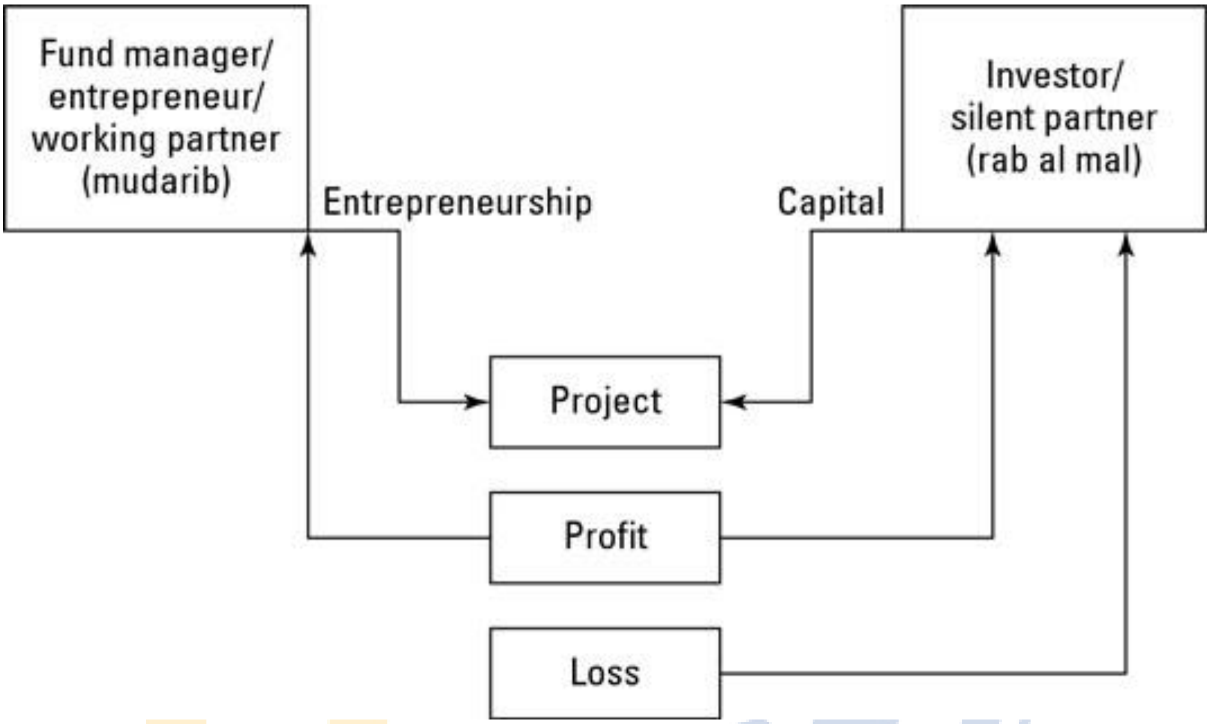
Question 2
A and B are the partners, with A investing Rs. 40,000 and B Investing Rs. 60,000. They decide to share profits in the ratio of 30:70. Explain how shall you treat the following

1. The firm makes the profit of Rs. 10,000
2. The firm makes the loss of Rs. 10,000

Question 3
A and B are the partners, with A investing Rs. 30,000 and B Investing Rs. 20,000. The firm makes the profit of Rs. 50,000 at the end of the year.

1. How shall the profit be divided
2. If before distribution of profits, A wants to buy out B, what is the amount payable by the A?

2. Mudaraba



- The investor (fund provider/supplier) is called "Rabb-ul-Maal while the person who utilizes this fund (the fund manager) is called "Mudarib";

It is a kind of
1. Joint business venture or Equity partnership
2. Where in one party provides 100% of the capital involved
3. Other party provides specialized knowledge and entrusted with exclusive responsibility of working
4. In case there is profit it shared among them in the pre-decided ratio
5. If there is loss only financier will borne

Question 4

A and B starts the business, with A investing Rs. 100,000 and B agreeing to handle the business operations. They decide to share profits in the ratio of 30:70. Explain how shall you treat the following

1. The firm makes the profit of Rs. 10,000
2. The firm makes the loss of Rs. 10,000

3. SUKUK

Sukuk is a plural word. The singular word was SAKK – which means CERTIFICATE.

The concept of sukuk is as old as 1st century. However it got recognition in 1988 when AAOIF – Accounting and Auditing Organisation of Islamic Financial Institution recognised it as a instrument which follows Islamic Laws and is permitted.

It is a kind of

1. Certificate
2. Having equal value
3. Representing undivided share
4. In ownership in
    a. Tangible asset
    b. Usufruct – Benefit
    c. Services

Types of SUKUK

1. Asset Based Sukuk
2. Debt Based Sukuk

SUKUK ASSET

1. Qualified
2. Quantified
3. Value
4. Revenue Generating

Difference between SUKUK and conventional Debt

	SUKUK	Conventional BOND
Basis	Its an Islamic certificate, sold to investors, who has partial ownership on the asset	It's a debt instrument, which are sold to investor, who receives fixed/variable interest.
Ownership	Investor gets proportional ownership	Do not have any underlying Asset
Investment criteria	Follows shari'ah Law	Follows local legislations
Units issued	Based on share of underlying asset	Based on share of Debt
Issue Price	Based on credit worthiness	Based on value of underlying asset.
Reward and Risk	Share in profits from the use of assets.	Receive interest payments and principal on redemption
Performance of underlying asset	Does have an impact on the cost and return	Does not affect the cost and the return

4. IJARA

- Ijarah is an Arabic word whose origin is 'Ujrah' (compensation /fee/fare);
- Ijarah means giving something to other for use against a fee or rent or fare;
- In conventional finance concept of Leasing is similar to Ijarah;

It is a kind of lease financing arrangement wherein one party transfer the asset to other partly for some specific time for specific fee which includes capital cost of assets and profit margin of the lessor. In this arrangement, the responsibility for maintenance of the leased items remains with the lessor.

- As per the Islamic laws of contract the:
  - Subject matter of Ijarah should be Valuable, Identified and Quantified;
  - The period of Lease must be determined in clear terms;
  - Any damage to the asset not caused by the Lessee's neglect, is to be borne by the Lessor;
  - Lessee will be responsible for Normal maintenance;
  - The Lessee is responsible for damage to the asset caused by fraud or negligence;
  - The lease period starts when the asset has been delivered to the lessee in usable condition whether or not the lessee has started using it;
  - Lease rentals for the entire lease period should be fixed (element of Gharar);
  - Rent can be fixed on periodic basis (periodic revision/floating) but periodic increment should be agreed upon;
  - The rent may be tied to a known benchmark, acceptable to both the parties.

Terms

1. Muajjir – Lessor
2. Mustajir – Lesse
3. Ma'jur – Asset on Rent
4. Al-Manfaah – The benefit – usufruct
5. Ujrah – Rent

IJARA V/S CONVENTIONAL LEASE

1) Ownership:

Conventional Lease : Leasing can provide financing for movable (industrial, transport and agricultural plant and equipment) or real estate assets, while at the same time allowing the creditor institution to retain ownership of the asset throughout the term of the contracts.

Ijara : "Muajjir" (lessor) is the owner of the leased property.

2) Risk bearer:

Conventional Lease : The lessor assumes and manages the risk of the asset.

Ijara : The risk and liabilities of ownership lie with the "Muajjir". The leased asset shall remain the risk of the "Muajjir" throughout the lease period. Any loss or harm caused by factors beyond the control of the "Mustajir" lessee shall be borne by the "Muajjir".

3) Starting time for rental obligation

Conventional Lease : The rental falls due from the date when the lessee accepted the goods.

Ijara : The rental falls due from the date of handing over the asset to "Mustajir".

4) Usefulness of property

Conventional Lease : The leased equipment must not be "limited use" property.

Ijara : It is a condition that the asset to be leased must be a non-fungible one which can be utilized more than once.

5) **Penalty**

Conventional Lease : Penalty can be charged to the lessee for delayed payment.

Ijara : Penalty can be charged to the lessee for delayed payment though the amount recovered is only to be used for charitable purposes by the lessor.

6) Repossession of an asset

Conventional Lease : The lease must not contain an option to purchase the asset at a bargain price.

Ijara : There can't be two contracts in one contract. Since the purpose of "purchase bargain option" is entirely different than the purpose of transferring the usufructs of an asset. Inserting the clause of "purchase bargain option" serves the purpose of another contract. On the one hand it allows the lessee to avail the usufructs of the leased asset and on the other hand it also gives the right to the lessee to purchase the same leased asset, which is not allowed in Shariah.

7) Valuation upon completion of leased period:

Conventional Lease : The asset must have secondary value after the expiry of the primary lease term.

Ijara : A leased asset must have a value upon completion of the agreed leased period.

8) Premature termination of lease:

Conventional Lease : Lease can be terminated in the event that the lessee fails to meet his obligations, notably the obligation to pay rent. The lessor must then instigate legal proceedings involving the bringing of a claim, where equipment is concerned. Lessee can't terminate lease if contract does not contain cancellation clause.

Ijara : Premature termination of the lease is allowed provided that the lessee has violated or contravened the terms of the lease.

9) Effect of premature termination:

Conventional Lease : On termination of lease contract, all obligations that are still executory on both sides are discharged.

Ijara : From the time of termination, the lessee is not obliged for rental payment.

10) Sale and lease back as one transaction:

Conventional Lease : This transaction involves the sale of the property by one company to another which in turn leases the same property back to the original seller.

Ijara : Sale and lease back are allowed, but only as two separate transactions.

11) **Determinant of rent:**

Conventional Lease : Lessors consider market related forces while scheduling lease payments. The market rate of interest provides a basis for lease determination.

Ijara : Rent is determined by market given forces. In practice, the market rate of interest is used to determine the rental rate, although this is not explicitly stated.

12) Equivalent to a sale:

Conventional Lease : A manufacturer or dealer doesn't recognize any selling profit on entering into an operating lease because it is not the equivalent of a sale.

Ijara : Leasing differs from sale in the way that it does not transfer the corpus or ownership of the property, which remains with the transferor.

The important fact is that under *Shariah* the leasing and sale/purchase transactions are two separate things and should not be mixed up in one contract, as both are independent and governed by separate rules.

The lease with promise to purchase and sale is different from the memorandum of sale. The rent paid by the lessee cannot, in any way, be considered as part of the price of the asset, rather it is the price of the service of the asset.

As described above, the leasing transaction simply denotes the transfer of the *usufruct* of a property from one person to another for an agreed-upon price called rent without transferring the corpus i.e. ownership of that asset.

Agreement to commence lease on some future date is allowed. However, the rent has to commence from the date of delivery. If the lessee has paid the price and the supplier delays delivery of the asset, then no rent is liable to be paid for the period of delay. It must be noted that future or forward sale in sale/purchase transaction is not permissible in Shariah. This is another major point , which differentiates leasing from a sale/purchase transaction under Shariah.

Conclusion

S.No.	**Dimensions**	**Differences**	
		Yes	**No**
1	Ownership	0	1
2	Risk bearer	0	1
3	Starting time for rental obligation	1	0
4	Usefulness of property	0	1
5	Penalty	0	1
6	Repossession of an asset	0	1
7	Asset has value upon completion of leased period	0	1
8	Premature termination	0	1
9	Effect of premature termination	0	1
10	Sale and lease back as one transaction	1	0
11	Determinant of rent	0	1
12	Equivalent of a sale	0	1
Total		**2**	**10**

5. MURABAHA

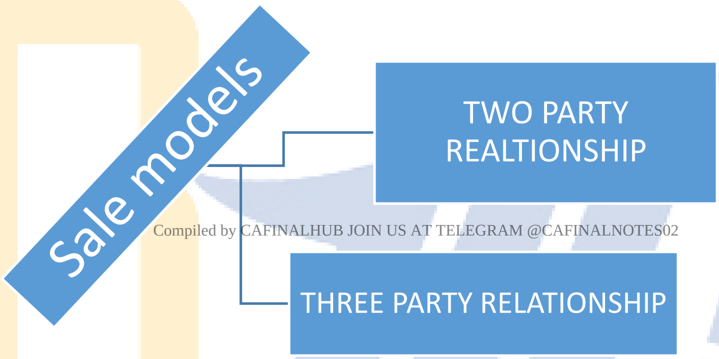
The word “Murabaha” has been derived from the Arabic word *“Ribah”*, which has literary meaning of profit.

The Murabaha can be denoted as “Sale With Profit”.

Murabaha is a particular kind of **sale** where Seller expressly mentions the cost it has incurred on purchase of the Asset(s) to be sold and sells it to another person by adding some profit, which is known to Buyer.

Murabaha finance is not a loan given on interest, it is a sale of Asset(s) for cash/deferred price.

It is the obligation of the Seller to disclose the Cost and Profit to the Buyer.



6. Salam and Istisna

The basic conditions for a validity of a sale in Shriah are three:
(1)The purchased commodity must be existing,
(2)The seller should have acquired the ownership of that commodity,
(3)The commodity must be in the physical or constructive possession of the seller,

There are only two exceptions to this principle in Shari’ah:
(1)Salam
(2)Istisna

SALAM

It is purchase of commodity for deferred delivery for immediate payment.

Sale

Object

Goods

– that can be measured

- Specification should be clearly define

- Product should be easily available

- The agreement cannot be for any unique or specific goods

Price

- Known very clearly

- Should be paid in advance

- Notes

1. The Delivery has be clearly agreed upon – ie the date, time and place should be defined.
2. If there is a delay, the buyer can wait or ask for immediate enforcement of contract
3. He cannot cancel the contract, unless the delivery is not as per the contract.
4. He cannot charge late payment fee

ISTISNA

Istisna is a kind of sale which is transacted before the subject matter is produced.

Sale

Object

Raw materials

- which can be owned by the seller or third party

- has to be converted into an finished asset

- The agreement need not necessarily be on general goods i.e it can be on unique asset also

- If the final product is not as per the terms decided the purchaser can cancel the contract

Price

- Price may be derred or paid in installments, basically it is on the stage of completion

Conditions of Istisna sale contract:

- Specification of type, kind, quality and quantity of the subject matter to be produced.
- Price of the subject matter must be known.
- Delivery date of subject matter must be determined.
- Option of rejection of goods by the buyer if the subject matter does not conform to the agreed specification.
- An Istisna contract is permitted only for raw materials that can be transformed from their natural state by a manufacturing or construction process involving labor.
- It is permissible that Istisna contract be concluded for the production of subject matter having unique descriptions as well as for the production of subject matter that has perfect substitutes available in the market.
- It is not permitted that the subject matter of an Istisna contract be an existing and identified capital asset.

THANKS.....

CHAPTER 5

STARTUP FINANCE

Introduction

Startup financing means some initial infusion of money needed to turn an idea (by starting a business) into reality. While starting out, big lenders like banks etc. are not interested in a startup business. The reason is that when you are just starting out, you're not at the point yet where a traditional lender or investor would be interested in you. So that leaves one with the option of selling some assets, borrowing against one’s home, asking loved ones i.e. family and friends for loans etc. But, that involves a lot of risk, including the risk of bankruptcy and strained relationships with friends and family.

So, the pertinent question is how to keep loans from family and friends strictly businesslike. This is the hard part behind starting a business -- putting so much at risk. But doing so is essential. It's what sets entrepreneurs apart from people who collect regular salaries as employees.

A good way to get success in the field of entrepreneurship is to speed up initial operations as quickly as possible to get to the point where outside investors can see and feel the business venture, as well as understand that a person has taken some risk reaching it to that level.

Some businesses can also be bootstrapped (attempting to found and build a company from personal finances or from the operating revenues of the new company).They can be built up quickly enough to make money without any help from investors who might otherwise come in and start dictating the terms.

In order to successfully launch a business and get it to a level where large investors are interested in putting their money, requires a strong business plan. It also requires seeking advice from experienced entrepreneurs and experts -- people who might invest in the business sometime in the future.

1. CHAPTER DESIGN

After going through the chapter student shall be able to understand:

- Introduction of Startup finance
- Pitch Presentation
- Sources of Funding
- Startup financing through Venture Capital Financing

2. SOME OF THE INNOVATIVE WAYS TO FINANCE A STARTUP

Every startup needs access to capital, whether for funding product development, acquiring machinery and inventory, or paying salaries to its employee. Most entrepreneurs think first of bank loans as the primary source of money, only to find out that banks are really the least likely benefactors for startups. So, innovative measures include maximizing non-bank financing.
Here are some of the sources for funding a startup:

(i) **Personal financing.** It may not seem to be innovative but you may be surprised to note that most budding entrepreneurs never thought of saving any money to start a business. This is important because most of the investors will not put money into a deal if they see that you have not contributed any money from your personal sources.

(ii) **Personal credit lines.** One qualifies for personal credit line based on one's personal credit efforts. Credit cards are a good example of this. However, banks are very cautious while granting personal credit lines. They provide this facility only when the business has enough cash flow to repay the line of credit.

(iii) **Family and friends.** These are the people who generally believe in you, without even thinking that your idea works or not. However, the loan obligations to friends and relatives should always be in writing as a promissory note or otherwise.

(iv) **Peer-to-peer lending.** In this process group of people come together and lend money to each other. Peer to peer to lending has been there for many years. Many small and ethnic business groups having similar faith or interest generally support each other in their start up endeavors.

(v) **Crowd funding**. Crowd funding is the use of small amounts of capital from a large number of individuals to finance a new business initiative. Crowd funding makes use of the easy accessibility of vast networks of people through social media and crowd funding websites to bring investors and entrepreneurs together.

(vi) **Microloans.** Microloans are small loans that are given by individuals at a lower interest to a new business ventures. These loans can be issued by a single individual or aggregated across a number of individuals who each contribute a portion of the total amount.

(vii) **Vendor financing.** Vendor financing is the form of financing in which a company lends money to one of its customers so that he can buy products from the company itself. Vendor financing also takes place when many manufacturers and distributors are convinced to defer payment until the goods are sold. This means extending the payment terms to a longer period for e.g. 30 days payment period can be extended to 45 days or 60 days. However, this depends on one's credit worthiness and payment of more money.

(viii) **Purchase order financing.** The most common scaling problem faced by startups is the inability to find a large new order. The reason is that they don't have the necessary cash to produce and deliver the product. Purchase order financing companies often advance the required funds directly to the supplier. This allows the transaction to complete and profit to flow up to the new business.

(ix) **Factoring accounts receivables.** In this method, a facility is given to the seller who has sold the good on credit to fund his receivables till the amount is fully received. So, when the goods are sold on credit, and the credit period (i.e. the date upto which payment shall be made) is for example 6 months, factor will pay most of the sold amount upfront and rest of the amount later. Therefore, in this way, a startup can meet his day to day expenses.

3. PITCH REPRESENTATION

Pitch deck presentation is a short and brief presentation (not more than 20 minutes) to investors explaining about the prospects of the company and why they should invest into the startup business. So, pitch deck presentation is a brief presentation basically using PowerPoint to provide a quick overview of business plan and convincing the investors to put some money into the business. Pitch presentation can be made either during face to face meetings or online meetings with potential investors, customers, partners, and co-founders. Here, some of the methods have been highlighted below as how to approach a pitch presentation:

(i) Introduction.

To start with, first step is to give a brief account of yourself i.e. who are you? What are you doing? But care should be taken to make it short and sweet. Also, use this opportunity to get your investors interested in your company. One can also talk up the most interesting facts about one's business, as well as any huge milestones one may have achieved.

(ii) Team.

The next step is to introduce the audience the people behind the scenes. The reason is that the investors will want to know the people who are going to make the product or service successful. Moreover, the investors are not only putting money towards the idea but they are also investing in the team. Also, an attempt should be made to include the background of the promoter, and how it relates to the new company. Moreover, if possible, it can also be highlighted that the team has worked together in the past and achieved significant results.

(iii) Problem.

Further, the promoter should be able to explain the problem he is going to solve and solutions emerging from it. Further the investors should be convinced that the newly introduced product or service will solve the problem convincingly. For instance, when Facebook was launched in 2004, it added some new features which give it a more professional and lively look in comparison to Orkut which was there for some time. It enabled Facebook to become an instant hit among the people. Further, customers have no privacy while using Orkut. However, in Facebook, you can view a person's profile only if he adds you to his list. These simple yet effective advantages that Facebook has over Orkut make it an extremely popular social networking site.

(iv) Solution

It is very important to describe in the pitch presentation as to how the company is planning to solve the problem. For instance, when Flipkart first started its business in 2007, it brought the concept of e- commerce in India. But when they started, payment through credit card was rare. So, they introduced the system of payment on the basis of cash on delivery which was later followed by other e-commerce companies in India. The second problem was the entire supply chain system. Delivering goods on time is one of the most important factors that determine the success of an ecommerce company. Flipkart addressed this issue by launching their own supply chain management system to deliver orders in a timely manner. These innovative techniques used by Flipkart enabled them to raise large amount of capital from the investors.

(v) Marketing/Sales

This is a very important part where investors will be deeply interested. The market size of the product must be communicated to the investors. This can include profiles of target customers, but one should be prepared to answer questions about how the promoter is planning to attract the customers. If a business is already selling goods, the promoter can also brief the investors about the growth and forecast future revenue.

(vi) Projections or Milestones

It is true that it is difficult to make financial projections for a startup concern. If an organization doesn't have a long financial history, an educated guess can be made. Projected financial statements can be prepared which gives an organization a brief idea about where is the business heading? It tells us that whether the business will be making profit or loss?

Financial projections include three basic documents that make up a business's financial statements.

- **Income statement:** This projects how much money the business will generate by projecting income and expenses, such as sales, cost of goods sold, expenses and capital. For your first year in business, you'll want to create a monthly income statement. For the second year, quarterly statements will suffice. For the following years, you'll just need an annual income statement.

- **Cash flow statement:** A projected cash flow statement will depict how much cash will be coming into the business and out of that cash how much cash will be utilized into the business. At the end of each period (e.g. monthly, quarterly, annually), one can tally it all up to show either a profit or loss.
- **Balance sheet:** The balance sheet shows the business's overall finances including assets, liabilities and equity. Typically, one will create an annual balance sheet for one's financial projections.

(vii) Competition

Every business organization has competition even if the product or service offered is new and unique. It is necessary to highlight in the pitch presentation as to how the products or services are different from their competitors. If any of the competitors have been acquired, there complete details like name of the organization, acquisition prices etc. should be also be highlighted.

(viii) Business Model

The term business model is a wide term denoting core aspects of a business including purpose, business process, target customers, offerings, strategies, infrastructure, organizational structures, sourcing, trading practices, and operational processes and policies including culture.

Further, as per Investopedia, a business model is the way in which a company generates revenue and makes a profit from company operations. Analysts use the term gross profit as a way to compare the efficiency and effectiveness of a firm's business model. Gross profit is calculated by subtracting the cost of goods sold from revenues. A business model can be illustrated with the help of an example. There are two companies – company A and company B. Both the companies are engaged in the business of renting movies. Prior to the advent of internet both the companies rent movies physically. Both the companies made Rs. 5 crore as revenues. Cost of goods sold was Rs. 400000. So, the companies made Rs. 100000 as gross profit. After the introduction of internet, company A started to offer movies online instead of renting or selling it physically. This change affected the business model of company A positively. Revenue is still Rs. 500000. But the significant part is that cost of goods sold is now Rs. 200000 only. This is because online sales lead to significant reduction of storage and distribution costs. So, the gross profit increases from 20% to 60%.

Therefore, Company A isn't making more in sales, but it figured out a way to revolutionize its business model, which greatly reduces costs. Managers at company A have an additional 40% more in margin to play with than managers at company A. Managers at company A have little room for error and they have to tread carefully.

Hence, every investor wants to get his money back, so it's important to tell them in a pitch presentation as to how they should plan on generating revenue. It is better to show the investors a list of the various revenue streams for a business model and the timeline for each of them. Further, how to price the product and what the competitor charges for the same or similar product shall also be highlighted. It is also beneficial to discuss the lifetime value of the customer and what should be the strategy to keep him glued to their product.

(ix) Financing

If a startup business firm has raised money, it is preferable to talk about how much money has already been raised, who invested money into the business and what they did about it. If no money has been raised till date, an explanation can be made regarding how much work has been accomplished with the help of minimum funding that the company is managed to raise.

It is true that investors like to see entrepreneurs who have invested their own money. If a promoter is pitching to raise capital he should list how much he is looking to raise and how he intend to use the funds.

4. MODES OF FINANCING FOR STARTUPS

(i) Bootstrapping

An individual is said to be boot strapping when he or she attempts to found and build a company from personal finances or from the operating revenues of the new company.

A common mistake made by most founders is that they make unnecessary expenses towards marketing, offices and equipment they cannot really afford. So, it is true that more money at the inception of a business leads to complacency and wasteful expenditure. On the other hand, investment by startups from their own savings leads to cautious approach. It curbs wasteful expenditures and enable the promoter to be on their toes all the time.

Five Sources of Bootstrap Financing

1. Factoring

Factoring means to sell your receivables – money you are to receive from your consumers – to a buyer, be it a financing company or otherwise, and raising capital (read immediate money) from the buyer against such receivables. The profit you were to make on the products being sold must be factored into the sale price of your receivables, as the receivables from the consumer as well as the responsibility to collect the same will be that of the buyer's.

2. Trade Credit

Create a detailed financial plan explaining to the supplier how you will pay it, and try to get trade credit of 30, 60 or 90 days from your suppliers. This is usually the practice with businesses, however being a new venture, receiving trade credit would be a bit challenging, but not impossible – a matter of negotiation.

3. Lease and Mortgage

Instead of spending capital on purchasing infrastructure at the very onset of your new venture, lease it. Churn some revenue with the infrastructure, and then consider buying the same. You can do the same with furniture and even with employees. Lastly, real estate is a good type of bootstrap financing too. You can try to borrow money from real estate equity to use for your business. You may also borrow money against your personal properties, as real estate mostly always appreciates with time and is therefore considered safe by lenders.

4. Customer Credit

You can use your consumers' letters of credit to purchase or acquire material you require from your supplier. That way, you do not need to pay the supplier immediately, and the supplier is also reassured that it will get the money due to it since you already have consumers willing to pay for, and in a sense vouch for, the product.

5. Yard Sale, Auction, On-the-side-Consulting

While bootstrapping, it is not uncommon for entrepreneurs to organize yard sales and auctions to raise money for their business. In fact, in 1975, Steve Jobs and Steve Wozniak sold their Volkswagen microbus and Hewlett-Packard calculator, respectively, to raise the capital of $ 1350 with which they began working on Apple I and went on to incorporate Apple Computer Inc. in 1977. You may also offer your services in the profession/ sector in which you work as a part time consultant, thereby ensuring a small but constant inflow of funds.

Raising funds is not the easiest thing to do for a startup, in fact, in some way it can be the litmus test of your concept, your hard work and your ability to convert that concept into a value adding product or service. Bootstrap financing has its own challenges – and its own benefits – and could be the smarter way to begin your venture. As Tableau explicated by example, raising capital can assume importance but you should not depend on it. Instead, assess how best you may bootstrap your business, raise funds through bootstrap financing, and conduct fundraising only when the time is right to do so.

Advantages Of Bootstrapping

1. Retaining Control

To bootstrap is to reduce reliance on external sources for finance and capital, and it is one of the most effective ways to ensure a positive cash flow. Your control of the company and your equity are not diluted, allowing you the freedom to manage operations, products, marketing – everything, in fact, as you deem fit. Investor influence is absent – so you may retain your vision and culture.

2. Ensures Efficiency

Let's face it, if you are spending your own money, and are fully aware of the limitations of that supply, you will be extra careful about how you spend it. And you will squeeze every bit that you can out of every penny, developing a resourcefulness that you may well not have had before. You suddenly become efficient with your money not because you should be, but because you *must* be.

3. Increases Awareness and Involvement

(Please note that this should not be construed to mean that if you raise capital from outside your company you are not aware or involved with your venture.) However, while bootstrapping, you will be involved with every single aspect of your venture. You will automatically be required to be more aware and informed, and to cultivate a wide skill-set.

4. More time to work

Time is money! Every hour that you do not need to spend chasing venture capitalists and other fund-doling entities, you will end up spending on more important aspects such as product development, finding and managing marketing avenues, sales, consumer interaction etc.

5. More Profits for you

The math is, you do not need to give back the money you never took, nor do you have to part with what you earned. Yes, it means more profit for you, whenever you get to the point of making profits.

6. Exposure to Alternatives

When you avoid the much-taken path of fund raising, various options of bootstrap financing present themselves to you, such as asset re-financing, trade credit, factoring as also old fashioned ways of raising funds such as yard sales, auctions, consulting on the side – you get creative to raise the money your venture needs.

(ii) Angel Investors

Despite being a country of many cultures and communities traditionally inclined to business and entrepreneurship, India still ranks low on comparative ratings across entrepreneurship, innovation and ease of doing business. The reasons are obvious. These include our old and outdated draconian rules and regulations which provides a hindrance to our business environment for a long time. Other reasons are redtapism, our time consuming procedures, and lack of general support for entrepreneurship. Off course, things are changing in recent times.

As per Investopedia, Angel investors invest in small startups or entrepreneurs. Often, angel investors are among an entrepreneur's family and friends. The capital angel investors provide may be a one-time investment to help the business propel or an ongoing injection of money to support and carry the company through its difficult early stages.

Angel investors provide more favorable terms compared to other lenders, since they usually invest in the entrepreneur starting the business rather than the viability of the business. Angel investors are focused on helping startups take their first steps, rather than the possible profit they may get from the business. Essentially, angel investors are the opposite of venture capitalists.

Angel investors are also called informal investors, angel funders, private investors, seed investors or business angels. These are affluent individuals who inject capital for startups in exchange for ownership equity or convertible debt. Some angel investors invest through crowdfunding platforms online or build angel investor networks to pool in capital.

Angel investors typically use their own money, unlike venture capitalists who take care of pooled money from many other investors and place them in a strategically managed fund.

Though angel investors usually represent individuals, the entity that actually provides the fund may be a limited liability company, a business, a trust or an investment fund, among many other kinds of vehicles.

Angel investors who seed startups that fail during their early stages lose their investments completely. This is why professional angel investors look for opportunities for a defined exit strategy, acquisitions or initial public offerings (IPOs).

(iii) Venture Capital Funds

1. Definition

Venture Capital is “Equity support to Fund a new concept that involve a higher risk and at the same time, have a high growth and profit.

Venture Capital is “It broadly implies an investments of long term, equity finance in high risk projects with high rewards possibilities’’

2. Features

(i) **Long time horizon**: The fund would invest with a long time horizon in mind. Minimum period of investment would be 3 years and maximum period can be 10 years.

(ii) **Lack of liquidity**: When VC invests, it takes into account the liquidity factor. It assumes that there would be less liquidity on the equity it gets and accordingly it would be investing in that format. They adjust this liquidity premium against the price and required return.

(iii) **High Risk**: VC would not hesitate to take risk. It works on principle of high risk and high return. So, high risk would not eliminate the investment choice for a venture capital.

(iv) **Equity Participation**: Most of the time, VC would be investing in the form of equity of a company. This would help the VC participate in the management and help the company grow. Besides, a lot of board decisions can be supervised by the VC if they participate in the equity of a company.

(v) **High Tech Project** : VC are generally found to be investing in high tech projects.

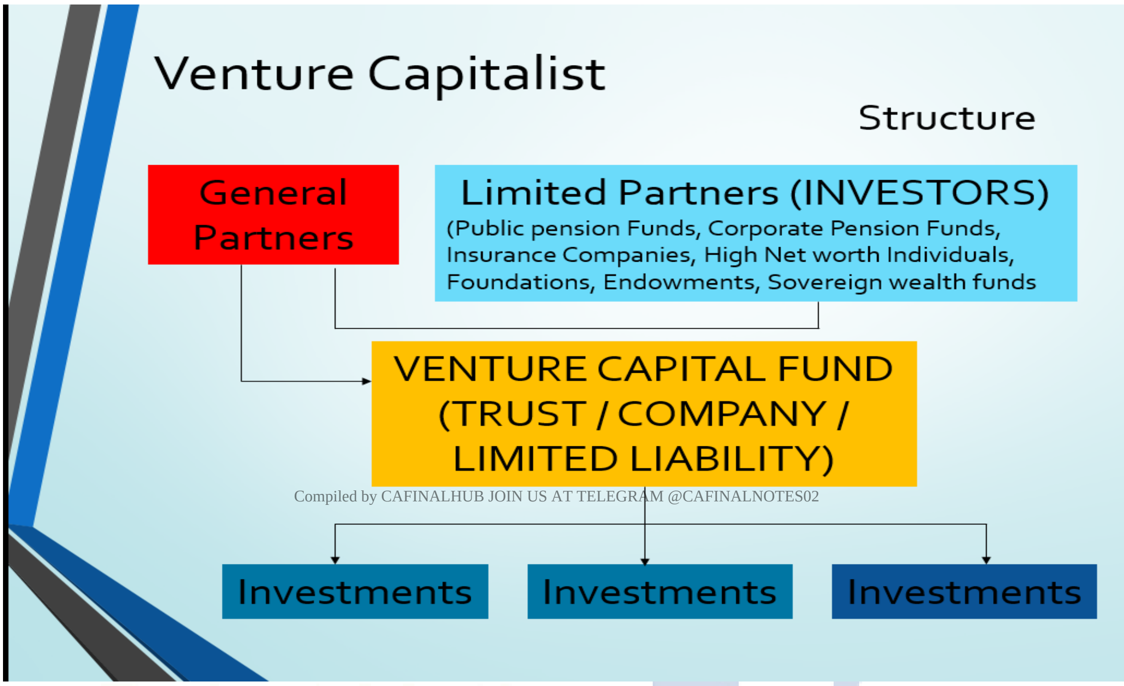
(vi) **Participation in Management** : Unlike traditional bank finance – venture capitalist may play active role in the management of the firms they invest in.

3. Evolution

- 1970 – GOI set up a committee to tackle the issue of lack of funding to start ups
- 1988 – Controller of Capital Issue – Was very restrictive
- 1995 – Abolition of CCI – Foreign finance companies were allowed to invest in India

- 1996 – New set of guidelines were issued to counter the charge that it favoured foreign players and did not give any inventive to the domestic individuals
- 1997 – IT revolution got the venture capital of the hook – however dotcom bust left many crying and the surviving once started financing at much later stage – leaving risky see capital and start up financing to a few daring ones.

4. Structure



5. Participants in Venture Capital Firms

1. General Partners : They are the executives of the firm. They are like working partners
2. Limited Partners : They only invest in the fund. They don't look after the management of the fund.
3. Venture partners : They bring in deals and gets income on the deals they bring in.
4. Entrepreneur in Residence : They are people with expertise in specific field. They are engaged by VC firms to look into certain specific deals.

6. Structure of Venture Capital Fund in India

Three main types of fund structure exist: one for domestic funds and two for offshore ones:

(a) **Domestic Funds**: Domestic Funds (i.e. one which raises funds domestically) are usually structured as: i) a domestic vehicle for the pooling of funds from the investor, and ii) a separate investment adviser that carries those duties of asset manager. The choice of entity for the pooling vehicle falls between a trust, a company or limited liability. With the trust form prevailing due to its operational flexibility.

(b) **Offshore Funds**: Two common alternatives available to offshore investors are: the "offshore structure" and the "unified structure".

Offshore structure: Under this structure, an investment vehicle (an LLC or an LP organized in a jurisdiction outside India) makes investments directly into Indian portfolio companies. Typically, the assets are managed by an offshore manager, while the investment advisor in India carries out the due diligence and identifies deals.

Unified Structure: When domestic investors are expected to participate in the fund, a unified structure is used. Overseas investors pool their assets in an offshore vehicle that invests in a locally managed trust, whereas domestic investors directly contribute to the trust. This is later device used to make the local portfolio investments.

7. Advantages of bringing VC in the company:

- It injects long- term equity finance which provides a solid capital base for future growth.
- The venture capitalist is a business partner, sharing both the risks and rewards. Venture capitalists are rewarded with business success and capital gain.
- The venture capitalist is able to provide practical advice and assistance to the company based on past experience with other companies which were in similar situations.
- The venture capitalist also has a network of contacts in many areas that can add value to the company.
- The venture capitalist may be capable of providing additional rounds of funding should it be required to finance growth.
- Venture capitalists are experienced in the process of preparing a company for an initial public offering (IPO) of its shares onto the stock exchanges or overseas stock exchange such as NASDAQ.
- They can also facilitate a trade sale.

8. Stages of funding for VC:

1. **Seed Money**: Low level financing needed to prove a new idea.

2. **Start-up**: Early stage firms that need funding for expenses associated with marketing and product development.

3. **First-Round**: Early sales and manufacturing funds.

4. **Second-Round**: Working capital for early stage companies that are selling product, but not yet turning in a profit.

5. **Third Round**: Also called Mezzanine financing, this is expansion money for a newly profitable company.

6. **Fourth-Round**: Also called bridge financing, it is intended to finance the "goingpublic" process. Risk in each stage is different. An indicative Risk matrix is given below:

Risk in each stage is different. An indicative Risk matrix is given below:

Financial Stage	Period (Funds locked in years)	Risk Perception	Activity to be financed
Seed Money	7-10	Extreme	For supporting a concept or idea or R&D for product development
Start Up	5-9	Very High	Initializing prototypes operations or developing
1^{st} Stage	3-7	High	Start commercials marketing production and
2^{nd} Stage	3-5	Sufficiently high	Expand market and growing working capital need
3^{rd} Stage	1-3	Medium	Market expansion, acquisition & product development for profit making company
4^{th} stage	1-3	Low	Facilitating public issue

9. VC Investment Process

The entire VC Investment process can be segregated into the following steps:

1. **Deal Origination**: VC operates directly or through intermediaries. Mainly many practicing Chartered Accountants would work as intermediary and through them VC gets the deal.

   Before sourcing the deal, the VC would inform the intermediary or its employees about the following so that the sourcing entity does not waste time:

   - Sector focus
   - Stages of business focus
   - Promoter focus
   - Turn over focus

   Here the company would give a detailed business plan which consists of business model, financial plan and exit plan. All these aspects are covered in a document which is called Investment Memorandum (IM). A tentative valuation is also carried out in the IM.

2. **Screening**: Once the deal is sourced the same would be sent for screening by the VC. The screening is generally carried out by a committee consisting of senior level people of the VC. Once the screening happens, it would select the company for further processing.

3. **Due Diligence**: The screening decision would take place based on the information provided by the company. Once the decision is taken to proceed further, the VC would now carry out due diligence. This is mainly the process by which the VC would try to verify the veracity of the documents taken. This is generally handled by external bodies, mainly renowned consultants. The fees of due diligence are generally paid by the VC. However, in many cases, this can be shared between the investor (VC) and Investee (the company) depending on the veracity of the document agreement.

4. **Deal Structuring**: Once the case passes through the due diligence it would now go through the deal structuring. The deal is structured in such a way that both parties win. In many cases, the convertible structure is brought in to ensure that the promoter retains the right to buy back the share. Besides, in many structures to facilitate the exit, the VC may put a condition that promoter has also to sell part of its stake along with the VC. Such a clause is called tag- along clause.

5. **Post Investment Activity**: In this section, the VC nominates its nominee in the board of the company. The company has to adhere to certain

guidelines like strong MIS, strong budgeting system, strong corporate governance and other covenants of the VC and periodically keep the VC updated about certain mile-stones. If milestone has not been met the company has to give explanation to the VC. Besides, VC would also ensure that professional management is set up in the company.

6. **Exit plan**: At the time of investing, the VC would ask the promoter or company to spell out in detail the exit plan. Mainly, exit happens in two ways: one way is 'sell to third party(ies)'. This sale can be in the form of IPO or Private Placement to other VCs. The second way to exit is that promoter would give a buy back commitment at a pre agreed rate (generally between IRR of 18% to 25%). In case the exit is not happening in the form of IPO or third party sell, the promoter would buy back. In many deals, the promoter buyback is the first refusal method adopted i.e. the promoter would get the first right of buyback.

5. STARTUP INDIA INITIATIVE

Startup India scheme was initiated by the Government of India on 16th of January, 2016. The definition of startup was provided which is applicable only in case of Government Schemes.

Startup means an entity, incorporated or registered in India:

- Not prior to five years,
- With annual turnover not exceeding Rs 25 crore in any preceding financial year, and
- Working towards innovation, development, deployment or commercialization of new products, processes or services driven by technology or intellectual property.

Provided that such entity is not formed by splitting up, or reconstruction, of a business already in existence. Provided also that an entity shall cease to be a Startup if its turnover for the previous financial years has exceeded Rs 25 crore or it has completed 5 years from the date of incorporation/ registration. Provided further that a Startup shall be eligible for tax benefits only after it has obtained certification from the Inter-Ministerial Board, setup for such purpose.

THANKS.....

CHAPTER 6

SMALL AND MEDIUM ENTERPRISES

Introduction

Small and medium enterprises (SMEs), particularly in developing countries, are the backbone of the nation's economy. They constitute the bulk of the industrial base and also contribute significantly to their exports as well as to their Gross Domestic Product (GDP).

Micro, Small and Medium Enterprises (MSMEs) contributes

- 8% of the country's GDP,
- 45% of the manufactures output and
- 40% of our exports
- provides employment to about 6 cr. people
- Through 2.6 crore enterprises.

The Micro Small and Medium Enterprises (MSME) sector forms the largest generator of employment in the Indian economy. It forms a major portion of the industrial activity.

Micro, Small and Medium Enterprises Development (MSMED) Act, 2006, is provided for facilitating the promotion and development and enhancing the competitiveness of micro, small and medium enterprises and for matters connected therewith or incidental thereto, emphasized on the following:

- Remove impediments due to multiple laws
- Introduce statutory consultative and recommendatory bodies in MSME policies
- Statutory registration procedures of MSMEs
- Statutory basis for purchase preference and credit policies
- Improve realization of payments of MSMEs

Learning objectives

1. INTRODUCTION
2. DEFINITION
3. FINANCE
4. GLOBAL PERSPECTIVE
5. EXPORT PROMOTION
6. BENEFITS AVAILABLE TO MICRO, SMALL AND MEDIUM ENTERPRISES
7. SME LISTINGS

DEFINITIONS

In accordance with the provision of Micro, Small & Medium Enterprises Development (MSMED)
Act, 2006 the Micro, Small and Medium Enterprises (MSME) are classified in two classes:

(i) Manufacturing Enterprises-The enterprises engaged in the manufacture or production of goods pertaining to any industry specified in the first schedule to the industries (Development and regulation) Act, 1951) or employing plant and machinery in the process of value addition to the final product having a distinct name or character or use. The Manufacturing Enterprise is **defined in terms of investment in Plant & Machinery**.

(ii) Service Enterprises-The enterprises engaged in providing or rendering of services are **defined in terms of investment in equipment.**

The limit for investment in plant and machinery / equipment for manufacturing / service enterprises, as notified, vide S.O. 1642(E) dtd.29-09-2006 are as under

Manufacturing Sector

Enterprises	Investment in plant & machinery
Micro Enterprises	Does not exceed twenty five lakh rupees
Small Enterprises	More than twenty five lakh rupees but does not exceed five crore Rupees
Medium Enterprises	More than five crore rupees but does not exceed ten crore rupees

Service Sector

Enterprises	Investment in equipments
Micro Enterprises	Does not exceed ten lakh rupees:
Small Enterprises	More than ten lakh rupees but does not exceed two crore rupees
Medium Enterprises	More than two crore rupees but does not exceed five crore rupees

FINANCE

No MSME unit can take off without monetary support. This need for finance can be classified into following types:

- Long and medium term loans
- Short term or working capital requirements
- Risk Capital
- Seed Capital/Marginal Money
- Bridge loans

Financial assistance in India for MSME units is available from a variety of institutions. The important ones are:

1. Commercial/Regional Rural/Co-operative Banks.
2. SIDBI: Small Industries Development Bank of India (refinance and direct lending)
3. SFCs/SIDCs: State Financial Corporations (e.g. Delhi Financial Corporation)/State Industrial Development Corporations

Long and medium term loans are provided by SFCs, SIDBI and SIDCs. Banks also finance term loans. This type of financing is needed to fund purchase of land, construction of factory building/shed and for purchase of machinery and equipment.

The short-term loans are required for working capital requirements, which fund the purchase of raw materials and consumables, payment of wages and other immediate manufacturing and administrative expenses. Such loans are generally available from commercial banks.

The commercial banks also sanction composite loan comprising of working capital and term loan up to a loan limit of Rs.1 crore.

For loans from financial institutions and commercial banks a formal application needs to be made. The details of documentation that need to be provided with the loan application are indicated below:

- Balance Sheet and Profit Loss Statement for last three consecutive years of firms owned by promoters
- Income Tax Assessment Certificates of Partners/Directors
- Proof of Possession of Land/Building
- Architect's estimate for construction cost
- Partnership deed/Memorandum and Articles of Associations of Company
- Project Report
- Budgetary Quotations of Plant and Machinery

A sanction or rejection letter is issued by bank after its assessment of the application. After receiving a sanction letter, applicants need to indicate in writing their acceptance of terms and conditions laid down by FI/Banks.

Subsequently, loan is disbursed according to the phased implementation of the project. In today's environment there are other choices apart from commercial banks and Government owned financial institutions. These options include venture capital funds and non-government finance companies.

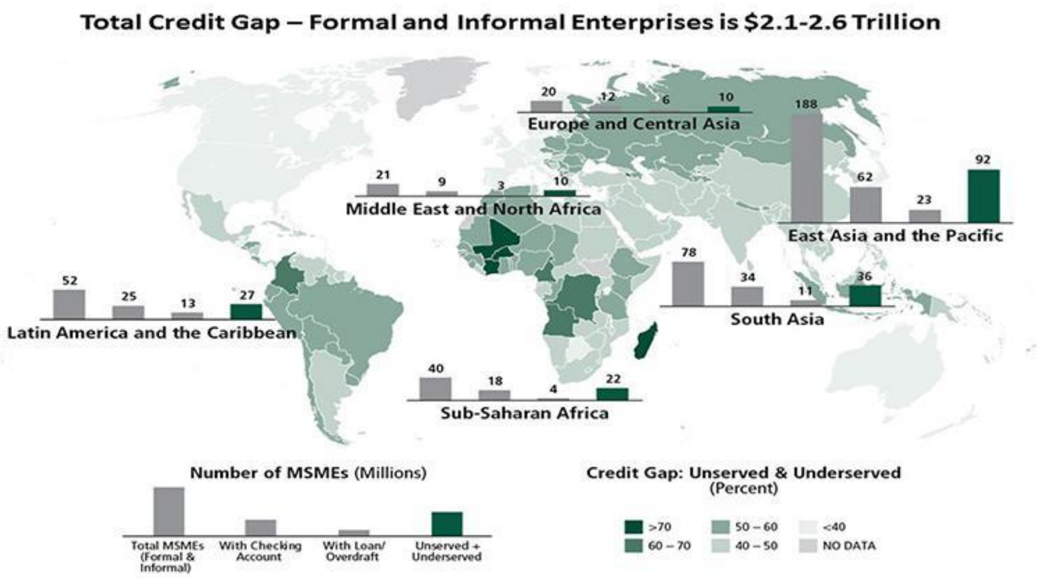
FINANCE

3.1 Overview

Small and Medium Enterprises (SMEs) play a major role in most economies, particularly in developing countries. Formal SMEs contribute up to 45 percent of total employment and up to 33 percent of national income (GDP) in emerging economies. These numbers are significantly higher when informal SMEs are included. According to estimates, 600 million jobs will be needed in the next 15 years to absorb the growing global workforce, mainly in Asia and Sub-Saharan Africa. In emerging markets, most formal jobs are with SMEs, which also create 4 out of 5 new positions. However, access to finance is a key constraint to SME growth; without it, many SMEs languish and stagnate.

SMEs are less likely to be able to secure bank loans than large firms; instead, they rely on internal or "personal" funds to launch and initially run their enterprises. Fifty percent of formal SMEs don't have access to formal credit. The financing gap is even larger when micro and informal enterprises are taken into account. Overall, approximately 70 percent of all MSMEs in emerging markets lack access to credit. While the gap varies considerably between regions, it's particularly wide in Africa and Asia. The current credit gap for formal SMEs is estimated to be US$1.2 trillion; the total credit gap for both formal and informal SMEs is as high as US$2.6 trillion.

A World Bank Group (WBG) study suggests there are between 365-445 million micro, small and medium enterprises (MSMEs) in emerging markets: 25-30 million are formal SMEs; 55-70 million are formal micro enterprises; and 285-345 million are informal enterprises. Moving informal SMEs into the formal sector can have considerable advantages for the SME (for example, better access to credit and government services) and to the overall economy (for example, higher tax revenues, better regulation). Also, improving SMEs' access to finance and finding solutions to unlock sources of capital is crucial to enable this potentially dynamic sector to grow and provide the needed jobs.



3.2 What World Bank does?

A key area of the World Bank Group's work is to improve SMEs' access to finance and find innovative solutions to unlock sources of capital.

Our approach is holistic, combining advisory and lending services to clients to increase the contribution that SMEs can make to the economy.

Advisory Support for Financial Sector Infrastructure:

- Credit Reporting Systems are important as better credit information can lead to increased credit for SMEs.
- Secured Transaction Registries ensure that SMEs can provide moveable collateral as the basis for more lending.
- Modernized Insolvency Regimes can help restructure viable businesses while also promoting the efficient and effective "exit" of those firms that are not economically efficient.
- Streamlining of Payments Systems supports the more efficient movement of money throughout the economy, including G2B, B2B, remittances and other payments.

The World Bank can help establish the legal and institutional framework for strong financial infrastructure systems.

Lending Operations and Policy Work:

- SME Lines of Credit provide dedicated bank financing – frequently for longer tenors than are generally available in the market – to support SMEs for investment, growth, export and diversification.
- Partial Credit Guarantee Schemes (PCGs) – the design of PCGs is crucial to SMEs' success, and support can be provided to design and capitalize such facilities.
- Early Stage Innovation Finance provides equity and debt/quasi-debt to start up or high growth firms which may otherwise not be able to access bank financing.
- Policy work, analytical work, and other Advisory Services can also be provided in support of SME finance activities.

The WBG is increasingly looking to develop more innovative forms of SME financing, including: an extension of early stage innovation financing delivery mechanisms; franchising models; digital finance solutions; crowd funding; P2P financing; and Big Data Solutions.

3.3 Results

A few examples of World Bank's work in the SME Finance space:

- **Lines of Credit:** In 2011 post the revolutions, countries in the Middle East and Africa region requested funding for SMEs to support private sector growth and employment generation. Around one billion dollars have subsequently been lent to Egypt, Tunisia, Morocco, Jordan and Lebanon. This has helped restore private sector funding in economies where severe budgetary strains have crowded out the private sector – particularly the more marginal SME sector. It is estimated that these loans have directly created around 150,000 jobs over the past four years.
- **Secured Transactions Reform**. Between October 2007 and June 2011 the secured transactions reform work supported by the WBG in China cumulatively facilitated US$3.58 trillion accounts receivable financing, of which US$1.09 trillion went to SMEs. As a result of the reform the total number of commercial loans involving movable assets grew by 21% per year over 2008-2010, versus a flat rate over the period 2006-2008.
- **In Colombia**, **in** less than one year more than 100,000 loans secured with movable assets have been registered in the movable collateral registry, of which 5,000 were for SMEs for an aggregate amount of US$3.43 billion (compared to a few hundred per year before the reform).

- **Liberia** started a collateral registry in 2014 to securitize movable Assets, making it possible for farmers and entrepreneurs to use such assets against which they could borrow money. In less than a year since its launch – most of which was during the Ebola crisis – US$227 million in loans were registered.
- In **Afghanistan**, the recent establishment of the Public Credit Registry to determine the credit performance of borrowers has significantly improved access to financing of small and medium enterprises.

EXPORT PROMOTION

With a view to rendering assistance to Micro & Small Manufacturing Enterprises in the field of exploring market potential, export promotion, participation in international trade fair exhibition , the following schemes are being implemented:-

1 Marketing Assistance and Export Promotion Scheme

(A) Plan Scheme 'Training and Manpower Development' consists of the following components:

- Participation in the International Exhibitions/ Fairs.
- Training Programmes on Packaging for Exports
- Marketing Development Assistance Scheme for MSME exporters (MSME-MDA)
- National Award for Quality Products.

(B) Export Promotion from the small-scale sector has been accorded a high priority in the India's export promotion strategy: Apart from the number of incentives and facilities to small-scale exporters, the following plan schemes are in operation for achieving growth in exports:

(I) Participation in the International Exhibitions/ Fairs - Office of the Development Commissioner (MSME) is participating in some of the selected International Exhibitions/ Fairs since 1985. It is purely promotional scheme to give exposure to the products of micro, small enterprises which otherwise are not in a position to participate in the exhibitions/ fairs at their own cost. Under the scheme, exhibits of the selected export-worthy units are displayed in the exhibition that provides an opportunity to MSEs in demonstrating their capabilities before the international community.

(II) Training Programmes on Packaging for Exports - India faces formidable hurdle in meeting and matching the packaging requirements of her exportable products in the markets abroad. The main objective of scheme is to generate much needed consciousness in the industry about the packaging problems of MSME exporters and to educate the entrepreneurs about the latest packaging techniques and designs of the packaging. These programmes on Packaging for Exports are conducted since 1979 by all the field institutes in collaboration with Indian Institute of Packaging and GS1 India (formerly EAN India) (A Bar Code solution provider). The programme is of One, Two & Three days duration and 20 to 35 existing and potential entrepreneurs have been participating in each of the programmes. As per instruction of IF Wing, only 50-60 percent (20 percent in NE region and J&K) of the total cost of the programme are recovered from the participants as participation fee. 20-25 programmes are being conducted every year throughout the country.

(III)Market Development Assistance Scheme for MSME exporters (MSME-MDA) - As part of the comprehensive policy package for MSMEs, MSME-MDA scheme has been announced in August 2000 and came into operation w.e.f. 30 th August, 2001. With a view to increase participation of representatives of participating units, the provision of MSME-MDA Scheme has been modified recently. The major changes in the earlier scheme are as under:

1. (i) The Govt. of India will reimburse the 75% of air fare by economy class and 50% subsidy on space rent. to general category of Micro manufacturing enterprises. (ii)100% to SC/ST women entrepreneur and entrepreneur of NE region (iii) The total subsidy on air fare, space rent & shipping cost of exhibits will be restricted to Rs.1.25 lakhs per unit for manufacturing enterprises or actual, whichever is less. (iv) Any unit can avail of this facility only once a year and (v) Only one person of the participating unit would be eligible for subsidy on air fare. (vi) The booking of minimum 6 Sq. Mtrs. is allowed.
2. The amount of 50% of space hiring charges shall be sent by a DD favouring PAO (MSME), New Delhi through MSME-Dis (Formerly SISIs)along with passport particulars plus first and last two pages of valid passport of their visiting representatives.
3. The circulars are issued to Director, all MSME-DIs (formerly SISIs) for selection of Small/ Micro manufacturing enterprises whose products conforming to the International Standards & Quality.

4. One SIDO officer will be deputed to each fair for coordination of MSME-India stall.

In addition, the scheme also provide for financial assistance upto Rs. 2.00 lakhs for commissioning specific market studies and assistance for initiating/ contesting anti-dumping cases is available to MSME Association limited to 50% of the total cost of Rs. 1.00 lakh whichever is less. Provision for reimbursement of 75% of one-time registration fee paid to GS1 India by MSME unit for adoption of Bar Coding (w.e.f. Ist January, 2002). 75% of Annual recurring fee of bar code is also available (w.e.f. 1st June 2007) for the 1st three years period. To avail financial assistance under the scheme, application may be sent along with requisite documents etc.

(IV) National Award for Quality Products - The objectives of the scheme are as follows:

a. To encourage small scale industries to produce quality products conforming to national and international standards.
b. To propagate a culture of quality consciousness amongst a vast section of Small Scale manufacturing units.
c. To install a sense of confidence of small industry products in the minds of the domestic consumers and to enhance the image of Indian products in export market.

These awards are given on the basis of recommendation by the State/ UT Level Selection Committee and the final selection by the National level Selection Committee for every calendar year.

2 Packaging for Exports

Role of packaging for exports has gained much significance in view of trends in the world markets. The need for better and scientific packaging for exports from small sector was recognised long back. With a view to acquaint MSME Exporters of the latest Packaging standards, techniques etc. training programmes on packaging for exports are organised in various parts of the country. These programmes are organized in association with Indian Institute of Packaging which has requisite expertise on the subject. Basic objective of these programmes is to generate the much needed consciousness in the industry and to educate the entrepreneurs about the scientific techniques of Packaging.

3 Technical & Managerial Consultancy Services

Technical & Managerial Consultancy Services to the MSME manufacturers/exporters is provided through a network of field offices of this office so as to ensure higher level of production and generation of higher exports.

4 National Awards for Quality Products

With a view to encourage the small scale units for producing Quality goods, National Awards for Quality Products are given to the outstanding small scale units, who have made significant contribution for improving quality of their products. The scheme is being operated since 1986. Winners of National Awards get a Trophy, a Certificate and a Cash Prize of Rs.25,000/-($559.6) National Awards encourage Small Scale Industries units to produce quality goods which further enables them to enter into export market.

BENEFITS AVAILABLE TO MSME

1. It enables reservation of certain items for exclusive manufacture of MSME enterprises. It helps them to protect their interest.
2. This policy helps in generating employment for the people and consequently, enhances the standard of living of people.
3. To encourage the small scale units, SEZ's are required to allocate 10% space for small scale units.
4. Under the MSME act, protections are offered in relation to timely payment by buyers to MSME's.
5. Assistance is also available in obtaining finance; help in marketing; technical guidance; training and technology upgradation, etc.
6. Further, an enterprise, whose post-issue face value does not exceed Rs. 25,00,00,000 (Rupees Twenty Five Crores only), is entitled to obtain certain exemptions from the eligibility requirements under the ICDR Regulation.

SME LISTING

1 New Listing

1.1 Incorporation

The Company shall be incorporated under the Companies Act, 2013.

1.2 Financials

- **Post Issue Paid up Capital**

  The post-issue paid up capital of the company shall be at least Rs. 3 crore.

- **Net worth**

  Net worth (excluding revaluation reserves) of at least Rs.3 crore as per the latest audited financial results.

- **Net Tangible Assets**

  At least Rs.3 crore as per the latest audited financial results.

- **Track Record**

  Distributable profits in terms of Section 123 of the Companies Act 2013 for at least two years out of immediately preceding three financial years (each financial year has to be a period of at least 12 months). Extraordinary income will not be considered for the purpose of calculating distributable profits.

  Or, the net worth shall be at least Rs.5 crores.

1.3 Other Requirements

1. It is mandatory for a company to have a website.
2. It is mandatory for the company to facilitate trading in demat securities and enter into an agreement with both the depositories.
3. There should not be any change in the promoters of the company in preceding one year from date of filing the application to BSE for listing under SME segment.

1.4 Disclosures

A certificate from the applicant company / promoting companies stating the following:

a)“The Company has not been referred to the Board for Industrial and Financial Reconstruction (BIFR)."

Note: Cases where company is out of BIFR is allowed.

B) There is no winding up petition against the company, which has been admitted by the court or a liquidator has not been appointed.

2 Migration from BSE SME Platform to the Main Board

The companies seeking migration to Main Board of BSE should satisfy the eligibility criteria. It is mandatory for the company to be listed and traded on the BSE SME Platform for a minimum period of two years and then they can migrate to the Main Board as per the guidelines specified by SEBI vide their circular dated 18th May 2010 and as per the procedures laid down in the ICDR guidelines Chapter X B.

3 Guidelines for Listing

3.1 Capital

The post issue face value capital should not exceed Rs. Twenty-five crores.

3.2 Trading lot size

- The minimum application and trading lot size shall not be less than Rs. 1,00,000/-.
- The minimum depth shall be Rs 1,00,000/- and at any point of time it shall not be less than Rs 1,00,000/-.
- The investors holding with less than Rs 1,00,000/- shall be allowed to offer their holding to the Market Maker in one lot.
- However in functionality the market lot will be subject to revival after a stipulated time.

3.3 Participants

The existing Members of the Exchange shall be eligible to participate in SME Platform.

3.4 Underwriting

The issues shall be 100% underwritten and Merchant Bankers shall underwrite 15% in their own account.

4 Benefits of Listing in SME

4.1 Easy access to Capital

BSE SME provides an avenue to raise capital through equity infusion for growth oriented SME's.

4.2 Enhanced Visibility and Prestige

The SME's benefit by greater credibility and enhanced financial status leading to demand in the company's shares and higher valuation of the company.

4.3 Encourages Growth of SMEs

Equity financing provides growth opportunities like expansion, mergers and acquisitions thus being a cost effective and tax efficient mode.

4.4 Ensures Tax Benefits

In case of listed securities Short Term Gains Tax is 15% and there is absolutely no Long Term Capital Gains Tax.

4.5 Enables Liquidity for Shareholders

Equity financing enables liquidity for shareholders provides growth opportunities like expansion, mergers and acquisitions, thus being a cost effective and tax efficient mode.

4.6 Equity financing through Venture Capital

Provides an incentive for Venture Capital Funds by creating an Exit Route and thus reducing their lock in period.

4.7 Efficient Risk Distribution

Capital Markets ensure that the capital flows to its best uses and those riskier activities with higher payoffs are funded.

4.8 Employee Incentives

Employee Stock Options ensures stronger employee commitment, participation and recruitment incentive.

QUESTIONS AND ANSWERS

1 What is the status of lending by banks to this sector?

Answer

Bank's lending to the Micro and Small enterprises engaged in the manufacture or production of goods specified in the first schedule to the Industries (Development and regulation) Act, 1951 and notified by the Government from time to time is reckoned for priority sector advances. However, bank loans up to Rs.5 crore per borrower / unit to Micro and Small Enterprises engaged in providing or rendering of services and defined in terms of investment in equipment under MSMED Act, 2006 are eligible to be reckoned for priority sector advances. Lending to Medium enterprises is not eligible to be included for the purpose of computation of priority sector lending. Detailed guidelines on lending to the Micro, Small and Medium enterprises sector are available in our Master Circular no. RPCD.MSME & NFS.BC.No.5/06.02.31/2013-14 dated July 1, 2013 . The Master circulars are issued by RBI, to banks, on various matters are available on RBI website www.rbi.org.in and updated in July each year.

2 What is meant by Priority Sector Lending?

Answer

Priority sector lending include only those sectors, as part of the priority sector that impact large sections of the population, the weaker sections and the sectors which are employment-intensive such as agriculture, and Micro and Small enterprises. Detailed guidelines on Priority sector lending are available in RBI Master Circular on Priority sector lending no. RPCD.CO.Plan.BC 9 /04.09.01/2013-14 dated July 1, 2013 . The Master circulars issued by RBI, to banks, on various matters are available on its website www.rbi.org.in and updated in July each year.

3 Are there any targets prescribed for lending by banks to MSMEs?

Answer

As per extant policy, certain targets have been prescribed for banks for lending to the Micro and Small enterprise (MSE) sector. In terms of the recommendations of the Prime Minister's Task Force on MSMEs banks have been advised to achieve a 20 per cent year-on-year growth in credit to micro and small enterprises, a 10 per cent annual growth in the number of micro enterprise accounts and 60% of total lending to MSE sector as on preceding March 31st to Micro enterprises. In order to ensure that sufficient credit is available to micro enterprises within the MSE sector, banks should ensure that

40 per cent of the total advances to MSE sector should go to micro (manufacturing) enterprises having investment in plant and machinery up to Rs. 10 lakh and micro (service) enterprises having investment in equipment up to Rs. 4 lakh ; 20 per cent of the total advances to MSE sector should go to micro (manufacturing) enterprises with investment in plant and machinery above Rs. 10 lakh and up to Rs. 25 lakh, and micro (service) enterprises with investment in equipment above Rs. 4 lakh and up to Rs. 10 lakh. Thus, 60 per cent of MSE advances should go to the micro enterprises. For details, the RBI Master Circular RPCD.MSME & FS.BC.No.5/06.02.31/2013 -14 dated July 1, 2013 on 'Lending to Micro, Small and Medium Enterprises (MSME) Sector, may please be seen.

4 Are there specialized bank branches for lending to the MSMEs?

Answer

Public sector banks have been advised to open at least one specialized branch in each district. The banks have been permitted to categorize their MSME general banking branches having 60% or more of their advances to MSME sector, as specialized MSME branches for providing better service to this sector as a whole. As per the policy package announced by the Government of India for stepping up credit to MSME sector, the public sector banks will ensure specialized MSME branches in identified clusters/centres with preponderance of small enterprises to enable the entrepreneurs to have easy access to the bank credit and to equip bank personnel to develop requisite expertise. Though their core competence will be utilized for extending finance and other services to MSME sector, they will have operational flexibility to extend finance/render other services to other sectors/borrowers.

5 How many such specialized branches for lending to MSMEs are there?

Answer

As on March 2013 there are 2032 specialized MSME branches.

6 How do banks assess the working capital requirements of borrowers?

Answer

The banks have been advised by RBI to put in place loan policies governing extension of credit facilities for the MSE sector duly approved by their Board of Directors Vide RBI circular; RPCD.SME & FS.BC.No.102/06.04.01/2008-09 dated May 4, 2009). Banks have, however, been advised to sanction limits after proper appraisal of the genuine working capital requirements of the borrowers keeping in mind their business cycle and short term credit requirement. As per Nayak Committee Report, working capital limits to SSI units is computed on the basis of minimum 20% of their estimated turnover up to credit limit of Rs.5crore. For more details paragraph 4.12.2 of the RBI Master Circular on lending to the MSME sector dated July 1, 2010 may please be seen.

7 How do banks assess the working capital requirements of borrowers?

Answer

The banks have been advised by RBI to put in place loan policies governing extension of credit facilities for the MSE sector duly approved by their Board of Directors Vide RBI circular; RPCD.SME & FS.BC.No.102/06.04.01/2008-09 dated May 4, 2009). Banks have, however, been advised to sanction limits after proper appraisal of the genuine working capital requirements of the borrowers keeping in mind their business cycle and short term credit requirement. As per Nayak Committee Report, working capital limits to SSI units is computed on the basis of minimum 20% of their estimated turnover up to credit limit of Rs.5 crore. For more details paragraph 4.12.2 of the RBI Master Circular on lending to the MSME sector dated July 1, 2010 may please be seen.

8 Is there any provision for grant of composite loans by banks?

Answer

A composite loan limit of Rs.1crore can be sanctioned by banks to enable the MSME entrepreneurs to avail of their working capital and term loan requirement through Single Window in terms of RBI Master Circular on lending to the MSME sector dated July 1, 2010. All scheduled commercial banks have been advised by our circular RPCD.SME&NFS. BC.No.102/06.04.01/2008-09 on May 4, 2009 that the banks which have sanctioned term loan singly or jointly must also sanction working capital (WC) limit singly (or jointly, in the ratio of term loan) to avoid delay in commencement of commercial production thereby ensuring that there are no cases where term loan has been sanctioned and working capital facilities are yet to be sanctioned. These instructions have been reiterated to schedule commercial banks on March 11, 2010.

9 What is Cluster financing?

Answer

Cluster based approach to lending is intended to provide a full-service approach to cater to the diverse needs of the MSE sector which may be achieved through extending banking services to recognized MSE clusters. A cluster based approach may be more beneficial (a) in dealing with well-defined and recognized groups (b) availability of appropriate information for risk assessment

(c) monitoring by the lending institutions and (d) reduction in costs. The banks have, therefore, been advised to treat it as a thrust area and increasingly adopt the same for SME financing. United Nations Industrial Development Organisation (UNIDO) has identified 388 clusters spread over 21 states in various parts of the country. The Ministry of Micro, Small and Medium Enterprises has also approved a list of clusters under the Scheme of Fund for Regeneration of Traditional Industries (SFURTI) and Micro and Small Enterprises Cluster Development Programme (MSE-CDP) located in 121 Minority Concentration Districts. Accordingly, banks have been advised to take appropriate measures to improve the credit flow to the identified clusters. Banks have also been advised that they should open more MSE focused branch offices at different MSE clusters which can also act as counseling. Centres for MSEs. Each lead bank of the district may adopt at least one cluster (Refer circular RPCD.SME & NFS.No.BC.90/06.02.31/2009-10 dated June 29, 2010)

10 Is credit rating mandatory for the MSE borrowers?

Answer

Credit rating is not mandatory but it is in the interest of the MSE borrowers to get their credit rating done as it would help in credit pricing that is cost of funds (interest and other charges etc.) of the loans taken by them from banks.

THANKS…..