CAPITAL MARKET ANALYSIS AND CORPORATE LAWS

FINAL
GROUP - III
PAPER - 11

STUDY NOTES

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SYLLABUS

Paper 11 : Capital Market Analysis & Corporate Laws
(One paper : 3 hours : 100 Marks)

OBJECTIVES

Comprehensive knowledge of Companies Act with respect to Corporate functions. Knowledge, comprehension and application of Corporate Governance Principles and ethical values of the profession. To provide knowledge, comprehension and application of the various regulations under vogue for financial and capital markets. Thorough understanding of the regulations framed by different Government institutions and authorities relating to capital markets.

Learning Aims

- Thorough understanding of the Companies Act
- Apply knowledge in the formation of operational decisions
- Understand the principles of corporate governance and ability to implement and report compliance.
- Understand the professional and ethical values.
- Understand the Capital Market operations
- Risk Management in Capital Markets

Skill set required

Level C: Requiring all six skill levels - knowledge, comprehension, application, analysis, synthesis, and evaluation

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SECTION I : CAPITAL MARKET ANALYSIS			60%
1.	Introduction of Capital Market & Capital Market Instruments	10%	
2.	Capital & Financial Market Regulation	10%	
3.	Capital Market Analysis	40%	
SECTION II : CORPORATE LAW & CORPORATE GOVERNANCE			40%
4.	Corporate functionalism in the context of Companies Act & Corporate Laws	20%	
5.	Corporate Governance	20%	

SECTION I : CAPITAL MARKET ANALYSIS

1. Introduction of Capital Market & Capital Market Instruments

- Capital Market / Security Market
- Primary Market / New Issues / IPO Market
- Secondary Market / Stock Market / Stock Exchange
- Depositaries
- Private placements of shares / Buy back of shares
- CAPM vs Market Model

- Issue mechanism
- Forward Contract and future contracts
- Clearing mechanism

2. Capital & Financial Market Regulation

- Financial System and Capital Market Instruments,
- SEBI – Regulation of Market and Control,
- Collective Investment Schemes, Depositories, Dematerialization of Securities,
- Regulation of banking & finance companies – role of Reserve Bank of India and Banking Ombudsmen; Regulation of Insurance sector by Insurance Regulation and Development Authority (IRDA),
- Cyber Law and regulation of e-commerce and electronic financial transactions,
- Contemporary issues and Development

3. Capital Market Analysis

- Stock market efficiency;
- Risk and Return;
- Investment Analysis;
- Cost of Finance And Financing Structures;
- Capital Asset Pricing Model;
- Products on Stock Exchanges: Equity / Stock Markets, Basket Trading, Derivatives, Debt Markets-Retail and Wholesale, Interest Rate Futures, Exchange Traded Funds, Mutual Funds (Close Ended).
- Risk Management System: Capital Adequacy Requirements, Intra day Trading limits, Gross Exposure Limit, Margining Procedure.
- Derivatives Markets: Introduction to Options and Futures, Explanation of Market Terminologies, Pay-off Structure, Basic Trading Strategies, Weekly Options.
- Debt Markets: Debt Products traded in Stock Exchanges, Wholesale Debt Markets, and Retail Debt Markets.
- Commodity Market & Trading Corporate Actions: Bonus, Rights, Dividend, Buy Back etc., Regulations to be followed by the Corporates, Impact on the Shareholders.
- Portfolio Management
- Basic Principle, Functions and Activities
- Factors effecting investment decision in portfolio management
- Investment strategy
- Portfolio theory
- Use of matrix approach in investment decisions
- Mutual Funds
- Role of Mutual Fund in financial market
- Advantage of investment in mutual fund
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- Financial Structure and Membership,
- Management and Control of Companies,
- Inter-corporate loans, Investments, Guarantees and Security,
- Maintenance of Statutory Books/Registers and Filing of Returns,
- Winding-up,
- Joint Ventures,
- Corporate Accountability,
- Competition Act and Competition Commission,
- Information Act and its corporate implication, Emerging Issues and Concepts
- Merger and Acquisition
- Reason for merger acquisition
- Objective of acquisition
- Gain from merger
- Problem of merger and acquisition
- Issues related to Companies Act 1956, Industrial (Development & Regulation) Act, Sick Industrial (Special Provision) Act, Income Tax Act, SEBI Regulations
- Function of Court
- Reconstruction
- De-merger or division

5. Corporate Governance

- Genesis, Narasimhan Committee and other Committee Recommendations on Corporate Governance,
- Effective Board of Directors and its role,
- Independent Directors and Audit Committee, Remuneration Committee, Nomination Committee;
- Evaluation of effectiveness of Internal Control-Management Accounting applications and Directors' Responsibility Statement;

- Going Concern status-financial and other indicators, role of management audit, evaluation of going concern uncertainties;
- Related party transactions and disclosures;
- Project management audit and corporate governance;
- Relevance of Risk Evaluation and Risk management;
- Evaluation of key financial decisions and disclosures;
- Management Audit for investors' protection in the context of Corporate Governance,
- Corporate Governance Norms as prescribed by SEBI

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STUDY NOTE - 1

INTRODUCTION OF CAPITAL MARKET & CAPITAL MARKET INSTRUMENTS

This Study Note includes

- Introduction
- Financial System and Capital Market Instruments
- Capital Market/ Security Market
- Primary Market/New Issue Market/IPO Market
- Secondary Market/ Stock Market/ Stock Exchange
- Depositories
- Private placement of Shares/ Buy back of Share
- Forward Contract and Future Contract
- Issue Mechanism
- Clearing Mechanism and Settlement Cycle
- Stock Market Indices

1.1 INTRODUCTION

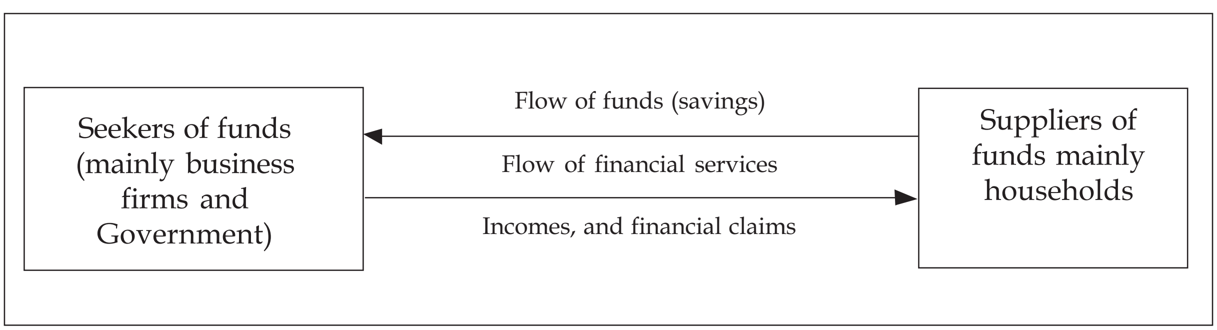
Financial market is a place or a system where financial assets or instruments are created and exchanged by market participants. Financial markets play a significant role in performing the resource management in an economy. They help capital creation by acting as a bridge between the savers and the spenders through various financial instruments like equity, debt or a mix of both. In the process it facilitates price discovery and providing liquidity for financial assets.

In every economic system, some units which may be individuals or institutions, are surplus-generating (savers) while others are deficit units (spenders). Savers can either invest or hold their savings in liquid cash. Holding liquid cash is required to meet transaction or precautionary or speculative needs. The surplus-generating units could invest in different forms. They could invest in physical assets viz. land and building, plant and machinery or in precious metal viz. gold and silver, or in financial assets viz. shares and debentures, units of the Mutual Funds, treasury bills, commercial papers, etc., The financial assets are also called financial claims or financial securities or paper assets. These financial securities are issued by deficit units in exchange for their savings. It is this reason that surplus-generating units are called investors while deficit units are called issuers. These investors and issuers of financial securities constitute two important elements of the securities market. The third critical element of markets is the intermediaries who act as conduits between the investors and issuers. Regulatory bodies, which regulate the functioning of the securities markets, constitute the last but very significant element of securities markets. Thus, there are four important elements of securities markets namely investors, issuers, intermediaries and regulators. Now depending upon the nature of the relationship among these elements of securities markets, the markets are classified as primary and secondary. Further, depending upon the time, the markets are classified as short term and long term and depending upon the issuers, these are classified government securities or corporate securities. Government securities are also called gilt-edged securities. To pick up the right kind of securities, an investor or a portfolio manager should be fully conversant with the different segments of securities markets, different types of securities which are traded and different trading arrangement which exist in the market. In this unit, we shall distinguish between primary market and secondary market securities and discuss various traded securities and trading arrangements prevalent in India. Let us begin distinguishing primary and secondary markets.

1.2. FINANCIAL SYSTEMS AND CAPITAL MARKET INSTRUMENTS

The economic development of a nation is reflected by the progress of the various economic units, broadly classified into corporate sector, government and household sector. While performing their activities these units will be placed in a surplus/deficit/balanced budgetary situations. There are areas or people with surplus funds and there are those with a deficit. A financial system or financial sector functions as an intermediary and facilitates the flow of funds from the areas of surplus to the areas of deficit. A Financial System is a composition of various institutions, markets, regulations and laws, practices, money manager, analysts, transactions and claims and liabilities.

Financial System;



The word "system", in the term "financial system", implies a set of complex and closely connected or interlinked institutions, agents, practices, markets, transactions, claims, and liabilities in the economy. The financial system is concerned about money, credit and finance-the three terms are intimately related yet are somewhat different from each other. Indian financial system consists of financial market, financial instruments and financial intermediation. These are briefly discussed below;

FINANCIAL MARKETS

A Financial Market can be defined as the market in which financial assets are created or transferred. As against a real transaction that involves exchange of money for real goods or services, a financial transaction involves creation or transfer of a financial asset. Financial Assets or Financial Instruments represents a claim to the payment of a sum of money sometime in the future and /or periodic payment in the form of interest or dividend.

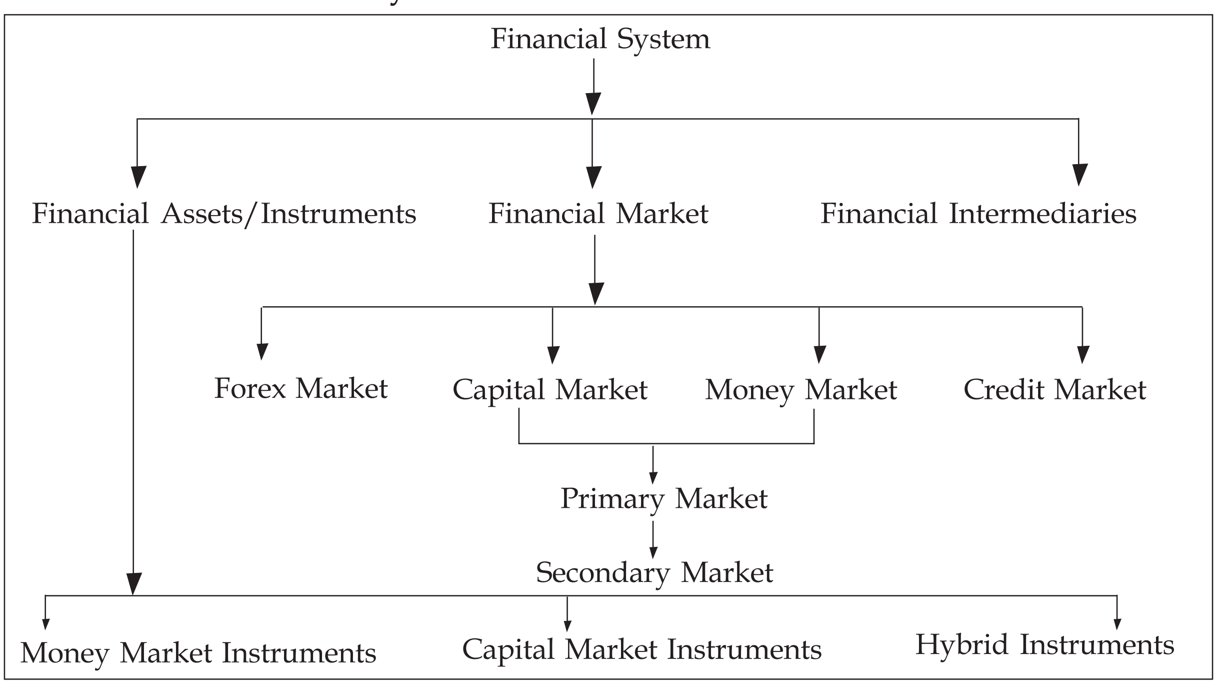
Money Market- The money market as a wholesale debt market for low-risk, highly-liquid, short-term instrument. Funds are available in this market for periods ranging from a single day up to a year. This market is dominated mostly by government, banks and financial institutions.

Capital Market - The capital market is designed to finance the long-term investments. The transactions taking place in this market will be for periods over a year.

Forex Market - The Forex market deals with the multicurrency requirements, which are met by the exchange of currencies. Depending on the exchange rate that is applicable, the transfer of funds takes place in this market. This is one of the most developed and integrated market across the globe.

Credit Market- Credit market is a place where banks, FIs and NBFCs purvey short, medium and long-term loans to corporate and individuals.

Constituents of a Financial System



The Indian financial sector has two broad segments –Organized and Unorganized. The organized segment includes commercial banks, development financial institutions, insurance companies and other non-banking financial institutions including mutual funds, unit trusts, etc. The unorganized sector of the Indian financial market consists mainly of Indigenous bankers, money lenders, Nidhi's and chitfunds. The organized and the unorganized sector consist of the money market, debt market and the capital market. Money market is a mechanism through which short term funds are loaned and borrowed. The money market instruments comprise of call money, certificate of deposits CD, commercial paper, mutual funds, commercial bills, and treasury bills.

The capital market comprises of the primary market and the secondary. The primary market helps both corporate and the government raise funds by issuing securities. The secondary market through continuous trading activities, provide liquidity in the system. It is also a reflection of the changing mood and perception of investors. Mutual funds play an important role in both markets and strengthen the transfer mechanism.

FINANCIAL INTERMEDIATION

Having designed the instrument, the issuer should then ensure that these financial assets reach the ultimate investor in order to garner the requisite amount. When the borrower of funds approaches the financial market to raise funds, mere issue of securities will not suffice. Adequate information of the issue, issuer and the security should be passed on to market place. There should be a proper channel within the financial system to ensure such transfer. To serve this purpose, **Financial intermediaries** came into existence. Financial intermediation in the organized sector is conducted by a wide range of institutions functioning under the overall surveillance of the Reserve Bank of India. In the initial stages, the role of the intermediary was mostly related to ensure transfer of funds from the lender to the borrower. This service was offered by banks, FIs, brokers, and dealers. However, as the financial system widened along with the developments taking place in the financial markets, the scope of its operations also widened. Some of the important intermediaries operating in the financial markets include; investment bankers, underwriters, stock exchanges, registrars, depositories, custodians, portfolio managers, mutual funds, financial advisors, financial consultants, primary dealers, satellite dealers, self regulatory organizations, etc. Though the markets are different, there may be a few intermediaries offering their services in more than one market e.g. underwriter. However, the services offered by them vary from one market to another.

Intermediary	Market	Role
Stock Exchange	Capital Market	Secondary Market to securities
Investment Bankers	Capital Market, Credit Market	Corporate advisory services, Issue of securities
Underwriters	Capital Market, Money Market	Subscribe to unsubscribed portion of securities
Registrars, Depositories, Custodians	Capital Market	Issue securities to the investors on behalf of the company and handle share transfer activity
Primary Dealers Satellite Dealers	Money Market	Market making in government securities
Forex Dealers	Forex Market	Ensure exchange in currencies

DEFINITION OF CAPITAL MARKET

- It is a place where people buy and sell financial instruments be it equity or debt.
- It is a mechanism to facilitate the exchange of financial assets.

Examples of capital market

In India – BSE & NSE are the two most active Stock Exchanges constituting majority of the capital market transactions.

International - NYSE, LSE & TSE are the major Stock Exchanges.

FINANCIAL INSTRUMENTS

(A) Money Market Instruments

The money market can be defined as a market for short-term money and financial assets that are near substitutes for money. The term short-term means generally a period upto one year and near substitutes to money is used to denote any financial asset which can be quickly converted into money with minimum transaction cost.

Some of the important money market instruments are briefly discussed below;

1. **Call/Notice Money**
2. **Treasury Bills**
3. **Term Money**
4. **Certificate of Deposit**
5. **Commercial Papers**

1. Call /Notice-Money Market

Call/Notice money is the money borrowed or lent on demand for a very short period. When money is borrowed or lent for a day, it is known as Call (Overnight) Money. Intervening holidays and/or Sunday are excluded for this purpose. Thus money, borrowed on a day and repaid on the next working day, (irrespective of the number of intervening holidays) is "Call Money". When money is borrowed or lent for more than a day and up to 14 days, it is "Notice Money". No collateral security is required to cover these transactions.

2. Inter-Bank Term Money

Inter-bank market for deposits of maturity beyond 14 days is referred to as the term money market. The entry restrictions are the same as those for Call/Notice Money except that, as per existing regulations, the specified entities are not allowed to lend beyond 14 days.

3. Treasury Bills.

Treasury Bills are short term (up to one year) borrowing instruments of the union government. It is an IOU of the Government. It is a promise by the Government to pay a stated sum after expiry of the stated period from the date of issue (14/91/182/364 days i.e. less than one year). They are issued at a discount to the face value, and on maturity the face value is paid to the holder. The rate of discount and the corresponding issue price are determined at each auction.

4. Certificate of Deposits

Certificates of Deposit (CDs) is a negotiable money market instrument issued in dematerialised form or as a Usuance Promissory Note, for funds deposited at a bank or other eligible financial institution for a specified time period. Guidelines for issue of CDs are presently governed by various directives issued by the Reserve Bank of India, as amended from time to time. CDs can be issued by (i) scheduled commercial banks excluding Regional Rural Banks (RRBs) and Local Area Banks (LABs); and (ii) select all-India Financial Institutions that have been permitted by RBI to raise short-term resources within the umbrella limit fixed by RBI. Banks have the freedom to issue CDs depending on their requirements. An FI may issue CDs within the overall umbrella limit fixed by RBI, i.e., issue of CD together with other instruments viz., term money, term deposits, commercial papers and intercorporate deposits should not exceed 100 per cent of its net owned funds, as per the latest audited balance sheet.

5. Commercial Paper

CP is a note in evidence of the debt obligation of the issuer. On issuing commercial paper the debt obligation is transformed into an instrument. CP is thus an unsecured promissory note privately placed with investors at a discount rate to face value determined by market forces. CP is freely negotiable by endorsement and delivery. A company shall be eligible to issue CP provided - (a) the tangible net worth of the company, as per the latest audited balance sheet, is not less than Rs. 4 crore; (b) the working capital (fund-based) limit of the company from the banking system is not less than Rs.4 crore and (c) the borrowed account of the company is classified as a Standard Asset by the financing bank/s. The minimum maturity period of CP is 7 days. The minimum credit rating shall be P-2 of CRISIL or such equivalent rating by other agencies.

Indian Capital Market Participants

Securities market in India has grown exponentially as measured in terms of amount raised from the market, number of stock exchanges and other intermediaries, the number of listed stocks, market capitalisation, trading volumes and turnover on stock exchanges and investor population. Along with this, the profiles of the investors, issuers and intermediaries have changed significantly. The market has witnessed fundamental institutional changes resulting in drastic reduction in transaction costs and significant improvements in efficiency, transparency and safety. Indian market is now comparable to many developed markets. The state of primary market of late has not been very encouraging as far as the industry is concerned. The number of issues and the amounts mobilised through the primary market is predominantly by financial institutions and banks as opposed to industry. This is a clear reflection of recessionary trends in the economy over the 5 years. The current state of the Indian capital markets and its market intermediaries is in the statistical table 1.1 given below:

SEBI Registered Market Intermediaries

Market Intermediaries	As on 31st March				
	2001	2002	2003	2004	2005
Stock Exchanges (Cash market)	23	23	23	23	22
Stock Exchanges (Derivatives market)	2	2	2	2	2
Brokers (Cash segment)	9,782	9,687	9,519	9,368	9,129
Corporate Brokers (Cash segment)	3,808	3,862	3,835	3,746	3,733
Sub-brokers (Cash segment)	9,957	12,208	13,291	12,815	13,68
Brokers (Derivative)	519	705	795	829	994
Foreign Institutional Investors	527	490	502	540	685
Custodians	14	12	11	11	11
Depositories	2	2	2	2	2
Repository Participants	335	380	438	431	477
Merchant Bankers	233	145	124	123	128
Bankers to an Issue	69	68	67	55	59
Underwriters	57	54	43	47	59
Debenture Trustees	37	40	35	34	35
Credit Rating Agencies	4	4	4	4	4
Venture Capital Funds	35	34	43	45	50
Foreign Venture Capital Investors	1	2	6	9	14
Registrar to an Issue and Share Transfer Agents	186	161	143	78	83
Portfolio Managers	39	47	54	60	84
Mutual Funds	39	38	38	37	39
Collective Investment Schemes	0	0	0	0	0
Approved Intermediaries (Stock Lending Schemes)	8	10	4	3	3

1.3. CAPITAL MARKET & CAPITAL MARKET INSTRUMENTS

The capital market generally consists of the following long term period i.e., more than one year period, financial instruments; In the equity segment Equity shares, preference shares, convertible preference shares, non-convertible preference shares etc and in the debt segment debentures, zero coupon bonds, deep discount bonds etc.

Section 85 of the Companies Act, 1956 permits public limited companies (having share capital) to have two kinds of shares namely - equity and preference. Section 86 furthers this position by declaring that "the share capital of a company limited by shares shall be of two kinds only, namely:

(i) Equity share capital

An equity interest in a company may be said to represent a share of the company's assets and a share of any profits earned on those assets after other claims have been met. The equity shareholders are the owners of the business; they purchase shares, the money is used by the company to buy assets, the assets are used to earn profits, which belong to the ordinary shareholders. After satisfying the rights of preference shares, the equity shares shall be entitled to share in the remaining amount of distributable net profits of the company. The dividend on equity shares is not fixed and may vary from year to year depending upon the amount of profits available. The rate of dividend is recommended by the Board of Directors of the company and declared by shareholders in the Annual General Meeting. Equity shareholders have a right to vote on every resolution placed in the meeting and the voting rights shall be in proportion to the paid-up capital. Equity capital can either be ;

(i) with voting rights; or

(ii) with differential rights as to dividend, voting or otherwise in accordance with such rules and subject to such conditions as may be prescribed.

The Companies (Amendment) Act, 2000 amended the provisions of the Act permitting companies to issue shares with differential voting right. The Central Government came out with the Companies (Issue of Shares with Differential Voting Rights) Rules, 2001 permitting the companies limited by shares to issue shares with differential rights as to dividend, voting or otherwise subject to the following conditions:

- The company has distributable profits in terms of section 205 of the Companies Act for preceding three financial years preceding the year in which it was decided to issue shares.
- The company has not defaulted in filing annual accounts and annual returns for the three financial years immediately preceding the financial year of the year in which it was decided to issue such shares.
- The company has not failed to repay its deposits or interest thereon on due date or redeem its debentures on due date or pay dividend.

- The Articles of Association of the company authorises the issue of shares with differential voting rights.
- The company has not been convicted of any offence arising under SEBI Act, 1992. Securities Contracts (Regulation) Act, 1956, Foreign Exchange Management Act, 1999.
- The company has not defaulted in meeting investors' grievances.
- The company has obtained the approval of shareholders in General Meeting by passing resolution under section 94.

Every company which issues shares with differential rights shall maintain a register as required under section 150 of the Companies Act, 1956 containing the particulars of differential rights to which the holder is entitled to.

Abolition of Standard Denomination for Equity Shares

Previously the Central Government has issued various circulars directing the companies to have uniform denomination of Rs.10 or Rs.100 for equity shares. The SEBI has modified the denomination of securities as under:

- The companies shall have the freedom to issue shares in any denomination to be determined by them in accordance with section 13(4) of the Companies Act, 1956. While doing so, the companies will have to ensure that shares are not issued in denomination of less than a rupee or decimal of rupee.
- The companies which seek to change the standard denomination may do so after amending the Memorandum and Articles of Association, if required.
- The existing companies, which have issued shares at Rs.10 and Rs.100, may also change the standard denomination into any denomination not below Re.1 by splitting or consolidating the existing shares after amending their Memorandum and Articles of Association. At any given time there shall be only one denomination for the shares of a company.
- Only companies whose shares are dematerialised shall be eligible to alter the 'standard denomination' and get the benefit of this circular.
- The stock exchanges may also make necessary changes in their existing trading and settlement software to give effect to the above decision. It is clarified that the companies which are already listed on one or more stock exchanges would be allowed to change the standard denomination of their equity shares only if they are in the compulsory demat list for all the investors announced by SEBI from time to time.
- With a view to enable the investors to take informed investment decision, the stock exchanges are also directed to reflect the denomination value of the shares as fixed by the company alongwith the market quotations.
- The companies desirous to avail the facility would be required to adhere to disclosure and accounting norms as may be specified from time to time.

(ii) Preference share capital:

Preference share is a hybrid security because it has features of both ordinary shares and bonds. Preference shareholders have preferential rights in respect of assets and dividends. In the event of winding up the preference shareholders have a claim on available assets before the ordinary shareholders. In addition, preference shareholders get their stated dividend before equity shareholders can receive any dividends. The dividends on preference shares are fixed and they must be declared before a legal obligation exists to pay them. The fixed nature of dividend is similar to that of interest on debentures and bonds. The declaration feature is similar to that of equity shareholders dividends.

The general forms of preference shares are as follows:

Cumulative and Non-cumulative Preference Shares The cumulative preference share gives a right to demand the unpaid dividend of any year, during the subsequent years when the profits are ample.

Cumulative Convertible Preference Shares The cumulative convertible preference (CCP) share is an instrument that embraces features of both equity shares and preference shares, but which essentially is a preference share. The CCPs are convertible into equity shares at a future specified date at a predetermined conversion rate once it is converted into equity shares, it passes all the characteristics of an equity share.

Participating and Non-participating Preference Shares Participating preference shares are those shares which are entitled to a fixed preferential dividend and, in addition, carry a right to participate in the surplus profits alongwith equity shareholders after dividend at a certain rate has been paid to equity shareholders.

Redeemable and Irredeemable Preference Shares Subject to an authority in the articles of association, a public limited company may issue redeemable preference shares to be redeemed either at a fixed date or after a certain period of time during the life time of the company. The Companies Act, 1956 prohibits the issue of any preference share which is irredeemable or is redeemable after the expiry of a period of twenty years from the date of issue.

(iii) Deferred/Founders Shares

A private company may issue deferred or founder's shares. Such shares are normally held by promoters and directors of the company. That is why they are usually called 'founders shares'. These shares are usually of a smaller denomination, say one rupee each. However they are generally given equal voting rights with equity shares which may be of higher denomination, say Rs. 10 each. Thus, by investing relatively lower amounts, the promoters may gain control over the management of the company. As regards the payment of dividends to holders of such shares, the articles usually provide that these shares will carry a dividend fixed in relation to the profits available after dividends have been declared on the preference and equity shares.

Shares Issued at a Premium

Section 78 of the Companies Act, 1956 deals with the provisions relating to application of premiums received on issue of shares. When a company issues shares at a premium, whether for cash or consideration other than cash, the premium collected on those shares shall be transferred to a separate account called 'Securities Premium Account'. The provisions of the act relating reduction of share capital shall also apply to the Securities Premium Account as it were a paid-up share capital of the company.

Shares Issued for Consideration Other Than Cash

A company may also issue shares as partly paid or fully paid for consideration other than cash under the circumstances mentioned below:

- To the underwriters of shares and promoters by way of payment of remuneration or for expenses incurred.
- To the vendors from whom the running business is purchased, as purchase price or consideration.
- Issue of bonus shares out of the reserves to the existing shareholders of the company.

Sweat Equity Shares

Under section 79A of the Companies Act, 1956, a company can issue sweat equity shares to its employees or directors at discount or for consideration other than cash for providing know-how or making available rights in the nature of intellectual property rights or value addition etc..

Hybrid Instruments

Hybrid instruments have both the features of equity and debenture. This kind of instruments is called as hybrid instruments. Examples are convertible debentures, warrants etc.

Financing from capital markets - There are two ways a company can raise money from the financial markets namely - Debt and Equity.

NEED FOR STOCK MARKET

1. It helps in the capital formation in the economy of the country
2. It facilitates and maintains active trading.
3. It provides liquidity to financial assets.
4. It also helps in price discovery process

SHORTCOMINGS OF STOCK MARKETS

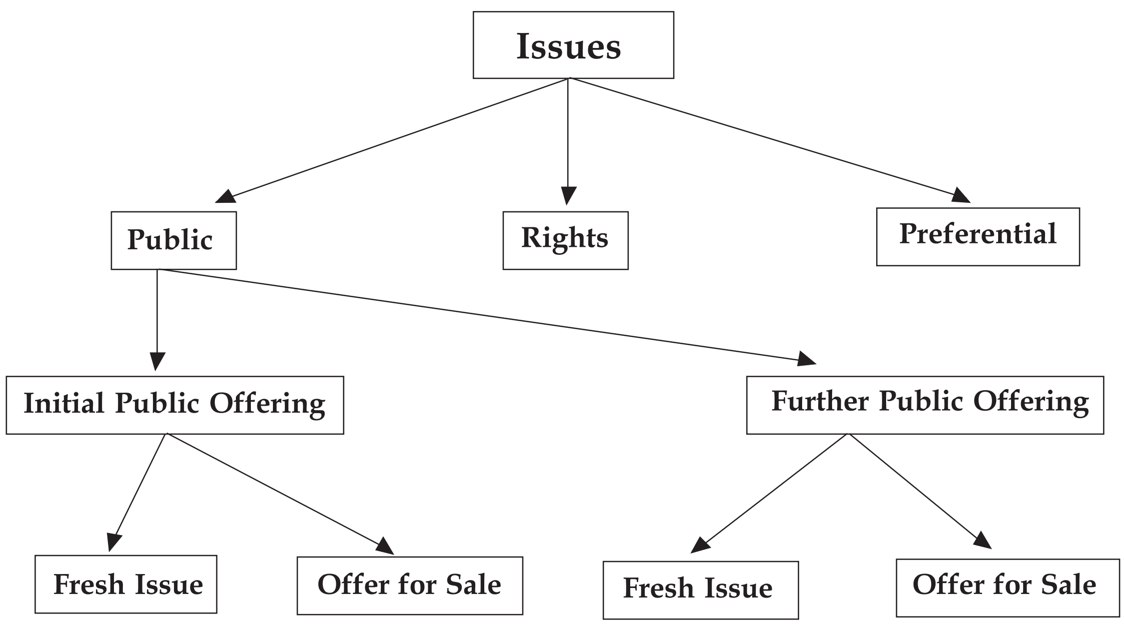
- Scarcity of floating stocks: Financial institutions, banks and insurance companies own 80 percent of the equity capital of the private sector.
- Speculation: 85 percent of the transactions on the NSE and BSE are speculative in nature.

- Price rigging: evident in relatively unknown and low quality scripts. Causes short term fluctuations in the prices.
- Insider trading: Obtaining market sensitive information to make money in the markets.

1.4. PRIMARY OR NEW ISSUE MARKET OR IPO MARKET

The Capital Market is broadly classified as Primary market and Secondary Market. The Primary market is the segment in which new issues are made whereas secondary market is the segment in which outstanding securities are traded. It is for this reason that the Primary Market is also called New issues Market or IPO/FPO market and the Secondary market is called Stock Market.

Classification of Issues



In the primary market, new issues may be made in five ways namely, public issue, rights issue, Bonus Issue, Preferential issue and private issue. **Public Issue** involves sale of securities to members of public either at par or at a premium. **Rights Issue** involves sale of securities to the existing shareholders/debenture holders at a fixed price. **Bonus Issue** is to offer shares to existing share holders at free of cost. **Preferential Issue** is an offer of equity by a listed company to a particular or a group of investors at a specific price which may not be related to the existing market price. **Private placement** involves selling securities privately to selected investors generally by unlisted companies using the offer document called as information memorandum. In the primary market, equity shares, fully convertible debentures (FCD), partially convertible centers (PCD), and non-convertibles debentures (NCD) are the securities commonly issued. Table 3.1 shows year wise new issues during the past 20 years in terms of number of issues and also their value:

Table 3.1.

1989-90 to 2008-09 (20 years)		
Year	Amount (Rs. Crore)	No. of Issues
1989-90	2,793	187
1990-91	1,704	141
1991-92	1,898	196
1992-93	6,252	528
1993-94	13,443	770
1994-95	12,928	1,336
1995-96	11,663	1,407
1996-97	11,388	697
1997-98	3,061	62
1998-99	7,911	32
1999-00	7,673	65
2000-01	6,518	119
2001-02	6,423	19
2002-03	5,732	14
2003-04	22,131	34
2004-05	25,526	34
2005-06	23,676	102
2006-07	24,993	85
2007-08 (as on 31/01/08)	51,408	85
	2,47,122	5,913

Source : SEBI Bulletin

Functions of new issue market

The main functions of new issue market is to facilitate transfer of resources from savers to the users. The savers are individuals, commercial banks, insurance companies etc. the users are public limited companies and the government. The new issue market plays an important role of mobilizing the funds from the savers and transfers them to borrowers for production purposes, an important requisite of economic growth. It is not only a platform for raising finance to establish new enterprises but also for expansion / diversification / modernizations of existing units. In this basis the new market can be classified as :

1. Market where firms go to the public for the first time through initial public offering (IPO).
2. Market where firms which are already trading to raise additional capital through seasoned equity offering (SEO).

The main function of new issue market can be divided into a triple service functions:

1. Origination
2. Underwriting
3. Distribution

Origination: Origination refers to the work of investigation, analysis and processing of new project proposals. Origination starts before an issue is actually floated in the market. There are two aspects in this functions:

1. A careful study of the technical, economic and financial viability to ensure soundness of the project. This is a preliminary investigation undertaken by the sponsors of the issue.
2. Advisory services which improve the quality of capital issues and ensure its success.

The advisory services include:

a) Type of issue

This refers to the kind of securities to be issued whether equity share, preference share, debenture or convertible debenture.

b) Magnitude of issue

c) Time of floating of an issue

d) Pricing of an issue – whether shares are to be issued at par or at premium

e) Methods of issue

f) Techniques of selling the securities

The function of origination is done by merchant bankers who may be commercial banks, all Indian financial institutions or private firms. Initially this service was provided by specialized division of commercial banks. At present, financial institutions and private firms also perform this service. Though this service is highly important, the success of the issue depends, to a large extent, on the efficiency of the market.

The origination itself does not guarantee the success of the issue. Underwriting, a specialized service is required in this regard.

Underwriting: Underwriting is an agreement whereby the underwriter promises to subscribe to a specified number of shares or debentures or a specified amount of stock in the event of public not subscribing to the issue. If the issue is fully subscribed then there is no liability for the underwriter. If a part of share issues remain unsold, the underwriter will buy the shares. Thus underwriting is a guarantee for the marketability of shares.

Method of underwriting

An underwriting agreement may take any of the following three forms:

1. Standing behind the issue

Under this method, the underwriter guarantees the sale of a specified number of shares within a specified period. If the public do not subscribe to the specified amount of issue, the underwriter buys the balance in the issue.

2. Outright purchase

The Underwriter, in this method, makes outright purchase of shares and resell them to the investors

3. Consortium method

Underwriting is jointly done by a group of underwriters in this method. The underwriters form a syndicate for this purpose. This method is adopted for large issue.

Advantages of underwriting

Underwriting assumes great significance as it offers the following advantages to the issuing company.

1. The issuing company is relieved from the risk of finding buyers for the issue offered to the public. The company is assured of raising adequate capital.

2. The company is assured of getting minimum subscription within the stipulated time, a statutory obligation to be fulfilled by the issuing company.

3. Underwriters undertake the burden of highly specialized function of distributing securities.

4. Provide expert advice with regard to timing of security issue, the pricing of issue, the size and type of securities to be issued etc.
5. Public confidence on the issue enhances when underwritten by reputed underwriters.

The underwriters in India may be classified into two categories :

- Institutional underwriters
- Non – institutional underwriters.

The institutional underwriters are

- Life Insurance Corporation of India (LIC)
- Unit Trust of India (UTI)
- Industrial Development Bank of India (IDBI)
- Industrial Credit and Investment Corporation of India (ICICI)
- Commercial banks and general insurance companies.

The pattern of underwriting of the above institutional underwriters differs vastly in India. LIC and UTI have purchased industrial securities from the new issue market with a view to hold them on their own portfolio. They have a preference for underwriting shares in large and well established firms. The development banks have given special attention to the issues in backward states and industries in the priority list. The thrust of the development banks is also towards small and new issues which do not have adequate support from other institutions. General insurance companies have shown preference in underwriting the securities of fairly new issues.

The non-institutional underwriters are brokers. They guarantee shares only with a view to earn commission from the company floating the issue. They are known to-off load the shares later to make a profit. The brokers work profit motive in underwriting industrial securities. After the elimination of forward trading, stock exchange broker have begun to take an underwritten to the total private capital issue varies between 72 percent to 97 percent.

Distribution

Distribution is the function of sale of securities to ultimate investors. This service is performed by brokers and agents who maintain regular and direct contact with the ultimate investors.

Methods of floating of new issues

The various methods which are used in the floating of securities in the new issue market are :

- Public issues
- Offer for sale
- Placement
- Rights issues

Public issues

Under this method, the issuing company directly offers to the general public / institutions a fixed number of shares at a stated price through a document called prospectus. This is the most common method followed by join stock companies to raise capital through the issues of securities.

1. Name of the company
2. address of the registered office of the company
3. existing and proposed activities
4. location of the industry
5. names of directors
6. authorized and proposed issue capital to the public
7. dates of opening and closing of the subscription list
8. minimum subscription
9. Names of brokers/underwriters/bankers/managers and registrars to the issue.
10. A statement by the company that it will apply to stock exchange for quotations of its shares.

According to the companies act, 1956 every application form must be accompanied by a prospectus. Now, it is no longer necessary to furnish a copy of the prospectus along with every application forms as per the companies Amendment Act, 1988. Now, an abridged prospectus is being annexed to every share application form.

Merits of issue through prospectus

1. Sale through prospectus has the advantage of inviting a large section of the investing public through advertisement.
2. It is a direct method and no intermediaries are involved in it.
3. Shares, under this method, are allotted to a large section of investors on a non-discriminatory basis. This procedure helps in wide dispersion of shares and to avoid concentration of wealth in few hands.

Demerits

1. It is an expensive method. The company has to incur expenses on printing of prospectus, advertisement, banks' commission, underwriting commission, legal charges, stamp duty, listing fees and registration charges.
2. This method is suitable only for large issues.

Offer for sale

The method of offer of sale constitute outright sale of securities through the intermediary of issue houses or share brokers. In other words, the shares are not offered to the public directly. This method consist of two stages : the first stage is a direct sale by the issuing company to the issue house and brokers at an agreed price. In the second stage, the intermediaries resell the above securities to the ultimate investors. The issue houses or stock brokers purchase the securities at a negotiated price and resell at a higher price. The difference in the purchase and sale price is called turn or spread.

The advantages of this method is that the company is relieved from the problem of printing and advertisement of prospectus and making allotment of shares. Offer of sale is not common in India. This method is used generally in two instances:

- Offer by a foreign company of a part of it to Indian investors
- Promoters diluting their stake to comply with requirements of stock exchange at the time of listing of shares.

Follow on Public Offering (FPO)

When an existing listed company either makes a fresh issue of securities to the public or makes an offer for sale of securities to the public for the first time, through an offer document, such issues are called as *'Follow on Public Offering'*. Such public issue of securities or offer for sale to public is required to satisfy the stock exchange listing obligations along with SEBI guidelines.

Rights Issue (RI)

When a listed company proposes to issue securities to its existing shareholders, whose names appear in the register of members on record date, in the proportion to their existing holding, through an offer document, such issues are called 'Rights Issue'. This mode of raising capital is best suited when the dilution of controlling interest is not intended.

Preferential Issue

A preferential issue is an issue of equity shares or of convertible securities by listed companies to a select group of persons which is neither a rights issue nor a public issue. The issuer company has to comply with the provisions of the Companies Act, as well as, SEBI's guidelines with reference to preferential issues as contained in Chapter XIII.

A company which makes any public or rights issue or an offer for sale can issue shares only in dematerialised form. A company shall not make a public or rights issue of shares unless all the existing partly paid shares have been fully paid-up or forfeited. A company which is making public issue of securities shall make an application to the stock exchange for listing of those shares.

Book Building

It is a capital issuance process which results towards a price discovery and also to assess demand analysis of the security. It is a process used for marketing equity shares of a company. (Fig.3.1)

Book-Building Process

- The Issuer nominates a merchant banker as book runner
- Specifies issue size and floor price
- Appoints syndicate members
- Investors place orders into the electronic book, termed as the process of bidding

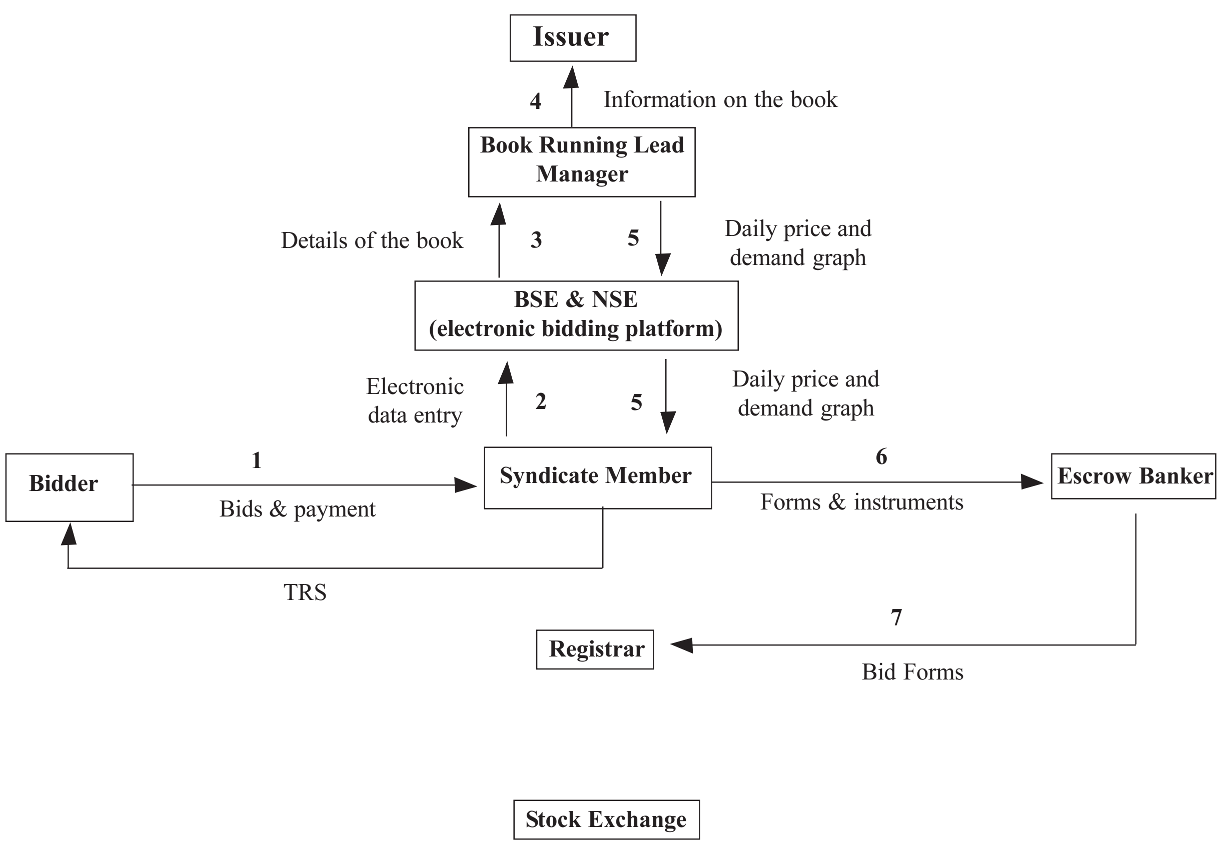
- Bids are entered, 'at' or 'above' the floor price
- Retail investors can bid at a cut-off price
- The price opted by majority of bidders shall be decided as the subscription price.

Fixed Price vs. Book-Building

i) Offer price is known to investor in advance	i) Only the floor price and price range is known
ii) Demand for the securities known after issue closure	ii) Demand for the securities is visible online as the book is built
iii) Application money credited to issuer Account.	iii) Application money is credited to an escrow account

Fig.3.1 – Bidding Process

Bidding process

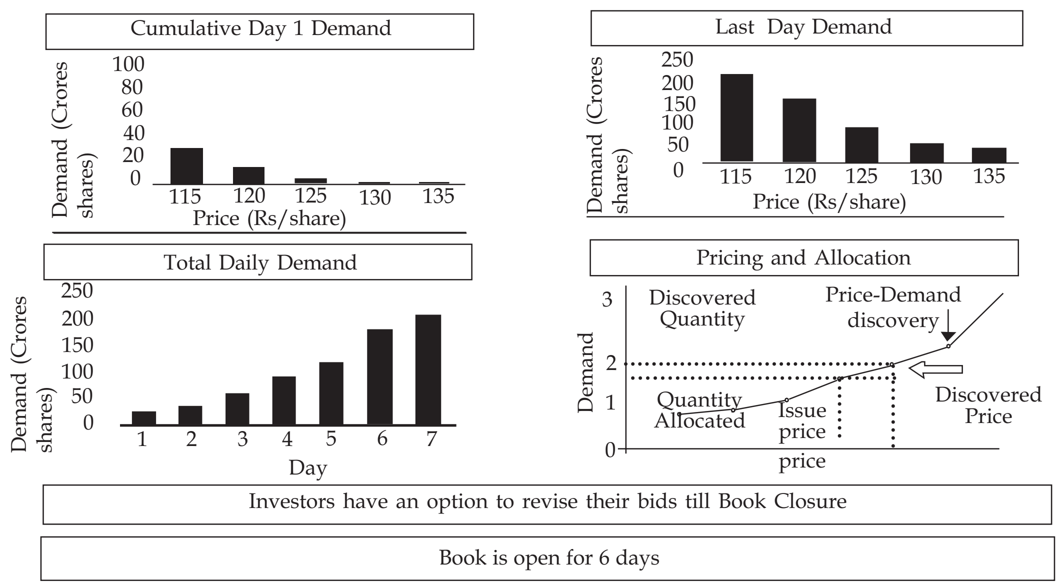


Source:nse-india.com

Fig. 3.2 - Price Discovery Process - Illustration

Price Discovery Process

With Illustrative Numbers



Eligibility Norms for Public Issue

SEBI has laid down the eligibility norms for entities accessing the primary market through public issues. The entry norms for companies making initial public offer or Follow on Public offer, are summarised as follows (students are advised to refer to SEBI guidelines to have the latest norms):

Entry Norm I

The company shall meet the following requirements:

(a) Net tangible assets of atleast Rs. 3 crores for 3 full years.

(b) Distributable profits in atleast three years.

(c) Net worth of atleast Rs. 1 crore in three years.

(d) If change in name, atleast 50% revenue for preceding 1 year should be from the new activity.

(e) The issue size does not exceed 5 times the pre-issue net worth.

To provide sufficient flexibility and also to ensure that genuine companies do not suffer on account of rigidity of the parameters, SEBI has provided two other alternative routes to company not satisfying any of the above conditions, for accessing the primary market.

Entry Norm II

(a) Issue shall be through book building route, with atleast 50% to be mandatorily allotted to the Qualified Institutional Buyers (QIBs).

(b) The minimum post-issue face value capital shall be Rs. 10 crores or there shall be a compulsory market-making for atleast 2 years.

OR

Entry Norm III

(a) The 'project' is appraised and participated to the extent of 15% by FIs/Scheduled commercial banks of which atleast 10% comes from the appraiser(s).

(b) The minimum post-issue face value capital shall be Rs. 10 crores or there shall be a compulsory market-making for at least 2 years

In addition to satisfying the aforesaid eligibility norms, the company shall also satisfy the criteria of having at least 1000 prospective allottees in its issue.

Green Shoe Option

Green Shoe Option denotes ***'an option of allocating shares in excess of the shares included in the public issue'.*** It is an option allowing the Issuing Company to issue additional shares when the demand is high for the shares when the flotation is on. SEBI guidelines allows the Issuing company to accept oversubscription, subject to a ceiling, say 15% of the offer made to public. In certain cases, the Green Shoe Option can be even more than 15%. It is extensively used in international IPOs to stabilise the post listing price of new issued shares. The concept has been introduced in the Indian capital market and is used in initial public offerings through book building process. SEBI has allowed the use of the option with a view to boost the investors' confidence and to put a check for speculative practices causing short-term volatility in post listing price. The Green Shoe Option facility would bring in price stability of initial public offerings.

Kinds of Offer Document

An offer document means 'prospectus' in case of a public issue or an offer for sale and ***'Letter of offer'*** in case of rights issue, which is required to be filed with the Registrar of Companies (ROC) and Stock Exchanges. An offer document covers all the relevant information to help an investor in making wise investment decisions.

Draft Prospectus - A company before making any public issue of securities, shall file a draft prospectus with SEBI, through an eligible merchant banker, atleast 21 days prior to the filing of prospectus with the Registrar of Companies. If any specific changes are suggested by SEBI within the said 21 days, the Issuing company or the lead merchant banker shall carryout such changes in the draft prospectus before filing the prospectus with ROC.

Draft Letter of Offer - A listed company, before making any rights issue for an amount exceeding Rs. 50 lakhs (including premium) shall file a draft letter of offer with SEBI, atleast 21 days prior to the filing of the letter of offer with regional stock exchange and shall carry changes as suggested by SEBI before the filing of the draft letter of offer with regional stock exchange.

Prospectus - A company issuing shares to public must issue a *'prospectus'*. The prospectus is an *'invitation'* to offer. It is an invitation to the public to take shares or debentures in the company or deposit money in the company. Section 2(36) of the Companies Act, 1956 defines prospectus as "any document described or issued as a prospectus and includes any notice, circular, advertisement or other document inviting deposits from the public or inviting offers from the public for the subscription or purchase of any shares in, or debentures of, a body corporate". Section 56 of the Companies Act provides that every prospectus must disclose matters specified in Schedule II.

Abridged Prospectus - Section 2(1) of the Companies Act, 1956 defines abridged prospectus means 'a memorandum containing such salient features of a prospectus as may be prescribed'. An abridged prospectus means the memorandum as prescribed in Form 2A under sub-section (3) of section 56 of the Companies Act. It contains all the salient features of a prospectus. A company cannot supply application forms for shares or debentures unless the form is accompanied by abridged prospectus.

Shelf Prospectus - Sometimes, securities are issued in stages spread over a period of time, particularly in respect of infrastructure projects where issue size is large as huge funds have to be collected. In such cases, filing of prospectus each time will be very expensive. In such cases, section 60A of the Companies Act, 1956 allows a prospectus called *'Shelf Prospectus'* to be filed with Registrar of Companies. At subsequent stages only *'Information Memorandum'* is required to be filed. The shelf prospectus shall be valid for a period of 1 year from the date of opening of first issue of securities under that prospectus.

Information Memorandum - The Information Memorandum shall contain all material facts relating to new charges created, changes in the financial position as have accrued between the first offer, previous offer and the succeeding offer. The Information Memorandum shall be filed with a period of 3 months prior to making of second or subsequent offer of securities under Shelf Prospectus. The Information Memorandum shall be issued to the public along with Shelf Prospectus filed at the first stage of offer. Where an update of Information Memorandum is filed every time an offer of securities is made, such memorandum together with the Shelf Prospectus shall constitute the Prospectus.

Red-Herring Prospectus*:* A prospectus is said to be a red-herring prospectus which contains all information as per prospectus contents but does not have information on price of securities offered and number of securities (quantum) offered through such document. Thus, a red-herring prospectus lacks price and quantity of the securities offered. This is used in book building issues only. In the case of book built issues, it is a process of price discovery and the price cannot be determined until bidding process is completed. Hence, such details are not shown in Red-herring prospectus filed with ROC in terms of the provisions of the Companies Act. Only on completion of the bidding process, the details of the final price are included in the offer document. The offer document filed thereafter with ROC is called a *'prospectus'*.

Disadvantages of Floatation

The disadvantages of flotation include the following:

- There are considerable costs in flotation and listing.
- It takes lot of management's time, before and after flotation and listing.
- The company must comply with the stringent stock exchange regulations.
- It will be necessary to meet the regulatory requirements for disclosure of information, including details of managerial remuneration.
- A dilution of management control will result from the widely held shares of the company.
- The affairs of the company are subject to public scrutiny and fluctuations in share price may some time cause adverse image in the public.
- Since the costs of flotation are higher, other ways of raising finance would reduce the cost of funds.
- Listed company status will put additional burden on the managerial staff.
- The buying and selling of shares by the directors and other related persons may attract the provisions of 'insider trading'.
- There will always be pressure from shareholders to declare dividends, which may not be in the interests of the company.
- The adverse campaigns against the company may drive down the share price, it is technically called 'bear raids'.
- The investors always expect the rise in the share price. The company's growth and profitability may not afford the increase in share price always.

Promoters

The *'promoter'* has been defined as a person or group of persons who are instrumental in formation of the company, who enable the company to start its commercial operations by bringing in the necessary funds required for the concern. The promoters are in the overall control of the company, whose names are mentioned in the offer document. Any director or officer discharging their functions in their professional capacity cannot be termed as promoter. The meaning of the term *'promoter'* is wide enough to cover the following relationships:

- *'Promoter group'* includes promoter, an immediate relative of the promoter (i.e. any spouse of that person, or any parent, brother, sister or child of the person or of the spouse).
- In case promoter is a company, a subsidiary or holding company of that company.
- Any company in which the promoter holds 10% or more of the equity capital or which holds 10% or more of the equity capital of the promoter.
- Any company in which a group of individuals or companies or combinations thereof who holds 20% or more of the equity capital in that company, also holds 20% or more of the equity capital of the issuer company.
- In case the promoter is an individual, any company in which 10% or more of the share capital is held by the promoter or an immediate relative of the promoter or a firm or HUF in which the promoter or any one or more of his immediate relative is a member.

Promoter Contribution

Promoters contribution in any public issue shall be in accordance with the following provisions under SEBI's DIP Guidelines:

- *Unlisted companies* - In the public issue, the promoters shall contribute not less than 20% of the post issue capital.
- *Offers for sale* - The promoters share holding after offer for sale shall not be less than 20% of post issue capital.
- *Listed companies* - The promoters shall participate either to the extent of 20% of the proposed issue or ensure post-issue shareholding to the extent of 20% of the post-issue capital.
- *Composite issues of listed companies* - The promoters contribution shall at the option of the promoters be either 20% of the proposed public issue or 20% of the post issue capital. Rights issue component of the composite issue shall be excluded while calculating the post issue capital.

1.5. SECONDARY MARKET / STOCK MARKET / STOCK EXCHANGE

One of the criteria in investment management which is considered as very important next to risk assessment is the liquidity. After the investors get the shares allotted through the primary market they need some platform or market place to provide liquidity for their investment. Thus, secondary market offers liquidity to investment made in the primary market. Both, primary and secondary markets co-exists, i.e. to say one depends on the other for its survival and growth. There are two broad segments of the stock markets (i) The organised stock exchanges and (ii) The Over-the-Counter (OTC) market. The primary middlemen in the stock market are brokers and dealers. The distinction between them is, the broker acts as an agent, whereas the dealer acts as a principal in the transaction. Stock markets are said to reflect the overall health of the country's economy. On the other hand, major economic indicators determine stock market movements to a large extent. From a thorough analysis of the various economic

Indicators and its implications on the stock markets, it is known that stock market movements are largely influenced by broad money supply, inflation, credit/deposit ratio and fiscal deficit apart from political stability. Besides, fundamental factors like corporate performance, industrial growth, etc. always exert a certain amount of influence on the stock markets. Because the stock market involves the trading of securities initially sold in the primary market, it is providing liquidity to the individuals who acquired these securities. The trends in stock market will have impact on the primary market. The secondary market in India comprises of 23 Stock Exchanges and more than 10000 listed companies out of which BSE has about 4888 and NSE has1225 companies listed with them as on 29th February 2008. A large volume of transactions on the secondary markets are transacted through BSE and NSE. Presently, the BSE & NSE put together account for more than 99% of the total turnover as compared to less than 1% by the other Stock Exchanges.

Reasons for Transactions on Secondary Market

There are two main reasons why individuals transact in the secondary market: **Information Motivated Reasons :** Information motivated investors believe that they have superior information about a particular security than other market participants. This information leads them to believe that the security is not being correctly priced by the market. If the information is good, this suggests that the security is currently under-priced, and investors with access to such information will want to buy the security. On the other hand, if the information is bad, the security will be currently overpriced, and such investors will want to sell their holdings of the security.

Liquidity Motivated Reasons: Liquidity motivated investors, on the other hand, transact in the secondary market because they are currently in a position of either excess or insufficient liquidity. Investors with surplus cash holdings (e.g., as a result of an inheritance or adequate savings of their income) will buy securities, where as investors with insufficient cash (e.g., to purchase a car or any other assets) will sell their securities.

The Securities which are traded in the secondary market may be classified as follows.

1. **On the basis of issuer, Securities may be classified** as
   - Industrial securities,
   - Government securities
   - Financial intermediaries securities.

Industrial securities issued by industrial and common undertakings in the private and public sector whereas government securities include securities issued by State governments, municipalities and public utilities. Government securities are generally considered risk-free, low return securities compared to the Industrial securities. Besides these two classes of issues, the Financial Intermediaries are emerging as the third important group. The securities issued by Financial Institutions and Banks would fall, in terms of risk-return features, somewhere in between the industrial securities and government securities.

On the basis of maturity, securities may be classified into **short term** and **long term** or Money Market and Capital Market securities. Treasury bills, commercial bills, commercial papers, certificate of deposits are short- term or money market securities. Equities, Preference shares, Debentures and Bonds are long term or capital market securities. On the basis of settlement of deals, securities may be classified into Forward securities and cash securities. Forward securities are those in which the settlement date can be shifted from one settlement date to other by paying the badla charges. Cash securities are those for which settlement dates cannot be shifted. The Forward securities are known by different names viz. specified shares or group A shares or Forward section. Cash securities are also known as Non-specified shares or group B shares or cash section.

Stock Market in India

From scattered and small beginnings in the 19th Century, India's stock market has risen to great heights. In 1990, we had 19 stock exchanges in the country. There were around 6,000 listed companies and the invested population stood around 15 million. You might be interested in knowing more about the growth of stock market in India. What functions does it perform? What is the form of organization of stock exchange in India? How are they administered? What is the trading system followed on these exchanges? We shall discuss these and other questions in the following sections.

Role and Functions of Stock Exchanges:

The history of stock exchanges shows that the development of joint stock enterprise would never have reached its present stage but for the facilities which the stock exchanges provide for dealing with the securities. Stock exchanges have a very important function to fulfill in the country's economy.

The stock exchange is really an essential pillar of the private sector corporate economy. It discharges essential functions in the process of capital formation and in raising resources for the corporate sector.

First the ***stock exchange provides a market place for purchase and sale of securities*** viz., shares, bonds, debentures etc. It, therefore, ensures the free transferability of securities which is the essential basis for the stock enterprise system. The private sector economy cannot function without the assurance provided by the exchange to the owners of shares and bonds that they can be sold in the market at any time. At the same time, those who invest their surplus funds in securities for long-term capital appreciation or for speculative purpose can also buy scripts of their choice in the market.

Secondly, ***the stock exchange provides the linkage between the savings in the household sector and investment in corporate economy.*** It mobilizes savings, and channelize them in the form of securities into those enterprises which are favored by the investors on the basis of such criteria as future growth prospects, good returns and appreciation of capital.

Thirdly, ***by providing a market quotation of the prices of shares and bonds*** – a sort of collective judgement simultaneously reached by many buyers and sellers in the market-the stock exchange serves the role of barometer, not only of the state of health of individual companies, but also of the nation's economy. The changes in share prices are brought about by a complex set of factors, all operating in the market simultaneously. Share values as a whole are subject to secular trends set by the economic programme of the nation, and governed by factors like general economic situation, financial and monetary policies, tax changes, political environment, international - economic and financial development, etc.

Membership, organization and Management

Nature of the century-old traditional stock exchanges are a highly organized and smoothly functioning network in the world. The membership of stock exchanges initially comprised of individuals and partnership firms. Later on the corporate entities and financial institutions were also allowed to become members. A number of financial institutions are now members of Indian Stock Exchanges. Over the years, stock exchanges have been initiated in various forms. For example, while the Ahmedabad Stock Exchange and M.P. (Indore) Stock Exchange were started as Non-profit making association of persons, the Calcutta Stock Exchange, Delhi Stock Exchange, U.P. Stock Exchange, Cochin Stock Exchange, Gauhati Stock Exchange, Bangalore Stock Exchange, Jaipur Stock Exchange and (Mangalore) Stock Exchange were established as public limited companies. Quite a few others have been started as Company limited by guarantee.

The entrance fee is different for different stock exchanges. Membership deposit and annual fees also varies from exchange to exchange. The entrance fee is different for different members among various exchanges based on their status like individual or corporate. The internal governance of exchange rests in a governing board comprising members of the board and Executive Director. The Members of the governing boards include brokers and SEBI Nominees called Public Representatives. The Chairman is expected to ensure the position of Executive Director can't be expected to be very strong because if he really tries to be may bring him into conflict with influential broker-members who may also be on the exchange's board which determines Executive Director's terms and conditions of service and his re-appointment on this term. It is not human nature to displease one's appointing authorities and it may be too much Executive Director's to be strict under the present scheme of things. Subject to the previous approval of the law, governing bodies of stock exchanges have wide powers to make bye-laws. Governing bodies furnish, censure and also expel any member, any remiser, and authorized clerk and employee. It has to adjudicate disputes. Above all, it has the power to make, amend, suspend and enforce rules, bye-regulations and supervise the entire functioning of a stock exchange.

To rationalize the functioning of the stock exchanges during the year 2007 all the exchanges in India were de-mutualized under a compulsory scheme brought out by SEBI in the year 2005. Except NSE all other exchanges were managed by the brokers who were members of the exchange by having major stake in the composition of the Governing Board. After the demutualization, management of the exchange rests with the owners (non-brokers) with more than 50% representation in the board and minority representation of the Trading Members and SEBI nominees. All the exchanges have become from Not-for profit organization to that of for-profit organizations. Those exchanges which have failed to complete the de-mutualisation within the stipulated time frame as given by SEBI were cancelled of their recognition as an exchange and hence, they have lost their identity as exchange and cease to exist.

Trading System

Trading on stock exchanges is done through brokers and dealers. All members can act as brokers and for this purpose they have to maintain a minimum security deposit and additional security deposit also called as base capital which will decide on the trading exposure that the said broker will be allowed to. Brokers act as agents for buying and selling on behalf of their clients, for which they receive brokerage/commission at stipulated rates. The maximum brokerage that can be charged is restricted to 2.5% of the value of transaction done and there is no minimum stipulated but it cannot be nil, except when the transactions are done for charitable organizations. Dealers act as principals and buy and sell securities on their own accounts. However, members cannot enter into contract with any person other than the member without prior permission of the governing Body. The Trading system of NSE has enhanced its efficiency, liquidity and transparency, by introducing a nation-wide on-line fully-automated screen based trading system (SBTS) (Fig.4.1) where a member can input into the computer trading terminal, the quantities of the securities he wanted to buy or sell and the prices at which he likes to transact and the transaction is executed as soon as it finds a matching sale or buy order from a counter party.

SBTS electronically matches orders on a strict price/time priority and hence cuts down on time, cost and risk of error, as well as on fraud resulting in improved operational efficiency. It allows faster incorporation of price sensitive information into prevailing prices, thus increasing the informational efficiency of markets. It enables market participants, irrespective of their geographical locations, to trade with one another simultaneously, improving the depth and liquidity of the market. It provides full anonymity by accepting orders, big or small, from members without revealing their identity, thus providing equal access to everybody. It also provides a perfect audit trail, which helps to resolve disputes by logging in the trade execution process in entirety.

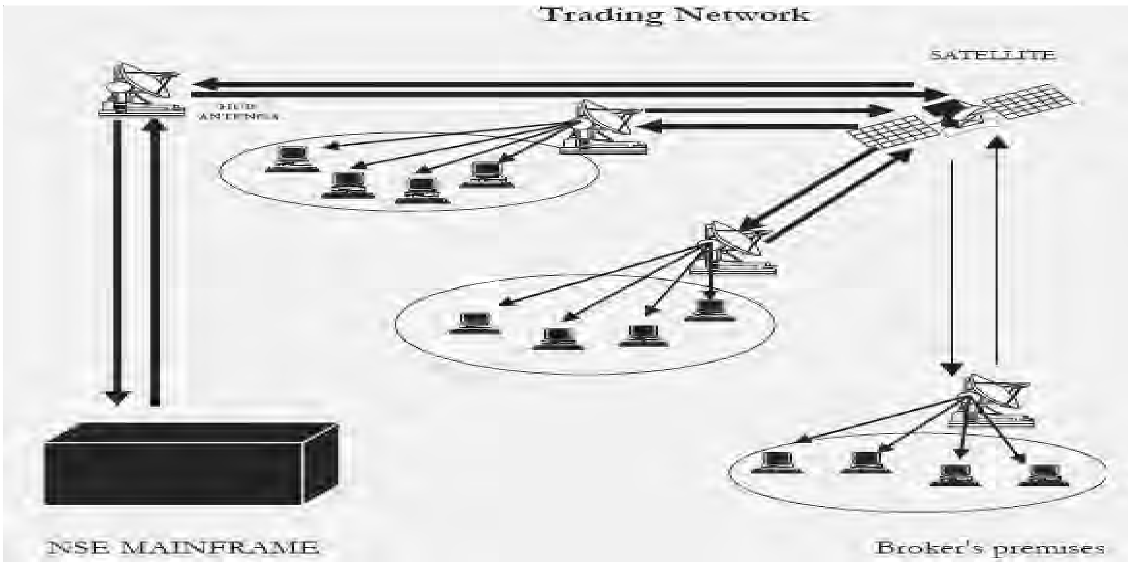


Fig: 4.1 Source: nseindia.com

In the very first year of its operation, NSE became the leading stock exchange in the country, impacting the fortunes of other exchanges and forcing them to adopt SBTS also. Today India can boast that almost 100% trading take place through electronic order matching. Technology was used to carry the trading platform from the trading hall of stock exchanges to the premises of brokers. NSE carried the trading platform further to the PCs at the residence of investors through the Internet and to handheld devices through WAP for convenience of mobile investors. This made a huge difference in terms of equal access to investors in a geographically vast country like India. The trading network is depicted in Figure 1.1. NSE has main computer which is connected through Very Small Aperture Terminal (VSAT) installed at its office. The main computer runs on a fault tolerant STRATUS mainframe computer at the Exchange. Brokers have terminals (identified as the PCs in the Figure 1) installed at their premises which are connected through VSATs/leased lines/modems. An investor informs a broker to place an order on his behalf. The broker enters the order through his PC, which runs under Windows NT and sends signal to the Satellite via VSAT/leased line/modem. The signal is directed to mainframe.

National Stock Exchange of India Ltd

The National Stock Exchange of India Limited (NSE) was promoted by IDBI, ICICI, IFCI, GIC, LIC, State Bank of India, SBI Capital Markets Limited, SHCIL and IL & FS as a Joint Stock Company under the Companies Act, 1956, on November 27,1992. The Government of India has granted recognition with effect from April 26,1993, initially for a period of five years. The GOI has appointed IDBI as a lead promoter. To form the infrastructure of NSE, IDBI had appointed a Hongkong Bound consulting firm M/s. International Securities Consulting Limited for helping in setting up of the NSE. The main objective of NSE is to ensure comprehensive nationwide securities trading facilities to investors through automated screen based trading called NEAT and automatic post trade clearing and settlement facilities. The NSE encourages corporate trading members with dealer networks, computerised trading and short settlement cycles. It has three segments, one dealing with wholesale debt instruments, the second to deal with capital market instruments called cash segment and the third for Futures and Options or Derivatives Market. The Clearing Corporation of India Limited (CCIL) an Electronic Clearing and Depository System (ECDS) set up by the Stock Holding Corporation of India Limited (SHCIL) provides the requisite clearing and settlement systems.

Features The recommendations of the High Power Committee on setting up of the National Stock Exchange, a 'Model Exchange' at New Mumbai to act as a National Stock Exchange (NSE) to provide access to all investors from across the country on an equal footing, and work as Integral component of the National Stock Market System. Hence, NSE is having the following vital features:

- NSE is promoted by Financial Institutions, Mutual Funds, and financed on a self-sustaining basis through levy of membership fees. The capital outlay of 30 crores of rupees was financed by admitting 1,000 members with an entry fee of Rs. 10 lakhs each. Fees for corporate and Institutional members was at a higher level of Rs. 25 lakhs.
- NSE is a company incorporated under the Companies Act of 1956. It is constituted by the Board of Directors (Board) and managed by it. 50 per cent of the Managing Board of the Exchange comprise of professionals who are not members. These professionals must be from a cross section of finance and industry, and must actively contribute to ensuring that the stock exchange functions in a balanced and fair manner.
- It is trading on large & medium sized securities of equity shares and debt instruments.
- It is a separate ring altogether. For the first time in our country, debt instruments were traded to become an active part in the secondary market of the nation.
- NSE made its debut with the debt market. The debt market is predominantly a market in Government Securities. The Central Government moving over to auctions at market-related rates of interest, the primary market has become active with the well informed and fine-tuned bidding at the auctions.
- It is having full support from the National Clearing and Settlement divisions, SHCIL and the Securities Facilities Support Corporation. It is using modern computer technology for the clearance and settlement procedures.
- Better transparency system for the securities trading & settlement.

The BSE is also providing similar facilities with more number of securities being listed especially low capital companies with limited equity shares floating in the market. Both BSE and

NSE have national presence and they dominate the stock markets. All other exchanges have created a platform by having either an alliance with or cross holding with these two premier exchanges or trading facility provided to their members through a subsidiary of the main exchanges.

Over The Counter Exchange of India (OTCEI)

Indeed in mid-eighties itself the G.S. Patel Committee on Stock Exchange reforms and the Abid Holi Committee on Capital Markets had recommended for the creation of a second tier stock market that will solve some of the problems of present stock exchanges . Over The Counter Exchange of India (OTCEI) was been promoted by ,UTI, IDBI, IFCI, LIC, GIC, SBI Capital Market and Canbank Financial Services as a non profit-making company under Section 25 of the Companies Act, 1956. The OTCEI is a recognized Stock Exchanges under section 4 of the Securities Contracts (Regulation) Act, 1956. Hence companies listed on the OTC Exchange enjoy the same status as companies listed on any other stock exchanges in the country.

OTC Exchange of India has picked the model from the NASDAQ system (National Association of Security Dealers-Automated Quotations) prevalent in the United States of America. Modifications suited to Indian conditions been adopted from OTC in America was an offshoot of their government's efforts to regulate the unlisted securities act. The Indian version of NASD-National Associations of Securities Dealers is what is called OTC Exchange of India. Unlike in the regular exchange, listing on OTCEI is a national listing from day one. Wherever and whenever counters start operating in the country they can trade in all the scripts of OTCEI. Separate listing in those regular places is not needed at all.

All said and done the OTCEI did not take off and was not successful due to many reasons like lower end technology, low liquidity, less participation by investors in small cap companies, etc.

Inter-connected Stock Exchange of India

Inter-connected Stock Exchange of India Limited (ISE), has been promoted by 15 Regional stock exchanges to provide trading linkage/connectivity to all the participating exchanges to widen their market. Thus, ISE is a national level exchange providing trading, clearing, settlement, risk management and surveillance support to the Inter-Connected Market System (ICMS). ISE aims to address the needs of small companies and retail investors with the guiding principle of optimising the infrastructure and harnessing the potential of regional markets to transform these into a liquid and vibrant market through the use of technology and networking. The participating exchange in ISE have in all about 4500 traders. In order to leverage its infrastructure as also to expand its nation-wide reach, ISE has also appointed dealers across various cities other than the participating exchange centers. These dealers are administratively supported through strategically located regional offices at Delhi, Calcutta, Chennai and Nagpur. ISE, thus expects to emerge as a low cost national level exchange in the country for retail investors and small intermediaries. ISE has also floated a wholly-owned subsidiary namely, ISE Securities and Services Limited (ISS) to take membership of NSE and other premier exchanges, so that traders and dealers of ISE can access other markets in addition to the local market and ISE. This will provide the investors in smaller cities with a solution for cost-effective and efficient trading in securities.

Core objectives of the Inter-connected Stock Exchange include creation of single integrated national level solution with access to multiple markets for providing high quality, low cost services to millions of investors across the country, a liquid and vibrant national level market for all listed companies in general and small capital companies in particular and providing trading, clearing and settlement facilities to the traders and dealers across the country at their doorstep with decentralised support system. Some of the features which make ISE a new age stock exchange are as follows:

- ISE is a national level recognised stock exchange having moderate listing fees and granting listing and trading permission to small and medium sized companies having a post public issue paid-up capital of Rs. 3 crore to Rs. 5 crore (subject to the appointment of market makers) besides companies with a capital of above Rs. 5 crore.
- All traders and dealers of ISE have access to NSE through ISE Securities and Services Ltd. (ISS), which ensures continuous attention of investors.
- Proposing to introduce the 'IPO Distribution System' for offering primary market issue.
- ISE has set up an 'Investors Grievance and Service Cell' which looks after all types of complaints of investors located across the country and provides decentralised support.
- Listing of stocks with ISE would give the company an advantage of being identified as a technology-savvy and Investor-friendly company.

The below Table 4.1 shows the distribution of Turnover on Cash segments of stock Exchanges, out of which you find the highest turnover in value in NSE and next being in BSE.

Table: 4.1 -Distribution of Turnover on Cash segments of Exchanges (Rs. crores)

Stock Exchange	2002-03	2003-04	2004-05	2005-06
1. Ahmedabad	54,035	14,844	15,459	4,544
2. Bangalore	6,033	70	0.0	0.05
3. Bhubaneswar	0.01	0.0	0.0	0.0
4. Calcutta	3,55,035	27,076	6,540	1,928
5. Cochin	187	27	0.0	0.0
6. Coimbatore	0.0	0.0	0.0	0.0
7. Delhi	83,871	5,828	11	3
8. Gauhati	0.04	0.03	0.1	0.0
9. Hyderabad	978	41	5	2
10. ICSE	233	55	65	0.05
11. Jaipur	0.0	0.0	0.0	0.0
12. Ludhiana	9,732	857	0.0	0.0
13. Madhya Pradesh	2	16	0.0	0.0
14. Madras	109	24	0.0	101
15. Magadh (Patna)	2	0.0	0.5	0.1
16. Mangalore	0.0	0.0	0.0	0.0
17. Mumbai (BSE)	10,00,032	3,07,292	3,14,073	150,26,108
18. NSE	13,39,511	5,13,167	6,17,989	160,99,534
19. OTCEI	126	4	0.1	16
20. Pune	6,171	1,171	1.8	0.0
21. SKSE	0.0	0.0	0.0	0.0
22. Utter Pradesh	24,747	25,237	14,763	11,751
23. Vadodara	1	10	3	0.1

Source: SEBI Bulletin

Demutualization of Stock Exchanges

Historically stock exchanges were formed as 'mutual' organisations, which were considered beneficial in terms of tax benefits and matters of compliance. They are generally 'not-for-profit' and tax exempted entities. The trading members who provide broking services, also own, control and manage such exchanges for their common benefit, but do not distribute the profits among themselves. The ownership rights and trading rights are clubbed together in a membership card which is not freely transferable and hence this card at times carries a premium. In contrast, in a '*demutual*' exchange, three separate sets of people own the exchange, manage it and use its services. The owners usually vest in management constituting a board of directors which is assisted by a professional team. A completely different set of people use trading platform of the exchange. These are generally 'for-profit' and tax paying entities. The ownership rights are freely transferable. Trading rights are acquired/surrendered in terms of transparent rules. Membership cards do not exist. These two models of exchanges are generally referred to as 'club' and '*institution*' respectively.

There are 23 recognised exchanges in the country. Three of them are 'Association of Persons', while the balance 20 are companies, either limited by guarantee or by shares. Except one exchange (NSE), all exchanges, whether corporates or association of persons, are not-for-profit making organisations. Except for two (OTCEI and NSE), all exchanges are 'mutual' organisations. An expert committee appointed by SEBI has recently recommended demutualisation of stock exchanges since stock exchanges, brokers, associations and investors association have overwhelmingly felt that such a measure was desirable. The committee has accordingly suggested the steps for such demutualisation.

The most important development in the capital market is concerning the demutualisation of the stock exchanges. Demutualisation of exchanges means segregating the ownership from management. This move was necessitated by the fact that brokers in the management of the stock exchange were misusing their position for personal gains. Demutualisation would bring in transparency and prevent conflict of interest in the functioning of the stock exchanges. The Minister of Finance in his union budget speech of 2002-03 has made important announcement that the process of demutualisation and corporatisation of stock exchanges is expected to be completed during the course of the current year. Now, all the stock exchanges in India are demutualised entities.

Money market

A money market is a mechanism which makes it possible for borrowers and lenders to come together. Essentially it refers to a market for short term funds. It meets the short term requirements of the borrowers and provides liquidity of cash to the lenders.

Money market is the market in which short term funds are borrowed and lent. The money market does not deal in cash or money but in trade bills, promissory notes and government papers which are drawn for short periods. These short term bills are known as near money.

Importance of money market

- Dealing in bills of exchange and commercial papers
- Acting as an outlet for the excess short term funds of commercial banks
- Dealing in treasury bills and short dated government securities
- Guiding central banking policies
- Making central banking policies effective
- Reduction of disparities in interest rates
- Influencing the capital market

Features of a Developed Money Market

- Existence of an efficient and effective central bank
- Well organized commercial banking system
- Existence of specialized sectors

- Free flow of funds between the various sub markets
- Adequate facilities for transfer of funds
- Uniformity in interest rates
- Availability of ample funds
- Availability of ample short term credit instruments
- Sensitiveness to internal and external events
- Existence of specialized financial institutions

Features and Weakness of Indian Money Market

- Existence of unorganized money market
- Absence of integration
- Diversity in money rates of interests
- Seasonal stringency of money
- Highly volatile call money market
- Absence of the bill market
- Absence of well organized banking system
- Availability of credit investments

Money market is the market in which short term funds are borrowed and lent. The money market does not deal in cash or money but in trade bills, promissory notes and government papers which are drawn for short periods. These short term bills are known as near money.

Money Market Instruments

Analysing specifically, the money market deals with the transactions of raising and supplying money in a short period not exceeding one year through various instruments. The following are important money market instruments:

- Treasury Bills (T-Bills)
- Central Government Securities (Gilt-edged Securities)
- State Government and Public Sector Instruments
- Municipal Bonds
- Commercial Paper
- Certificates of deposit
- Bills Rediscounting

- Call/Notice Money Market
- Repurchase Agreements (Repos)
- Inter Bank Participation
- Bank deposits
- Term Money
- Corporate Debentures and Bonds
- Bankers Acceptance
- Commercial Bills
- Fringe Market

Call Money Market

Call money refers to that transaction which is received or delivered by the participants in the call money market and where the funds are returnable next day. The call money transactions are also referred to as overnight funds. Notice money on the other hand is a transaction where the participants will take time to receive or deliver for more than two days but generally for a maximum of fourteen days. In both the cases the transaction is unsecured. Therefore, as a prudential measure, a counter-party exposure limits are listed according to which the lender lends money. In short, resorting to the call/notice money transactions reflect temporary mis-match of funds during the short period of one to fourteen days. The participants, who have surplus, lend their money to shed the mismatch for the relative period. The participants who are short of funds, would borrow funds for the relative period. The rate at which the funds will be deployed or borrowed will be determined on the basis of the market conditions at a given point of time. When the market is highly liquid, the funds would be easily available where as the funds will be difficult to obtain in a tight money market conditions. The rates are low in an easy money or liquid market and the rates would be high in a tight money market. A liquid market may fluctuate even overnight due to sudden changes in the financial environment, change in policy of the central monetary authority or the Government or even due to any other external factor which has an implication on the financial market. The document by which the call/notice money are carried out is the call/ notice money receipt which is exchanged against Banker's Cheque/Reserve Bank Cheque. The following day or on a day fixed according to the notice, the reversal takes place by repayment from the borrower to the lender against return of the call/notice money receipt duly discharged by the lender.

Repurchase Agreements (Repos)

Repurchase agreements are simply called as 'repos 'arise when one party sells a security to another party with an agreement to buy it back at a specified time and price. Repos are active between the commercial banks. In a ready forward deal or repos transaction, a bank avails itself of funds against the pledge of securities. Basically it is pledge transaction, with the bank committing itself to buy back the security, therefore, paying back the amount borrowed on pledge at a mutually agreed price after a specified period. This period ranges between one and

14 days. The difference between the sale and buy-back price is the interest cost. The basic advantage of a repo is that a collateral security is offered to the lender eliminating counterparty risk, especially in a volatile market. Repo is a risk free short-term instrument for balancing short-term liquidity needs. Banks have often resorted to ready forward deals among themselves, as also with Discount and Finance House of India (DFHI) and Securities Trading Corporation of India (STCI) to overcome short-term funds mismatches. At present, the RBI permits repos between banks, cooperative banks and eligible institutions, ie., the DFHI and the STCI.

Other Money Market Instruments

Term Money - RBI has permitted some of the Financial Institutions like IDBI, ICICI, IFCI, HBI, SIDBI, NABARD, EXIM-Bank etc. to borrow from the market for a period of 3 months and upto a period of not more than 6 months within the stipulated limits. The rate of interest on the term money is determined between the parties by mutual negotiation. The investment in term money is unsecured and the limits are fixed by RBI. The term money is accepted by their institutions at a discounted value. On the due date the payment will be equal to the face value of the instrument, which for all purpose consist of term deposit receipt.

Corporate Debentures and Bonds The debentures and bonds issued by private sector companies for periods from five to seven years for long-term funding requirements. They have a similar target market like PSU bonds but are less liquid as the banks are not permitted to buy debentures and bonds of corporates in the secondary market.

Bank Deposits The banks are permitted to keep deposits with other banks for a period of 15 days and above. The rate of interest of such deposits is freely determined by the two banks between themselves through negotiations. These deposits are not reckoned for the purpose of cash reserve ratio (CRR) requirements. Like the call/notice money transactions, the transactions relating to the bank deposit is evidenced by way of deposit receipt. These deposits are not transferable, but they could be prematurely closed at the discretion of the lender.

Bankers Acceptance A banker’s acceptance is a draft against a bank ordering the bank to pay some specified amount at a future date. The banker’s acceptance is very safe security and is used as a money market instrument.

Commercial Bills - Purchase and discounting of commercial bills is a way by which banks provide funds for working capital required by commerce, trade and industry. The financial instrument trading in the bills market is the bill of exchange. It is a written instrument containing unconditional order signed by the maker, directing to pay a certain amount of money to a particular person, or to the bearer of the instrument. It is a negotiable self-liquidating instrument with low degree of risk. Its liquidity is exceeded only by T-bills, call loans and cash, in that order. The spread between the face value of the bill and ready money paid is the discount rate. Till the bill matures, the banks can use the same process of discounting to get ready cash. The eligibility criterion is that the bill should arise out of a genuine trade transaction and the maturity period should fall within 90 days from the date of discounting.

Fringe Market The fringe market is a disorganised money market, deemed to include everything that is outside the scope of the money market (i.e., the institutional money market). The fringe market includes activities like the Inter-Corporate Deposit (ICD) market, small scale trade financing, financing of investments in the stock market, discounting and lending against lOUs or promissory notes, etc. The ICDs market is the most visible feature of the fringe market. As its name indicates it essentially involves short-term borrowing and lending of funds amongst the corporations. Generally the fringe market exist, wherever the main borrowers and lenders of the funds are based, i.e., at the location of the industrial, corporate and trading establishments. The interest rates at which the funds can be lent in the fringe market are generally higher than those operating in the money market. The risk level of the fringe market is higher too - the people who borrow at exorbitant rates are the ones who are most likely to default.

Illustration 1.

(i) Gold Luck Ltd. has an excess cash of Rs. 16,00,000 which it wants to invest in short-term marketable securities. Expenses relating to investment will be Rs. 40,000.

The securities invested will have an annual yield of 8%.

The company seeks your advice as to the period of investment so as to earn a pre-tax income of 4%.

(ii) Also, find the minimum period for the company to break-even its investment expenditure. Ignore time value of money.

Solutions:

(i) Pre-tax Income Required on Investment of Rs. 16,00,000

Let the period of investment be 'P' = Rs. 16,00,000X 4% = Rs. 64,000

$$\left(16{,}00{,}000 \times \frac{8}{100} \times \frac{p}{12}\right) - 40{,}000 = 64{,}000$$

$$10{,}666.66P - 40{,}000 = 64{,}000$$

$$10{,}666.66P = 40{,}000 + 64{,}000$$

$$P = 9.750$$

To earn 4% pre tax return of Rs.16,00,000 should be invested in the shorter marketable securities for a period 9.750 months

(ii) break-even its investment expenditure

$$\left(16{,}00{,}000 \times \frac{8}{100} \times \frac{p}{12}\right) - 40{,}000 = 0$$

$$10{,}666.66P - 40{,}000 = 0$$

$$10666.66P = 40{,}000$$

$$P = \frac{40{,}000}{10{,}666.66} = 3.75$$

∴ The minimum period to break-even its investment expenditure is 3.75 months.

STOCK EXCHANGE

The stock exchange is a market for existing securities i.e. those which have been already issued and listed on a stock exchange. These securities purchased and sold continuously among investors without direct involvement of companies. Stock exchange provides not only free transferability of shares but also makes continuous evaluation of securities traded in the market.

Distinctions between new issue market and stock exchange

The distinction between new issue market and stock exchange can be made on three grounds.

1. Functional difference
2. Organisational difference
3. Nature of contribution to industrial finance

1. Functional difference

New Issue market deals with new securities which are issued for the first time for public subscription. The stock exchange provides a ready market for buying and selling of already issued securities.

2. Organisational difference

The stock exchange have physical existence and are located in particular geographical areas. Stock exchange is a place where dealers of security meet regularly at appointed time announced by the market. It is well established organization with rules and regulations for conduct of the business. The members are supplied with information about companies and daily changes in prices of stocks.

New issue market enjoys neither any tangible form nor any administration organizational set up nor is subject to any centralized control and administration for the execution of the business. It renders services to the lenders and borrowers of funds at the time of any particular operation and the services are taken up entirely by banks, brokers and underwriters.

3. Nature of contribution to industrial finances

The new issue market provides the issuing company with funds for starting new enterprises or for either expansion or diversification of an existing one by marking direct link between companies which require funds and the investing public. So, the contribution of new issue market is direct. The role of stock exchange in providing capital is indirect as it provides marketability to the shares.

Relationship between new issue market and stock exchange

Despite the above mentioned differences, the new issue market and stock exchange are inseparably connected and work in conjunction with each other.

The new issues first placed in the new issue market can be disposed of subsequently in the stock exchange. The stock exchange provides the mechanism for regular and continuous purchase and sale of securities. This facility is of immense utility to potential investors who are assured that they will be able to dispose of the allotment of shares at any time. Thus the two markets are complimentary in nature.

Both the markets are connected to each other even at the time of new issue. The companies which makes new issue apply for listing of shares on a recognized stock exchange. Listing of shares adds prestige to the firm and widens the market for the investors. The companies which want stock exchange listing have to comply with statutory rules and regulations of the stock exchange to ensure fair dealing in them. The stock exchange, thus, exercise considerable control over the organization of new issues.

The new issue market and stock market are economically an integral part of a single market i.e, industrial securities market. Both are susceptible to the common influence of the environment conditions such as political stability, economic conditions, monetary policy of the central bank and the fiscal policy of the government. The two markets act and react upon each other in the same direction. When the stock prices go up in the market, the new issues increase and when the stock prices show a downward trend the new issues decline. The new issue market also depends on the stock exchange to find out price movements and general economic outlook and to forecast the climate for the success of new issues.

Price Band

The issuer company can mention a price band of 20% (cap in the price band should not be more than 20% of the floor price) in the offer document filed with SEBI and actual price can be determined at a later date before filing the offer document with ROC.

Lock-in Period

'Lock- in' indicates the freeze on transfer of shares. SEBI (Disclosure and Investor Protection) Guidelines, 2000 have stipulated lock-in requirement as to specified percentage of shares subscribed by promoters with a view to avoid unscrupulous floating of securities and to ensure the promoters involved in the issue continue to have controlling interest in the company, who can be subjected for legal compliances. The lock-in requirement provisions are contained in Chapter IV of the said guidelines as summarised below:

Lock-in of Minimum Specified Promoters Contribution in Public Issues

- In case of any issue of capital to the public the minimum promoter contribution shall be locked in for a period of 3 years.
- The lock-in shall start from the date of allotment in the proposed public issue and the last date of the lock-in shall be reckoned as 3 years from the date of commencement of commercial production or the date of allotment in the public issue whichever is later.
- *'The date of commencement of commercial production'* means the last date of the month in which commercial production in a manufacturing company is expected to commence as stated in the offer document.

Lock-in of Excess Promoters' Contribution

- In case of public issue by unlisted company, if the promoter's contribution in the proposed issue exceeds the required minimum contribution, such excess contribution shall also be locked-in for a period of one year.
- In case of public issue by a listed company, participation by promoters in proposed public issue in excess of the required minimum percentage shall also be locked-in for a period of one year.
- In case short-fall in the firm allotment category is met by the promoter, such subscription shall be locked-in for a period of one year.
- The securities forming part of promoters contribution and issued last to the promoters shall be locked-in first for the specified period.
- The securities issued to the financial institutions appearing as promoters, if issued last, shall not be locked-in before the shares allotted to the other promoters.

Lock-in of Pre-issue Share Capital of an Unlisted Company

- The entire pre-issue share capital, other than that locked in as promoters contribution, shall be locked-in for a period of one year from the date of commencement of commercial production or the date of allotment in the public issue, whichever is later.
- The above provision is not applicable to the pre-issue share capital held by venture capital funds and foreign venture capital investors.
- The above provision is also not applicable if shares are held for a period of at least one year at the time of filing draft offer document with SEBI and being offered to the public through offer for sale.

e-IPO

The companies are now allowed to issue capital to the public through the on-line system of the stock exchanges. For making such on-line issues, the companies should comply with the provisions contained in Chapter 11A of SEBI (Disclosure and Investor Protection) Guidelines, 2000. The appointment of various intermediaries by the Issuer includes a prerequisite that such members/registrars have the required facilities to accommodate such an on-line issue process.

Qualified Institutional Buyers (QIBs)

Qualified Institutional Buyers are those institutional investors who are generally perceived to possess expertise and the financial muscle to evaluate and invest in the capital market. As per the SEBI guidelines QIBs shall mean the following:

- Public Financial Institution as defined in section 4A of the Companies Act, 1956
- Scheduled Commercial Banks
- Mutual Funds
- Foreign Institutional Investors registered with SEBI
- Multilateral and Bilateral Development Financial Institutions
- Venture Capital Funds registered with SEBI
- Foreign Venture Capital Investors registered with SEBI
- State Industrial Development Corporations
- Insurance Companies registered with the Insurance Regulatory and Development Authority (IRDA)
- Provident Funds with minimum corpus of Rs. 25 crores
- Pension Funds with minimum corpus of Rs. 25 crores.

These entities are not required to register with SEBI as QIBs. Any entities falling under the categories specified above are considered as QIBs for the purpose of participating in primary issuance process.

Placement

Under this method, the issue houses or brokers buy the securities outright with the intention of placing them with their clients afterwards. Here the brokers act as almost wholesalers selling them in retail to the public. The brokers would make profit in the process of reselling to the public. The issue houses or brokers maintain their own list of client and through customer contact sell the securities.

Placement has the following advantages:

1. Timing of issue is important for successful floatation of shares. In a depressed market conditions when the issues are not likely to get public response though prospectus, placement method is a useful method of floatation of shares.

2. This method is suitable when small companies issue their shares.

The main disadvantage of this method is that the securities are not widely distributed to the large section of investors. A selected group of small investors are able to buy a large number of shares and get majority holding in a company.

This method of private placement is used to a limited extent in India. The promoters sell the shares to their friends, relatives and well wishers to get minimum subscription which is a precondition for issue of shares to the public.

Safety Net

Safety net is a scheme under which a person or a company (generally a finance company) undertakes to buy shares issued and allotted in a new issue from the allottees at a stipulated price This is an agreement in relation to an issue of equity shares. The main feature of the safety net is to provide the equity investors safety of their investments from fall of the share price below the issue price. This facility will be generally provided in the bear market environment. Closely held companies who are going to issue shares to the public for the first time may also provide safety net facility to the investors in their shares where the investors has no benchmark price to go by and therefore the safety net would provide him a sort of confidence regarding safety of their investment into equity shares. The safety net scheme generally puts provision for buying back the shares at a price lower than the issue price, and the difference will be the premium to the buyer for the risk taken in purchase of shares back from the investors.

Stock invest

In case of oversubscription of issue, there have been inordinate delay in refund of excess application money and large amounts of investors' funds remain locked up in companies for long periods affecting the liquidity of the investing public. To overcome the said problem a new instrument called 'stockinvest' is introduced. The Stockinvest is a non-negotiable bank instrument issued by the bank in different denominations. The investor who has a savings or current account with the bank will obtain the stockinvest in required denominations and will have to enclose it with the share/debenture application. On the face of the instrument provides for space for the investor to indicate the name of the issues, the number and amount of shares/debentures applied for and the signature of the investor. The stockinvests issued by the bank will be signed by it and the date of issue will also be indicated on the instruments. Simultaneously with the issue of stockinvest, the bank will mark a lien for the amounts of stockinvest issued in the deposit account of the investor. On full or partial allotment of shares to the investor, the Registrar to issue will fill the columns of stockinvest indicating the entitlement for allotment of shares/debentures, in terms of number, amount and application number and send it for clearing.

The investor's bank account would get debited only after the shares/debentures allotted. In respect of unsuccessful applicants, the funds continue to remain in their account and earn interest if the account is a savings or a term deposit. The excess application money of partly successful applicants also, will remain in their accounts. There will be lien on the funds for a maximum of four months period. The stockinvest is intended to be utilised only by the account holders and the stockinvest should not be handed over to any third party for use. In case the cancelled/partly utilised stockinvest is not received by an investor from the registrar, lien will be lifted by the issuing branch on expiry of four months from the date of issue against an indemnity bond from the investor.

Rights Issues

If an existing company intends to raise additional funds, it can do so by borrowing or by issuing new shares. One of the most common methods for a public company to use is to offer existing shareholders the opportunity to subscribe further shares. This mode of rising finance is called *'Rights Issues'*. The existing shareholders have right to entitlement of further shares in proportion to their existing shareholding. A shareholder who does not want to buy the right shares, his right of entitlement can be sold to someone else. The price of rights shares will be generally fixed above the nominal value but below the market price of the shares. The issue of quoted shares at below the nominal value is not allowed, and it would be rare for this to happen for unquoted shares. Section 81 of the Companies Act provides for the further issue of shares to be first offered to the existing members of the company, such shares are known as 'Right shares' and the right of the members to be so offered is called the *'right of pre-emption'*.

Section 81 of the Companies Act, 1956 deals with the provisions relating to rights issues.

- Any Company
  - (i) which has completed two years after its incorporation or
  - (ii) which has completed one year from the first allotment of shares after its incorporation
- whichever is earlier, if it proposes to increases its subscribed capital by allotment of further shares, then the subsequent provisions shall apply.
- Those further shares shall be first be offered to the existing shareholders in proportion to the shares held by them in the paid up capital, on the date of such offer.
- At least 15 days notice shall be given from the date of offer. The notice shall specify the number of shares offered and the limiting time of the offer.
- The notice shall mention that if the offer is not accepted within the time of offer, will be deemed to have been declined.
- Unless the articles of the company otherwise mention, such offer has the right of renunciation.
- The notice of offer shall contain a statement a renunciation.
- If it is declined to accept the offer, the Board of directors may dispose of those shares in such manner as they think most beneficial to the company.

Bought Out Deal

Bought Out Deal (BOD) is a process of investment by a sponsor or a syndicate of investors/ sponsors directly in a company. Such direct investment is being made with an understanding between the company and the sponsor to go for public offering in a mutually agreed time. Bought out deal, as the very name suggests is a type of wholesale offer of equities by a company. A company allots shares in full or in lots to a sponsors at a price negotiated between the company and the sponsor(s). After a particular period of agreed upon between the sponsorer and the company the shares are issued to the public by the sponsorer with a premium. The holding cost of such shares by the sponsor may either be reimbursed by the company or the sponsor may absorb the profit in part or full as per the agreement, arising out of the public offering at a premium. After the public offering the shares are listed in one or more stock exchanges.

Advantages Bought out deal is not only advantageous to the company going for it but also to the sponsors and common investors.

- The company has the advantage of using the fund immediately without waiting as in the case of direct public issue. In case of BOD the company instantly gets funds and is able to focus its attention on project implementation without worrying for source of investment. Bought out deals are ideally suited in circumstances when money needs to be arranged fast without which the project may suffer. Lowering or eliminating issue cost from the preliminary expenses is another advantage to the company.
- The time taken to raise money in the capital market by a company takes as much as six months and this time is very high for a company in an infancy stage. The waste of time in the initial stage can be avoided by going for BOD.
- In case of a new and untried product it is easier to convince an investment banker for an investment in the company rather than the general public. Hence BOD is an innovative method of financing for such companies.
- When the market sentiment is low and the secondary market is undergoing a bear phase, a company may not like to come to the market with a public issue. In such case BOD is a superior process to get fund for the company.
- The merchant bankers also gain handsomely from a BOD. The merchant banks expect a return of around 30% from a BOD whereas private financing institutions expect a return of 40% to 60% from a BOD. The gains can be tremendous provided the sponsors select proper issues and price it attractively to the investors.
- The investors also gain from the BOD in a way that they get good issues where some merchant banker has already invested in it. The common investors do not have enough scope and information for proper evaluation of a company. The merchant bankers are professionals and can make proper appraisal of a company.

1.6 DEPOSITORIES

The depositories are an important intermediaries in the securities market that is scrip-less or moving towards such a state. In India, the Depositories Act defines a depository to mean "a company formed and registered under the Companies Act, 1956 and which has been granted a certificate of registration under sub-section (IA) of section 12 of the Securities and Exchange Board of India Act, 1992." The principal function of a depository is to dematerialize securities and enable their transactions in book-entry form.

Dematerialisation of securities occurs when securities, issued in physical form, are destroyed and an equivalent number of securities are credited into the beneficiary owner's account. In a depository system, the investors stand to gain by way of lower costs and lower risks of theft or forgery, etc. They also benefit in terms of efficiency of the process. But the implementation of the system has to be secure and well governed. All the players have to be conversant with the rules and regulations as well as with the technology for processing. The intermediaries in this system have to play strictly by the rules.

A depository established under the Depositories Act can provide any service connected with recording of allotment of securities or transfer of ownership of securities in the record of a depository. A depository cannot directly open accounts and provide services to clients. Any person willing to avail of the services of the depository can do so by entering into an agreement with the depository through any of its Depository Participants.

Depository is an organisation which holds securities of investors in electronic form at the request of the investors through a registered Depository Participant. It also provides services related to transactions in securities.

Bank and Depository

It can be compared with a bank, which holds the funds for depositors. A Bank – Depository Analogy is given in the following table:

BANK-DEPOSITORY – AN ANALOGY

BANK	DEPOSITORY
Holds funds in an account	Hold securities in an account
Transfers funds between accounts on the instruction of the account holder	Transfers securities between accounts on the instruction of the account holder
Facilitates transfer without having to handle money	Facilitates transfer of ownership without having to handle securities
Facilitates safekeeping of money	Facilitates safekeeping of securities

Types of Depositories registered with SEBI

At present two Depositories viz. National Securities Depository Limited (NSDL) and Central Depository Services (I) Limited (CDSL) are registered with SEBI.

Benefits of availing depository services

The benefits are enumerated below:-

1. A safe and convenient way to hold securities;
2. Immediate transfer of securities;
3. No stamp duty on transfer of securities;
4. Elimination of risks associated with physical certificates such as bad delivery, fake securities, delays, thefts etc.;
5. Reduction in paperwork involved in transfer of securities;
6. Reduction in transaction cost;
7. No odd lot problem, even one share can be sold;
8. Nomination facility;
9. Change in address recorded with DP gets registered with all companies in which investor holds securities electronically eliminating the need to correspond with each of them separately;
10. Transmission of securities is done by DP eliminating correspondence with companies;
11. Automatic credit into demat account of shares, arising out of bonus/split/consolidation/merger etc.
12. Holding investments in equity and debt instruments in a single account.

1.7 BUY BACK OF SHARES

A **treasury stock** or **reacquired stock** is stock which is bought back by the issuing company, reducing the amount of outstanding stock on the open market ("open market" including insiders' holdings).

Stock repurchases are often used as a tax-efficient method to put cash into shareholders' hands, rather than pay dividends. Sometimes, companies do this when they feel that their stock is undervalued on the open market. Other times, companies do this to provide a "bonus" to incentive compensation plans for employees. Rather than receive cash, recipients receive an asset that might appreciate in value faster than cash saved in a bank account. Another motive for stock repurchase is to protect the company against a takeover threat.

Benefits of BBS

If efficient market theory is correct, a company buying back its stock should have no effect at all on its stock price. If the market fairly prices a company's shares at $50/share, if a company buys back 100 shares for INR 5000, it now has INR 5000 less cash but there are 100 fewer shares outstanding; the net effect should be that the value per share is unchanged. However, buying back shares does improve certain per-share ratios, such as price/earnings (earnings per share is increased due to fewer shares outstanding), but that is only because valuing a company's shares according to those ratios is not accurate when a company is holding a lot of cash. If a company's shares are underpriced, then a company can benefit its other shareholders by buying back shares. If a company's shares are overpriced, then a company is actually hurting its remaining shareholders by buying back stock.

Incentives

One other reason for a company to buy back its own stock is to reward holders of stock options. Option holders are hurt by dividend payments, since, typically, they are not eligible to receive them. A share buyback program *may* increase the value of remaining shares (if the buyback is executed when shares are underpriced); if so, option holders benefit. A dividend payment short term *always* decreases the value of shares after the payment, so, on the day shares go ex-dividend, option holders *always* lose. Finally, if the sellers into a corporate buyback are actually the option holders themselves, they may directly benefit from temporarily unrealistically favorable pricing.

After buyback

The company can either retire the shares (however, retired shares are not listed as treasury stock on the company's financial statements) or hold the shares for later resale. Buying back stocks reduces the number of outstanding shares. To see this, note that accompanying the decrease in the number of shares outstanding is a reduction in company assets, in particular, cash assets, which are used to buy back shares.

Investors in IPOs:

The investors in any Initial Public Offering (IPO) constitute retail Investors, Qualified Institutional Buyers and Non- Institutional Investors. As per the existing SEBI regulations, the allocation of shares to QIBs, NIIs and retail investors has to be in the ratio of 50:15:35. Under NIIs, resident Indian individuals, HUFs, NRIs, societies and trusts, whose application size in terms of value is more than Rs 1 lakh, are allowed to bid. According to sources in investment banking circles, QIBs and 'bulge bracket' sponsors (HNIs) ensure the success of public issues in the market. This is evident from the fact that public issues with higher NII participation invariably list at a higher premium.

Qualified Institutional Buyer - QIB

QIBs primarily refer to institutions that manage at least $100 million in securities including banks, savings and loans institutions, insurance companies, investment companies, employee benefit plans, or an entity owned entirely by qualified investors. Also included are registered broker-dealers owning and investing, on a discretionary basis, $10 million in securities of non-affiliates.

High Net Worth Individual – (HNI)

A classification of an investor, to denote an individual or a family with high net worth. High net worth is generally quoted in terms of liquid assets over a certain figure. The exact amount differs by financial institution and region. The categorization is relevant because high net worth individuals generally qualify for separately managed investment accounts instead of regular mutual funds.

The most commonly quoted figure for membership in the high net worth ″club″ is $1 million in liquid financial assets. An investor with less than $1 million but more than $100,000 is considered to be "affluent", or perhaps even "sub-HNWI". The upper end of HNWI is around $5 million, at which point the client is then referred to as "very HNWI". More than $50 million in wealth classifies a person as ″ultra HNWI".

HNWIs are in high demand by private wealth managers. The more money a person has, the more work it takes to maintain and preserve those assets. These individuals generally demand (and can justify) personalized services in investment management, estate planning, tax planning, and so on.

Objective Questions:

1. The price at which a company's shares are offered initially in the primary market (Issue Price ; Listing Price ; Market Price)
2. The market value of a quoted company, which is calculated by multiplying its current market price by the number of outstanding shares is referred as ________ (Price rigging ; Market Capitalization ; Stock Invest)
3. Shares normally held by promoters and directors of the company (Preference shares ; Deferred Shares ; Convertible Bonds)
4. Issue of shares to its employees or directors at discount or for consideration other than cash for providing know-how or making available rights in the nature of intellectual property rights or value addition. (Sweat Equity ; Green Shoe option ; Seasoned Equity)
5. A ________ which contains all information of the company contents but does not have information on price of securities offered and number of securities (quantum) offered through such document to the Public. (Offer for sale ; Bought out Deal ; Red –Herring Prospectus)
6. _______ is an unsecured promissory note privately placed with investors, freely negotiable by endorsement at a discount rate to face value determined by market forces. (Certificate of Deposit ; Commercial Paper ; Treasury Bill)

7. A company allots shares in full or in lots to a sponsor at a price negotiated between the company and the sponsor(s). (Bought Out Deal ; Buy Back of Shares ; Irredeemable Preference shares)

8. An option allowing the Issuing Company to issue additional shares when the demand is high for the shares when the flotation is on.

   (Follow on Offer ; Green Shoe option; Call option)

9. The investors who tend to purchase a company's stock usually based on relationships between the current market price of the company and certain business fundamentals.(Growth Investing ; Value Investing ; Stock Invest)

10. A Custodian is basically an organisation, which helps register and safeguard the securities of its clients. (Depository ; Trustee ; Stock exchange)

11. A ________can be seen as a method for company to invest in itself by buying shares from other investors in the market. (Initial Public Offer ; Rights issue ; Buy back)

12. A__________ is like a bank wherein the deposits are securities (viz. shares, debentures, bonds, government securities, units etc.) in electronic form. (Depository ; SafetyNet ; eIPO)

13. _____________is the process by which physical certificates of an investor are converted to an equivalent number of securities in electronic form and credited to the investor's account with his *Depository Participant* (DP). (Demutualisation ; Dematerialization ; Rematerialisation)

14. The responsibility for regulating the securities market is shared by __________. [Department of Economic Affairs (DEA)Department of Company Affairs (DCA) Reserve Bank of India (RBI) Securities and Exchange Board of India (SEBI). All the above (c) and (d)]

15. The Securities and Exchange Board of India (SEBI) is the regulatory authority in India established under Section 3 of SEBI Act, ______. (1990 ; 1992 ; 1991)

16. An issue where an allotment is made to less than 50 persons (Rights Issue ; Bought out deal ; Private Placement ;)

17. Lead Manager stipulates the floor price or a price band and leave it to market forces to determine the final price. (Remutualisation ; Book Building ; Fixed Price)

18. SBTS stands for _______ (Stock Buy Trading System, Screen Based Trading System, Screen Bolt Trading System)

19. An existing listed company either makes a fresh issue of securities to the public or makes an offer for sale of securities to the public for the first time. (Initial Public Offer ; Follow on offering; Green Shoe option)

20. First exchange in the world to use satellite communication technology for trading. Its trading system, called _______(SBTS; NEAT;)
21. ___________refers to the legal structure of an exchange whereby the ownership, the management and the trading rights at the exchange are segregated from one another. (Rematerialisation; Demutualisation; Dematerialisation)
22. An ________shows how a specified portfolio of share prices are moving in order to give an indication of market trends. (Forex; Index; CommodityEx)
23. An outright sale of securities through the intermediary of issue houses or share brokers where, the shares are not offered to the public directly. (Offer for sale; Follow on offer; Secondary Offer)
24. Bond issued at a discount and repaid at a face Value. (Eurobonds; Yankee Bonds; zero –coupon bonds)
25. The Securities market essentially has three categories of participants, namely, ___ (NSDL, SEBI, Investors.; RBI; Brokers; Companies; Issuers, Investors in securities, Intermediaries)

[Answers: 1. a ; 2. b ; 3. b ; 4. a ; 5. c ; 6. b ; 7. a ; 8. b ; 9. b ; 10. a ; 11.c ; 12.a ; 13. b ; 14. e ; 15 b ; 16. c ; 17. b ; 18. b ; 19.b ; 20. b ; 21. b ; 22. b ; 23.a ; 24. c ; 25. c]

1.8. FORWARD CONTRACT AND FUTURE CONTRACTS

Forward Contract

A forward contract is an agreement made today between a buyer and seller to exchange the commodity or instrument for cash at a predetermined future date at a price agreed upon today. The agreed upon price is called the 'forward price 'with a forward market the transfer of ownership occurs on the spot, but delivery of the commodity or instrument does not occur until some future date. In a forward contract, two parties agree to do a trade at some future date, at a stated price and quantity. No money changes hands at the time the deal is signed. For example, a wheat farmer may wish to contract to sell their harvest at a future date to eliminate the risk of a change in prices by that date. Such transaction would take place through a forward market. Forward contracts are not traded on an exchange, they are said to trade over the counter (OTC). The quantities of the underlying asset and terms of contract are fully negotiable. The secondary market does not exist for the forward contracts and faces the problems of liquidity and negotiability.

Problems in Forward Contracting

The forward contracts are affected by the problems like (a) Lack of centralisation of trading (b) Illiquidity (c) Counter party risk.

Futures Contract

The futures contract is traded on a futures exchange as a standardised contract, subject to the rules and regulations of the exchange. It is the standardisation of the futures contract facilitates the secondary market trading. The futures contract relates to a given quantity of the underlying asset and only whole contracts can be traded, and trading of fractional contracts are not allowed in futures contracting.

The terms of the futures contracts are not negotiable. A futures contract is a financial security, issued by an organised exchange to buy or sell a commodity, security or currency at a predetermined future date at a price agreed upon today. The agreed upon price is called the 'futures 'price.

Types of Futures Contract

Futures contracts may be classified into two categories:

Commodity Futures : Where the underlying is a commodity or physical asset such as wheat, cotton, butter, eggs etc. Such contracts began trading on Chicago Board of Trade (CBOT) in 1860's. In India too, futures on soyabean, black pepper and spices have been trading for long

Financial Futures : Where the underlying is a financial asset such as foreign exchange, interest rates, shares, treasury bill or stock index.

Standardised Items in Futures The standardised items in any futures contract are:

(a) Quantity of the underlying

(b) Quality of the underlying (not required in financial Futures)

(c) The date and month of delivery

(d) The units of price quotation (not the price itself) and minimum change in price (tick-size)

(e) Location of settlement

Important Features of Futures Contract:

The important features of futures contract is given below:

Standardisation : The important feature of futures contract is the standardisation of contract. Each futures contract is for a standard specified quantity, grade, coupon rate, maturity etc. The standardisation of contracts fetches the potential buyers and sellers and increases the marketability and liquidity of the contracts.

Clearing house : An organisation called 'futures exchange' will act as a clearing house. In futures contract, the obligation of the buyer and the seller is not to each other but to the clearing house in fulfilling the contract which ensure the elimination of the default risk on any transaction.

Time Spreads : There is a relationship between the spot price and the futures price of contract. The relationship also exists between prices of futures contracts which are on the same commodity or instrument but which have different expiry dates. The difference between the prices of two contracts is known as the 'time spread' which is the basis of futures market

Margins : Since the clearing house undertakes the default risk, to protect itself from this risk, the clearing house requires the participants to keep margin money, normally ranging between 5% to 10% of the face value of the contract.

Uses of Forward and Future Contracts

The uses of forward and futures contracting are as follows:

Hedging: The classic hedging application would be that of a wheat farmer forward/ futures selling his harvest at a known price in order to eliminate price risk. Conversely, a bread factory may want to buy wheat forward/futures inorder to assist production planning without the risk of price fluctuations.

Price discovery: Price discovery is the use of forward/futures prices to predict spot price that will prevail in the future. These predictions are useful for production decisions involving the various commodities.

Speculation: - If a speculator has information or analysis which forecasts an upturn in a price, then he can go long on the forward/futures market instead of the cash market, wait for the price rise, and then take a reversing transaction. The use of forward/futures market here gives leverage to the speculator.

Forward Contract vs. Future Contract

Forward contracts are private bilateral contracts and have well established commercial usage. Future contracts are standardised tradable contracts fixed in terms of size, contract date and all other features. The differences between forward and Futures contracts are given below :

Forward contracts	Future contracts
1. The contract price is not publicly disclosed and hence not transparent.	1. The contract price is transparent.
2. The contract is exposed to default risk by counterparty.	2. The contract has effective safeguards against defaults in the form of clearing corporation guarantees for trades and daily mark to market adjustments to the accounts of trading members based on daily price change.
3. Each contract is unique in terms of size, expiration date and asset type/quality.	3. The contracts are standardised in terms of size, expiration date and all other features.
4. The contract is exposed to the problem of liquidity.	4. There is no liquidity problem in the contract.
5. Settlement of the contract is done by delivery of the asset on the expiration date.	5. Settlement of the contract is done on cash basis.

Participants in Futures Market

The major players in the futures market are Hedgers, Speculators and Arbitrageurs.

Hedgers	- Hedgers wish to eliminate or reduce the price risk to which they are already exposed. The hedging function solely focuses on the role of transferring the risk of price changes to other holders in the futures markets.
Speculators	- Speculators are those class of investors who willingly take price risks to profit from price changes in the underlying.
Arbitrageurs	- Arbitrageurs profit from price differential existing in two markets by simultaneously operating in two different markets.

Mechanism in Futures Contracts

- Buy a future to agree to take delivery of a commodity. This will protect against a rise in price in the spot market as it produces a gain if spot prices rise. Buying a future is said to be going long.
- Sell a future to agree to make delivery of a commodity. This will protect against a fall in price in the spot market as it produces a gain if spot prices fall. Selling a future is said to be going short.

A futures contract is a contract for delivery of a standard package of a standard commodity or financial instrument at a specific date and place in the future but at a price which is agreed when the contract is taken out. Certain futures contracts, such as on stocks or currency, settled in cash on the price differentials, because clearly delivery of this particular commodity would be difficult.

The futures price is determined as follows:

Futures Price = Spot Price + Costs of Carrying

The spot price is the current price of a commodity. The costs of carrying of a commodity will be the aggregate of the following:

(a) Storage

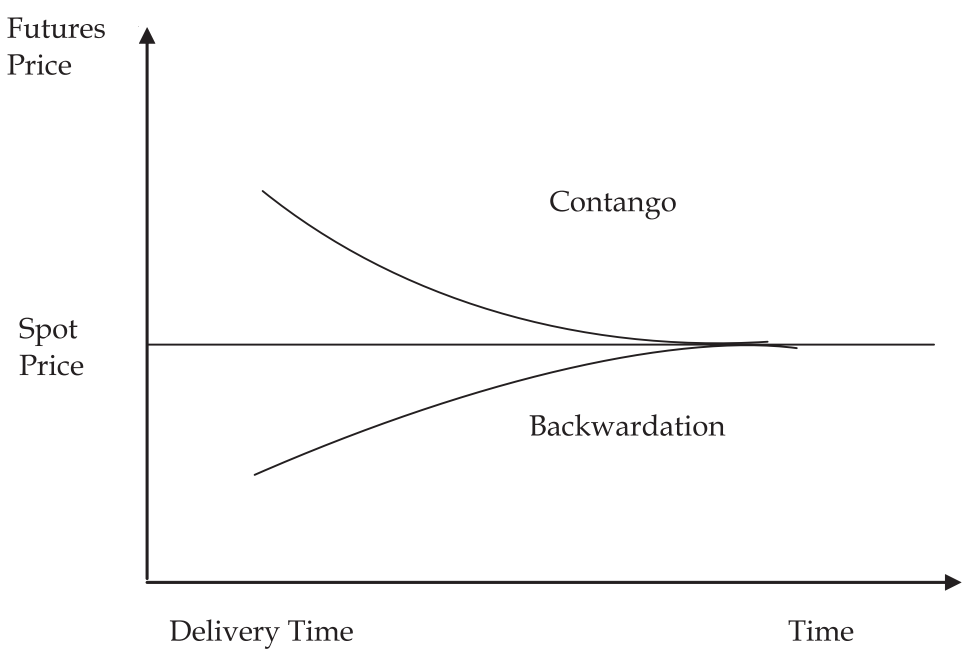
(b) Insurance

(c) Transport costs involved in delivery of commodity at an agreed place.

(d) Finance costs ie., interest forgone on funds used for purchase of the commodity.

Basis = Futures – Spot Price

Although the spot price and futures price generally move in line with each other, the basis is not constant. Generally basis will decrease with time. And on expiry, the basis is zero and futures price equals spot price. If the futures price is greater than the spot it is called *contango.* Under normal market conditions futures contracts are priced above the spot price. This is known as the contango market. In this case, the futures price tends to fall over time towards the spot, equalling the spot price on delivery day. If the spot price is greater than the futures price it is called *'backwardation'*. Then the futures price tends to rise over time to equal the spot price on the delivery day. So in either case, the basis is zero at delivery This may happen when the cost of carry is negative, or when the underlying asset is in short supply in the cash market but there is an expectation of increased supply in future - example agricultural products. The direction of the change in price tends to hold for cycles of contracts with different delivery dates. If the spot price is expected to be stable over the life ot the contract, a contract with a positive basis will lead to a continued positive basis although this will be lower in nearby delivery dates than in far-off delivery dates. This is a normal contango. Conversely, normal backwardation is the result of a negative basis where nearer maturing contracts has higher futures prices than far-off maturing contract.



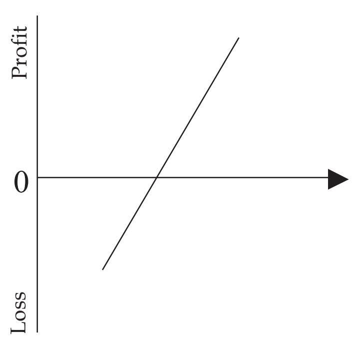
FUTURES CONTRACTS –CONTANGO AND BACKWARDATION

Simple Payoff Positions in Futures The buyer of a futures contract is said to 'go long' the future, whereas the seller is said to 'go short'. With a long position, the value of the position rises as the asset price rises and falls as the asset price falls. With a short position, a loss ensues it the asset price rises but profits are generated if the asset price falls.

Buyer's Payoff The buyer of futures contract has an obligation to purchase the underlying instrument at a price when the spot price is above the contract price the buyer will buy the instrument for the price 'C and can sell the instrument for higher spot price thus making a profit. When the contract price is above spot price, a loss is made by the buyer of the contract.

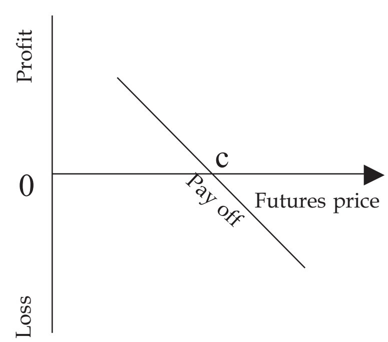
Seller's Payoff The seller of the contract makes a profit when the contract price is above the spot price. The seller will purchase the instrument at the spot price and sells at the contract price. The seller makes loss when the spot price is above the contract price

Long position



C = Contract price

Short position



C = Contract price

PAY OFF IN LONG AND SHORT FUTURES POSITION

Illustration 3

Suppose a trader has bagged an order for which he has to supply 2,000 tonnes of aluminium sheet to the buyer within next two months.

After obtaining the order the trader is observing a rise of price of aluminium sheet in the open market and, if such a rise continues, the profit margin of the trader may get shrinked, even he may land on a huge loss just because of the rise of procurement price of the aluminium sheet. But if the trader under the circumstances purchases aluminium sheet futures, then any loss for the rise of price of aluminium to be bought by the trader for the supply order could be then off-setted against profit on the future contract, and, however, if there is a fall of price, extra profit on fall of price of aluminium sheet can also be offset against cost or loss of future contract. So hedging technique is equivalent of insurance facility against market risk where price is always volatile.

1.9 ISSUE MECHANISM

Stock market or securities market is a market where securities issued by firms in the form of shares, bonds and debentures can be bought and sold freely. It consists of primary market and secondary market.

Primary market or the new issues market is the market which is concerned with the issue of new securities. Companies often raise funds through the primary market for setting up or expanding their business. The various methods through which capital can be raised are:-

- **By prospectus:-** Capital can be raised from the general public by the issue of prospectus. The prospectus is an invitation to the general public for subscribing to the capital. It contains various details regarding the particulars of the company, its financial position, etc.

- **By offer for sale:-** This method is almost similar to the prospectus except the difference that initially shares are taken up by a third party in bulk. Later, a statement like prospectus is issued for sale of shares to the public.

- **By private placing:-** Shares are sold to individuals or institutions directly by making a private appeal to them.

- **By offering rights issue:-** Companies may also raise capital from the existing shareholders by making a rights issue. Under the rights issue, the shareholders have the right to a certain number of shares in proportion to the shares held by them.

Secondary market or stock exchange is a highly organised market for the purchase and sale of second hand quoted or listed securities ('quoting' or 'listing' of a particular security implies incorporating that security in the register of the stock exchange). It is an association, organisation or body of individuals, whether incorporated or not, established for the purpose of assisting, regulating and controlling business in buying, selling and dealing in securities.

The various instruments of stock market include:-

- Shares, which represents the interests or rights of the investors (measured in terms of money) to participate in the profits made by the company while it is a going concern, or in the assets of the company when it is wound up

- IPOs or Initial Public Offerings is the first sale of a company's common shares to public investors for the purpose of raising capital in the primary market

- Mutual Funds is a mechanism of mobilizing the savings and resources of various individual investors, especially small investors and investing them in shares and securities of the companies
- Bond is a security representing a long-term promise to pay a certain sum of money at a certain fixed time or over the course of the loan, with a fixed rate of interest payable to the bond holder.

The rating of stock market implies evaluating the various options of issuing securities in the primary as well as the secondary market. It is a tool which enables the investor to check the future capability of each stock as well as that of its issuer. It is focussed on communicating to the investors the relative ranking of the profits or loss probability for a given fixed income investment in comparison with other related instruments. However, the evaluation of the security issues are not recommendations to buy or sell or a indicate the suitability of any particular security for the investor.

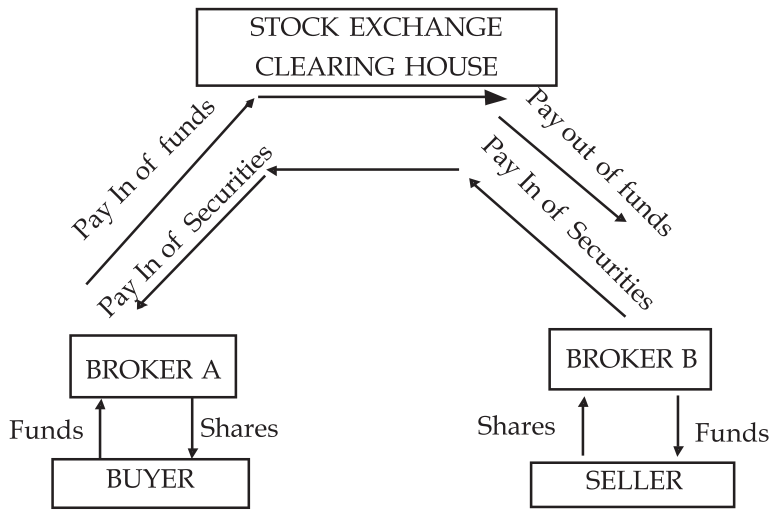
The rating of the bonds issued by corporates, government, etc. is called the bond rating. The rating of preference share issued by a company is called preference share rating. whereas, the rating of equity shares issued by a company is called equity rating.

1.10 CLEARING AND SETTLEMENT MECHANISM

Settlement mechanism

Once you have bought or sold shares, the transaction is complete only when you have taken delivery of the shares you have purchased, or received money for the shares you have sold. This is called settlement in stock market parlance. The stock exchanges have a complex mechanism in place to ensure that every trade is properly matched, and shares are received or delivered properly. In case of a shortfall of securities, an auction is resorted to close out the difference. The mechanism through which all parties to a transaction get their receivables i.e. either funds or shares is known as ‘clearing and settlement’ or simply ‘settlement’. (Fig. 9.1)

Settlement Process



Settlement agents

On each of the exchanges, thousands of orders get matched with each other during the course of a trading cycle. Even though for each trade there is a buyer broker and a seller broker, they never interact with each other for the settlement of that trade. Their interaction is only with the settlement agency of their exchange. When an investor enters into a transaction with a broker, either the shares or funds have to be delivered to the broker. In turn, the broker delivers these to the settlement agent on 'pay-in day' (explained in the next section). Having made sure that it has received shares and funds from all brokers, it processes the deliveries and earmarks the shares for delivery to the buyer broker. So on the pay-out day (explained in the next section) it is able to deliver shares to the respective buyer broker and funds to the respective seller broker.

For trades on BSE, the settlement agent is called as **'Clearing House (CH)'** while on NSE it is **'National Securities Clearing Corporation Ltd. (NSCCL)'**

Clearing House – Settlement Agent of the BSE

The clearing and settlement operations of the BSE is managed by a company called BOI Share Holding, which is a subsidiary of Bank of India and BSE and is known as Clearing House. All settlements for securities are through the Clearing House on a delivery versus payment (DVP) basis.

Trading Mechanism in Stock Exchanges

The bye-laws of the stock exchanges does not permit an outsider, who is not a member to transact business directly. Buying and selling of securitites could be engaged only through a broker, who is a member of a stock exchange. The trading mechanism follows the following procedure:

i) **Choosing a broker** - selecting a broker can be based on either a known member or proximity / popularity .

ii) **Engaging the broker** – Complying with the legal terms and signing an agreement with the broker of your choice

iii) **Opening an account with broker** – A DP account to be opened becomes necessary for opening an account with the broker.

iv) **Placing the order** – An order is placed with the broker for buying or selling a specific number of securities

v) **Exercising of the choice of orders –** The orders placed are executed for which a certain percentage of brokerage charges are levied

The transaction cycle for placing an order is as given below in Fig.9.2

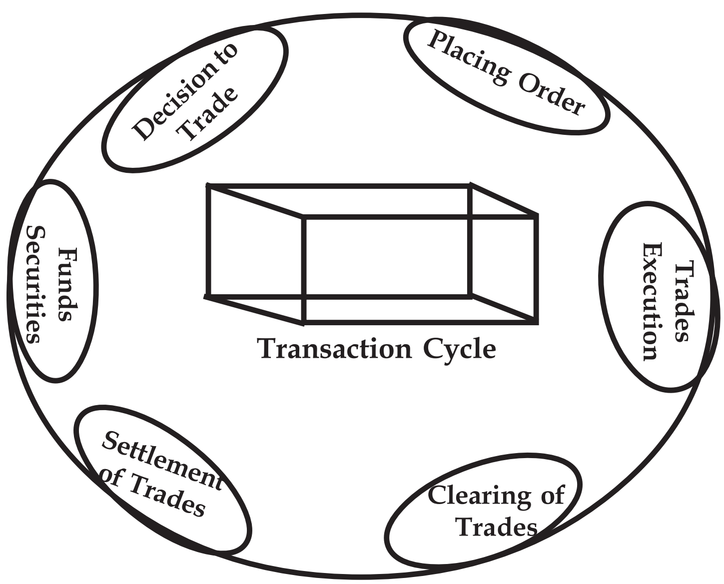


Fig.9.2 – Transaction Cycle

vi) Giving Margin money to broker – A margin money is deposited with the broker to take exposure on any loss incurred on transacting a contract

vii) Preparing Contract Note - After execution of the contract a contract note is issued to the client.

viii) Settlement of the contract – The payment of funds by the buyer is made for the shares bought and the delivery of securities sold is done by the seller thus settling the contract entered with the broker.

Types of Orders

i. **Market orders or Best Rate orders –** instructions given to brokers to buy or sell at the best possible price . Example : Buy 1000 shares of Suzlon at the best price.

ii. **Limit Orders -** instructions to brokers to buy or sell at a stated price. It specifies the maximum or minimum price the investor is willing to accept for his trade. This protects the clients against paying more or selling for less than intended price. Example: Buy 1000 shares of RPL at Rs. 164 each.

iii. **Discretionery Order –** instructed to buy or sell the stock within a range of price. **Example :** Buy 500 SBI shares around Rs.1800

iv. **Stop- Loss order -** this type of order is used to limit the amount of losses or to protect the amount of capital gains useful to both investors and speculators. The order is executed once the its price reaches the specified point to avoid further loss. Example: sell RPL at Rs. 65, stop loss @ Rs.62 to limit the loss on sale.

Executions of Trade:

A . Settlement Cycle

B. Rolling settlement

C. Price filters / circuit filters

D. Intraday Price bands

The settlement cycle on the BSE is Trade plus two days, or T+2, as per a SEBI directive implementing this new cycle from April 1, 2003. Earlier a settlement cycle consisted of five days trading period within which any transaction buy/sell must be completed. There are two types of settlement, namely, Fixed and Rolling. The settlement cycle or trading cycle was reduced to one week from the earlier pattern of 14 to 30 days of trading cycle. This long trading cycle had been adversely affecting the trading system, leading to investor defaults due to price variations.

A) A Fixed settlement cycle starts on a particular day and ends after five days. For instance, in NSE the settlement cycle starts on Wednesday of one week and ends on Tuesday of the following week, whereas in BSE it starts on Monday and ends on Friday. A pay-in –day and a pay-out-day follows the settlement cycle. The pay-in-day refers to all the buyer brokers depositing the money for the purchase of shares. The pay-out-day refers to the exchange handing over the proceeds to the seller brokers. Subsequently, the Rolling Settlement on T+5 basis was introduced effectively reducing the trading cycle to one day. Since April 2003, all stock exchanges follow a T+2 rolling settlement system.

B) Rolling Settlement:

The rolling settlement was introduced by SEBI on January 10, 2000. Ten stocks were selected initially and SEBI has announced a list of 156 stocks which was included in rolling settlement made by the first fortnight of May 2000. In a rolling settlement of a T+5 period trades are settled 5 days from the date of transaction. If an investor purchases 500 shares of RIL and sells 400 shares on Monday he would be asked to settle the net outstanding of 100 shares on the following Monday. This means all open positions are squared up on the fifth or sixth day from the trading date.

In the T+2 rolling settlement, trades are settled on the second working day. For example, trades taking place on Monday are settled on Wednesday, etc.

	Activity	Day
Trading	Rolling Settlement Trading	T (Eg. Monday)
Clearing	Custodial confirmation	T+1 working days
	Delivery Generation	T+1 working days
Settlement	Securities and Funds Pay in	T+2 working days
	Securities and Funds Pay out	T+2 working days

C) Price Filters / Circuit Breakers:

The index-based market-wide circuit breakers were implemented in compulsory rolling settlement with effect from July 02, 2001.

The index-based market-wide circuit breaker system applies at 3 stages of the index movement, either way viz. at 10%, 15% and 20%. These circuit breakers when triggered bring about a coordinated trading halt in all equity and equity derivative markets nationwide. The market-wide circuit breakers are triggered by movement of either the BSE Sensex or the NSE S&P CNX Nifty, whichever is breached earlier. The % movement of the index and the time frame of the trading halt is given below:

- 10% movement - a one-hour market halt if the movement takes place before 1:00 p.m.
  - at or after 1:00 p.m. but before 2:30 p.m., a trading halt for ½ hour.
  - at or after 2:30 p.m. there will be no trading halt and market shall continue trading.

• 15% movement - a two-hour halt if the movement takes place before 1 p.m.

- on or after 1:00 p.m., but before 2:00 p.m., a trading halt of one hour

- on or after 2:00 p.m. the trading shall halt for remainder of the day.

• 20% movement - trading shall be halted for the remainder of the day.

D) Intraday Price Bands

Daily price bands are applicable on securities as below:

- Daily price bands of 2% (either way) on securities as specified by the Exchange.
- Daily price bands of 5% (either way) on securities as specified by the Exchange.
- Daily price bands of 10% (either way) on securities as specified by the Exchange.
- Price bands of 20% (either way) on all remaining scrips (including debentures, warrants, preference shares etc).
- No price bands are applicable on: scrips on which derivative products are available or scrips included in indices on which derivative products are available..

E) Margins:

i) Daily Margin - For the purpose of imposition of the daily margins, the members of the Exchange are categorised into two categories, i.e., Type -I members who are allowed to carry-forward their trades in 'A' group scrips from one settlement to another and Type-II members who have not opted to carry-forward their trades.

The Type-I members are required to pay daily margin on their trades in 'A' group scrips both for delivery as well as carry-forward at the rate of 10%. The members also have to pay mark-to-market margin on their positions in these scrips provided the mark-to-market margin amount exceeds the amount already paid on daily margin as specified above, and in such cases the difference between the two margins is required to be paid. The Exchange collects daily margins from Type-I members for their transactions in 'B1' and 'B2' group scrips and from Type-II members for their transactions in 'A', 'B1' and 'B2' group scrips based on the outstanding positions in the market. The margins are computed on the basis of gross exposure of the members and the higher of the gross exposure margin or MTM margin is payable.

Computation of daily Margin: The higher of the Gross Exposure Margin (GEM) and Mark to Market Margin (MTM) is taken and the Volatility Margin (VM) is added to it to arrive at the daily margin payable :

Daily Margin Amount = Higher of (GEM, MTM) + VM

Daily margins are payable by afternoon of T+1 day, where 'T' is the trade day, and 1 is the succeeding working day. Margins on Friday's positions are payable on Monday. This margin is debited to member's accounts normally in the evening.

Margins are required to cover the trade exposures of the members of the stock exchange. They play a predominant role in controlling the Liquidity and safety of trades in the stock market. Higher the margin requirement, better the safety of the transaction but lower the liquidity in the market and vice versa. Lower the margin requirement will encourage speculative trading thereby enhancing liquidity in the market. “Margin trading” allows the investor to trade on borrowed funds from a bank or a broker to buy shares.

A member entering an order, needs to enter the client code. Based on this information, margin is computed at the client level, which will be payable by the trading members on T+1 basis.

The different forms of daily margins levied by the Clearing Corporation:

a. Gross Exposure margin (GEM)

b. Mark to Market margin (MTM)

c. Additional Volatility margin (AVM)

a. Gross Exposure margin:

Exposure is a cumulation of net outstanding open positions of all market sub-segments. This cumulation is done only till the actual pay-in day of each of these sub-segments and includes positions in securities that are in no delivery. As and when the pay-in day of a particular trading cycle is reached, the net outstanding open positions of that cycle are excluded from the calculation of GE one day prior to the pay-in day of that segment. The GE on Monday, excludes the positions pertaining to the settlement for which trading was completed on the previous Tuesday. Margins calculated on Friday’s trades which are payable on Monday also exclude the positions pertaining to the settlement for which trading was completed on the previous Tuesday.

Computation of Gross Exposure margin:

The net outstanding position in every security is first computed by taking the difference of the Buy Value and Sell Value. The total outstanding gross exposure is then arrived at by summing up all the security-wise net outstanding positions in value terms irrespective of whether the net outstanding position is a net buy or net sell position across all securities traded – G.E. = S (| Buyvalue – Sellvalue |).

The following example will clarify the calculation of gross exposure utilized:

Security	Buy Value	Sell Value	Buy Value – Sell Value
A	20,00,000	10,00,000	+10,00,000
B	10,00,000	30,00,000	-20,00,000

GE = S (| 10,00,000| + | -20,00,000|) = 30,00,000

b. *Mark to Market Margin:* The mark-to-market (MTM) margin is collected by the stock exchange in addition to the daily margin. While calculating MTM all notional profits of the members are ignored and all notional losses are collected on a daily basis. The members are, thus, required to pay the higher of daily margin or MTM margin. By introducing MTM margin, the management of risk on the outstanding position of the members has considerably improved. The margins are debited to the members bank accounts on the next day of the trade (i.e.,T+1). In case of delay in payment of daily margin, a late fee @ 1% of the amount involved is imposed.

Mark to market margin is calculated by marking each transaction in a scrip to the closing price of the scrip at the end of trading. In case the security has not been traded on a particular day, the latest available closing price at the NSE is considered as the closing price.In the event of the net outstanding position of a member in any security being nil, the difference between the buy and sell values would be considered as notional loss for the purpose of calculating the mark to market margin payable. In case of a net loss, the same is collected as the MTM margin over and above the daily VaR margin and if there is a profit the same is ignored for the purpose of computing the MTM margin.

Example:

The difference between the close price and the price at which the trade was executed (trade price) multiplied by the cumulative buy and sell open position in each security would give us the Mark to Market Profit/loss in each security. Mark to market profit/loss can be calculated using the formula given below:

MTM Profit/Loss = [(Total Buy Qty * Close price) – Total Buy Value] + [Total Sell Value – (Total Sell Qty * Close price)]

Sr. No.	Security	Buy Quantity	Buy Price	Sell Quantity	Sell Price	Close Price	Mtm Profit/Loss Per Security
1	A	1000	50000.00	2000	90000.00	56.00	-16000
2	B	1600	64000.00	1800	73800.00	36.00	2600
3	C	600	3000.00	300	1500.00	5.00	0
4	D	0	0.00	2000	30000.00	14.00	2000
5	E	1000	6300.00	0	0.00	5.00	-1300
6	F	800	32000.00	500	19250.00	35.00	-2250

MTM Profit / Loss for A = [(1000 * 56) – 50000] + [90000 – (2000 * 56)] = - 16000

MTM Profit / Loss for all other securities have also been calculated in the same manner.

Further, if there are frequent delays or non-payment of margins by the members, the intra-day trading limits and gross exposure limits of members are curtailed and their BOLT Trading Work Stations (TWSs) are deactivated for a specified period. Such cases are also referred to the Disciplinary Action Committee for taking disciplinary action against members.

Earlier, the daily margins were computed manually by the members and paid to the Exchange on the following day. Hence, there was a scope for evasion of margins by the members. Since November 1996, the daily margins are computed by the Exchange (a software was developed for calculation of daily margins) and the same are downloaded by the members in their back-office system. This has almost entirely eliminated the possibility of margin evasion by any member and has resulted in better risk management.

c) Additional Volatility Margin

In order to control volatility in the prices of scrips and to provide an exit route to Investors, SEBI had, inter alia, directed the Stock Exchanges to introduce additional margin called Volatility Margin on a graded basis. Volatility in any scrip is computed on a rolling basis over a period of six weeks.

Volatility in percentage terms	**Percentage of volatility margin applicable**
40% and above but less than 50%	5%
50% and above but less than 70%	10%
70% and above but less than 90%	15%
90% and above	20%

The AVM is computed on the net outstanding position of the members in the scrip which has attracted this margin. If a scrip attracts Additional Volatility Margin and Mark-to-Market margin, then higher of the two is recovered. Additional Volatility Margin is not computed for scrips quoting below Rs. 40/-.

The computation of volatility and the percentage of Additional Volatility Margin applicable are as under:

Volatility Margin is charged on the net outstanding value of a security as per the applicable volatility margin percentage for that security. Therefore,

Volatility margin = Absolute of [(Buy Value – Sell Value) * Volatility margin percentage] or,

Mod | (Buy Value – Sell Value) * Volatility margin percentage |

To arrive at the appropriate volatility margin percentage, the volatility percentage of the security is first calculated in the following manner:

Volatility percentage of a security = (High price – Low price) *100 /Low price where the high price and low price considered are the highest and lowest traded prices of the security for the past 6 weeks.

Appropriate adjustments are made for price variations on account of calls, bonuses, rights, mergers, amalgamations and other corporate benefits, and when securities are traded ex-benefits, for the purpose of computing volatility percentage.

The volatility percentage for all securities is calculated on the last day of every normal settlement. Then, on the basis of the volatility percentage slabs, the volatility margin percentage corresponding to the volatility percentage of the security is identified and applied on that security for the next settlement.

ii) ***Value at Risk-based Margin*** **(VaR)** - is the maximum loss not exceeded with a given probability defined as the confidence level, over a given period of time. The VaR rate is applied to gross exposure to determine VaR-based margin. The VaR margin calculation is based on the volatility of the index (either sensex or Nifty) as the higher of scrip VaR and index VaR multiplied with a suitable multiplier. The computation of the VaR rate as well as the gross exposure on which VaR rate is applied is explained below:

Scrip-wise VaR : The scrip-wise daily volatility is calculated using the exponential moving weighted average method for preceeding six months. The volatility (v_t) at the end of the day t, is estimated using the previous volatality estimate (V_{t-1}) at the end of the previous day t-1, and the return (r_t) observed in the market for the day t is calculated as given below:

$$6v_t^2 = p \times V_{t-1}^2 + (1-p) \times r_t^2$$

Where 'p' is a parameter which indicates how rapidly volatility estimate Changes, which is a value estimated as 0.94 used by BSE, as specified in the JR Varma report.

Index VaR: The volatility of Index VaR is calculated in the same manner as given above.

The VaR calculated for Nifty as above is then compared with the Sensex VaR for the Day. The higher of the two is considered as Index VaR. However a Minimum Index VaR of 5% is stipulated by SEBI.

iii) Special Margin

Since February, 1996, with a view to curtail unwarranted rise in the prices and volumes, special margins have been introduced. The special margins, which may range from 25% to 100% are imposed on net cumulative purchases in scrips in which rise in price is abnormal and high volumes are noticed.

iv) Special Ad-hoc Margin

In order to caution the members from building position in low cap and infrequently traded B2 group scrips, the Exchange recovers special ad-hoc margin if a member build up a buy or sell position in a single B2 group scrip beyond Rs. 3 millions and Rs. 15 millions in all B2 group scrips in a settlement. The rate of special ad-hoc margin varies between 25% and 100%.

v) Ad-hoc Margin

As a risk management measure, Ad-hoc margins are imposed on members over and above the daily margins in case members have excessive purchase positions, concentrated purchase positions in some scrips or their financial position does not appear to be sound vis-a-vis their exposure in the market.

The purpose of the margin, as in case of other margins, is to ensure safety of the market. The statistics of 1997 and 1998 of surveillance action initiated against members show that compliance level in payment of margins has improved substantially.

Financial markets across the world are traded on an exchange and presided over by a regulator. For each contract there is a system of margining and leverage. It is important to emphasise, that the margining/leverage system is not unique to India. The margin requirements of few other countries are as shown in Table 9.1, given below:

Table: 9.1 – Margin Requirements in various countries

Country/ Exchange	Margin requirements1			Margin Ratio2		
	Dec 13, 2007	Jan 18, 2008	Jan 22, 2008	Dec 13, 2007	Jan 18, 2008	Jan 22, 2008
Europe/Stoxx	3,300	3,300	3,300	7.5	8.2	8.7
Germany/DAX	14,603	14,603	14,603	7.3	7.9	8.5
Hong Kong/ H-Shares	136,780	120,590	120,590	16.9	16.7	20.1
Hong Kong/ Hang Seng	170,100	159,850	159,850	12.3	12.8	14.7
India/NIFTY	**32,964**	**29,955**	**40,154**	**10.7**	**10.1**	**15.4**
Japan/Nikkei	5,000	5,000	5,000	6.4	7.4	7.7
Korea	18,109	16,598	15,368	15.0	15.0	15.0
Malaysia	4,600	4,600	4,600	6.6	6.4	6.9
Singapore	5,875	5,000	5,000	6.9	6.6	7.1
Taiwan	2,625	2,500	2,500	8.2	7.9	8.8
UK/FTSE	3,000	3,000	3,000	4.7	5.1	5.2
USA/Nasdaq	12,500	12,500	12,500	5.9	6.8	7.0
USA/S&P 500	22,500	22,500	22,500	6.1	6.8	6.9

1: All figures are in local currency units for contract lots, which differ from country to country
2: Margin ratio is the ratio of required absolute margin value to the size of contract value

Margins based on turnover & Exposure limits (Initial margins)

Intra-day turnover limit:

Members of stock exchange are subject to intra-day trading limits. Gross turnover (buy+sell) intra-day of the member should not exceed thirty three and one-third (33 1/3) times the base capital (cash deposit and other deposits in the form of securities or bank guarantees with NSCCL and NSE). Members violating the intra-day gross turnover limit at any time on any trading day are not be permitted to trade forthwith. Member's trading facility is restored from the next trading day with a reduced intra-day turnover limit of 20 times the base capital till deposits in the form of additional deposits (additional base capital) is deposited with NSCCL. Members are given a maximum of 15 days time from the date of the violation to bring in the additional capital.

Upon members failing to deposit the additional capital within the stipulated time, the reduced turnover limit of 20 times the base capital would be applicable for a period of one month from the last date for providing the margin deposits. Upon the member violating the reduced intra-day turnover limit, the above mentioned provisions apply and the intra-day turnover limit will be further reduced to 15 times. Upon subsequent violations, the intra-day turnover limit will be further reduced from 15 times to 10 times and then from 10 times to 5 times the base capital. Members are not permitted to trade if any subsequent violation occurs till the required additional deposit is brought in.

Gross Exposure Limits :

Members are also subject to gross exposure limits. Gross exposure for a member, across all securities in rolling settlements, is computed as absolute (buy value – sell value), i.e. ignoring +ve and -ve signs, across all open settlements. Open settlements would be all those settlements for which trading has commenced and for which settlement payin is not yet completed. The total gross exposure for a member on any given day would be the sum total of the gross exposure computed across all the securities in which a member has an open position.

The total base capital being the base minimum capital (cash deposit and security deposit) and additional deposits, not used towards margins, in the nature of securities, bank guarantee, FDR, or cash with NSCCL and NSE.

Trading and Exposure Limits

NSCCL (National Securities Clearing Corporation Ltd.) imposes limits on turnover and exposure in relation to the deposits (funds and securities) available with the Exchange/NSCCL. The members are subject to limits on trading volumes in a day as well as exposure at any point of time. Gross intra-day turnover (Buy + Sell) of a member shall not exceed 33 1/3 times of the capital available with NSCCL. Similarly, gross exposure (aggregate of cumulative net outstanding positions in each security, at any point of time) of a member shall not exceed 8.5 times of free base capital up to Rs. 1 crore.

If a member has free capital in excess of Rs. 1 crore, his exposure shall not exceed Rs. 8.5 crore plus 10 times of the capital in excess of Rs. 1 crore.

Determination of Gross Exposure: The gross exposure of a member is computed across all securities and across all open settlements in rolling settlement. Open settlements are all those settlements for which trading has commenced and for which pay-in is yet to be completed. It is arrived at by adding up the absolute values of the products of net cumulative values and the specified adjustment factor, for all securities in which a member has an open position. For this purpose, scrips have been classified in to four groups, based on market capitalisation, impact cost and number of trades.

Exposure Limit Violation: Members exceeding the gross exposure limit are not permitted to trade with immediate effect (trading terminals are disabled automatically) until the member's cumulative gross exposure is reduced to below the gross exposure limits as defined above or any such lower limits as applicable to the members. Alternatively, a member may bring in additional base capital resulting in enhanced gross exposure limit.

Listing of Securities

Listing means admission of the securities to dealings on a recognised stock exchange. The securities may be of any public limited company, Central or State Government, quasi governmental and other financial institutions/corporations, municipalities, etc.

The objectives of listing are mainly to :

- provide liquidity to securities;
- mobilize savings for economic development;
- protect interest of investors by ensuring full disclosures.
- Making a quotation available for a company's share to be traded.
- Trading on a SE – Public Ltd. Companies with minimum paid up capital of Rs. 5 Crores
- Trading on BSE / NSE - Minimum paid up capital of Rs. 10 Crores

Listing of securities have to be in accordance with the provisions of the Securities Contracts (Regulation) Act, 1956, Securities Contracts (Regulation) Rules, 1957, Companies Act, 1956, Guidelines issued by SEBI and Rules, Bye-laws and Regulations of the Exchange.

Settlement Cycle

At the end of each trading day, concluded or locked-in trades are received from NSE by NSCCL. NSCCL determines the cumulative obligations of each member and electronically transfers the data to Clearing Members (CMs). All trades concluded during a particular trading period are settled together. A multilateral netting procedure is adopted to determine the net settlement obligations (delivery/receipt positions) of CMs. NSCCL then allocates or assigns delivery of securities inter se the members to arrive at the delivery and receipt obligation of funds and securities by each member. On the securities pay-in day, delivering members are required to bring in securities to NSCCL. On pay out day the securities are delivered to the respective receiving members. Settlement is deemed to be complete upon declaration and release of pay-out of funds and securities.

Exceptions may arise because of short delivery of securities by CMs, bad deliveries or company objections on the pay-out day. NSCCL identifies short deliveries and conducts a buying-in auction on the day after the pay-out day through the NSE trading system. The delivering CM is debited by an amount equivalent to the securities not delivered and valued at a valuation price (the closing price as announced by NSE on the day previous to the day of the valuation). If the buy-in auction price is more than the valuation price, the CM is required to make good the difference. All shortages not bought-in are deemed closed out at the highest price between the first day of the trading period till the day of squaring off or closing price on the auction day plus 20%, whichever is higher. This amount is credited to the receiving member's account on the auction pay-out day.

National Securities Clearing Corporation – Settlement Agent of NSE

The clearing and settlement operations of the NSE are managed by its wholly owned subsidiary, the National Securities Clearing Corporation Limited, also known as Clearing Corporation.

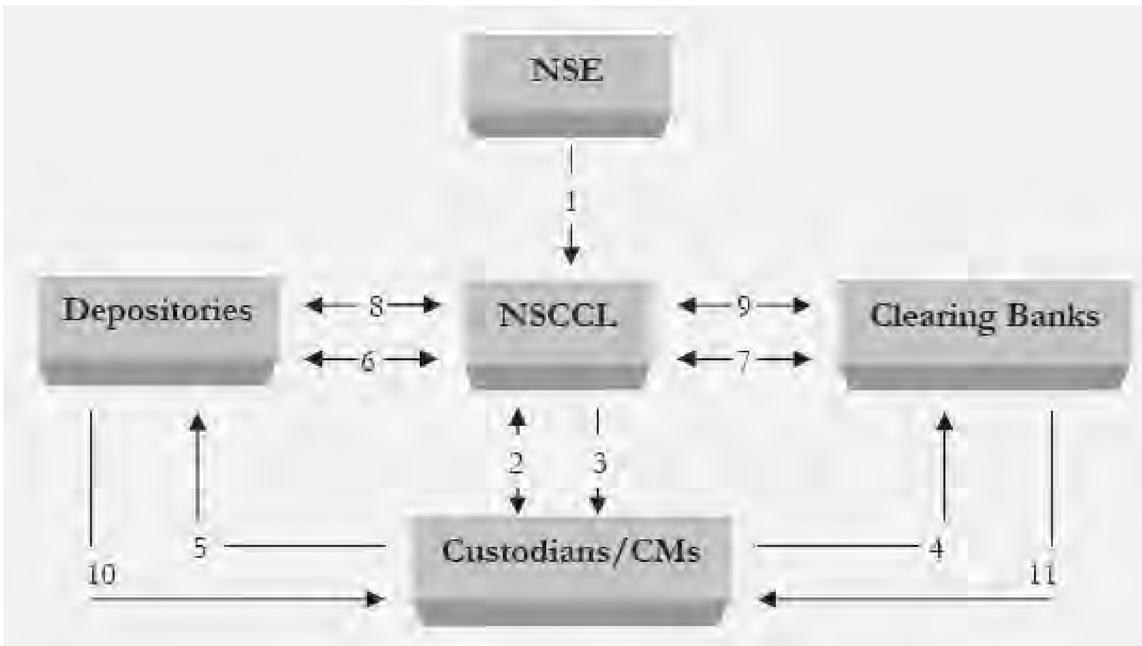


Fig.9.3 – Clearing Corporation Settlement Mechanism

(Source: bseindia.com)

The futures and the options contracts on the NSE have different settlement mechanisms.

Settlement of Nifty or individual futures contracts: For future contracts there is daily mark-to-market and final settlement price.

Daily Mark-to-Market Settlement: The positions in the futures contracts for each member is marked-to-market to the daily settlement price (available in the NSE Web site), of the futures contracts at the end of each trade day. The profits/ losses are computed as the difference between the trade price or the previous day's settlement price, as the case may be, and the current day's settlement price.

The clearing members (CM) who have suffered a loss are required to pay the mark-to-market loss amount to NSCCL, which is in turn passed on to the members who have made a profit. This is known as daily mark-to-market settlement.

Final Settlement

On the expiry of the futures contracts, NSCCL marks all positions of a CM to the final settlement price and the resulting profit / loss is settled in cash. The final settlement of the futures contracts is similar to the daily settlement process except for the method of computation of final settlement price. The final settlement profit / loss is computed as the difference between trade price or the previous day's settlement price, as the case may be, and the final settlement price of the relevant futures contract. Final settlement loss/ profit amount is debited/ credited on T+1 day (T= expiry day).

Settlement of index or individual option contracts: Index contracts can be exercised only on expiry whereas individual option contracts can be exercised any time before expiry.

Interim Exercise Settlement

This is applicable only for individual stock option contracts. Interim exercise settlement is effected for valid exercised option positions at in-the-money strike prices, at the close of the trading hours, on the day of exercise. Valid exercised option contracts are assigned to short positions in option contracts with the same series, on a random basis. The interim exercise settlement value is the difference between the strike price and the settlement price of the relevant option contract. Exercise settlement value is debited/ credited to the relevant CMs clearing bank account on T+2 day (T= exercise date).

Final Exercise Settlement Final Exercise settlement is effected for option positions at in-the-money strike prices existing at the close of trading hours, on the expiration day of an option contract.

Long positions at in-the money strike prices are automatically assigned to short positions in option contracts with the same series, on a random basis. For index options contracts, exercise style is European style, while for options contracts on individual securities, exercise style is American style. Final Exercise is Automatic on expiry of the option contracts. Option contracts, which have been exercised, shall be assigned and allocated to Clearing Members at the client level. Final settlement loss/ profit amount for index option contracts is debited/ credited to the relevant CMs clearing bank account on T+1 day (T = expiry day). Final settlement loss/ profit amount for option contracts on Individual Securities is debited/ credited to the relevant CMs clearing bank account on T+2 day (T = expiry day).

1.11 STOCK INDICES

Index

A measurement of the trend of share prices. It is not just an average of share prices, but weighted to reflect the number of shares outstanding for an individual scrip, but weighted to reflect the number of shares outstanding for an individual scrip. Thus, a 25% price fluctuation in a scrip with a small shareholding may have a much less impact on the market than a 3% fluctuation in a widely held scrip. The index thus gives an idea of the value change in share prices rather than just price change. The most widely known share price indices are the Dow Jones Industrial Average and Standard & Poor's 500 in New York, The Financial Times Stock Exchange 100 index or FT-SE 100 (called Footsie) in London, and the Economic Times, Financial Express, Business Standard, and the BSE indices in India.

BSE SENSEX Index

Bombay Stock Exchange Limited (BSE) in 1986 came out with a Stock Index that subsequently became the barometer of the Indian Stock Market. *SENSEX,* first compiled in 1986 was calculated on a "Market Capitalization-Weighted" methodology of 30 component stocks representing a sample of large, well-established and financially sound companies. One can identify the booms and bust of the Indian equity market through SENSEX. The base year of SENSEX is 1978-79. *SENSEX* is not only scientifically designed but also based on globally accepted construction and review methodology. The Index was initially calculated based on the "Full Market Capitalization" methodology but was shifted to the free-float methodology with effect from September 1, 2003. The "Free-float Market Capitalization" methodology of index construction is a widely followed index construction methodology on which majority of global equity benchmarks are based , regarded as an industry best practice globally. All major index providers like MSCI, FTSE, STOXX, S&P and Dow Jones use the Free-float methodology.

The general guidelines for selection of constituents in SENSEX are as follows:

1. **Listed History:** The scrip should have a listing history of at least 3 months at BSE. Exception may be considered if full market capitalisation of a newly listed company ranks among top 10 in the list of BSE universe. In case, a company is listed on account of merger/ demerger/ amalgamation, minimum listing history would not be required.

2. **Trading Frequency:** The scrip should have been traded on each and every trading day in the last three months. Exceptions can be made for extreme reasons like scrip suspension etc.

3. **Final Rank:** The scrip should figure in the top 100 companies listed by final rank. The final rank is arrived at by assigning 75% weightage to the rank on the basis of three-month average full market capitalisation and 25% weightage to the liquidity rank based on three-month average daily turnover & three-month average impact cost.

4. **Market Capitalization Weightage:** The weightage of each scrip in SENSEX based on three-month average free-float market capitalisation should be at least 0.5% of the Index.

5. **Industry Representation:** Scrip selection would generally take into account a balanced representation of the listed companies in the universe of BSE.

6. **Track Record:** In the opinion of the Committee, the company should have an acceptable track record.

BSE National Index or BSE 100 Index works as broad-based index reflecting the stock market at national level. Initially Sense was compiled of only 30 most effective stocks of the market. Due to its limited effect, in 1989 BSE started BSE 100 index, compiled of 100 companies from "Specified" and the "Non-Specified" list of the five major stock exchanges, viz. Mumbai, Calcutta, Delhi, Ahmedabad and Madras. Year 1983-1984 was chosen as the base year due to the market stability that year.

'BSE-200' and the 'DOLLEX-200'

The Exchange launched dollar-linked version of BSE-100 index i.e. Dollex-100 on May 22, 2006.With a view to provide a better representation of the increased number of companies listed, increased market capitalisation and the new industry groups, the Exchange constructed and launched on 27th May, 1994, two new index series viz., the 'BSE-200' and the 'DOLLEX-200' indices. Since then, BSE has come a long way in attuning itself to the varied needs of investors and market participants.

Other BSE Indices

In order to fulfill the need of the market participants for still broader, segment-specific and sector-specific indices, the Exchange has continuously been increasing the range of its indices. The launch of BSE-200 Index in 1994 was followed by the launch of BSE-500 Index and 5 sectoral indices in 1999. In 2001, BSE launched the BSE-PSU Index, DOLLEX-30 and the country's first free-float based index - the BSE TEC*k* Index. The Exchange shifted all its indices to a free-float methodology (except BSE PSU index) in a phased manner.

BSE-500 Index

Due to the changing pattern of the economy, Bombay Stock Exchange coined a new index as, BSE 500 comprising 500 scrips. The index represents about 93% of the total market capitalizations, ideally said to represent the total market. Initially calculated on the basis of full market capitalization methodology, later on free float methodology replaced the full market capitalization. BSE 500 was launched on August 16 2005. Year 1999 is selected as the base year because of its proximity to the current period and the base value is 1000.

BSE-Midcap

BSE Midcap index was introduced by BSE to make sure the unbiased movement of the market. Midcap index track the performance of the companies with relatively small market capitalization. As the companies listed in BSE 500 index represents the 93% of total market capitalization.With Mid-Cap index it was easy to represent the mid cap companies listed on the stock exchange. It was also based on the free float methodology. Base year chosen is 2002-2003 and the base index value is 1000 for each indices.

BSE – Small Cap

BSE Small Cap Index was introduced to track the performance of the small cap companies listed on the stock exchange. BSE Small indices truly helped the investing community as they capture the movement of the mid and small segments of the market. Base year is 2002-2003 and the base index value is 1000.

BSE TECk

As Information Technology, Media, & Telecom sectors are emerging as the major dominating sectors of the economy, BSE introduced the TECk index. It serves as a quality benchmark for the investment community in these knowledge based sectors. BSE TECk index is composed of 21 quality stocks from the IT, Media and Telecom sectors. The base date chosen is April 2, 2001 and the base value for BSE TECk Index is 1000 points.

BSE Auto Index

In August 2004 BSE launched a new Sector Series (90/FF) indices comprising BSE Auto Index, BSE BANKEX, BSE Capital Goods Index, BSE Consumer Durables Index, BSE FMCG Index, BSE Health care Index, BSE IT Index, BSE Metal Index, BSE Oil & Gas Index, BSE Mid Cap Index, BSE Small Cap Index. BSE Auto Index comprises all the major auto stocks in the BSE 500 Index.

BSE Bankex Index

Bankex was launched by BSE to track the performance of the leading banking sectors as bank stocks are emerging as a major segment of the stock markat. The base date for BANKEX is 1st January 2002 and base value for BANKEX is 1000 points. Bankex Index includes 12 selected major stocks which represent total 90% market capitalization of all the banking sector stocks listed on the BSE.

BSE CG

Consumer goods index is a part of the BSE sectoral Indices. To track the performance of companies dealing with the consumer goods it was necessary to list them in a new index named CG Index. CG Index comprises the companies occupying 90% market capitalization in the field of consumer goods.

BSE CD

Products whose life expectancy is at least three years are known as consumer durable. BSE classified the 90% market capitalization stocks in the field of consumer durable in the Sector Series (90/FF). Stocks are constructed and maintained as per the global best practices.

BSE FMCG

Products that shows a sudden shelf turnover, at comparatively low cost are classified as Fast Moving Consumer Goods. Eatables, soft drinks, and cleaning materials falls in FMCG category. Examples of FMCG brands are Coca-Cola, Kleenex and Mars. FMCG Index monitors the performance of the major brands in the FMCG category. Scrips having a minimum of 90% trading frequency in preceding six months are eligible to be included in the FMCG Index.

BSE HC

Health Care and Pharma sector are emerging as strong effectors on the economy of India. BSE launched a new Health Care Index, monitoring the health care sector performance individulally.On August 23, 2004 five sectoral Indices viz BSE IT, BSE FMCG, BSE Capital Goods, BSE Consumer Durables and BSE Health care were shifted to Free-Float methodology and joined the Sector Series (90/FF). 90% coverage in health care sector is given from the universe of BSE-500 index constituents. Top stock performers in the health care sector are listed in the BSE Health Care Index.

BSE IT

Keeping track of the changing trends in Indian Economy, BSE launched new sectoral index named IT Index. Stocks capturing 90% market capitalization from the IT sector are listed on the IT Index. Indices are calculated and displayed on the BOLT system on the real time basis. Like all the similar indices 1998-99 is chosen as the base year, and the base value was fixed at 1000 points in order to keep the index comparable with other similar indices.

BSE Metal Index was launched on August 23, 2004. Metal stocks performing well in the economy are indexed in the BSE metal index.

BSE Oil and Gas Index – Oil and Gas sector is gaining its own weightage in the economy. The stocks from oil and gas sectors have lot to effect on the stock market movement. Oil and Gas index was launched effective August 23, 2004 as part of the new series “90/FF”. The index covers 90% of the sectoral market capitalization and is based on the Free-Float methodology.

NSE Indices:

S&P CNX Nifty - is a well diversified 50 stock index accounting for 21 sectors of the economy. It is used for a variety of purposes such as benchmarking fund portfolios, index based derivatives and index funds. S&P CNX Nifty is owned and managed by India Index Services and Products Ltd. (IISL), which is a joint venture between NSE and CRISIL. IISL is India’s first specialised company focused upon the index as a core product. IISL have a consulting and licensing agreement with Standard & Poor’s (S&P), who are world leaders in index services.

Other NSE Indices are:

S&P CNX Nifty ; CNX Nifty Junior ; CNX 100; S&P CNX 500; CNX Midcap; Nifty Midcap 50; S&P CNX Defty; CNX Midcap 200

SENSEX Calculation Methodology

SENSEX is calculated using the “Free-float Market Capitalization” methodology. As per this methodology, the level of index at any point of time reflects the Free-float market value of 30 component stocks relative to a base period. The market capitalization of a company is determined by multiplying the price of its stock by the number of shares issued by the company. This market capitalization is further multiplied by the free-float factor to determine the free-float market capitalization.

The base period of SENSEX is 1978-79 and the base value is 100 index points. This is often indicated by the notation 1978-79=100. The calculation of SENSEX involves dividing the Free-float market capitalization of 30 companies in the Index by a number called the Index Divisor. The Divisor is the only link to the original base period value of the SENSEX. It keeps the Index comparable over time and is the adjustment point for all Index adjustments arising out of corporate actions, replacement of scrips etc. During market hours, prices of the index scrips, at which latest trades are executed, are used by the trading system to calculate SENSEX every 15 seconds and disseminated in real time.

Methods of Computing Indices:

Indices are the barometer of the Indian Stock Market. They are the Representative of market movements. It helps to identify the booms and bust of the Indian equity market through SENSEX.

The methods of computing Indices are:

1. **Market Value Weighted Index**
2. **Price Weighted Index**

Base Market Capitalisation Adjustment: The formula for adjusting the Base Market Capitalisation is as follows:

$$\text{New Base Market Capitalization} = \text{Old Base Market Capitalization} \times \frac{\text{New Market Capitalisation}}{\text{Old Market Capitalization}}$$

Example : suppose a company issues right shares which increases the market capitalisation of the shares of that company by say, Rs.100 crores. The existing Base Market Capitalisation (Old Base Market Capitalisation), say, is Rs.2450 crores and the aggregate market capitalisation of all the shares included in the index before the right issue is made is, say Rs.4781 crores. The "New Base Market Capitalisation" will then be equal to Rs.2501.24 crores.

$$\frac{2450 \text{ X } (4781+100)}{4781} = \text{Rs.}2501.24 \text{ crores}$$

i) **Market value-weighted index** is an index whose components are weighted according to the total market value of their outstanding shares. Also called a **capitalization-weighted index**. The impact of a component's price change is proportional to the issue's overall market value, which is the share price times the number of shares outstanding.

ii) **Price-weighted index** is a stock market index where each constituent makes up a fraction of the index that is proportional to its price. For a stock market index this implies that stocks are included in proportions based on their quoted prices.

Apart from these two we have equal –weighted index also.

Clearing Mechanism

A Clearing Member's open position calculation is arrived by aggregating the open position of all the Trading Members (TM) and all custodial participants clearing through him. A TM's open position in turn includes his proprietary open position and clients' open positions.

a. **Proprietary / Clients' Open Position** : While entering orders on the trading system, TMs are required to identify them as proprietary (if they are own trades) or client (if entered on behalf of clients) through 'Pro / Cli' indicator provided in the order entry screen. The proprietary positions are calculated on net basis (buy - sell) and client positions are calculated on gross of net positions of each client i.e., a buy trade is off-set by a sell trade and a sell trade is off-set by a buy trade.

b. **Open Position**: Open position for the proprietary position are calculated separately from client position.

Types of Clearing Members

- Trading Member Clearing Member (TM-CM): A Clearing Member who is also a TM. Such CMs may clear and settle their own proprietary trades, their clients' trades as well as trades of other TM's
- Professional Clearing Member (PCM): A CM who is not a TM. Typically banks or custodians could become a PCM and clear and settle for TM's.
- Self Clearing Member (SCM): A Clearing Member who is also a TM. Such CMs may clear and settle only their own proprietary trades and their clients' trades but cannot clear and settle trades of other TM's.
- Clearing Member Eligibility Norms : Net worth of atleast Rs.300 lakhs. The net worth requirement for a CM who clears and settles only deals executed by him is Rs. 100 lakhs.M Deposit of Rs. 50 lakhs to NSCCL which forms the Base Minimum Capital (BMC) of the CM. Additional incremental deposits of Rs.10 lakhs to NSCCL for each additional TM in case the CM undertakes to clear and settle deals for other TMs.

Clearing Banks

NSCCL has empanelled 8 clearing banks namely Canara Bank, HDFC Bank, Global Trust Bank, IndusInd Bank, ICICI Bank, UTI Bank, Centurion Bank, Bank of India, IDBI Bank and Standard Chartered Bank.

Every Clearing Member is required to maintain and operate a clearing account with any one of the empanelled clearing banks at the designated clearing bank branches. The clearing account is to be used exclusively for clearing & settlement operations.

Settlement Schedule

Product	Settlement	Schedule
Futures Contracts on Index & Individual Securities	Daily Mark-to-Market Settlement	Pay-in : T+1 working day at or after 11.30 a.m. Payout : T+1 working day at or after 12.00 p.m. (T is trade day)
Futures Contracts on Index & Individual Securities	Final Settlement	Pay-in : T+1 working day at or after 11.30 a.m. Payout : T+1 working day at or after 12.00 p.m. (T is expiration day of contract)
Interest Rate Futures Contracts	Daily Mark-to-Market Settlement	Pay-in : T+1 working day on or after 11.30 a.m. Payout : T+1 working day on or after 12.00 p.m. (T is trading day)
Interest Rate Futures Contracts	Final Settlement	Pay-in : T+1 working day on or after 11.30 a.m. Payout : T+1 working day on or after 12.00 p.m. (T is expiration day)
Options Contracts on Index & Individual Securities	Premium Settlement	Pay-in : T+1 working day at or after 11.30 a.m. Payout : T+1 working day at or after 12.00 p.m. (T is trade day)
Options Contracts on Index	Exercise & Final Settlement	Pay-in : T+1 working day at or after 11.30 a.m. Payout : T+1 working day at or after 12.00 p.m. (T is expiration day of contract)
Options Contract on Individual Securities	Interim Exercise Settlement	Pay-in : T+2 working day at or after 11.30 a.m. Payout : T+2 working day at or after 12.00 p.m. (T is exercise day)
Options Contract on Individual Securities	Exercise & Final Settlement	Pay-in : T+2 working day at or after 11.30 a.m. Payout : T+2 working day at or after 12.00 p.m. (T is expiration day)

Settlement Price

Product	Settlement	Settlement Price
Futures Contracts on Index or Individual Security	Daily Settlement	Closing price of the futures contracts on the trading day. (The closing price is the last half hour weighted average price of the contract).
Unexpired illiquid futures contracts	Daily Settlement	Theoretical Price computed as per formula $F=S * e^{rt}$
Futures Contracts on Index or Individual Securities	Final Settlement	Closing price of the relevant underlying index / security in the Capital Market segment of NSE, on the last trading day of the futures contracts.(The closing price of the underlying index / security is its last half an hour weighted average value / price in the Capital Market segment of NSE)
Options Contracts on Individual Securities	Interim Exercise Settlement	Closing price of such underlying security on the day of exercise of the options contract. (The closing price of the underlying security is its last half an hour weighted average price in the Capital Market Segment of NSE).
Options Contracts on Index and Individual Securities	Final Exercise Settlement	Closing price of such underlying security (or index) on the last trading day of the options contract. (The closing price of the underlying security (or index) is its last half an hour weighted average price in the Capital Market Segment of NSE).

National Stock Exchanges (NSE) - Derivatives Segment Clearing & Settlement - Settlement Mechanism

Settlement of futures contracts on index and individual securities - Daily Mark-to-Market Settlement

The positions in the futures contracts for each member is marked-to-market to the daily settlement price of the futures contracts at the end of each trade day.

The profits/ losses are computed as the difference between the trade price or the previous day's settlement price, as the case may be, and the current day's settlement price. The CMs who have suffered a loss are required to pay the mark-to-market loss amount to NSCCL which is in turn passed on to the members who have made a profit. This is known as daily mark-to-market settlement.

National Stock Exchanges (NSE)- Derivatives Segment - Clearing & Settlement Settlement Mechanism - Interest Rate Derivatives: Settlement Procedure & Settlement Price

Daily Mark to Market Settlement and Final settlement for Interest Rate Futures Contract

Daily Mark to Market settlement and Final Mark to Market settlement in respect of admitted deals in Interest Rate Futures Contracts shall be cash settled by debiting/ crediting of the clearing accounts of Clearing Members with the respective Clearing Bank.

All positions (brought forward, created during the day, closed out during the day) of a F&O Clearing Member in Futures Contracts, at the close of trading hours on a day, shall be marked to market at the Daily Settlement Price (for Daily Mark to Market Settlement) and settled.

All positions (brought forward, created during the day, closed out during the day) of a F&O Clearing Member in Futures Contracts, at the close of trading hours on the last trading day, shall be marked to market at Final Settlement Price (for Final Settlement) and settled.

Daily Settlement Price shall be the closing price of the relevant Futures contract for the Trading day.

Final settlement price for an Interest rate Futures Contract shall be based on the value of the notional bond determined using the zero coupon yield curve computed by National Stock Exchange or by any other agency as may be nominated in this regard.

Open positions in a Futures contract shall cease to exist after its expiration day.

Daily Settlement Price

Daily settlement price for an Interest Rate Futures Contract shall be the closing price of such Interest Rate Futures Contract on the trading day. The closing price for an interest rate futures contract shall be calculated on the basis of the last half an hour weighted average price of such interest rate futures contract. In absence of trading in the last half an hour, the theoretical price would be taken or such other price as may be decided by the relevant authority from time to time.

Theoretical daily settlement price for unexpired futures contracts, shall be the futures prices computed using the (price of the notional bond) spot prices arrived at from the applicable ZCYC Curve. The ZCYC shall be computed by the Exchange or by any other agency as may be nominated in this regard from the prices of Government securities traded on the Exchange or reported on the Negotiated Dealing System of RBI or both taking trades of same day settlement(i.e. t = 0).

In respect of zero coupon notional bond, the price of the bond shall be the present value of the principal payment discounted using discrete discounting for the specified period at the respective zero coupon yield. In respect of the notional T-bill, the settlement price shall be 100 minus the annualized yield for the specified period computed using the zero coupon yield curve. In respect of coupon bearing notional bond, the present value shall be obtained as the sum of present value of the principal payment discounted at the relevant zero coupon yield and the present values of the coupons obtained by discounting each notional coupon payment at the relevant zero coupon yield for that maturity. For this purpose the notional coupon payment date shall be half yearly and commencing from the date of expiry of the relevant futures contract.

For computation of futures prices from the price of the notional bond (spot prices) thus arrived, the rate of interest may be the relevant MIBOR rate or such other rate as may be specified from time to time.

Final Settlement Price for mark to market settlement of interest rate futures contracts

Final settlement price for an Interest rate Futures Contract on zero coupon notional bond and coupon bearing bond shall be based on the price of the notional bond determined using the zero coupon yield curve computed as explained above. In respect of notional T-bill it shall be 100 minus the annualised yield for the specified period computed using the zero coupon yield curve.

Settlement value in respect of notional T-bill

Since the T-bills are priced at 100 minus the relevant annualised yield, the settlement value shall be arrived at using the relevant multiplier factor. Currently it shall be 91/365

Settlement Schedule

Product	Settlement	Schedule
Interest Rate Futures Contracts	Daily Mark-to-Market Settlement	Pay-in : T+1 working day on or after 11.30 a.m. Payout : T+1 working day on or after 12.00 p.m. (T is trading day)
Interest Rate Futures Co	Final Settlement	Pay-in : T+1 working day on or after 11.30 a.m. Payout : T+1 working day on or after 12.00 p.m. (T is expiration day)

Settlement of Custodial Participant (CP) Deals

NSCCL provides a facility to entities like institutions to execute trades through any TM, which may be cleared and settled by their own CM. Such entities are called Custodial Participants (CP).

To avail of this facility, a CP is required to register with NSCCL through his CM, which allots them a unique CP code. The CP and the CM are required to enter into an agreement as per specified format.

Thereafter, all trades executed by such CP through any TM are required to have the CP code in the relevant field on the F&O trading system at the time of order entry. Such trades executed on behalf of a CP are required to be confirmed by their CM (and not the CM of the TM through whom the trade was executed), within the time specified by NSE, using the confirmation facility provided by NSCCL to the CMs in the F&O segment.

Till such time the trade is confirmed by the CM of the CP, the same is considered as a trade of the TM and the responsibility of settlement of such trade vests with the CM of the TM. Once the trades have been confirmed by the CM of the CP, they form part of the obligations of the CM of the CP and they shall be responsible for all obligations arising out of such trades including the payment of margins and settlement of obligations.

Key Words

- Primary market
- Secondary market
- National Network
- Trading System
- OTCEI
- Demutualization of Stock Exchanges
- Money market
- Call Money Market
- Commercial Paper
- Certificates of deposit
- Bills Rediscounting
- Call/Notice Money Market
- Repurchase Agreements (Repos)
- Inter Bank Participation
- Bank deposits
- Term Money
- Public issues
- Offer for sale
- Placement
- Rights issues
- Green Shoe Option
- e-IPO
- QIBs
- Rights Issues
- Bought Out Deal
- Book Buiding

- Depositories
- Buy Back of shares
- CAPM
- Stock Indices
- Forward Contract
- Futures Contract
- Clearing Mechanism

Summary

In this chapter author tried to explain the Operations of Indian Stock Market and purpose of stock market. The Stock Market helps in the capital formation of the country. It maintains active trading It increases liquidity of assets, It also helps in price recovery process and short coming of stock exchanges Scarcity of floating stocks: Financial institutions, banks and insurance companies own 80 percent of the equity capital in the private sector.Speculation:85 percent of the transactions on the NSE and BSE are speculative in nature. Reasons for Transactions on Secondary Market. The Securities which are traded in the secondary market may be classified as follows. Primary Vs. Secondary Market Stock Market in India Apart form the above you will understand the Role and Stock Exchange Functions, Membership, organization and Management, Trading System, Stock Market Information System, Principle Weaknesses of Indian Stock Market, Directions to reform the functioning of stock exchanges, Listing of securities , National Stock Exchange of India Ltd, Over The Counter Exchange of India (OTCEI), Interconnected Stock Exchange of India, Demutualisation of Stock Exchanges Money market, Importance of money market, Features of a Developed Money Market, State Government/Public Sector/Municipality Issued, Certificate of Deposit , Call Money Market, Inter-Bank Participation Certificate , Bills Rediscounting Other Money Market Instruments , Money Laundering are explained .

Bought out deal, as the very name suggests is a type of wholesale of equities by a company. A company allots shares in full or in lots to a sponsors at a price negotiated between the company and the sponsor(s).

The principal function of a depository is to dematerialise securities and enable their transactions in book-entry form. Dematerialisation of securities occurs when securities, issued in physical form, are destroyed and an equivalent number of securities are credited into the beneficiary owner's account.

A **treasury stock** or **reacquired stock** is stock which is bought back by the issuing company, reducing the amount of outstanding stock on the open market ("open market" including insiders' holdings).

Stock repurchases are often used as a tax-efficient method to put cash into shareholders' hands, rather than pay dividends. Sometimes, companies do this when they feel that their stock is

undervalued on the open market. Other times, companies do this to provide a "bonus" to incentive compensation plans for employees. Rather than receive cash, recipients receive an asset that might appreciate in value faster than cash saved in a bank account.

CAPM explains the behaviour of security prices and provides a mechanism whereby investors could assess the impact of a proposed security investment on the overall portfolio risk and return. CAPM suggests that the prices of securities are determined in such a way that the risk premium or excess return are proportional to systematic risk, which is indicated by the beta coefficient.

Stock market or securities market is a market where securities issued by firms in the form of shares, bonds and debentures can be bought and sold freely. It consists of primary market and secondary market.

In a forward contract, two parties agree to do a trade at some future date, at a stated price and quantity. No money changes hands at the time the deal is signed. For example, a wheat farmer may wish to contract to sell their harvest at a future date to eliminate the risk of a change in prices by that date. Such transaction would take place through a forward market.

The futures contract is traded on a futures exchange as a standardised contract, subject to the rules and regulations of the exchange. It is the standardisation of the futures contract facilitates the secondary market trading. The futures contract relates to a given quantity of the underlying asset and only whole contracts can be traded, and trading of fractional contracts are not allowed in futures contracting.

Forward contracts are private bilateral contracts and have well established commercial usage. Future contracts are standardised tradable contracts fixed in terms of size, contract date and all other features.

Once you have bought or sold shares, the transaction is complete only when you have got the shares you purchased, or received money for the shares you sold. This is called settlement in stock market parlance. The stock exchanges have a complex mechanism in place to ensure that every trade is properly matched, and shares are received or delivered properly. In case of a shortfall of securities, an auction is resorted to close out the difference. The mechanism through which all parties to a transaction get their receivables i.e. either funds or shares is known as 'clearing and settlement' or simply 'settlement'

Short questions

1. Explain briefly the operations of Indian stock market
2. What are the needs for a stock market in the country like India?
3. Write on Primary vs. Secondary market
4. Explain Stock market in India and Role and stock exchange functions
5. Write on Membership, organization and management of Stock exchanges

6. What are the principle weaknesses of Indian stock market?
7. What are the major directions to reform the functioning of stock exchanges?
8. What do you mean by Listing of securities. Explain?
9. Explain CAPM
10. Write in detail on the Issue mechanism of Primary market
11. Explain Briefly the clearing mechanism of the stick market.
12. Distinguish between Forward contract and Future contract
13. Write a note on buy back of shares
14. Write a short note on
    - Depositories
    - Private placement of shares
    - National stock exchange of India ltd
    - Over the counter exchange of India (OTCE)
    - Inter-connected stock exchange of India
    - Demutualization of stock exchanges
    - Money market
    - Importance of money market
    - Features of a developed money market
    - State government/public sector/municipality issued
    - Certificate of deposit
    - Call money market
    - Repurchase agreements (repos)
    - Inter-bank participation certificate
    - Bills rediscounting
    - Other money market instruments
    - Money laundering

STUDY NOTE - 2

CAPITAL & FINANCIAL MARKET REGULATIONS

This study Note includes

- **SEBI – Regulation of market and control**
- **Collective investment schemes, Depositories and Dematerialization of securities**
- **Regulation of banking and finance companies – Role of RBI and Banking ombudsmen;**
- **Regulation of insurance sectors by insurance regulation and development authority (IRDA)**
- **Cyber law and regulation of E Commence and electronic financial transaction**
- **Contemporary issues and development**

2.1. SEBI – REGULATION OF MARKET AND CONTROL

Stock market Regulation

SECURITIES AND EXCHANGE BOARD OF INDIA

Securities and Exchange Board of India (SEBI)

U.K. and U.S.A. had long back created separate boards for the regulation of the securities market – In U.K it has **th*e Securities and Investment Board (SIB)*** and U.S. has the ***Securities and Exchange Commission (SEC).*** Indian Government's intention to set up a separate Board for the regulation and orderly functioning of the market was first declared in the Budget Speech by Shri Rajiv Gandhi, the then Prime Minister and Minister of Finance, while presenting the Budget for the year 1987-88. He stated, "The capital markets in India have exceeded Rs. 25,000 crores in 1986-87. They were only about Rs. 6750 Crores in 1980-81, for a healthy growth of capital markets, investors must be fully protected. Trading malpractice must be prevented. Government have decided to set up a separate board for the regulation and orderly function of Stock Exchange and the securities industry".

Origin

By a Notification issued on 1st April 1988, Securities and Exchange Board of India (SEBI), was constituted as an interim administrative body to function under the over all administrative control of the Ministry of Finance of the Central Government.

In July 1988, the SEBI, constituted as aforesaid, published an approach paper on 'Comprehensive legal issues for securities market'.

The SEBI was given a statutory status on 30th January, 1992 by an Ordinance to provide for establishing of SEBI. A Bill to replace the Ordinance was introduced in Parliament on 3rd march, 1992 and was passed by the President's assent. However, as provided for in section 1(3), this Act is to be deemed to have come into force on 30th January, 1992 i.e. the date on which the SEBI Ordinance was promulgated.

Powers and Functions of SEBI

Chapter IV of SEBI Act, 1992 deals with the powers and functions of the Board. Section 11 of the Act lays down that it shall be the duty of the Board to protect the interests of the investors in securities and to promote the development of, and to regulate the securities markets by such measures as it thinks fit. These measures would include:

a) regulating the business in stock exchanges and any other securities markets;

b) 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;

c) 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;

d) registering and regulating the working of venture capital funds and collective investment schemes, including mutual funds;

e) promoting and regulating self-regulatory organisations;

f) prohibiting fraudulent and unfair trade practices relating to securities markets;

g) promoting investors' education and training of intermediaries of securities markets;

h) prohibiting insider trading in securities; (i) regulating substantial acquisition of shares and takeover of companies;

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 organisations in the securities market;

j) 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;

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

l) levying fees or other charges for carrying out the purposes of this section;

m) conducting research for the above purposes;

n) 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;

o) performing such other functions as may be prescribed.

For carrying out the duties assigned to it under the Act, SEBI has been vested with the same powers as are available to a Civil Court under the Code of Civil Procedure, 1908 for trying a suit in respect of the following matters:

(i) the discovery and production of books of account and other documents at the place and time indicated by SEBI.

(ii) summoning and enforcing the attendance of persons and examining them on oath.

(iii) inspection of any books, registers and other documents of any person listed in section 12 of the Act, namely stock brokers, sub brokers, share transfer agents, bankers to an issue, trustee of trust deed, registrar to an issue, merchant bankers, underwriters, portfolio managers, investment advisors and other such intermediaries associated with securities markets.

(iv) inspection of any book or register or other document or record of the company referred to in Sub-section (2A);

(v) issuing commissions for the examination of witnesses or documents.

Power to Issue Directions

Section 11B of the Act provides that if SEBI is satisfied after making due enquiries, that it is necessary:

(i) in the interest of investors, or orderly development of securities market; or

(ii) to prevent the affairs of any intermediary or other persons referred to in section 12 being conducted in a manner detrimental to the interests of investors or securities market; or

(iii) to secure the proper management of any such intermediary or person, it may issue such directions, -

a) to any person or class of persons referred to in section 12, or associated with the securities market; or

b) to any company in respect of matters specified in section 11A, as may be appropriate in the interests of investors in securities and the securities market.

As per Section 11(4) SEBI, may, by an order or for reasons to be recorded in writing take any of the following measures either pending investigation or inquiry or on completion of such investigation or enquiry:

a) suspend the trading of any security in a recognised stock exchange.

b) restrain persons from accessing the securities market and prohibit any person associated with securities market to buy, sell or deal in securities.

c) suspend any office-bearer of any stock exchange or self regulatory organisation from holding such position.

d) impound and retain the proceeds or securities in respect of any transaction which is under investigation.

e) Attach for a period not exceeding one month, with prior approval of a magistrate, one or more bank accounts of any intermediary or any person associated with the securities market in any of the Act or rules or regulations made there under.

f) direct any intermediary or any person associated with the securities market in any manner not to dispose of or alienate an asset forming past of any transaction which is under investigation.

Section 11A of SEBI Act provides that SEBI may prohibit for the protection of the investors, any company from issuing any offer document including a prospectus or advertisement soliciting money from the public for the issue of securities, and specify the conditions subject to which such offer documents can be issued. The Board may specify the matters relating to issue of capital, transfer of securities and other matters shall be disclosed by the companies. It may also by issuing prospectus, any offer document or advertisement soliciting money from public for issue of securities. SEBI may also specify the conditions subject to which the prospectus, such offer document or advertisement, if not prohibited, may be issued.

Organisation (Management Of SEBI)

The management of SEBI vests in the board which consists of the following members, namely

a) A Chairman

b) Two members from amongst the officials of the 'Ministers of the Central Government dealing with Finance of Law'

c) One member from amongst the official of the Reserve Bank of India.

d) Two other members, to be appointed by the Central Government

The general superintendence, direction and management of the affairs of the SEBI vests in a Board of members, which may exercise all powers and do all acts and things which may be exercised or done by the Board which otherwise determined by regulations, the chairman shall also have powers of general superintendence and direction of the affairs of the Board and may also exercise all powers and do all acts and things which may be exercised done by the board.

The Chairman and members referred to at (a) and (b) above shall be appointed by the Central Government and the member referred to at (a) and (c) above shall be nominated by the Central

Government and the Reserve Bank of India respectively.

For day to day functions the activities of SEBI have been divided into five operational departments viz. many markets-policy, intermediaries, investor grievances and guidance, etc.,

- Such Management & Intermediaries, investor grievances and guidance, etc.
- Secondary market-exchange administration, inspection and non-member intermediaries etc.,
- Secondary market-exchange administration, inspection and non-member intermediaries, etc.,
- Institutional investment-Mutual funds and Fills, mergers and acquisitions, research & publications and internal regulation.
- Each department is headed by an Executive Director. Besides these five departments, there are legal and investigation department.

Activities

The first major activity undertaken by SEBI was preparation of an Approach paper on comprehensive legislation for Securities markets. Since inception, SEBI has issued a number of guidelines, rules, drafts regular consultative papers etc. in order to regulate and develop the securities market and protect investors in some important guidelines et. Issue by SEBI include.

a) Rules regarding registration of intermediaries such as share transfer agents, bankers to the issue, detect trustees to the trust deeds, registrars to an issue, underwriters, portfolio managers and investment advisors brokers and sub-brokers associated with the securities market.

b) Guidelines for merchant bankers stating authorized activities of merchant bankers, the authorization and the terms of authorization.

c) Code of Conduct for merchant bankers, the violation, intentional or otherwise, of which will make merchant bankers guilty of misconduct or unprofessional conduct.

d) Categorizations of merchant bankers, under which merchant bankers have been categorized into categories. Category 1 merchant bankers are authorized to act in the capacity of lead management co-market advisor or consultant to an issue, portfolio manager and underwriter to an issue as mandatory required. … II merchant bankers are authorized to act in the capacity of co-manager/advisor or consultant to an issue of portfolio manager.

e) Guidelines on portfolio management services which cover such aspects as portfolio management act client relationship, investment tenure, fees to be paid to the portfolio manager, client's money account, investment of the client fund, periodical reports to clients and administrative powers of the SEBI regard.

f) Guidelines for lead managers for inter se allocation of responsibilities which require that wherever the more than one lead manager to the issue inter se allocation of the pre-issue and post-issue activities/sub-act will be properly made and information in this regard sent to SEBI.

Regarding the number of lead managers in an issue, SEBI has prescribed that for a total issue aggregation less than Rs. 50 crore the number of lead managers will not exceed two ; for a total issue of Rs. 50 crore and above but less than Rs. 100 crore the number of lead managers may go upto maximum of three and for issues aggregate of Rs. 100 crore and above but less than Rs. 200 crores the number may go upto a maximum of five. For aggregating above Rs. 400 crore, the number of lead managers in excess of five will be prescribed by SEBI pertaining to each case.

g) Guidelines regarding purchase of non-convertible part of debentures from the subscribers

h) Regulation for registrars and share transfer agents

i) Regulation on insider trading

j) Guidelines for mutual funds and asset management companies

k) Draft regulation for substantial acquisition of shares in listed companies

l) Consultative paper on free market pricing of capital issue.

m) Guidelines on capital issues/Guidelines for Disclosure and Investor Protection along with clarification as of March, 1993.

n) Guidelines on issue of securities by Development Financial Institutions.

o) Formation of two advisory committees ; one on primary market and the other on secondary market, company members from professional organisations , academic and investing public.

Business India (March 1-14, 2006) noted what SEBI has done so far what it still needs to do as follows

WHAT IT HAS DONE SO FAR	WHAT IT STILL NEEDS TO DO
Registration of brokers	Appointment of nominees on exchange base
Inspection of stock exchange	Code of conduct for merchant bank
Investor protection rules	Penalizing erring companies
Protection for debenture holders	Bringing UTI under mutual fund rules
Stopping misuse of Promoter's quota	Rules for new instruments
Better disclosure norms	Corporate membership in stock exchange
RO status for merchant bankers	Postal ballot for company AGM's
Free pricing for public issues	Code for takeovers

WHAT IT HAS DONE SO FAR	WHAT IT STILL NEEDS TO DO
Insider trading norms	Norms for custodial, depository services
Capital adequacy norms for brokers	Comprehensive legislation
C… on kerb trading	Penal powers over companies
Fighter controls over mutual funds	Uniform accounting standards
Comprehensive norms for underwriters	Capital market development fund
Country rules for foreign institutional	Investors / Investor protection funds
Permission for private mutual funds	
Guidelines for asset management firms	
Rules for lead managers	
Rules for bankers to the issue	
Forms for issue of stock invests	
Guidelines for bonus share issues	
Rules for underwriters	
Advisory panels for primary, secondary market	
Investor education campaign	

SECURITISATION

The concept SEBI in its short span of existence, has performed excellently as its developmental and national role is concerned. How far it would be able to carry out its enforcement role is yet to be seen.

Self – Regulation

If the foregone sections, we have discussed the regulatory framework applicable to primary and secondary market in India. The focus of discussion has been on what may be called legislative regulation of securities.

In addition to legislative regulation, self-regulation is equally important. Indeed in developed securities.. like U.K. self-regulations play an important role. There exist a number of self-regulatory organization in which they really complement for the legislative regulation.

The spirit of self-regulation had been prevalent in the Indian securities market as well. If one looks at the given to recognized stock exchanges in India to make and enforce bye-laws under the Securities Contracts (Regulation) Act, 1956, one tends to conclude that Indian stock exchanges have been envisaged as self-regulatory conditions. Just to elaborate the point let us look at section 9 of the Securities Contracts (Regulation) Act, which states as follows.

The recognized stock exchange may, subject to the previous approval of the Central Government (till 1991) securities and Exchange Board of India (since 1992) make bye-laws for the regulation and control of contracts. In particular, without prejudice generally of the foregoing power, such bye-laws may provide for.

a) the opening and closing of markets and the regulation of the hours of trade

b) The clearing house for the periodical settlement of contracts and difference there under, the delivery of the securities, the passing on of delivery orders and the regulation and maintenance of such a clearing settlement.

c) The submission to the Central Government (till 1991) and Securities and Exchange Board of India (since by the clearing house as soon as may be after each periodical settlement of all or any of the following, namely

    a) The total number of each category of security carried over from one settlement period to another

    b) The total number of each category of security contracts which have been squared up during the course of settlement period

    c) The total number of each category of security actually delivered at each clearing

d) The number and classes of contracts in respect of which settlements shall be made or different through the clearing house.

e) The regulation, or prohibition of badlas or carry-over facilities.

f) The fixing, altering or postponing of days for settlements;

g) The determinations and declaration of market rates, including the opening, closing, highest and lowest for securities.

h) The terms, conditions and incidents of contracts, including the prescription of market requirement and conditions relating there to and the forms of contracts in writing.

i) The regulation of the entering into, making, performance, recession and termination, of contracts between members or between a member and his constituent or between a member and a person not a member, and consequences of a breach by a seller buyer, and there responsibility of member not parities to such contracts.

j) The regulation of taravani business including the placing of limitations thereon;

k) The listing of securities on the stock exchange, the inclusion of any security for the purpose of listing and the suspension or withdrawal of any such securities, and the suspension or prohibition of trade specified securities.

l) The method and procedure for the settlement parties to contracts in any capacity.

m) The levy and recovery of fees, fines and penalties

n) The regulation of the course of business between parties to contracts in any capacity.

o) The fixing of a scale of brokerage and other charges;

Regulatory Framework of Security Market

The four main legislations governing the securities market are: (a) the SEBI Act, 1992 which establishes SEBI to protect investors and develop and regulate securities market; (b) the Companies Act, 1956, which sets out the code of conduct for the corporate sector in relation to issue, allotment and transfer of securities, and disclosures to be made in public issues; (c) the Securities Contracts (Regulation) Act, 1956, which provides for regulation of transactions in securities through control over stock exchanges; and (d) the Depositories Act, 1996 which provides for electronic maintenance and transfer of ownership of demat securities.

Legislations

SEBI Act, 1992: The SEBI Act, 1992 establishes SEBI with statutory powers for (a) protecting the interests of investors in securities, (b) promoting the development of the securities market, and (c) regulating the securities market. Its regulatory jurisdiction extends over corporates in the issuance of capital and transfer of securities, in addition to all intermediaries and persons associated with securities market. It can conduct enquiries, audits and inspection of all concerned and adjudicate offences under the Act. It has powers to register and regulate all market intermediaries and also to penalise them in case of violations of the provisions of the Act, Rules and Regulations made there under. SEBI has full autonomy and authority to regulate and develop an orderly securities market. The details have been covered ahead in the next chapter.

Securities Contracts (Regulation) Act, 1956: It provides for direct and indirect control of virtually all aspects of securities trading and the running of stock exchanges and aims to prevent undesirable transactions in securities. It gives central government/SEBI regulatory jurisdiction over (a) stock exchanges through a process of recognition and continued supervision, (b) contracts in securities, and (c) listing of securities on stock exchanges. As a condition of recognition, a stock exchange complies with prescribed conditions of Central Government. Organised trading activity in securities takes place on a specified recognised stock exchange. The stock exchanges determine their own listing regulations which have to conform to the minimum listing criteria set out in the Rules.

Depositories Act, 1996: The Depositories Act, 1996 provides for the establishment of depositories in securities with the objective of ensuring free transferability of securities with speed, accuracy and security by (a) making securities of public limited companies freely transferable subject to certain exceptions; (b) dematerialising the securities in the depository mode; and (c) providing for maintenance of ownership records in a book entry form. In order to streamline the settlement process, the Act envisages transfer of ownership of securities electronically by book entry without making the securities move from person to person. The Act has made the securities of ail public limited companies freely transferable, restricting the company's right to use discretion in effecting the transfer of securities, and the transfer deed and other procedural requirements under the Companies Act have been dispensed with. The details have been dealt in the chapter on Depositories.

Regulators

The responsibility for regulating the securities market is shared by Department of Economic Affairs (DEA), Ministry of Company Affairs, Reserve Bank of India (RBI) and SEBI. The activities of these agencies are coordinated by a High Level Committee on Capital Markets. The orders of SEBI under the securities laws are appealable before a Securities Appellate Tribunal.

Most of the powers under the SCRA are exercisable by DEA while a few others by SEBI. The powers of the DEA under the SCRA are also con-currently exercised by SEBI. The powers in respect of the contracts for sale and purchase of securities, gold related securities, money market securities and securities derived from these securities and carry forward contracts in debt securities are exercised concurrently by RBI. The SEBI Act and the Depositories Act are mostly administered by SEBI. The powers under the Companies Act relating to issue and transfer of securities and non-payment of dividend are administered by SEBI in case of listed public companies.

Regulation of Secondary Market

As noted above Securities Contracts (Regulation) Act 1956 and the rules made there under, namely the securities Contracts (Regulation) Rules, 1957 are the main laws governing stock exchanges in India.

The preamble to the Securities Regulation Act states that is "an act to prevent undesirables transaction in Securities by regulating the business of dealing therein, by prohibiting options and by providing certain other matters connected therewith". This Act provides for the direct and indirect control of virtually all aspects of securities leading and the running of the stock exchange. The Act makes every transaction in securities in any notified State area illegal and punishable by fine and/or imprisonment if it is not entered into between or with members of a recognized stock exchange in the state or area.

The Act thus prohibits the existence of other than recognized stock exchanges and provides the mechanism recognizing stock exchanges. Appendix 5.2 gives the list of recognized stock exchanges as of 1992. Application for the Central Government for recognition must include a copy of the rules relating in general to the constitution of the stock exchange and in particular to, among other things, the admission into the stock exchanges of various basses of members, the exclusion, expulsion and readmission of members, and the procedure for registration of a stock exchange. In determining whether to grant recognition, the Central Government may make whatever require is necessary and impose in the rules and bye-laws of the stock exchanges whatever conditions are required to ensure "fair dealing" and to "protect investors" These conditions concern, inter alia, the qualification for members, the manner in which contracts are to be entered into and enforced, the representation of not more than three Central Government nominees on the board of the stock exchange, and the maintenance of books and record by members and their audit by chartered accountants. The Central Government has the power to impose further conditions, other than in the rules and bye-laws, such as limiting the number of members. Finally, the Central Government has the power unilaterally to withdraw recognition.

After it recognizes a stock exchange, the Central Government exerts regulatory control over it, as per reports are furnished to the Central Government. Certain books and records are maintained for a period of years. The Central Government can make an inequiry itself, or through an appointment of third party, into the affairs of a stock exchange or any of its members. All officers, directors, members, and others who have had dealings matter under inquired are required to produce requested documents, statements, or information.

The Central Government retains control over the stock exchange's bye-laws and its rule amendment stock exchange, subject to previous Central Government approval, has the authority to make bye-laws for regulation and control of contracts and the regulation of trading. Similarly, no rule amendments have effect they are approved by the Central Government. The Central Government, furthermore, has the power to direct exchange to amend its rules ; and if it fails to do so, the Government may directly amend the such rules exchange. The suspension of business may be complete or subject to conditions. Suspensions may not be more than seven days initially but may be extended form time to time. The Central Government may super the governing body of any exchange of declaration and then appoint any person or group of persons to exceed and perform all the power and duties of the governing body.

Other powers granted to the Central Government the ability to stop further trading in specified second for the purpose of preventing undesirable speculations, and the power to compel a public company "in the initial of the trade or in the public interest" to list its securities on any of the recognized exchanges.

The Securities Regulation Rules specifically provide for membership of an exchange. No person can eligible for membership if he is less than twenty-one years of age, is not a citizen of India, has been adjudged bankrupt, or has been convicted of an offence involving fraud or dishonesty. Under section 8, rules relative membership of stock exchanges are given which are reproduced bellows.

Regulation of OTCEI

The functioning and operations of the OTCEI is subject to the provision of the Securities Contracts (Regulation Act, 1956, the Companies Act, 1956 and other relevant laws which are applicable to Indian stock exchanges of operations are supervised by SEBI and Government of India. The criteria for admission of members, licensed dealers and Companies on the OTCEI is prescribed as follows.

Criteria for admission of members

The members would be Public Financial Institutions, Scheduled Banks, Mutual funds, Banking Subsidies SEBI – registered merchant Banks, Venture Capital Funds and Venture Capital Companies, Non-banking Final companies having a minimum financial net wroth as specified by OTCEI. The applicant should satisfy the elegant requirements of the Securities Contracts (Regulation) Rules, 1957.

The member should posses necessary skills, resources and capabilities to appraise project/ common establish its viability, analyze company's financial worth, evaluate company's management and determine more for company's products.

The member should have the necessary status ad standing to be able to carry the confidence of the members and licensed dealers while recommending scrip to the market for investment.

The member should have sufficient financial reserves to 'sponsor' and trade in the scrip

The member should be authorized by SEBI for carrying out merchant banking activities.

The member should have adequate organizational infrastructure to establish and manage the OTC count (That is office space, computers, PTI scam, telephones, telex, fax and any other data communication equipped specified).

The net worth of the member should be minimum Rs. 2.50 crores.

Criteria for admission of licensed dealers

The licensed dealers would e a corporate body, partnership firms and individuals having minimum tan.. net worth of an amount to be decided by the OTCEI governing board from time to time. The corporate bond should satisfy the eligibility requirements of the Securities Contracts (Regulation) Rules, 1957. The licensed dealers should have minimum tangible liquid net worth which would be sufficient to carry investment, trading and market making in the scrips listed on the OTC Exchanges.

The licensed dealers should have adequate organizational infrastructure such as office space, compound PTI scan, telephones (minimum two), telex, fax and other data communications equipment specified.

Licensed dealers should at least be graduates. Additional weightage will be given for additional ratio professional qualification. Licensed dealers should have adequate knowledge of trading, stock valuation, share transfer rules and relation.

Apart from the above, the licensed dealers will be required to comply with the following terms and conditions

a) If the applicant is a corporate body, the promoters should hold at least 40% of the equity capital.

b) In case of change in dealership from individual/partnership firm to corporate body original individual dealers/shares of the partnership firm should hold at least 40% of the capital of the new corporate body.

c) Partnership firms and corporate applicants must nominate one of the authorized signatories whose signification will be considered for eligibility and the same person will be required to take a written test and appear in interview.

d) Dealership is not transferable.

e) If there is a change in shareholding of a body corporate who is a dealer, resulting in change in ownership management, OTC Exchange of India reserves the right to review the status of dealership of that dealer.

Criteria for admission (for listing) of companies

The company should be sponsored by a member of the OTCEI

The sponsor to certify that all the scrips proposed to be offered for trading on OTC Exchange have already on subscribed to my members and licensed dealers of OTCEI.

The company to agree to abide by all statutory and OTCEI's provisions for listing.

The company to agree to enter into an agreement with the OTCEI in a prescribed format.

The company will comply with the provisions laid down in the Notification to be issued by the Government of factor subscribed to by member and licensed dealers of OTCEI.

The company to agree to abide by all statutory and OTCEI's provisions for listing.

The company will comply with the provisions laid down in the Notification to be issued by the Government of .. for listing on the OTC Exchange of India.

The issues of securities by companies and their listing on the OTCEI will be governed by the following defines.

i. The minimum issued equity share of accompany for eligibility for listing on the OTCEI will be Rs. 30 lakh subject to a minimum public offer of equity shares worth Rs. 20 lakhs in face value.

ii. For companies with an issued equity capital of more than Rs. 30 lakhs but less than Rs. 300 lakhs, the return public offer should be 40% of the issued capital or Rs. 20 lakh worth of shares in value, whichever higher in relaxation of rule 19(2)(b) of the Securities Contracts (Regulation) Rules, 1957.

iii. Companies with an issued equity capital of more than Rs. 300 lakhs seeking listing on the OTCEI will be comply with the listing requirements and guidelines as are applicable to such companies for enlistment on other organized stock exchanges, for venture capital companies 20% of capital should be minimum issued to …in OTCEI.

iv. Companies covered under the MRTO Act/FERA may be listed on the OTCEI only if they satisfy the … for listing on other recognized stock exchanges, such as minimum issued equity capital of Rs. 300 … such other limit as may be prescribed from time to time.

v. A company with an issued equity share capital of more than Rs. 25 crore will be eligible for listing on the OTCEI.

vi. Companies which are engaged in investments, leasing, finance, hire-purchase, amusement parks, etc. … not be eligible for listing on the OTCEI.

vii. In the minimum number of centers for collection of application forms in respect of issue of securities by companies, under the OTCEI shall be four, one each from the Northern, Western, Southern, Eastern regions of the … However, OTCEI shall have power to increase the number of centers depending upon the size and nature …. Of securities made by a company.

viii. Securities and Exchange Board of India (SEBI) vide it's its latter dated July 16, 1992 has inter alia classified as regards issue of shares through OTC Exchange of India as follows.

ix. Where a direct public issue is made through OTC without the sponsor taking any shares the normal underlines for disclosures and investor protection shall apply.

x. Where the shares of a company have been taken by the sponsor, such shares may be offered to the public calculate date at such price as the sponsor may deem fit in accordance with the regulations of OTC subject to the following conditions.

xi. The promoters after such offer retain at least 25% of the total issued capital with lock-in-period of five years from the date of the sponsor taking up the shares.

xii. The sponsor agrees to act as market maker for the shares at least for a period of three years compulsory basis and also finds an additional market maker for such compulsory market making and

xiii. The sponsor compulsorily fives two way quotes based on minimum or maximum trading prices as stipulated by OTC respect of the scrip.

With a view to making markets more competitive and compliant, SEBI has brought in the following new regulations:

- SEBI (Prohibition of Fraudulent and Unfair Trade Practices relating to Securities Market) Regulations, 2003
- SEBI (Ombudsman) Regulations, 2003
- SEBI (Central Listing Authority) Regulations, 2003
- SEBI (Central Database for Market Participants) Regulations, 2003
- SEBI (Self Regulatory Organizations) Regulations, 2004
- SEBI (Criteria For Fit and Proper Person) Regulations, 2004

As a measure of regulatory pro-activeness, the existing regulations were reviewed and the following amendment to regulations were notified:

- SEBI (Foreign Institutional Investors) (Amendment) Regulations, 2003
- SEBI (Mutual Funds) (Amendment) Regulations, 2003
- SEBI (Depositories and Participants)(Amendment) Regulations, 2003
- SEBI (Debenture Trustees) (Amendment) Regulations, 2003

- SEBI (Prohibition of Insider Trading) (Amendment) Regulations, 2003
- SEBI (Issue of Sweat Equity)(Amendment) Regulations, 2003
- SEBI (Stock Brokers and Sub-Brokers)(Amendment) Regulations, 2003
- SEBI (Stock Brokers and Sub-Brokers) (Second Amendment) Regulations, 2003
- SEBI (Procedure for Holding Enquiry and Imposing Penalty)(Amendment) Regulations, 2003
- SEBI (Ombudsman)(Amendment) Regulations, 2003
- SEBI (Foreign Institutional Investors) (Amendment) Regulations, 2004

REGULATION OF THE INVESTMENTS OF A MUTUAL FUND

The investments of a mutual fund are subject to a set of regulations prescribed by SEBI. The important ones are

1. A mutual fund, under all its schemes taken together, will not own more than 10 percent of any company's paid up capital carrying voting rights.
2. A scheme shall not invest more than 15 percent of its NAV in debt instruments issued by a single issuer which are rated not below investment grade by an authorised credit rating agency.
3. Barring certain exceptions, a scheme shall not invest more than 10 percent of its NAV in the equity shares or equity related instruments of any one company.
4. A scheme shall not invest more than 5 percent of its NAV in unlisted equity shares or equity related instruments in case of an open ended scheme and 10 percent of its NAV in case of a close ended scheme.
5. Mutual funds shall mark all investments to market.

Legal Framework of Indian Capital Markets

Various acts, rules, regulations, ordinances, guidelines, clarifications, press releases and bye laws of self regulatory organisations constitute the legal framework of Indian capital market. The Indian securities laws, rules and regulations enacted for its capital market include the following:

- The Companies Act, 1956
- The Securities Contracts (Regulation) Act, 1956
- The Securities Contracts (Regulation) Rules, 1957
- The Securities and Exchange Board of India Act, 1992

- The SEBI (Insider Trading) Regulations, 1992
- The SEBI (Merchant Bankers) Regulations, 1992
- The SEBI (Stock Brokers and Sub Brokers) Rules, 1992
- The SEBI (Debenture Trustees) Rules, 1993
- The SEBI (Debenture Trustees) Regulations, 1993
- The SEBI (Portfolio Managers) Rules, 1993
- The SEBI (Portfolio’ Managers) Regulations, 1993
- The SEBI (Registrars to Issue and Share Transfer Agents) Rules, 1993
- The SEBI (Registrars to Issue and Share Transfer Agents) Regulations, 1993
- The SEBI (Underwriters) Rules, 1993
- The SEBI (Underwriters) Regulations, 1993
- The SEBI (Appeal to Central Government) Rules, 1993
- The SEBI (Bankers to an Issue) Rules, 1994
- The SEBI (Bankers to an Issue) Regulations, 1994
- The SEBI Appellate Tribunal (Procedure) Rules, 1994
- The SEBI (Foreign Institutional Investors) Regulations, 1995
- The SEBI (Prohibition of fraudulent and unfair trade practices relating to securities market) Regulations, 1995
- Depositories Act, 1996
- The SEBI (Depositories and Participants) Regulations, 1996
- The SEBI (Mutual Funds) Regulations, 1996
- The SEBI (Venture Capital Funds) Regulations, 1996
- The SEBI (Custodian) Regulations, 1994
- The SEBI (Substantial Acquisition of Shares and Takeover) Regulations, 1997
- The Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002

The primary capital market provides opportunity to Issuers of securities, Government well as corporate, to raise resources to meet their requirements of investment or discharge some obligation. The issuers create and issue fresh securities in exchange of funds through public issues and private placements.

SEBI (Disclosure and Investor Protection) Guidelines, 2000

The primary capital issues are regulated by SEBI in terms of SEBI guidelines. SEBI has framed the guidelines in 1992, which were changed many a time keeping in view the inconsistencies, market development and changing needs of the capital market. New set guidelines were issued in the year 2000 called SEBI (Disclosure and Investor Protection) Guidelines, 2000, which are also amended subsequently. The said guidelines are issued by SEBI under section 11 of the Securities and Exchange Board of India Act, 1992. It provides a comprehensive framework for primary capital issues by the companies. The guidelines are applicable to:

(i) all public issues by listed and unlisted companies,

(ii) all offers for sale and rights issues exceeding Rs. 50 lakhs by listed companies whose equity share capital is listed.

The guidelines are not applicable to:

(a) A banking company including local area bank

(b) Public sector banks

(c) Infrastructure companies

(d) Rights issue by a listed company

The guidelines consist of framework of capital issuances as follows:

- Eligibility Norms for Companies Issuing Securities (Chapter n)
- Pricing by Companies Issuing Securities (Chapter HI)
- Promoters Contribution and Lock-in requirements (Chapter IV)
- Pre-Issue Obligations (Chapter V & VI)
- Post Issue Obligations (Chapter VII)

General Information - Capital Market Regulation

Several public sector undertakings have issued "debt instruments" commonly known as PSU bonds. These bonds are securities as defined under the SCR Act. Interest earned on some of these PSU bonds are not liable to income tax.

- Regulating the business in stock exchange and any other securities markets
- Registering and regulating the working of collective investment schemes, including mutual funds.

- Prohibiting fraudulent and unfair trade practices relating to securities markets.
- Promoting investor's education and training of intermediaries of securities markets.
- Prohibiting insider trading in securities, with the imposition of monetary penalties on guilty market intermediaries.
- Regulating substantial acquisition of shares and takeover of companies.
- Calling for information from, carrying out inspection, conducting inquiries and audits of the stock exchanges and intermediaries and self-regulatory organizations in the securities market.
- Carry forward deals permitted only on stock exchanges, which have screen, based trading system.
- Transactions carried forward cannot exceed 25% of a broker's total transactions on any one day.
- 90-day limit for carry forward and squaring off allowed only till the 75th day (or the end of the fifth settlement).
- Daily margins to rise progressively from 20% in the first settlement to 50% in the fifth.

2.2. COLLECTIVE INVESTMENT SCHEME, DEPOSITORIES, DEMATERIALISATION OF SECURITIES

Collective Investment Scheme:

A **collective investment scheme** is a way of investing money with other people to participate in a wider range of investments than may be feasible for an individual investor, and to share the costs of doing so.

Terminology varies with country but collective investment schemes are often referred to as **managed funds**, **mutual funds** or simply **funds** (note: mutual fund has a specific meaning in the US). Around the world large markets have developed around collective investment and these account for a substantial portion of all trading on major stock exchange.

Collective investments are promoted with a wide range of investment aims either targeting specific geographic regions (*e.g.* Emerging Europe) or specified themes (*e.g.* Technology). Depending on the country there is normally a bias towards the domestic market to reflect national self-interest, familiarity and the lack of currency risk. Funds are often selected on the basis of these specified investment aims, their past investment performance and other factors such as fees.

As per the mandate given by the Government of India, the entities which issue agro bonds, plantation bonds etc. were to be treated as "Collective Investment Schemes" coming under the purview of the SEBI Act.

The committee has defined a Collective Investment Schemes by identifying 3 important characteristics, namely Pooling of Investments, Management by a separate entity and Absence of day to day control of the investors. While finalising the definition, the committee recognizes that it may be possible that some arrangements of this nature like time shares, club memberships etc. would also get covered in the definition. It is suggested that SEBI may be given appropriate powers to grant exemptions to any class of arrangements which are not desired to be regulated as Collective Investment Schemes. It has been also observed that many of the existing collective investment schemes resort to entering into multiple agreements with the investors whereby the investor is given the ownership of land and the company is given the right to develop this land. The amounts collected are treated as license fee by the company thereby trying to limit the liability of the scheme. The committee wishes to make it clear that the substance of such arrangements should be relied upon to determine whether the scheme is a collective investment scheme or not. The principle of no day to day control of the investor in management of the property should be the prime criterion in determining the status of such schemes.

Collective investment schemes-structure and constitution

The committee reviewed the information filed with SEBI by the existing collective investment schemes. It was noted that most of the schemes are being operated by companies registered under the provisions of the Companies Act, 1956. Some of the schemes were also launched by non corporate entities like Association of Persons. Though all of the existing schemes have been managing investors funds, there is no distinction between the management and trustee function. In most of the cases there is an intermingling of the schemes accounts with those of the company's accounts. Consequently, it has become difficult to ensure adequate investor protection measures in this structure of operations. Due to the inherent nature of collective investment schemes, where assets are managed for and on behalf of the investors, these schemes must declare a trust in favour of the members over the scheme properties.

Collective investment management companies- registration, constitution and obligations.

As the Collective Investment schemes, in general, accept monies from ordinary investors, the committee feels that these investments would be better protected if they are managed by persons who have the capability to ensure that the desired activities are carried out efficiently, honestly and fairly. Keeping in mind this underlying principle, the committee recommends that any entity seeking registration with SEBI, to operate collective investment schemes, must possess adequate organisational capacity to meet the current and future operational demands in addition to necessary skill and experience required to operate such schemes.

The following conditions must be satisfied before an entity is licensed to carry out the activities of a collective investment management company:

(A) Adequate Management structure

The Board of Directors of the CIMA should possess adequate professional experience in related fields. They should have high integrity and must not have been found guilty of moral turpitude or convicted of any economic offense or violation of any security laws. The composition of the Board should be such that at least 50% of the directors must be independent persons, who are either directly or indirectly not associated with the persons who are in control of the collective investment management company. At least one of the directors would be representative of the trustee. The management team of the CIMA must also comprise of responsible officers who have not been found guilty of moral turpitude or convicted of any economic offense or violation of any securities laws.

(B) Financial Requirements

The committee recommends that the CIMA must have a minimum net worth of not less than Rs. 10 Crores. This is to ensure that the Collective Investment Management company has sufficient financial resources to ensure ongoing scheme related cash requirements. The minimum net worth requirement has also been specified in the mutual funds regulations and it acts as a filter and allows only the serious and committed players to enter the markets.

II. Depositories, Dematerialisation of Securities

A Depository is a securities "bank," where dematerialised physical securities are held in custody, and from where they can be traded. This facilitates faster, risk-free and low cost settlement. A Depository is akin to a bank and performs activities similar in nature. At present, there are two Depositories in India, National Securities Depository Limited (NSDL) and Central Depository Services (CDS). NSDL was the first Indian Depository. It was inaugurated in November 1996. NSDL was set up with an initial capital of Rs 124 crore, promoted by Industrial Development Bank of India (IDBI), Unit Trust of India (UTI), National Stock Exchange of India Ltd. (NSEIL) and the State Bank of India (SBI).

NSDL carries out its activities through business partners - Depository Participants (DPs), Issuing Corporates and their Registrars and Transfer Agents, Clearing Corporations/Clearing Houses. NSDL is electronically linked to each of these business partners via a satellite link through Very Small Aperture Terminals (VSATS). The entire integrated system (including the VSAT linkups and the software at NSDL and at each business partner's end) has been named the "NEST" (National Electronic Settlement & Transfer) system. The investor interacts with the Depository through a Depository Participant of NSDL. A DP can be a bank, financial institution, a custodian or a broker.

A Depository Participant: DP is an agent of the depository and is authorised to offer depository services to investors. According to SEBI guidelines, financial institutions, banks, custodians, stockbrokers, etc. can become Depository Participants in a depository. You can open your securities account through a DP and start dematerialising your securities into your account and / or start trading in the electronic mode. The balances in your account are maintained with the depository and are available through the DP. Your DP will intimate you the status of your holdings or transactions from time to time.

Benefits of DP

As an investor you will enjoy many benefits if you buy and sell in the depository mode. Some of the benefits are :-

- No bad deliveries
- Reduced paper work

- No risk of loss, mutilation or theft of share certificates.
- Faster settlement
- No stamp duty for transfer of shares
- Low transaction cost for buying and selling in the dematerialised segment
- Low interest rates on loans granted against pledge of dematerialised securities by banks
- Low margin on securities pledged with banks
- Pay-In and pay-out of securities on the same day
- Increase in the liquidity of your securities because of faster transfer and registration of securities in your account.
- Instant disbursement of non-cash corporate action benefits like bonus and rights into your account. Regular account status updates available from the DP at any point of time

Various services offered by CDS

CDS offers the following services to the investors through its Depository Participants:

- Dematerialisation: i.e. converting physical securities into electronic form in your account.
- Rematerialisation: i.e. converting electronic securities balances in your account back into physical securities.
- Maintaining your holdings in the electronic form.
- Effecting settlement of securities traded on the stock exchanges.
- Effecting settlement of trades not done on the stock exchanges i.e. off-market trades.
- Enabling you to receive electronic credit in your account in case of public issues.
- Enabling you to receive your non-cash corporate action benefit such as bonus and rights in the electronic form.
- Enabling you to pledge your dematerialised securities.
- Facilitating Securities lending and borrowing

Dematerialisation

Dematerialisation is the process by which a client can get physical certificates converted into electronic balances. An investor intending to dematerialise its securities needs to have an account with a DP. The client has to deface and surrender the certificates registered in its name to the DP. After intimating NSDL electronically, the DP sends the securities to the concerned Issuer/ R&T agent. NSDL in turn informs the Issuer/ R&T agent electronically, using NSDL Depository system, about the request for dematerialisation. If the Issuer/ R&T agent finds the certificates in order, it registers NSDL as the holder of the securities (the investor will be the beneficial owner) and communicates to NSDL the confirmation of request electronically. On receiving such confirmation, NSDL credits the securities in the depository account of the Investor with the DP.

Features:

- Holdings in only those securities that are admitted for dematerialisation by NSDL can be dematerialised.
- Only those holdings that are registered in the name of the account holder can be dematerialised.
- Names of the holders of the securities should match with the names given for the demat account.
- If the same set of joint holders held securities in different sequence of names, these joint holders by using 'Transposition cum Demat facility' can dematerialise the securities in the same account even though share certificates are in different sequence of names. e.g., If there are two share certificates one in the name of X first and Y second and another in the name of Y first and X second, then these shares can be dematerialised in the depository account which is in any name combination of X and Y i.e., either X first and Y second or Y first and X second. Separate accounts need not be opened to demat each share certificate. If shares are in the name combinations of X and Y, it cannot be dematerialised into the account of either X or Y alone.
- Check the demat performances of the companies whose shares are to be given for dematerialisation.
- Demat requests received from client (registered owner) with name not matching exactly with the name appearing on the certificates merely on account of initials not being spelt out fully or put after or prior to the surname, can be processed, provided the signature of the client on the Dematerialisation Request Form (DRF) tallies with the specimen signature available with the Issuers or its R & T agent.
- A client may, in the normal course, receive demat confirmation in about 30 days from the date of submission of demat request to the DP.
- There are special processes for Securities issued by Government of India and simultaneous transmission and demat.

Procedure:

- The client (registered owner) will submit a request to the DP in the Dematerialisation request form for dematerialisation, along with the certificates of securities to be dematerialised. Before submission, the client has to deface the certificates by writing "SURRENDERED FOR DEMATERIALISATION".

- The DP will verify that the form is duly filled in and the number of certificates, number of securities and the security type (equity, debenture etc.) are as given in the DRF. If the form and security count is in order, the DP will issue an acknowledgement slip duly signed and stamped, to the client.
- The DP will scrutinize the form and the certificates. This scrutiny involves the following :
- Verification of Client's signature on the dematerialisation request with the specimen signature (the signature on the account opening form). If the signature differs, the DP should ensure the identity of the client.
  - ♦ Compare the names on DRF and certificates with the client account.
  - ♦ Paid up status
  - ♦ ISIN (International Securities Identification Number)
  - ♦ Lock - in status
  - ♦ Distinctive numbers
- In case the securities are not in order they are returned to the client and acknowledgment is obtained. The DP will reject the request and return the DRF and certificates in case:
- A single DRF is used to dematerialise securities of more than one company.
- The certificates are mutilated, or they are defaced in such a way that the material information is not readable. It may advise the client to send the certificates to the Issuer/ R&T agent and get new securities issued in lieu thereof.
- Part of the certificates pertaining to a single DRF is partly paid-up; the DP will reject the request and return the DRF along with the certificates. The DP may advise the client to send separate requests for the fully paid-up and partly paid-up securities.
- Part of the certificates pertaining to a single DRF is locked-in, the DP will reject the request and return the DRF along with the certificates to the client. The DP may advise the client to send a separate request for the locked-in certificates. Also, certificates locked-in for different reasons should not be submitted together with a single DRF
- In case the securities are in order, the details of the request as mentioned in the form are entered in the DPM (software provided by NSDL to the DP) and a Dematerialisation Request Number (DRN) will be generated by the system.
- The DRN so generated is entered in the space provided for the purpose in the dematerialisation request form.
- A person other than the person who entered the data is expected to verify details recorded for the DRN. The request is then released by the DP which is forwarded electronically to DM (DM - Depository Module, NSDL's software system) by DPM.

- The DM forwards the request to the Issuer/ R&T agent electronically.
- The DP will fill the relevant portion viz., the authorisation portion of the demat request form.
- The DP will punch the certificate on the company name so that it does not destroy any material information on the certificate.
- The DP will then despatch the certificates along with the request form and a covering letter to the Issuer/ R&T agent.
- The Issuer/ R&T agent confirms acceptance of the request for dematerialisation in his system DPM (SHR) and the same will be forwarded to the DM, if the request is found in order.
- The DM will electronically authorise the creation of appropriate credit balances in the client's account.
- The DPM will credit the client's account automatically.
- The DP must inform the client of the changes in the client's account following the confirmation of the request.
- The issuer/ R&T may reject dematerialisation request in some cases. The issuer or its R&T Agent will send an objection memo to the DP, with or without DRF and security certificates depending upon the reason for rejection. The DP/Investor has to remove reasons for objection within 15 days of receiving the objection memo. If the DP fails to remove the objections within 15 days, the issuer or its R&T Agent may reject the request and return DRF and accompanying certificates to the DP. The DP, if the client so requires, may generate a new dematerialisation request and send the securities again to the issuer or its R&T Agent. No fresh request can be generated for the same securities until the issuer or its R&T Agent has rejected the earlier request and informed NSDL and the DP about it.

2.3. REGULATION OF BANKING & FINANCE COMPANIES – ROLE OF RBI AND BANKING OMBUDSMEN

The Reserve Bank of India (RBI) brought about crucial amendments to the Banking Ombudsman Scheme, 2006 which will now enable aggrieved customers to not only appeal against any Ombudsman's decision but also to appeal in case of complaints being rejected. The appeal could be made to the deputy governor's office of the RBI.

The Ombudsman, however, has the right to reject complaints if they are ; not on the grounds of complaint referred to in clause 8; beyond the pecuniary jurisdiction of Banking Ombudsman prescribed; frivolous, vexatious, malafide; without any sufficient cause; that it is not pursued by the complainant with reasonable diligence; in the opinion of the Banking Ombudsman there is no loss or damage or inconvenience caused to the complainant; or requiring consideration of elaborate documentary and oral evidence and the proceedings before the Banking Ombudsman.

In case of a complaint being aggrieved by the award under clause 12 or by rejection of a complaint, he may exercise the option of an appeal within 30 days, the RBI said in its notification.

Clause (8), is when an award lapses automatically in thirty days if the complainant does not furnish a letter of acceptance as full and final settlement of claims.

Under the scheme, the central bank has appointed 15 Banking Ombudsmen located mostly in state capitals.

The Banking Ombudsman tries to resolve customer complaints through conciliation or mediation and even passes an award if it is not resolved through such settlement.

Also, the bank shall, unless it has preferred an appeal, within one month from the date of receipt of the award, comply with the award and intimate compliance to the Banking Ombudsman, the RBI notification added.

Financial Supervision

The Reserve Bank of India performs this function under the guidance of the Board for Financial Supervision (BFS). The Board was constituted in November 1994 as a committee of the Central Board of Directors of the Reserve Bank of India.

Objective

Primary objective of BFS is to undertake consolidated supervision of the financial sector comprising commercial banks, financial institutions and non-banking finance companies.

Constitution

The Board is constituted by co-opting four Directors from the Central Board as members for a term of two years and is chaired by the Governor. The Deputy Governors of the Reserve Bank are ex-officio members. One Deputy Governor, usually, the Deputy Governor in charge of banking regulation and supervision, is nominated as the Vice-Chairman of the Board.

BFS meetings

The Board is required to meet normally once every month. It considers inspection reports and other supervisory issues placed before it by the supervisory departments.

BFS through the Audit Sub-Committee also aims at upgrading the quality of the statutory audit and internal audit functions in banks and financial institutions. The audit sub-committee includes Deputy Governor as the chairman and two Directors of the Central Board as members.

The BFS oversees the functioning of Department of Banking Supervision (DBS), Department of Non-Banking Supervision (DNBS) and Financial Institutions Division (FID) and gives directions on the regulatory and supervisory issues.

Functions

Some of the initiatives taken by BFS include:

i. restructuring of the system of bank inspections

ii. introduction of off-site surveillance,

iii. strengthening of the role of statutory auditors and

iv. strengthening of the internal defences of supervised institutions.

The Audit Sub-committee of BFS has reviewed the current system of concurrent audit, norms of empanelment and appointment of statutory auditors, the quality and coverage of statutory audit reports, and the important issue of greater transparency and disclosure in the published accounts of supervised institutions.

Current Focus

- supervision of financial institutions
- consolidated accounting
- legal issues in bank frauds
- divergence in assessments of non-performing assets and supervisory rating model for banks.

2.4. REGULATION OF INSURANCE SECTOR BY IRDA (INSURANCE REGULATION AND DEVELOPMENT AUTHORITY)

A contract of insurance is a contract by which one party in consideration of the price paid to him proportionate to the risk provides security to the other party that he would make good the loss by the happening of any event.

The insurer (insurance company) makes good the loss or compensates the insured against happening of a specified risk such as fire, theft or any other similar contingency. The property insured is the subject matter of insurance. The loss may arise from uncertain events or perils / hazards causing destruction or damage to the property or death/ disablement of a person.

Principles of Insurance:

The contract of insurance is required to fulfill the principles of insurance namely;

- Insurable Interest
- Indemnity
- Subrogation
- Proximate Cause

- Good Faith
- Consideration

Insurable Interest : The Insured must have the insurable interest in the subject matter of insurance ie., benefit by its safety or prejudiced by its loss.

Indemnity : The insured person is placed financially, in the same position as he was before the loss.

Subrogation: The legal right of one person, having indemnified the other in a contractual obligation to assume the place of another and avail all rights and remedies of the another, whether enforced or not. *Example:* The Insurer of an importer of electrical goods receives claims in respect of faulty toaster. The insurer pays the claim and takes over the insured's right to claim from the manufacturer.

Proximate Cause : (Causa Proxima)- The active and efficient cause that sets into motion a train of events, which bring about result/ loss with no other intervening cause. *Example:* During the war period, a bomb was dropped on a factory, which caused fire to the factory. The proximate cause was enemy action and not fire

Good Faith : (Uberrima Fidae) the insured is duty bound to disclose all material facts relating to the risk to be covered. Both parties are expected to observe goodfaith on disclosing the information of the contract.

Consideration: ("quid pro quo") Each policy holder is obliged to pay only a rateable portion to the insurer, under each separate policy.

Types of Insurance : includes (A) Life Insurance (B) General insurance

A. Life Insurance

B. General Insurance

   (i) Fire Insurance

   (ii) Marine Insurance

   (iii) Miscellaneous

The Insurance is a federal subject in India. The primary legislation that deals with insurance business in India is: Insurance Act, 1938, and Insurance Regulatory & Development Authority Act, 1999.

As per the section 4 of IRDA Act, 1999, Insurance Regulatory and Development Authority (IRDA, which was constituted by an act of parliament) specify the composition of Authority, all appointed by the Government of India, constituting a ten member team consisting of

   (a) a Chairman;

   (b) fivewhole-timemembers;

   (c) four part-time members,

The Insurance Regulatory and Development Authority was established under the provisions of section 3 of the Insurance Regulatory and Development Authority Act, 1999 (41 of 1999).

According to the Act, "Insurance Cover" means an insurance contract whether in the form of a policy or a cover note or a Certificate of Insurance or any other form prevalent in the industry to evidence the existence of an insurance contract"

Duties, Powers and Functions of IRDA

Section 14 of IRDA Act, 1999 lays down the duties, powers and functions of IRDA

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

As per the provisions contained in sub-section (1), the powers and functions of the Authority shall include, -

- issue to the applicant a certificate of registration, renew, modify, withdraw, suspend or cancel such registration;
- 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;
- specifying requisite qualifications, code of conduct and practical training for intermediary or insurance intermediaries and agents
- specifying the code of conduct for surveyors and loss assessors;
- promoting efficiency in the conduct of insurance business;
- promoting and regulating professional organisations connected with the insurance and re-insurance business;
- levying fees and other charges for carrying out the purposes of this Act;
- calling for information from, undertaking inspection of, conducting enquiries and investigations including audit of the insurers, intermediaries, insurance intermediaries and other organisations connected with the insurance business;
- 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);
- 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;
- regulating investment of funds by insurance companies;
- regulating maintenance of margin of solvency;
- adjudication of disputes between insurers and intermediaries or insurance intermediaries;

- supervising the functioning of the Tariff Advisory Committee;
- specifying the percentage of premium income of the insurer to finance schemes for promoting and regulating professional organisations referred to in clause (f);
- specifying the percentage of life insurance business and general insurance business to be undertaken by the insurer in the rural or social sector; and
- exercising such other powers as may be prescribed

Regulation on Unit – Linked Plans:

After being a witness to rampant misrepresentation of ULIPs (unit linked insurance plans), the regulator - Insurance Regulatory and Development Authority (IRDA) finally introduced some much-needed guidelines to lend an element of insurance to an otherwise investment product. ULIPs made an entry at a rather opportune time for insurance companies., From 3,000 points, the BSE Sensex surged furiously to over 12,000 points in an unprecedent manner leaving investors breathless. Unfortunately, even insurance companies were rather excited by the sharp rise in stockmarkets. The ULIPS product was more geared towards 'offering a return' than insuring lives. And this anomaly was put to good use by insurance agents by adopting the marketing gimmicks like tax benefit under sec 80 (c), paying premium for only 3 years were the premium for first three years are normally high so as to recover the entire cost of the policy. The IRDA, to their credit, did intervene at regular intervals to infuse some much-needed sanity.

On July 1, 2006, the IRDA introduced revised ULIP guidelines to correct "some" of these anomalies, but more to be achieved later.

IRDA has given the new ULIP a 'face', in insurance a face can be taken as the sum assured and the tenure. The old ULIP lacked both and individuals did not have an inkling about either even after taking the ULIP. The latest guidelines dictate that:

1. Term/Tenure

- The ULIP client must have the option to choose a term/tenure.
- If no term is defined, then the term will be defined as '70 minus the age of the client'. For example if the client is opting for ULIP at the age of 30 then the policy term would be 40 years.
- The ULIP must have a minimum tenure of 5 years.

2. Sum Assured

The minimum sum assured is calculated as:

(Term/2 * Annual Premium) or (5 * Annual Premium) whichever is higher.

There is no clarity with regards to the maximum sum assured.

3. **Premium payments**

If less than first 3 years premiums are paid, the life cover will lapse and policy will be terminated by paying the surrender value. However, if at least first 3 years premiums have been paid, then the life cover would have to continue at the option of the client.

4. **Surrender value**

The surrender value would be payable only after completion of 3 policy years.

5. **Top-ups**

Insurance companies can accept top-ups only if the client has paid regular premiums till date. If the top-up amount exceeds 25% of total basic regular premiums paid till date, then the client has to be given a certain percentage of sum assured on the excess amount. Top-ups have a lock-in of 3 years (unless the top-up is made in the last 3 years of the policy).

6. **Partial withdrawal**

The client can make partial withdrawals only after 3 policy years.

7. **Settlement**

The client has the option to claim the amount accumulated in his account after maturity of the term of the policy upto a maximum of 5 years. For instance, if the ULIP matures on January 1, 2007, the client has the option to claim the ULIP monies till as late as December 31, 2012. However, life cover will not be available during the extended period.

8. **Loans**

No loans will be granted under the new ULIP.

9. **Charges**

The insurance company must state the ULIP charges explicitly. They must also give the method of deduction of charges.

10. **Benefit Illustrations**

The client must necessarily sign on the sales benefit illustrations. These illustrations are shown to the client by the agent to give him an idea about the returns on his policy. Agents are bound by guidelines to show illustrations based on an optimistic estimate of 10% and a conservative estimate of 6%. Now clients will have to sign on these illustrations, because agents were violating these guidelines and projecting higher returns.

While what the IRDA has done is commendable, a lot more needs to be done.

Regulations for Insurance Brokers:

An "insurance broker" according to the IRDA Act, means a person for the time-being licensed by the Authority under regulation 11, who for a remuneration arranges insurance contracts with insurance companies and/ or reinsurance companies on behalf of his clients."

(a) obtaining detailed information of the client's business and risk management philosophy;

(b) familiarising himself with the client's business and underwriting information so that this can be explained to an insurer and others;

(c) rendering advice on appropriate insurance cover and terms;

(d) maintaining detailed knowledge of available insurance markets, as may be applicable;

(e) submitting quotation received from insurer/s for consideration of a client;

(f) providing requisite underwriting information as required by an insurer in assessing the risk to decide pricing terms and conditions for cover;

(g) acting promptly on instructions from a client and providing him written acknowledgements and progress reports;

(h) assisting clients in paying premium under section 64VB of Insurance Act, 1938 (4 of 1938);

(i) providing services related to insurance consultancy and risk management;

(j) assisting in the negotiation of the claims; and

(k) maintaining proper records of claims;

2.5. CYBER LAW AND REGULATION OF E COMMERCE AND ELECTRONIC FINAN CIAL INSTRUMENTS:

Cyber laws are meant to set the definite pattern, some rules and guidelines that defined certain business activities going on through internet legal and certain illegal and hence punishable. **The IT Act 2000, the cyber law of India**, gives the legal framework so that information is not denied legal effect, validity or enforceability, solely on the ground that it is in the form of electronic records.

1. The E-commerce industry carries out its business via transactions and communications done through **electronic records** . It thus becomes essential that such transactions be made legal . Keeping this point in the consideration, the IT Act 2000 **empowers** *the government departments to accept filing, creating and retention of official documents in the digital format*. The Act also puts forward the proposal for setting up the legal framework essential for the authentication and origin of **electronic records / communications** through digital signature.

2. The Act **legalizes the e-mail** and gives it the status of being *valid form of carrying out communication in India* . This implies that e-mails can be duly produced and approved in a court of law , thus can be a regarded as substantial document to carry out **legal proceedings.**

3. The act also talks about **digital signatures** and digital records . These have been also awarded the status of being legal and valid means that can form strong basis for launching litigation in a court of law. It invites the corporate companies in the business of being **Certifying Authorities** for issuing secure Digital Signatures Certificates.

4. The Act now allows Government to issue **notification on the web** thus heralding e-governance.

5. It eases the task of companies of the filing any form, **application** or document by laying down the guidelines to be submitted at any *appropriate office, authority, body or agency owned or controlled by the government.* This will help in ***saving costs***, *time and manpower* for the corporates.

6. The act also provides **statutory remedy** to the coporates in case the crime against the accused for breaking into their computer systems or network and damaging and copying the data is proven. The remedy provided by the Act is in the form of monetary damages, not exceeding **Rs. 1 crore($200,000)**.

7. Also the law sets up the **Territorial Jurisdiction** of the Adjudicating Officers for cyber crimes and the Cyber Regulations Appellate Tribunal.

8. The law has also laid guidelines for providing **Internet Services** on a license on a non-exclusive basis.

The IT Law 2000, though appears to be self sufficient, it takes mixed stand when it comes to many practical situations. It looses its certainty at many places like:

1. The law misses out completely the issue of **Intellectual Property Rights**, and makes no provisions whatsoever for *copyrighting, trade marking or patenting of electronic information and data.* The law even doesn't talk of the rights and liabilities of domain name holders , the first step of entering into the e-commerce.

2. The law even stays silent over the **regulation of electronic payments** gateway and segregates the negotiable instruments from the applicability of the IT Act , which may have major effect on the growth of e-commerce in India . It leads to make the banking and **financial sectors irresolute** in their stands .

3. The act empowers the Deputy Superintendent of Police to look up into the investigations and filling of charge sheet when any case related to cyber law is called. This approach is likely to result in **misuse** in the context of Corporate India as companies have public offices which would come within the ambit of "public place" under the Act. As a result, companies will not be able to escape potential **harassment** at the hands of the DSP.

4. Internet is a borderless medium ; it spreads to every corner of the world where life is possible and hence is the cyber criminal. Then how come is it possible to feel relaxed and secured once this law is enforced in the nation.

Amendments to the Reserve Bank of India Act, 1934, E Commerce Act, 1998

(a) The Reserve Bank of India Act, 1934 is amended by inserting after Chapter IIIC, the following Chapter III D: "Chapter III D".

(1) If the Bank is satisfied that in the interest of development of efficient payment systems it is necessary to promote and establish multiple electronic funds transfer (EFT) systems, it may by order, allow banking companies, financial or other institutions, or any other person desirous of setting up an EFT System to apply for authorisation from the Bank to commence and operate an EFT System.

(2) An application for approval under sub-section (1) shall be submitted in the form specified by the Bank from time to time, along with a scheme of operations of the proposed system and the documents relating to rights, duties and liabilities of the person participating in such system.

(3) The Bank may, before granting approval for any such proposed system, require the applicant or the proposed participants in the system to submit such further information and particulars as considered necessary and the Bank may also cause such reasonable inspection of the premises, equipments, machineries, books or other documents, or accounts and transactions, relating to the proposed system as considered essential by the Bank, with permission of the applicant.

(4) The Bank may, subject to such modifications and alterations to the scheme and any contract and documents submitted therewith as are considered desirable, approve or reject any application submitted for approval under sub-section (2). Provided that while approving the scheme, the Bank may impose such terms, restrictions, limitations and conditions as it may deem fit, on the applicant or the proposed participant or any other person likely to be affected or benefited thereby. Provided further, that before rejecting any such application the Bank may serve notice on the applicant requiring it to show cause as to why the application should not rejected and if so requested by the applicant, an opportunity for hearing should also be given.

(5) Any Regulation framed by the Bank for regulation of multiple payment systems shall be binding on the applicant, the proposed participants and any other person likely to be affected or benefited thereby.

(6) No person, other than a person whose application is approved by the Bank under sub-section (4) shall commence or operate any EFT System.

Explanation: For the purpose of this Section:

"EFT System" means the Electronic Fund Transfer System established by these Regulations for carrying out interbank and intrabank funds transfers within India, through EFT centres connected by a network, and providing for settlement of payment obligations arising out of such funds transfers, between participating banks or institutions. "**Banking company**" means a company as defined in Section 5 of the Banking Regulation Act, 1949, and includes the State Bank of India, constituted by the State Bank of India Act, 1955, a Subsidiary Bank constituted under the State Bank of India (Subsidiary Banks) Act, 1959, a Corresponding New Bank constituted under the Banking Companies (Acquisition and Transfer of Undertakings) Act, 1970 or the Banking Companies (Acquisition and Transfer of Undertakings) Act, 1980, a cooperative bank, as defined in Section 56 of Part V of the Banking Regulation Act, 1949 and such other banks as may be specified from time to time. "Financial Institutions" shall bear the meaning assigned to it in Section 4A(1) of the Companies Act, 1956 and includes an institution notified under Sub-section (2) of that Section. "Institution" means "a public financial institution and includes a department or agency of the Central or State Government or any other organisation approved by the Reserve Bank as eligible to open a settlement account with it."

(b) Section 58(2) of the Reserve Bank of India Act, 1934, is amended by inserted after existing clause (P), the following new clause (PP):

"(PP) The regulation of multiple payment systems"

2.6. CONTEMPORARY ISSUES IN FINANCE

VENTURE CAPITAL

Concept of venture capital : The term "Venture capital" is understood in many ways. In a narrow sense, if refers to investment in new and tried enterprises that are lacking a stable record of growth.

In a broader sense, venture capital refers to the commitment of capital as shareholding, for the formulation and setting up of small firms specializing in new ideas or new technologies. It is not merely an injection of funds into a new firm; it is a simultaneous input of skill needed to set up the firm, design its marketing strategy and organize and mange it. It is an association with successive stages of firm's development with distinctive types of financing appropriate to each stage of development.

Meaning of venture capital: Venture capital is long term risk capital to finance high technology project which involves risk but at the same time has strong potential for growth. Venture capitalist pools their resources including managerial abilities to assist new entrepreneurs in the early years of the project. Once the project reaches the stage of profitability, they sell their equity holdings at high premium.

Definition of a venture capital company: A venture capital company is defined as "a financing institution which joins an entrepreneur as a co-promoter in a project and shares the risks and rewards of the enterprise".

Features of venture capital

Some of the features of venture capital financing are as under:

1. Venture capital is usually in the form of an equity participation. It may also take the form of convertible debt or long term loan.
2. Investment is made only in high risk but high growth potential projects.

3. Venture capital is available only for commercialization of new ideas or new technologies and not for enterprises which are engaged in trading, booking, financial services, agency, liaison work or research and development.

4. Venture capitalist joins the entrepreneurs as a co-promoter in project and shares the risks and rewards of the enterprise.

5. There is continuous involvement in business after making an investment by the investor.

6. Once the venture has reached the full potential the venture capitalist disinvests his holdings either to the promoters or in the market. The basic objective of investment is not profit but capital appreciation at the time of disinvestment.

7. Venture capital is not just injection of money but also an input needed to setup the firm, design its marketing strategy and organize and manage it.

8. Investment is usually made in small and medium scale enterprises.

Disinvest mechanism: The objective of venture capitalists to sell of the investment made by him at substantial capital gains. The disinvestment options available in development countries are:

1. Promoters buy back
2. Public issues
3. Sale to other venture capital funds
4. Sale in OTC market &
5. Management buy outs

In India, the most popular investment route is promoter's buy back. This permits the ownership and control of the promoter in tact.

The risk capital and technology finance corporation, CAN-VCF etc. in India allow promoters to buy back equity of their enterprise.

The public issue would be difficult and expensive since first generation entrepreneurs are not known in the capital market. The option involves high transaction cost and also less feasible for small venture on account of high listing requirements of the stock exchange.

The OTC exchange in India has been set up in 1992. It is hoped that OTCEI would provide disinvestment opportunity to venture capital firms.

The other investment options such as management buy out sale to other venture capital funds are not considering appropriate in India.

Scope of venture capital

1. Development of an idea – seed finance
2. Implementation stage – start up finance

3. Fledging stage – Additional finance

4. Establishment stage – Establishment finance

Importance of venture capital

1. Advantages to investing public: The investing public will be able to reduce risk significantly against unscrupulous management, if the public invest in venture fund who in turn will invest in equity of new business. With their expertise in the field and continuous involvement in the business they would be able to stop malpractices by management.

2. Advantage of promoters: the entrepreneur for the success of public issues is required to convince tens of underwriters, brokers and thousands of investors but to obtain venture capital assistance; he will be required to sell his ideas to justify the officials of the venture funds.

3. General: A developed venture capital institutional set up reduces the time lag between a technological innovation and its commercial exploitation.

Securitisation is the process of conversion of existing assets or future cash flows into marketable securities. In other words, securitisation deals with the conversion of assets which are not marketable into marketable ones.

For the purpose of distinction, the conversion of existing assets into marketable securities is known as asset-backed securitisation and the conversion of future cash flows into marketable securities is known as future-flows securitisation.

Some of the assets that can be securitised are loans like car loans, housing loans, et cetera and future cash flows like ticket sales, credit card payments, car rentals or any other form of future receivables.

Suppose Mr X wants to open a multiplex and is in need of funds for the same. To raise funds, Mr X can sell his future cash flows (cash flows arising from sale of movie tickets and food items in the future) in the form of securities to raise money.

This will benefit investors as they will have a claim over the future cash flows generated from the multiplex. Mr X will also benefit as loan obligations will be met from cash flows generated from the multiplex itself.

The process and participants

Section 5 of the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002, mandates that only banks and financial institutions can securitise their financial assets.

In the traditional lending process, a bank makes a loan, maintaining it as an asset on its balance sheet, collecting principal and interest, and monitoring whether there is any deterioration in borrower's creditworthiness.

This requires a bank to hold assets (loans given) till maturity. The funds of the bank are blocked in these loans and to meet its growing fund requirement a bank has to raise additional funds from the market. Securitisation is a way of unlocking these blocked funds.

Consider a bank, ABC Bank. The loans given out by this bank are its assets. Thus, the bank has a pool of these assets on its balance sheet and so the funds of the bank are locked up in these loans. The bank gives loans to its customers. The customers who have taken a loan from the ABC bank are known as obligors.

To free these blocked funds the assets are transferred by the originator (the person who holds the assets, ABC Bank in this case) to a special purpose vehicle (SPV).

The SPV is a separate entity formed exclusively for the facilitation of the securitisation process and providing funds to the originator. The assets being transferred to the SPV need to be homogenous in terms of the underlying asset, maturity and risk profile.

What this means is that only one type of asset (eg: auto loans) of similar maturity (eg: 20 to 24 months) will be bundled together for creating the securitised instrument. The SPV will act as an intermediary which divides the assets of the originator into marketable securities.

These securities issued by the SPV to the investors and are known as pass-through-certificates (PTCs). The cash flows (which will include principal repayment, interest and prepayments received) received from the obligors are passed onto the investors (investors who have invested in the PTCs) on a pro rata basis once the service fees has been deducted.

The difference between rate of interest payable by the obligor and return promised to the investor investing in PTCs is the servicing fee for the SPV.

The way the PTCs are structured the cash flows are unpredictable as there will always be a certain percentage of obligors who won't pay up and this cannot be known in advance. Though various steps are taken to take care of this, some amount of risk still remains.

The investors can be banks, mutual funds, other financial institutions, government etc. In India only qualified institutional buyers (QIBs) who posses the expertise and the financial muscle to invest in securities market are allowed to invest in PTCs.

Mutual funds, financial institutions (FIs), scheduled commercial banks, insurance companies, provident funds, pension funds, state industrial development corporations, et cetera fall under the definition of being a QIB. The reason for the same being that since PTCs are new to the Indian market only informed big players are capable of taking on the risk that comes with this type of investment.

In order to facilitate a wide distribution of securitised instruments, evaluation of their quality is of utmost importance. This is carried on by rating the securitised instrument which will acquaint the investor with the degree of risk involved.

The rating agency rates the securitised instruments on the basis of asset quality, and not on the basis of rating of the originator. So particular transaction of securitisation can enjoy a credit rating which is much better than that of the originator.

High rated securitised instruments can offer low risk and higher yields to investors. The low risk of securitised instruments is attributable to their backing by financial assets and some credit enhancement measures like insurance/underwriting, guarantee, etc used by the originator.

The administrator or the servicer is appointed to collect the payments from the obligors. The servicer follows up with the defaulters and uses legal remedies against them. In the case of ABC bank, the SPV can have a servicer to collect the loan repayment installments from the people who have taken loan from the bank. Normally the originator carries out this activity.

Once assets are securitised, these assets are removed from the bank's books and the money generated through securitisation can be used for other profitable uses, like for giving new loans.

For an originator (ABC bank in the example), securitisation is an alternative to corporate debt or equity for meeting its funding requirements. As the securitised instruments can have a better credit rating than the company, the originator can get funds from new investors and additional funds from existing investors at a lower cost than debt.

Impact on banking

Other than freeing up the blocked assets of banks, securitisation can transform banking in other ways as well.

The growth in credit off take of banks has been the second highest in the last 55 years. But at the same time the incremental credit deposit ratio for the past one-year has been greater than one.

What this means in simple terms is that for every Rs 100 worth of deposit coming into the system more than Rs 100 is being disbursed as credit. The growth of credit off take though has not been matched with a growth in deposits.

So the question that arises is, with the deposit inflow being less than the credit outflow, how are the banks funding this increased credit offtake?

Banks essentially have been selling their investments in government securities. By selling their investments and giving out that money as loans, the banks have been able to cater to the credit boom.

This form of funding credit growth cannot continue forever, primarily because banks have to maintain an investment to the tune of 25 per cent of the net bank deposits in statutory liquidity ratio (SLR) instruments (government and semi government securities).

The fact that they have been selling government paper to fund credit off take means that their investment in government paper has been declining. Once the banks reach this level of 25 per cent, they cannot sell any more government securities to generate **liquidity.**

And given the pace of credit off take, some banks could reach this level very fast. So banks, in order to keep giving credit, need to ensure that more deposits keep coming in.

One way is obviously to increase interest rates. Another way is Securitisation. Banks can securitise the loans they have given out and use the money brought in by this to give out more credit.

MERCHANT BANKING

The term merchant banking is used differently in different countries and so there is no precise definition for it. In London, merchant banker refers to those who are members of British Merchant Banking and Securities House Association who carry on consultation, leasing, Portfolio services, assets management, euro credit, loan syndication etc. In America, merchant banking is concerned with mobilizing saving of people and directing the funds to business enterprise.

Definition

There is no universal definition for merchant banking. In assumes diverse function in different countries. So merchant banking may be defined as, "an institution which covers a wide range of activities such as management of customer services, portfolio management, credit syndication, acceptance credit, counselling, insurance etc.

The notification of the Ministry of finance defines a merchant banker as "any person who is engaged in the business of issue management either by making arrangements regarding selling, buying or subscribing to the securities as mangers, consultant, adviser or rendering corporate advisory service in relation to such issue management".

Origin

Merchant banking originated through the entering of London merchants in financing foreign trade through acceptance of bills. Later – the merchants assisted the government of under developed countries in raising long term funds through floatation of bonds in London money market. Over a period, they extended their activities to domestic business of syndication of long term and short term finance, underwriting of new issues, acting as registrars and share transfer agents, debentures trustees, portfolio mangers, negotiating agents for mergers, take over etc. the post was period witnessed the rapid growth of merchant banking through the innovative instrument like Euro dollar and the growth of various financial centers like Singapore, Hong Kong, Baharain, Kuwait, Dubai etc.

Merchant Banking in India

In India prior to the enactment of Indian Companies Act, 1956, managing agents acted as issue houses for securities, evaluated project reports, planned capital structure and to some extent provided venture capital for new firms. Few shares broking firms also function as merchant bankers.

The need for specialized merchant banking service was felt in India with the rapid growth in the number and size of the issues made in the primary market. The merchant banking services were started by foreign bankers, namely the National Grindlays banks in 1967 and city bank in 1970. The banking commission in its report in 1972 recommended the setting up of merchant banking institution by commercial banks and financial institutions. This marked the beginning of specialized merchant banking in India.

To begin with, merchant banking services were offered along with other traditional banking services. In the mid- eighties, the banking regulations act was amended permitting commercial banks to offer a wide range of financial services through the subsidiary rule. The Sate Bank of India was the first Indian Bank to set up merchant banking division in 1972. Later ICICI set up its Merchant Banking Division followed by Bank of India, Bank of Baroda, Canara Bank, Punjab National Bank and UCO Bank. The merchant banking gained prominence during 1983-84 due to new issue boom.

Merchant banks and commercial banks

There are differences in approach, attitude and areas of operations between commercial banks and merchant banks. The differences between merchant banks and commercial banks are summarized below:

1. Commercial banks basically deal and debt related finance and their activities are appropriately arrayed around credit proposal, credit appraisal and loan sanctions. On the other hand, the area of activities of merchant bankers is "equity and equity related". They deal with mainly funds raised through money market and capital market.
2. Commercial banks are asset oriented and their lending decisions are based on detailed credit analysis of loan proposals and the value of security offered against loans. They generally avoid risks. The merchant bankers are management oriented. They are willing to accept risk of business.
3. Commercial bankers are merely financiers. The activities of merchant bankers include project counselling, corporate counselling in areas of capital restructuring, amalgamations, mergers, takeover etc, discounting and rediscounting of short term paper in money markets, managing, underwriting and supporting public issues in new issue market and acting as brokers and advisers on portfolio management in stocks exchange. Merchant banking activities have impact on growth, stability and liquidity of money markets.

Services of merchant banks

The financial institutions in India could not meet the demands for long term funds required by the ever expanding industry and trade. The corporate sector enterprises, therefore, meet their requirements through issue of shares and debentures in capital market. To raise money from capital market, promoters bank upon merchant bankers who manage the whole show by rendering multifarious services. The merchant bankers also advice the investors of the incentives available in the form of tax relief's and other statutory obligation.

The services of merchant bankers are described in details in the following section.

1. Corporate counselling
2. Project counselling
3. Loan syndication
4. Issue management
    - Public issue through prospectus
    - Marketing
    - Pricing of issues

5. Post Issue management
6. Underwriting of public issue
7. Managers, consultants or advisers to the issue
8. Portfolio management
9. Advisory services relating to mergers and takeovers
10. Off shore finance
11. Non – Resident investment

Scope for merchant banking in India

In the present day capital market scenario, the merchant banks play the role of an encouraging and supporting force to the entrepreneurs, corporate sector and the investors. There is vast scope for merchant bankers to enlarge their operations both in domestic and international market.

1. Growth of new issues market
2. Entry of foreign investors
3. Changing policy of financial institutions
4. Development of debt market
5. Innovation in financial instruments
6. corporate restructuring
7. Disinvestment

Key words

- OTCE
- Depositories
- Dematerialisation
- RBI
- IRDA
- Fund transfer
- Ecommerce
- Venture capital
- Securitisation
- Merchant banking
- Fund manager

STUDY NOTE - 3

CAPITAL MARKET ANALYSIS

This Study Note includes

- **Risk and return**
- **Stock Market Efficiency**
- **Investment Analysis**
- **Capital Asset Pricing Model vs Market Models**
- **Products of stock exchanges**
- **Derivatives markets**
- **Debt markets**
- **Commodity markets**
- **Portfolio management**
- **Mutual funds**

3.1 RISK AND RETURN

Risk Defined

Risk can be defined as the probability that the expected return from the security will not materialize. Every investment involves uncertainties that make future investment returns risk prone. Uncertainties could be due to the political, economic and industry factors.

Risk could be systematic in future depending upon the source of it. Systematic risk is for the market as a whole, while unsystematic risk is specific to an industry or the company individually. The first three risk factors discussed below are systematic in nature and the rest are unsystematic. Political risk could be whether it affects the market as a whole or just a particular industry.

Types of Investment Risk

i. Systematic vs Unsystematic Risk

Modern investment analysis categorizes the traditional sources of risk causing variability in returns into two general types: those that are pervasive in nature, such as market risk or interest rate risk, and those that are specific to a particular security issue, such as business or financial risk. Therefore, we must consider these two categories of total risk. The following discussion introduces these terms. Dividing total risk into its two components, a general (market) component and a specific (issuer) component, we have systematic risk and nonsystematic risk, which are additive:

Total risk = General risk + Specific risk
= Market risk + Issuer risk
= **Systematic risk + Nonsystematic risk**

Systematic Risk : An investor can construct a diversified portfolio and eliminate part of the total risk, the diversifiable or non-market part. What is left is the non- diversifiable portion or the market risk. Variability in a security's total returns that is directly associated with overall movements in the general market or economy is called **systematic (market) risk**.

Virtually all securities have some systematic risk, whether bonds or stocks, because systematic risk directly encompasses interest rate, market, and inflation risks. The investor cannot escape this part of the risk because no matter how well he or she diversifies, the risk of the overall market cannot be avoided. If the stock market declines sharply, most stocks will be adversely affected; if it rises strongly, as in the last few months of 1982, most stocks will appreciate in value. These movements occur regardless of what any single investor does. Clearly, market risk is critical to all investors.

Non- systematic Risk: The variability in a security's total returns not related to overall market variability is called the **non- systematic (non-market or unsystematic) risk**. This risk is unique to a particular security and is associated with such factors as business and financial risk as well as liquidity risk. Although all securities tend to have some nonsystematic risk, it is generally connected with common stocks.

Remember the difference: Systematic (Market) Risk is attributable to broad macro factors affecting all securities. Nonsystematic (Non-Market) Risk is attributable to factors unique to a security. Different types systematic and unsystematic risk are explained as under:

1. Market Risk

The variability in a security's returns resulting from fluctuations in the aggregate market is known as market risk. All securities are exposed to market risk including recessions, wars, structural changes in the economy, tax law changes, even changes in consumer preferences. Market risk is sometimes used synonymously with systematic risk.

2. Interest Rate Risk

The variability in a security's return resulting from changes in the level of interest rates is referred to as interest rate risk. Such changes generally affect securities inversely; that is, other things being equal, security prices move inversely to interest rates. The reason for this movement is tied up with the valuation of securities. Interest rate risk affects bonds more directly than common stocks and is a major risk faced by all bondholders. As interest rates change, bond prices change in the opposite direction.

3. Purchasing Power Risk

A factor affecting all securities is purchasing power risk also known as inflation risk. This is the chance that the purchasing power of invested dollars will decline. With uncertain inflation, the real (inflation-adjusted) return involves risk even if the nominal return is safe (e.g., a Treasury bond). This risk is related to interest rate risk, since interest rates generally rise as inflation increases, because lenders demand additional inflation premiums to compensate for the loss of purchasing power.

4. Regulation Risk

Some investments can be relatively attractive to other investments because of certain regulations or tax laws that give them an advantage of some kind. Municipal bonds, for example pay interest that is exempt from local, state and federal taxation. As a result of that special tax exemption, municipals can price bonds to yield a lower interest rate since the net after-tax yield may still make them attractive to investors. The risk of a regulatory change that could adversely affect the stature of an investment is a real danger. In 1987, tax law changes dramatically lessened the attractiveness of many existing limited partnerships that relied upon special tax considerations as part of their total return. Prices for many limited partnerships tumbled when investors were left with different securities, in effect, than what they originally bargained for. To make matters worse, there was not an extensive secondary market for these illiquid securities and many investors found themselves unable to sell those securities at anything but "firesale" prices if at all.

5. Business Risk

The risk of doing business in a particular industry or environment is called business risk. For example, as one of the largest steel producers, U.S. Steel faces unique problems. Similarly, General Motors faces unique problems as a result of such developments as the global oil situation and Japanese imports.

6. Reinvestment Risk

The YTM calculation assumes that the investor reinvests all coupons received from a bond at a rate equal to the computed YTM on that bond, thereby earning interest on interest over the life of the bond at the computed YTM rate. In effect, this calculation assumes that the reinvestment rate is the yield to maturity.

If the investor spends the coupons, or reinvests them at a rate different from the assumed reinvestment rate of 10 percent, the realized yield that will actually be earned at the termination of the investment in the bond will differ from the promised YTM. And, in fact, coupons almost always will be reinvested at rates higher or lower than the computed YTM, resulting in a realized yield that differs from the promised yield. This gives rise to reinvestment rate risk.

This interest-on-interest concept significantly affects the potential total dollar return. The exact impact is a function of coupon and time to maturity, with reinvestment becoming more important as either coupon or time to maturity, or both, rises. Specifically:

1. Holding everything else constant, the longer the maturity of a bond, the greater the reinvestment risk.
2. Holding everything else constant, the higher the coupon rate, the greater the dependence of the total dollar return from the bond on the reinvestment of the coupon payments.

   Let's look at realized yields under different assumed reinvestment rates for a 10 percent non-callable 20-year bond purchased at face value. If the reinvestment rate exactly equals the YTM of 10 percent, the investor would realize a 10 percent compound return when the bond is held to maturity, with $4,040 of the total dollar return from the bond attributable to interest on interest. At a 12 percent reinvestment rate, the investor would realize a 11.14 percent compound return, with almost 75 percent of the total return coming from interest on interest ($5,738/ $7,738). With no reinvestment of coupons (spending them as received), the investor would achieve only a 5.57 percent return. In all cases, the bond is held to maturity.

Clearly, the reinvestment portion of the YTM concept is critical. In fact, for long-term bonds the interest-on-interest component of the total realized yield may account for more than three-fourths of the bond's total dollar return.

7. Bull-Bear Market Risk

This risk arises from the variability in the market returns resulting from alternating bull and bear market forces. When security index rises fairly consistently from a low point, called a trough, over a period of time, this upward trend is called a bull market. The bull market ends when the market index reaches a peak and starts a downward trend. The period during which the market declines to the next trough is called a bear market.

8. Management Risk

Management, all said and done, is made of people who are mortal, fallible and capable of making a mistake or a poor decision. Errors made the management can harm those who invested in their firms. Forecasting errors is difficult work and may not be the effort and, as a result, imparts a needlessly sceptical outlook.

An agent- principal principle relationship exists when the shareholder owners delegate the day to day decision making authority to managers who are hired employees rather than substantial owners. This theory suggests that owners will work harder to maximize the value of the company than employees will. Various researches in the field indicate that investors can reduce their losses to difficult-to-analyse management errors by buying shares in those corporations in which the executives have significant equity investments.

9. Default Risk

Is that portion of an investment's total risk that results from changes in the financial integrity of the investment? For example, when a company that issues securities moves either further away from bankruptcy or closer to it, these changes in the firm's financial integrity will be reflected in the market price of its securities. The variability of return that investors experience as a result of changes in the creditworthiness of a firm in which they invested is their default risk.

Almost all the losses suffered by investors as a result of default risk are not the result of actual defaults and / or bankruptcies. Investor losses from default risk usually result from security prices falling as the financial integrity of a corporation weakness-market prices of the troubled firm's securities will already have declined to near zero. However, this is not always the case – 'creative' accounting practices in firms like ENRON, WorldCom, Arthur Anderson and Computer Associates may maintain quoted prices of stock even as the company's net worth gets completely eroded. Thus, the bankruptcy losses would be only a small part of the total losses resulting from the process of financial deterioration.

10. International Risk

International Risk can include both Country risk and Exchange Rate risk.

Exchange Rate Risk All investors who invest internationally in today's increasingly global investment arena face the prospect of uncertainty in the returns after they convert the foreign gains back to their own currency. Unlike the past when most U.S. investors ignored international investing alternatives, investors today must recognize and understand **exchange rate risk**, which can be defined as the variability in returns on securities caused by currency fluctuations. Exchange rate risk is sometimes called currency risk.

For example, a U.S. investor who buys a German stock denominated in marks must ultimately convert the returns from this stock back to dollars. If the exchange rate has moved against the investor, losses from these exchange rate movements can partially or totally negate the original return earned. Obviously, U.S. investors who invest only in U.S. stocks on U.S. markets do not face this risk, but in today's global environment where investors increasingly consider alternatives from other countries, this factor has become important. Currency risk affects international mutual funds, global mutual funds, closed-end single country funds, American Depository Receipts, foreign stocks, and foreign bonds.

Country Risk Country risk, also referred to as political risk, is an important risk for investors today. With more investors investing internationally, both directly and indirectly, the political, and therefore economic, stability and viability of a country's economy need to be considered. The United States has the lowest country risk, and other countries can be judged on a relative basis using the United States as a benchmark. Examples of countries that needed careful monitoring in the 1990s because of country risk included the former Soviet Union and Yugoslavia, China, Hong Kong, and South Africa.

Liquidity Risk

Liquidity risk is the risk associated with the particular secondary market in which a security trades. An investment that can be bought or sold quickly and without significant price concession is considered liquid. The more uncertainty about the time element and the price concession, the greater the liquidity risk. A Treasury bill has little or no liquidity risk, whereas a small OTC stock may have substantial liquidity risk.

It is that portion of an asset's total variability of return which results from price discounts given or sales concessions paid in order to sell the asset without delay. Perfectly liquid assets are highly marketable and suffer no liquidation costs. Illiquid assets are not readily marketable and suffer liquidation costs. Illiquid assets are not readily marketable – either price discounts must be given or sales commissions must be paid, or both the costs must be incurred by the seller, in order to find a new investor for an illiquid asset. The more illiquid the asset is, the larger the price discounts or the commissions that must be paid to dispose of the assets.

Political Risk

It arises from the exploitation of a politically weak group for the benefit of a politically strong group, with the efforts of various groups to improve their relative positions increasing the variability of return from the affected assets. Regardless of whether the changes that cause political risk are sought by political or by economic interests, the resulting variability of return is called political risk if it is accomplished through legislative judicial or administrative branches of the government.

Domestic political risk arises from changes in environmental regulations, zoning requirements, fees, licenses, and most frequently taxes. Taxes could be both direct and indirect. Some types of securities and certain categories of investors enjoy a privileged tax status.

International political risk takes the form of expropriation of non residents assets, foreign exchange controls that won't let foreign investors withdraw their funds, disadvantageous tax and tariff treatments, requirements that non residents investors give partial ownership to local residents, and un-reimbursed destruction of foreign owned assets by hostile residents of the foreign country.

Industry Risk

An industry may be viewed as group of companies that compete with each other to market a homogeneous product. Industry risk is that portion of an investment's total variability of return caused by events that affect the products and firms that make up an industry. For example, commodity prices going up or down will effect all the commodity producers, though not equally.

The stage of the industry's life cycle, international tariffs and/or quotas on the products produced by an industry, product/industry related taxes (e.g. cigarettes), industry wide labour union problems, environmental restrictions, raw material availability, and similar factors interact with and affect all the firms in an industry simultaneously. As a result of these common features, the prices of the securities issued by the competing firms tend to rise and fall together.

These risk factors do not make up an exhaustive list but are only representative of the major classifications involved. All the uncertainties taken together make up the total risk, or the total variability of return.

Measurement of Risk

Volatility

Of all the ways to describe risk, the simplest and possibly most accurate is " the uncertainty of a future outcome". The anticipated return for some future period is known as the **expected return**. The actual return over some past period is known as the **realized return**. The simple fact that dominates investing is that the realized return on an asset with any risk attached to it may be different from what was expected. Volatility may be described as the range of movement (or price fluctuation) from the expected level of return. The more a stock, for example, goes up and down in price, the more volatile that stock is. Because wide price swings create more uncertainty of an eventual outcome, increased volatility can be equated with increased risk. Being able to measure and determine the past volatility of a security is important in that it provides some insight into the riskiness of that security as an investment.

Standard Deviation

Investors and analysts should be at least somewhat familiar with the study of probability distributions. Since the return an investor will earn from investing is not known, it must be estimated. An investor may expect the TR (total return) on a particular security to be 10 percent for the coming year, but in truth this is only a "point estimate."

Beta

Beta is a measure of the systematic risk of a security that cannot be avoided through diversification. Beta is a relative measure of risk-the risk of an individual stock relative to the market portfolio of all stocks. If the security's returns move more (less) than the market's returns as the latter changes, the security's returns have more (less) volatility (fluctuations in price) than those of the market. It is important to note that beta measures a security's volatility, or fluctuations in price, relative to a benchmark, the market portfolio of all stocks.

Securities with different slopes have different sensitivities to the returns of the market index. If the slope of this relationship for a particular security is a 45-degree angle, the beta is 1.0. This means that for every one percent change in the market's return, on average this security's returns change 1 percent. The market portfolio has a beta of 1.0. A security with a beta of 1.5, indicates that, on average, security returns are 1.5 times as volatile as market returns, both up and down. This would be considered an aggressive security because when the overall market return rises or falls 10 percent, this security, **on average**, would rise or fall 15 percent. Stocks having a beta of less than 1.0 would be considered more conservative investments than the overall market.

Beta is useful for comparing the relative systematic risk of different stocks and, in practice, is used by investors to judge a stock's riskiness. Stocks can be ranked by their betas. Because the variance of the market is a constant across all securities for a particular period, ranking stocks by beta is the same as ranking them by their absolute systematic risk. Stocks with high betas are said to be high-risk securities.

Risk and Expected Return

Risk and Expected return are the two key determinants of an investment decision. Risk, in simple terms, is associated with the variability of the rates of return from an investment; how much do individual outcomes deviate from the expected value? Statistically, risk is measured by any one of the measures of dispersion such as Co-efficient of range, variance, standard deviation etc.,

The Risk involved in investment depends on various factors such as :

i) The length of the maturity period- longer maturity periods impart greater risk to investments.

ii) The Credit-worthiness of the issuer of securities – the ability of the borrower to make periodical interest payments and pay back the principal amount will impart safety to the investment and this reduces risk.

iii) The nature of the instrument or security also determines the risk. Generally, government securities and fixed deposits with banks tend to be the riskless or least risky ; Corporate debt instruments like the Debentures tend to be riskier than government bonds and ownership instruments like equity shares tend to be riskiest. The relative ranking of instruments by risk is once again connected to the safety of the investment.

iv) Equity shares are considered to be the most risky investment on account of the variability of the rates of returns and also because the residual risk of bankruptcy has to be borne by the equity holders.

v) The liquidity of an investment also determines the risk involved in that investment. Liquidity of an asset refers to its quick saleability without a loss or with a minimum of loss.

vi) In addition to the foretasted factors, there are also various others such as the economic, industry and firm specific factors which affect the risk of an investment. A detailed analysis of these risk factors will be taken up in the next chapter.

Another major factor determining the investment decision is the rate of return expected by the investor. The rate of return expected by the investor consists of the yield and capital appreciation.

Determinants of Rate of return:

Therefore, three major determinants of the Rate of Return expected by the investor are :

i) The time preference risk free real rate

ii) The expected rate of inflation

iii) The risk associated with the investment which is unique to the investment.

Hence,

Required return = Risk free real rate + Inflation premium + Risk Premium

It was stated earlier that the rate of return from an investment consists of the yield and capital appreciation if any. The difference between the sale price and the purchase price is the capital appreciation and the interest or dividend divided by the purchase price is the yield. Accordingly

$$\text{Rate of return } (R_t) = \frac{I_t + [P_t - P_{t-1}]}{P_{t-1}} = \text{(Eqn 1.1)}$$

Where R_t = Rate of return per time period 't'

I_t = Income for the Period 't'

P_t = Price at the end of time period 't'

P_{t-1} = Initial price, i.e., price at the beginning of the period 't'.

In the above equation 't' can be a day or a week or a month or a year or years and accordingly daily, weekly, monthly or annual rates of return could be computed for most capital assets.

The above equation can be split in to two components. Viz.,

$$\text{Rate pf return } (R_t) = \frac{I_t}{P_{t-1}} + \frac{P_t - P_{t-1}}{P_{t-1}} \qquad \text{(Eqn 1.2)}$$

Where $\frac{I_t}{P_{t-1}}$ is called the Current yield, and

$\frac{P_t - P_{t-1}}{P_{t-1}}$ is called the capital gain yield.

Or **ROR = Current yield +capital gain yield**

Illustration 1. The following information is given for a corporate bond. Price of the bond at the beginning of the year: Rs. 90, Price of the bond at the end of the year : Rs. 95.40, Interest received for the year : Rs. 13.50. Compute Rate of return

Solutions;

The rate of return can be computed as follows :

$$\frac{13.50 + (95.40 - 90)}{90} = 0.21 \text{ or } 21\% \text{ per annum}$$

The return of 21% consists of 15% current yield and 6% capital gain yield.

There is always a direct association between the rates of return and the asset prices. Finance theory stipulates that the price of any asset is equal to the sum of the discounted cash flows which the capital asset owner would receive. Accordingly the current price of any capital asst can be expected, symbolically, as

$$P_0 = \sum_{t=1}^{n} \frac{E(I)}{(1+r)^t} + \frac{P_n}{(1+r)^n}$$

Where $E(R_t)$ = expected income to be received in year 't'

P_0 = Current price of the capital asset

P_n = Price of the asset on redemption or on liquidation

R = The rate of return investors expect given the risk inherent in that capital asset.

Thus, 'r' is the rate or return, which the investors require in order to invest in a capital asset, that is used to discount the expected future cash flows from that capital asset.

Illustration 2

Mr. Amirican has purchased 100 shares of Rs. 10 each of Kinetic Ltd. in 2005 at Rs. 78 per share. The! company has declared a dividend @ 40% for the year 2006-07. The market price of share as at 1-4-2006 was Rs. 104 and on 31-3-2007 was Rs. 128. Calculate the annual return on the investment for the year 2006-07.

Dividend received for 2004-05 = Rs. 10 X 40/100 = Rs. 4

Solutions:

Calculation of annual rate of return on investment for the year 2006-07

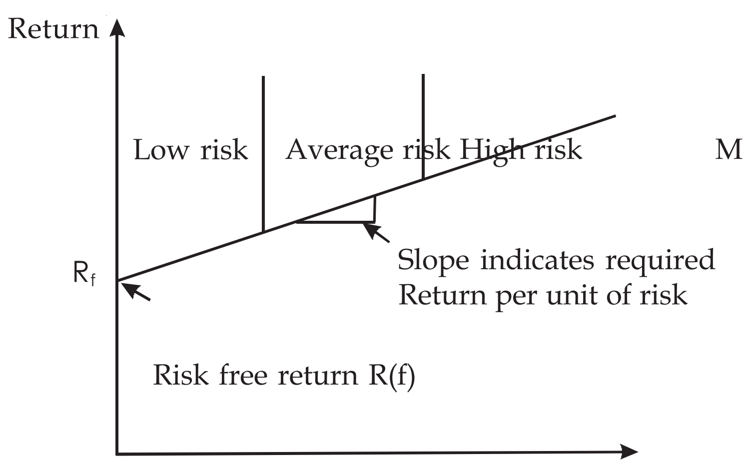
$$R = \frac{D_1 + (P_1 - P_0)}{P_0} = \frac{4 + (128 - 104)}{104} = 0.2692 \text{ or } 26.92\%$$

Risk-Return Relationship: The most fundamental tenet of Finance Literature is that there is a trade-off between risk and return. The risk-return relationship requires that the return on a security should be commensurate with its riskiness. If the capital markets are efficient operationally then all investment assets should provide a rate of return that is consistent with the risks associated with them. The Risk and return are directly variable. i.e., an investment with higher risk should produce higher return.

The risk/return trade-off could easily be called the "ability-to-sleep-at-night test." While some people can handle the equivalent of financial skydiving without batting an eye, others are terrified to climb the financial ladder without a secure harness. Deciding what amount of risk you can take while remaining comfortable with your investments is very important.

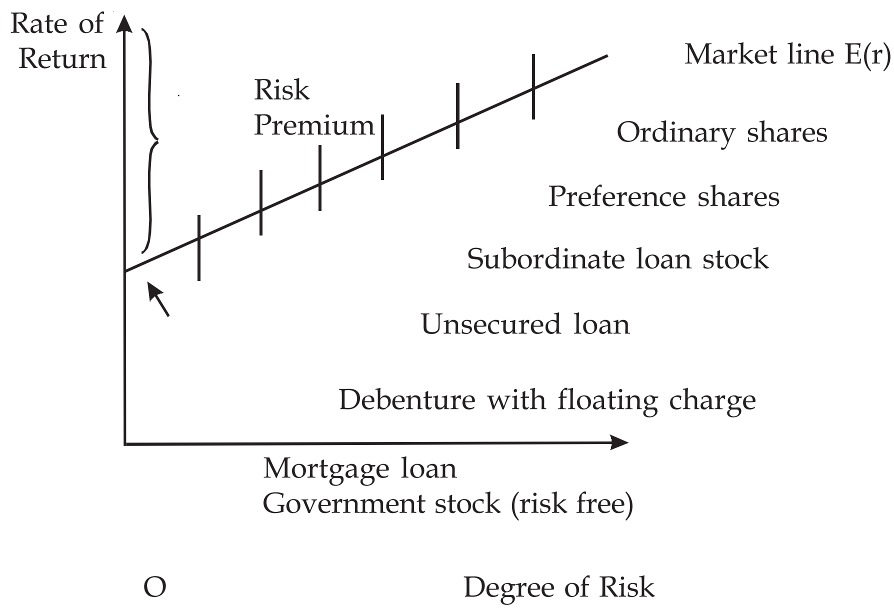
In the investing world, the dictionary definition of **risk is** the chance that an investment's actual return will be different than expected. Technically, this is measured in statistics by standard deviation. Risk means you have the possibility of losing some, or even all, of our original investment.

Low levels of uncertainty (low risk) are associated with low potential returns. High levels of uncertainty (high risk) are associated with high potential returns. The risk/return tradeoff is the balance between the desire for the lowest possible risk and the highest possible return. This is demonstrated graphically in the chart below. A higher standard deviation means a higher risk and higher possible return. Figure represents the relationship between risk and return.



RISK AND RETURN RELATIONSHIP

The slope of the Market line indicates the return per unit of risk required by all investors Highly risk-averse investors would have a steeper line, and vice versa. Yields on apparently similar stocks may differ. Differences in price, and therefore yield, reflect the market's assessment of the issuing company's standing and of the risk elements in the particular stocks. A high yield in relation to the market in general shows an above average risk element. This is shown in Figure



RISK RETURN RELATIONSHIP OF DIFFERENT STOCKS

Given the composite market line prevailing at a point of time, investors would select investments that are consistent with their risk preferences. Some will consider low risk investments, while others prefer high risk investments.

A common misconception is that higher risk equals greater return. The risk/return trade-off tells us that the higher risk gives us the possibility of higher returns. There are no guarantees. Just as risk means higher potential returns, it also means higher potential losses.

On the lower end of the scale, the risk-free rate of return is represented by the return on treasury Bill of Government Securities because their chance of default is next to nothing. If the risk-free rate is currently 8 to 10%, this means, with virtually no risk, we can earn 8 to 10% per year on our money.

The common question arises: who wants to earn 6% when index funds average 12% per year over the long run? The answer to this is that even the entire market (represented by the index fund) carries risk. The return on index funds is not 12% every year, but rather -5% one year, 25% the next year, and so on. An investor still faces substantially greater risk and volatility to get an overall return that is higher than a predictable government security. We call this additional return the risk premium, which in this case is 8% (12% - 8%).

Determining what risk level is most appropriate for you isn't an easy question to answer. Risk tolerance differs from person to person. Your decision will depend on your goals, income and personal situation, among other factors.

PORTFOLIO AND SECURITY RETURNS

A Portfolio is a collection of securities. Since it is rarely desirable to invest the entire funds of an individual or an institution in a single security, it is essential that every security be viewed in a portfolio context. Thus, it seems logical that the expected return of a portfolio should depend on the expected return of each of the security contained in the portfolio. It also seems logical that the amounts invested in each security should be important. Indeed, this is the case. The example of a portfolio with three securities shown in Table A illustrates this point. The expected holding period value – relative for the portfolio is clearly:

$$\frac{\text{Rs. } 23{,}100}{\text{Rs. } 20{,}000} = 1.155$$

Giving an expected holding period return of 15.50 %.

(a) Security and Portfolio Values

Security	No.of Shares	Current Price Per Share	Current Value	Expected End-of-Period Share Value	Expected End-of-Period Share Value
1	2	3	4	5	6
XYZ	100	Rs. 15.00	1,500	Rs.18.00	Rs. 1,800
ABC	150	20.00	3,000	22.00	3,300
RST	200	40.00	8,000	45.00	9,000
KNF	250	25.00	6,250	30.00	7,500
DET	100	12.50	1,250	15.00	1,500
			Rs. 20,000		Rs. 23,100

(b) Security and Portfolio Value-Relatives

Security	Current Value	Proportion of current value of Properties	Current Price Per Share	Expected End-of-Period Value per share	Expected Holding-Period Value-Relative	Contribution to Portfolio Expected Holding-Period Value- Relative
(1)	(2)	3 = (2) / Rs. 20,000	(4)	(5)	(6) = (5) / (4)	(7) = (3) X (6)
XYZ	Rs. 1,500	.0750	Rs. 15.00	Rs. 18.00	1.2	0.090000
ABC	3,000	.1500	20.00	22.00	1.1	0.165000
RST	8,000	.4000	40.00	45.00	1.125	0.450000
KNF	6,250	.3125	25.00	30.00	1.2	0.375000
DET	1,250	.0625	12.50	15.00	1.2	0.075000
	20,000	1.0000				1.155000

(c) Security and Portfolio Holding-period Returns

Security	Proportion of Current Value of Portfolio	Expected Holding Period Return (%)	Contribution to Portfolio Expected Holding Period Return (%)
1	2	3	4
XYZ	.0750	20.00	1.50
ABC	.1500	10.00	1.50
RST	.4000	12.50	5.00
KNF	.3125	20.00	6.25
DET	.0625	20.00	1.25
	1.0000		15.50

Since portfolio's expected return is a weighted average of the expected returns of its securities, the contribution of each security to the portfolio's expected returns depends on its expected returns and its proportionate share of the initial portfolio's market value. Nothing else is relevant. It follows that an investor who simply wants the greatest possible expected return should hold one security : the one which is considered to have the greatest expected return. Very few investors do this, and very few investment advisers would counsel such an extreme policy. Instead, investors should diversify, meaning that their portfolio should include more than one security. This is because diversification can reduce risk.

Illustration 6

The average market prices and dividend per share of Asian CERC Ltd. for the past 6 years are given below

Year	Average market price (Rs.)	Dividend per share(Rs.)
2007	68	3.0
2006	61	2.6
2005	50	2.0
2004	53	2.5
2003	45	2.0
2002	38	1.8

Solution:

Calculate the average rate of return of Asian CERC Ltd.'s shares for past 6 years.

Year	Average market price per share (Rs.)	Capital gain (%)	Dividend per share (Rs.)	Dividend yield (%)	Rate of return (%)
2002	38	-	1.8	4.74	-
2003	45	18.42	2.0	4.44	22.86
2004	53	17.78	2.5	4.72	22.50
2005	50	-5.66	2.0	4.00	-1.66
2006	61	22.00	2.6	4.26	26.26
2007	68	11.48	3.0	4.41	15.89

R = 1/5 (22.86 + 22.50 - 1.66 + 26.26 + 15.89)
= 1/5(85.85) = 17.17%

RISK

All possible questions which the investor may ask, the most important one is concerned with the probability of actual yield being less than zero, that is, with the probability of loss. This is the essence of risk. A useful measure of risk should somehow take into account both the probability of various possible "bad" outcomes and their associated magnitudes. Instead of measuring the probability of a number of different possible outcomes, the measure of risk should somehow estimate the extent to which the actual outcome is likely to diverge from the expected.

Two measures are used for this purpose : the average (or mean) absolute deviation and the standard deviation

Illustration: 7

The rate of return of equity shares of Wipro Ltd., for past six years are given below:

Year	01	02	03	04	05	06
Rate of return (%)	12	18	-6	20	22	24

Calculate the average rate of return, standard deviation and variance.

Solutions

Calculation of Average rate of Return ($\overline{R}$)

$$\overline{R} = \frac{\sum R}{N} = \frac{12+18-6+20+22+24}{6} = 15\%$$

$$\sigma^2 = \frac{\sum\left(R - \overline{R}\right)^2}{N}$$

Year	Rate of Return (%)	$(R-\overline{R})$	$(R-\overline{R})^2$
2001	12	-3	9
2002	18	3	9
2003	-6	-21	441
2004	20	5	25
2005	22	7	49
2006	24	9	81
		$\sum(R-\overline{R})^2 =$	614

$$\text{Variance}\,(\sigma)^2 = \frac{614}{6} = 102.33$$

$$\sigma = \sqrt{\sigma^2} = \sqrt{\text{Variance}}$$

$$\sqrt{102.33} = 10.12\%$$

Illustration 8

Mr.RKV invested in equity shares of Wipro Ltd., its anticipated returns and associated probabilities are given below:

Return %	-15	-10	5	10	15	20	30
Probability	0.05	0.10	0.15	0.25	0.30	0.10	0.05

You are required to calculate the expected rate of return and risk in terms of standard deviation.

Solutions:

Calculation of expected return and risk in terms of Standard Deviation

Return (R)	Probability (P)	(PxR)	$(R-\overline{R})$	$(R-\overline{R})^2$	$(R-\overline{R})^2$ x P
-15	0.05	- 0.75	-5.5	30.25	1.5125
-10	0.10	-1.0	-0.5	0.25	0.0250
5	0.15	0.75	-4.5	20.25	3.0375
10	0.25	2.50	0.5	0.25	.0625
15	0.30	4.50	5.5	30.25	9.0750
20	0.10	2.00	10.5	110.25	11.0250
30	0.05	1.50	20.5	420.25	21.0125
	1.00	$\overline{R}$ =9.5%		$\sum(R \_ \overline{R})^2 P$ = 45.75	

Expected Return $\overline{R} = \sum(PXR) = 9.5\%$

Standard Deviation = $\sum(R - \overline{R})^2 P = \sqrt{45.75} = 6.764$

The risk in the above illustration, can be measured by taking the range of 45% (ie. 30%- (-) 15%) and standard deviation of 6.764. The investment carries greater risk in terms of high variation in return.

Illustration 9

The probabilities and associated returns of Modern Foods Ltd., are given below:

Return%	12	15	18	20	24	26	30
Probability	0.05	0.10	0.24	0.26	0.18	0.12	0.05

Calculate the standard deviation

Solution:

Return (R)	Probability (P)	(PxR)	$(R-\overline{R})$	$(R-\overline{R})^2$ x P
12	0.05	0.60	- 8.56	3.664
15	0.10	1.50	- 5.56	3.091
18	0.24	4.32	- 2.56	1.573
20	0.26	5.20	- 0.56	0.082
24	0.18	4.32	3.44	2.130
26	0.12	3.12	5.44	3.551
30	0.05	1.50	9.44	4.456
	1.00	$\overline{R}$ = 20.56 %	$\sum(R - \overline{R})^2 P = 18.547$	

Expected Return $\overline{R} = \sum(PXR) = 20.56\%$

Standard Deviation = $\sum(R - \overline{R})^2 P = \sqrt{18.547} = 4.31\%$

The expected return is greater at 20.56%, the range of returns is 18% (i.e. 30% - 12%) and the standard Deviation is lower at 4.31%. The investment carries lesser risk in terms of low variation in return.

Illustration 10

Mr. Marin provides the following information from the same compute his expected return and standard deviation and variance

Events	1	2	3	4
Probability	.20	.40	.30	.10
Return (%)	-10	25	20	10

Solution:

Calculating the Mean Absolute Deviation

Event	Probability	Return %	PX Return	Deviation	Probability X Deviation	Probability X Absolute Deviation
(1)	(2)	(3)	(4)	(5)	(6)	(7)
a	.20	-10	-2.0	-25.0	-5.0	5.0
b	.40	25	10.0	10.0	4.0	4.0
c	.30	20	6.0	5.0	1.5	1.5
d	.10	10	1.0	-5.0	-0.5	0.5
			Expected Return = 15.0		0	Average = 10.0 Absolute Deviation

Calculating the Standard Deviation

Event	Probability	Deviation	Deviation squared	Probability X Deviation
(1)	(2)	(3)	(4) = (3) ^{2}	(5) = (2) X (4)
a	.20	-25.0	625.0	125.0
b	.40	10.0	100.0	40.0
c	.30	5.0	25.0	7.5
d	.10	-5.0	25.0	2.5
		Variation = Weighted average squared deviation =		175.0
		Standard Deviation = square root of variance =		13.2287

When an analyst predicts that a security will return 15% next year, he or she is presumably stating something comparable to an expected value. If asked to express the uncertainty about the outcome, he or she might reply that the odds are 2 out of 3 that the actual return will be within 10% of the estimate (i.e., 5% and 25%). The standard deviation is a formal measure of uncertainty, or risk, expressed in this manner, just as the expected value is a formal measure of a "best guess" estimate. Most analysts make such predictions directly, without explicitly assessing probabilities and making the requisite computations.

Illustration : 11

The possible returns and associated probabilities of Securities X and Y are given below:

Security X		Security Y	
Probability	Return %	Probability	Return %
0.05	6	0.10	5
0.15	10	0.20	8
0.40	15	0.30	12
0.25	18	0.25	15
0.10	20	0.10	18
0.05	24	0.05	20

Calculate the expected return and standard deviation of security X and Y

Solution:

Calculation expected Return and Standard Deviation of Security X

Probability (P)	Return % (R)	(PXR)	$(R-\overline{R})$	$(R-\overline{R})^2$ P
0.05	6	0.30	- 9.5	4.5125
0.15	10	1.50	-5.5	4.5375
0.40	15	6.00	-0.5	0.1000
0.25	18	4.50	2.5	1.5625
0.10	20	2.00	4.5	2.0250
0.05	24	1.20	8.5	3.6125
1.00		$\overline{R} = 15.5$	$\sum (R - \overline{R})^2 P = 16.35$	

Expected return of Security $X\ \overline{R} = 15.5\%$

Standard of Deviation of Security X

$$\sigma_y^{\ 2} = 16.35$$

$$\sigma_y = \sqrt{16.35} = 4.04\%$$

Calculation of Expected return and Standard Deviation of Security Y

Probability (P)	Return % (R)	(PXR)	$(R-\overline{R})$	$(R-\overline{R})^2$ P
0.10	5	0.50	-7.25	5.2563
0.20	8	1.60	-4.25	3.6125
0.30	12	3.60	-0.25	0.0188
0.25	15	3.75	2.75	1.8906
0.10	18	1.80	5.75	3.3063
0.05	20	1.00	7.75	3.0031
		12.25	$\sum(R\_\overline{R})^2 P$ 17.0876	

Expected Return Security Y $\overline{R}$ =12.25%

Standard of Deviation of Security Y

$$\sigma_y^{\,2} = 17.0876$$

$$\sigma_y = \sqrt{17.0876} = 4.134\%$$

Analysis- Security A has higher expected return and lower level of risk as compared to Security Y.

Return and Risk of Portfolio

Return of Portfolio (Two Assets)

The expected return from a portfolio of two or more securities is equal to the weighted average of the expected returns from the individual securities.

$$\sum(R_p) = W_A(R_A) + W_B(R_B)$$

Where,

$\sum(R_p)$ = Expected return from a portfolio of two securities

W_A = Proportion of funds invested in Security A

W_B = Proportion of funds invested in Security B

R_A = Expected return of Security A

R_B = Expected return of Security B

$W_A + W_B = 1$

Illustration 13.

A Ltd.'s share given a return of 20% and B Ltd's share gives 32% return. Mr. Gotha invested 25% in A Ltd shares and 75% of B Ltd. Shares. What would be the expected return of the portfolio.

Solution:

Portfolio Return

$$= 0.25(20) + 0.75\ (32) = 29\%$$

Illustration 14.

Mr. RKV's portfolio consists of six securities The individual returns of each of the security in the portfolio is given below:

Security	Proportion of investment in the portfolio	Return
Wipro	10%	18%
Latham	25%	12%
SBI	8%	22%
ITC	30%	15%
RNL	12%	6%
DLF	15%	8%

Calculate the weighted average of return of the securities consisting the portfolio.

Solutions:

Security	Weight (W)	Return(%) (R)	(WxR)
Wipro	0.10	18	1.80
Latham	0.25	12	3.00
SBI	0.08	22	1.76
ITC	0.30	15	4.50
RNL	0.12	6	0.72
DLF	0.15	8	1.20
			12.98

$\therefore$ Portfolio return is 12.98%

Risk of Portfolio (Two Assets)

The risk of a security is measured in terms of variance or standard deviation of its returns. The portfolio risk is not simply a measure of its weighted average risk. The securities consisting in a portfolio are associated with each other. The portfolio risk also considers the covariance between the returns of the investment, covariance of two securities is a measure of their co-movement, it expresses the degree to which the securities vary together. The standard deviation of two share portfolio is calculated by applying formula given below:

$$\sigma_p^2 = W_A^2\sigma_A^2 + W_B^2\sigma_B^2 + 2\,W_A W_B \rho_{AB}\sigma_A\sigma_B$$

Where,

σ_p = Standard deviation of portfolio consisting securities A and B

$W_A\ W_B$ = Proportion of funds invested in Security A and Security B

$\sigma_A\ \sigma_B$ = Standard deviation of returns of Security A and Security B

ρ_{AB} = Correlation coefficient between returns of Security A and Security B

The correlation coefficient (ρ_{AB}) can be calculated as follows:

$$\rho_{AB} = \frac{Cov_{AB}}{\sigma_A\sigma_B}$$

The covariance of Security A and Security B ie., (Cov_{AB}) can be presented as follows :

$$\boxed{Cov_{AB} = \sigma_A\sigma_B\ \rho_{AB}}$$

The diversification of unsystematic risk, using two security portfolio, depends upon the correlation that exists between the returns of those two securities. The quantification of correlation is done through calculation of correlation coefficient of two securities (ρ_{AB}).

The value of correlation ranges between- 1 to 1, it can be interpreted as follows:

If $\rho_{AB} = 1$, No unsystematic risk can be diversified

If $\rho_{AB} = -1$, All unsystematic risk can be diversified

If $\rho_{AB} = 0$, Correlation exists between the returns of Security A and Security B.

Illustration 16

The returns of Security Wipro and Security Infosys for the past six years are given below:

	Security A	Security B
Year	Security Wipro Return %	Security Infosys Return %
2003	9	10
2004	5	-6
2005	3	12
2006	12	9
2007	16	15

Calculate the risk and return of portfolio consisting Security A & Security B.

Solution:

Calculation Mean Return and Standard Deviation of Security A

Year	Return % R	$(R-\overline{R})$	$(R-\overline{R})^2$
2003	9	0	0
2004	5	-4	16
2005	3	-6	36
2006	12	3	9
2007	16	7	49
	45		110

Mean Return $(\overline{R})$ = 45/5 = 9%

Standard Deviation $(\sigma_A) = \sqrt{110} = 10.49\%$

Calculation Mean Return and Standard Deviation of Security B

Year	Return %	$(R-\overline{R})$	$(R-\overline{R})^2$
2003	10	2	4
2004	-6	14	196
2005	12	4	16
2006	9	1	1
2007	15	7	49
	40		266

Mean Return $(\overline{R})$ = 40/5 = 8%

Standard Deviation $(\sigma_B) = \sqrt{266} = 16.31\%$

Analysis-Security A has a higher historic level return and lower risk as compared to Security B. Correlation Coefficient (ρ_{AB}).

$$=\frac{N\sum XY-\left(\sum X\right)\left(\sum Y\right)}{\sqrt{N\sum X^2-\left(\sum X\right)^2}\sqrt{N\sum Y^2-\left(\sum Y\right)^2}}$$

A's return %		B's return %		
X	X^2	Y	Y^2	XY
9	81	10	100	90
5	25	-6	36	-30
3	9	12	144	36
12	144	9	81	108
16	256	15	225	240
$\sum X$ =45	$\sum X^2$ =515	$\sum Y$ = 40	$\sum Y^2$ =586	$\sum XY$ = 444

$$=\frac{5\times 444-45\times 40}{\sqrt{(5\times 515)-(45)^2}\sqrt{5\times 586)-(40)^2}}$$

$$\frac{2{,}220-1800}{\sqrt{2575-2025}\sqrt{2930-1600}}=\frac{420}{\sqrt{550}\sqrt{1330}}$$

$$=\frac{420}{23.452\times 36.469}=\frac{420}{855.271}=0.491$$

Verification:

Calculation of Covariance of Returns of Securities A and B

Year	Returns %		$(R_A-\overline{R}_A)$	$(R_B-\overline{R}_B)$	$(R_A-\overline{R}_A)\times(R_B-\overline{R}_B)$
	A	B			
2003	9	10	0	2	0
2004	5	-6	-4	-14	56
2005	3	12	-6	4	-24
2006	12	9	3	1	3
2007	16	15	7	7	49
					Cov_{AB} = 84

$$\rho_{AB} = \frac{Cov_{AB}}{\sigma_A \sigma_B} = \frac{84}{10.49 \times 16.31} = 0.491$$

$$Cov_{AB} = \sigma_A \sigma_B \ \rho_{AB} = 10.49 \times 16.31 \times 0.491 = 84$$

Return of portfolio (R_P)

$$= (0.80 \times 9) + (0.20 \times 8) = 7.2 + 1.6 = 8.8\%$$

Risk of portfolio (σ_P)

$$\sigma_P{}^2 = (0.80^2 \times 10.49^2) + (0.20^2 \times 16.31^2) + (2 \times 0.80 \times 0.20 \times 10.49 \times 16.31 \times 0.491)$$

$$= (0.64 \times 110.04) + (0.04 \times 266.02) + 26.88$$

$$= 70.43 + 10.64 + 26.88 = 107.95$$

$$\sigma_P = \sqrt{107.95} = 10.39\%$$

Risk and Return of Portfolio (Three Assets)

Formula for calculating risk of portfolio consisting three securities

$$\sigma_P{}^2 = W_X{}^2 \sigma_X{}^2 + W_Y{}^2 \sigma_Y{}^2 + W_Z{}^2 \sigma_Z{}^2 + 2W_X W_Y \rho_{YZ} \sigma_Y \sigma_Z + 2WyWz\rho yz\sigma y\sigma z + 2W_X W_Z \rho_{XZ} \sigma_X \sigma_Z$$

Where,

W_x, W_y, W_z = Proportion of amount invested in securities X Y and Z

$\sigma_x, \sigma_Y, \sigma_z$ = Standard deviations of securities X, Y and Z

ρ_{XY} = Correlation coefficient between securities X and Y

ρ_{YZ} = Correlation coefficient between securities Y and Z

ρ_{XZ} = Correlation coefficient between securities X and Z

Illustration 17

A portfolio consists of three securities P, Q and R with the following parameters:

	Security P	Security Q	Security R	Correlation coefficient
Expected return (%)	35	22	20	
Standard deviation (%)	30	26	24	
Correlation coefficient:				
PQ				-0.5
QR				+0.4
PR				+0.6

If the securities are equally weighted, how much is the risk and return of the portfolio of these three securities?

Solutions :

Expected Portfolio Return

$$= (25 \times \frac{1}{3}) + (22 \times \frac{1}{3}) + (20 \times \frac{1}{3}) = 22.33\%$$

$$\sigma_P^{\ 2} = (30)^2 \ (\frac{1}{3})^2 + (26)^2 \times (\frac{1}{3})^2 + (24)^2 \ (\frac{1}{3})^2 + 2(\frac{1}{3}) \ (\frac{1}{3})^2 (-0.5)(30)(26)$$

$$+2(\frac{1}{3})(\frac{1}{3})(0.4)(26)(24)+2(\frac{1}{3}) \ (1/3)(0.6)(30)(24)$$

$$\sigma_P^{\ 2} = 100 + 75.11 + 64 - 86.67 + 55.47 + 96 = 303.91$$

$$\sigma_P = \sqrt{303.91} = 17.43\%$$

Optimal Portfolio (Two assets)

The investor can minimise his risk on the portfolio. Risk avoidance and risk minimisation are the important objectives of portfolio management. A portfolio contains different securities, by combining their weighted returns we can obtain the expected return of the portfolio. A risk averse investor always prefer to minimise the portfolio risk by selecting the optimal portfolio. The minimum risk portfolio with two assets can be ascertained as follows :

$$W_A = \frac{\partial_B^{\ 2} - Cov_{AB}}{\partial_A^{\ 2} + \partial_B^{\ 2} - Cov_{AB}}$$

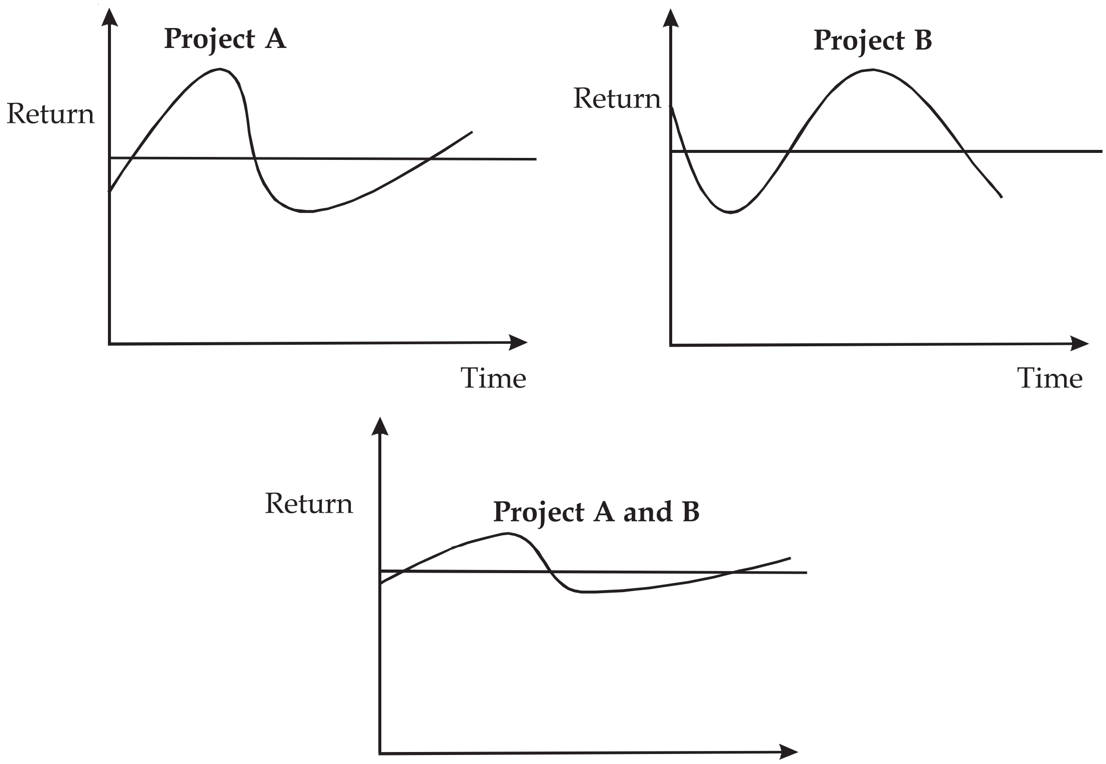
In continuation to illustration 16 we can calculate the proportion to be invested (W_A) in Security A.

$$= \frac{16.31^2 - 84}{(10.49^2 + 16.31^2) - (2 \times 84)} = \frac{182.02}{208.06} = 0.875$$

Therefore, 87.5% of funds should be invested in Security A and 12.5% should be invested in Security B, which represents the optimal portfolio.

Portfolio Diversification and Risk

In an efficient capital market the important principle to consider is that, ***investors should not hold all their eggs in one basket***; investor should hold a well diversified portfolio. In order to understand portfolio diversification one must understand correlation. Correlation is a statistical measure that indicates the relationship, if any, between series of numbers representing anything from cash flows to test data. If the two series move together, they are positively correlated; if the series move they are positively correlated; if the series move in opposite directions, they are negatively correlated. The existence of perfectly correlated expecially negatively correlated- projects is quite rare. In order to diversify project risk and thereby reduce the firm's overall risk, the projects that are best combined or added to the existing portfolio of projects are those that have a negative (or low positive) correlation with existing projects. By combining negatively correlated projects, the overall variability of returns or risk can be reduced. Figure 32.2 illustrates the result of diversifying to reduce risk.



REDUCTION OF RISK THROUGH DIVERSIFICATION

It shows that a portfolio is containing the negatively corrected projects A and B, both having the same expected return, E, also has the return E, but less risk (ie. Less variability of return) than either of the projects taken separately. This type of risk is sometimes described as diversifiable or alpha risk. The creation of a portfolio by combining two perfectly correlated projects cannot reduce the portfolio's overall risk below the risk of the least risky project, while the creation of a portfolio combining two projects that are perfectly negatively correlated can reduce the portfolio's total risk to a level below that of either of the component projects, which in certain situations may be zero.

Benefits of Diversification:

The gains in risk reduction from portfolio diversification depend inversely upon the extent to which the returns on securities in a portfolio are positively correlated. Ideally the securities should display negative correlation. This implies that if a pair of securities has a negative correlation of returns, then in circumstances where one of the securities is performing badly the other is likely to be doing well and vice versa in reverse circumstances. Therefore the average 'return on holding the two securities is likely to be much 'safer' than investing in one of them alone.

Utility Function and Risk Taking

Common investors will have three possible attitudes to undertake risky course of action (i) an aversion to risk (ii) a desire to take risk, and (iii) an indifference to risk. The following example will clarify the risk attitude of the individual investors.

Illustration 18

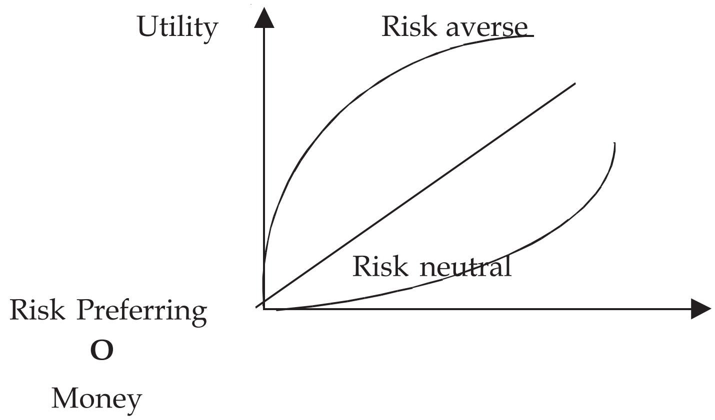
The possible outcomes of two alternatives A and B, depending on the state of economy are as follows:

State of economy	Possible outcome (Rs)	
	A	B
Normal	100	100
Boom	110	200

If we assume that the three states of the economy are equally likely, then expected value for each alternative is Rs. 100.

- A risk seeker is one who, given a choice between more or less risky alternatives with identical expected values, prefers the riskier alternative ie., alternative B.
- A risk averted would select the less risky alternative Le., alternative A.
- The person who is indifferent to risk (risk neutral) would be indifferent to both alternative A and B, because they have same expected values.

The empirical evidence shows that majority of investors are risk-averse. Some generalisations concerning the general shape of utility functions are possible. People usually regard money as a desirable commodity, and the utility of a large sum is usually greater than the utility of a smaller sum. Generally a utility function has a positive slope over an appropriate range of money values, and the slope probably does not vary in response to small changes in the stock of money. For small changes in the amount of money going to an individual the slope is constant and the utility function is linear. If the utility functions linear, decision maker maximises expected utility by maximising expected monetary value. However, for large variations in the amount of money this likely to be the case. For large losses and large gains the utility function after approaches upper and lower limits. The slope of the curve will usually increase sharply as the amount of loss increases, because the disutility of a large loss is proportionately more than the disutility of a small loss, but the curve will flatten as the loss becomes very large. For a risk averse decision maker, the expected utility of a function is less than the utility of the expected monetary value. It is also possible for the decision maker to be risk preferring, at least over some range of the utility function. In its case the expected utility of a function is more than the utility function. In this case the expected utility of a function is more than the utility of the expected monetary value (EMV).



UTILITY FUNCTION AND RISK TAKING

Illustration 18:

National Corporation is planning to invest in a security that has several possible rates of return. Given the following probability distribution returns, what is the expected rate return on investment? Also compute the standard deviation of the returns. What do the resulting numbers represent?

Solutions;

Probability (P) (1)	Return (R) (2)	Expected Return [E(R)] (3) = (1) X (2)	Weighted Return $[E(R)-R]^2$ P
0.10	-10%	-1%	52.9%
0.20	5%	1%	12.8%
0.30	10%	3%	2.7%
0.40	25%	10%	57.6%
		E = 13%	σ^2= 126.0
			σ=11.22%

From our studies in statistics, we know that if the distribution of returns were normal, then National could expect a return of 13% with a 67% possibility that this return would vary up or down by 11.22% between 1.78%) (13% -11.22%) and 24.22%(13% + 11.22%). However, it is apparent from the probabilities that the distribution is not normal.

Illustration 19

Assume that the current rate on a one – year security is 7 percent. You believe that the yield on a one-year security will be 9 percent one year from now and 10 percent 2 years from now. According to the expectations hypothesis, what should the yield be on a three-year security?

Solution:

Find the geometric mean by averaging the continuously compounded rates.

[In(1.07) + In (1.09)+ In (1.10)]/3

(0.06766 + 0.08618 + 0.09531)/3

=0.24915/3
=0.08305

Then converting to nominal rate :

Exp. (0.08305) – 1 = 0.0866

Your expectation imply that the current rate on a three-year security shall be 8.66 percent.

Illustration 20

RKV is evaluating a security. One year Treasury bills are currently paying 9.1 percent. Calculate the below investment's expected return and its standard deviation. Should RKV invest in this security?

Probability	.15%	.30%	.40%	.15%
Return	15	7	10	5

Solution:

Probability (P)	Return (R)	Expected Return	Weighted Return
(1)	(2)	(3) = (1) X (2)	
0.15	15%	2.25%	5.22
0.30	7	2.10	1.32
0.40	10	4.00	0.32
0.15	5	0.75	2.52
		E(R) = 9.1%	σ^2= 9.39%
			σ=3.06%

RKV should not invest in this security. The level of risk is excessive for a return which is equal to the rate offered on treasury bills.

Illustration 21

T.S. Shekhar has a portfolio of five securities. The expected rate and amount of investment in each security is as follows :

Security	A	B	C	D	E
Expected Return	.14	.08	.15	.09	.12
Amount invested	Rs.20,000	Rs.10,000	Rs.30,000	Rs.25,000	Rs.15,000

Compute the expected return on Shekhar's portfolio.

Solutions:

The expected return on Shekhar's portfolio is :

$$E(R_p) = (20{,}000/1{,}00{,}000).14+(10{,}000/1{,}00{,}000).08+(30{,}000/1{,}00{,}000).15$$
$$+(25{,}000/1{,}00{,}000).9+(15{,}000/1{,}00{,}000).12$$
$$= .028+.008+.045+.0225+.018 = .1215$$
$$= 12.15\%$$

Illustration 22

T.S. Kumar holds a two-stock portfolio. Stock ABC has a standard deviation of returns of .6 and stock XYZ has a standard deviation of .4. The correlation coefficient of the two stocks returns is 0.25. Kumar holds equal amounts of each stock. Compute the portfolio standard deviation for the two-stock portfolio.

Solutions:

$$\sigma_P = \sqrt{.5^2 \times .6^2 + 2 \times .5 \times .5 \times .6 \times .4 \times .25 + (.5)^2 \times .4^2}$$

$$= \sqrt{.09 + .03 + .04}$$

$$= \sqrt{.16} = .4$$

$$= .4$$

Illustration 23:

Ravi Shankar has prepared the following information regarding two investments under consideration. Which investment should be accepted ?

Security ABC		Security XYZ	
Probability	Return	Probability	Return
0.30	27%	0.21	15%
0.50	18%	0.30	6%
0.20	-2%	0.40	10%
-	-	0.10	4%

Solutions:

Investment in security ABC				Investment in security XYZ			
Probability	Return	Expected Return	Weighted Deviation	Probability	Return	Expected Return	Weighted Deviation
				0.20%	15%	3.0%	6.728%
0.30	27%	8.1%	31.8%	0.30	6	1.8	3.072
0.50	18	9.0	0.8	0.4	10	4.0	0.256
0.20	-2	-0.4	69.9	0.1	4	0.4	2.704
		E(R) = 16.7%	σ= 102.5%			E(R) = 9.2%	σ=12.76%
			σ = 10.12%				σ =3.57%

Illustration 24

Ammy, a Korean- based auto manufacturer, is evaluating two overseas locations for proposed expansion of production facilities, one site in Neeroland and another on Forexland. The likely future return form investment in cash site depends to great extent on future economic conditions. These scenarios are postulated, and the internal rate of return form cash investment is computed under each scenario. The results with their estimated probabilities are shown below:

	Internal Rate of Return (%)	
Probability	Neeroland	Forexland
0.3	20	10
0.3	10	30
0.4	15	20

Required :

Calculate the expected value of the IRR and the standard deviation of the return of investments in each location. What would be the expected return and the standard deviation of the following split investment strategies :

(i) committing 50% of the available funds to the site in Neeroland and 50% to Forexland.
(ii) committing 75% of the available funds to the site in Neeroland and 25% to Forexland site? (Assume zero correlation between the returns from the two sites)

Solution:

Neeroland :

Expected Value of IRR

= (0.3 × 20%) + (0.3 × 10%) + (0.4 × 15%)
= 6% + 3% + 6%
= 15%

Outcome (1)	Deviation (2)	Sq'd Dev (3)	P (4)	Sq'd Dev. Xp (5) = (3) (4)
20	+5	25	.3	7.5
10	-5	25	.3	7.5
15	0	0	.4	0
			Variance = Total =	15
			σ = 3.87	

Forexland :

Expected Value of IRR

= (0.3 X 10) + (0.3 X 30%) + (0.4 X 20%)

= 3% + 9% + 8%

= 20%

Outcome (1)	Deviation (2)	Sq'd Dev (3)	P (4)	Sq'd Dev. Xp (5) = (3) (4)
10	-10	100	.3	30
30	+10	100	.3	30
20	0	0	.4	0
			Variance = Total =	60
			σ = 7.75	

(b) (i) For a 50/50 split investment

EV for IRR

= (0.5 X 15) + (0.5 X 20%)

= 17.5%

σ = 4.1833

(ii) For a 75/25 spilt investment

= (.75 X 15%) + (0.25 X 20%)

= 16.25%

σ = 4.03, i.e., Lower Risk, Lower Return

Illustration 25

You have invested Rs. 50,000, 30 percent of which is invested in Company A, which has a expected rate of return of 15 percent, and 70 percent of which is invested in Company B, with an expected return of 12 percent. What is the return on you portfolio? What is the expected percentage rate of return?

Solutions:

(a) The rate of return is the percentage of the amount invested in as stock multiplied by its expected rate of return. Thus, of the Rs. 50,000 invested.

Company A – 30 percent of total with 15 percent rate of return :

30 X Rs. 50,000 X .15 = Rs. 2,250

Company B – 70 percent with a 12 percent rate of return :

70 X Rs. 50,000 X.12 = Rs. 4,200

The total return is Rs. 6450 (i.e., Rs. 2250 + Rs.4,200)

(b) The expected percentage rate of return is the total return divided by the amount invested:

$$r = \frac{\text{Total Return}}{\text{Total amount invested}}$$

$$r = \frac{\text{Rs. }6450}{\text{Rs. }50,000} = 12.90\%$$

Illustration 26

Suppose you invest in four securities. Company ABC has on expected return of 20 percent, Company BCD has on expected return of 10 percent, Company CDE has on expected return of 12 percent, and Company DEF has an expected return of 9 percent. You have invested Rs. 40,000. What is the expected rate of return on your portfolio?

Solution:

The expected rate of return is the weighted average of expected rates in the portfolio :

$$E(R_P) = \sum_{i=1}^{n} W_i \ E(R_i)$$

The portfolio weights are first determined by the formula

$$W_A = \frac{\text{Rs. Invested in ABC}}{\text{Total equity investment}}$$

Since you have invested equally in four securities and total investment is Rs.40,000, the portfolio weight are equal ($W_{ABC} = W_{BCD} = W_{CDE} = W_{DEF}$) and are determined:

$$W_A = \frac{\text{Rs.}10,000}{\text{Rs. }40,000} = .25$$

Hence, the expected return on the individual securities and the expected rate of return on the portfolio is : $R_P = (W_{ABC} \times r_{ABC}) + (W_{BCD} \times r_{BCD}) + (W_{CDE} \times r_{CDE}) + (W_{DEF} \times r_{DEF})$

$= (.25 \times .20) + (.25 \times .10) + (.25 \times .12) + (.25 \times .09)$

$= .1275 = 12.75\%$

Illustration 27

Assume the investor in Problem 26 wants to determine how risky his portfolio and wants you to compute the portfolio variance. If the expected correlations and variance of the stocks are as follows, what is the variance of the portfolio?

Correlations		ABC	BCD	CDE	DEF
	BCD	.50	-	-	-
	CDE	.60	.30	-	-
	DEF	-.30	-.20	-.10	-
Variances:		.04	.16	.02	.10

Solution:

To Compute the variance, you need to make a covariance matrix. Using the square roots of the variances and correlations given, the covariance are calculated:

$Cov(r_{ABC}, R_{BCD})$ = .500 X .200 X .400 = .040
$Cov(r_{ABC}, R_{CDE})$ = .600 X .200 X .141 = .017
$Cov(r_{ABC}, R_{DEF})$ = -.300 X .200 X .316 = -.019
$Cov(r_{BCD}, R_{CDE})$ = .300 X .400 X .141 = .017
$Cov(r_{BCD}, R_{DEF})$ = .200 X .400 X .316 = -.025
$Cov(r_{CDE}, R_{DEF})$ = .100 X .141 X .316 = .004

With the given variance and the portfolio weights, the covariance matrix is as follows:

Securities	Weights	ABC .25	BCD .25	CDE .25	DEF .25
ABC	.25	.04	.040	.017	-.019
BCD	.25	.040	.16	.017	-.025
CDE	.25	.017	.017	.02	-.004
DEF	.25	-.019	-.025	-.004	.10

Multiplying each covariance by the weight at the top of the column and at the left of the row and summing, we get;

.25 X .25 X .04 = .0025

.25 X .25 X .040 = .0025

.25 X .25 X .017 = .0011

.25 X .25 X -.019 = –.0012

.25 X .25 X .040 = .0025

.25 X .25 X .160 = .0100

.25 X .25 X .017 = .0011

.25 X .25 X -.025 = -.0016

.25 X .25 X .017 = .0011

.25 X .25 X .017 = .0011

.25 X .25 X .020 = .0013

.25 X .25 X -.004 = -.0003

.25 X .25 X -.019 = -.0012

.25 X .25 X -.025 = -.0016

.25 X .25 X .004 = -.0003

.25 X .25 X .100 = .0063

Total portfolio variance = .0233

Illustration 28

Suppose you have Rs. 10,000 to invest and would like to sell Rs. 5000 in stock XYZ short to invest in ABC. Assuming no correlation between the two securities, compute the expected return and the standard deviation of the portfolio from the following characteristics:

Security	ABC	XYZ
E(R)	.12	.02
σ (R)	.08	.10

Solutions:

Expected Return :

$$E(R)_P = W_{ABC}\,E(R_{ABC}) + W_{XYZ}\,E(R_{XYZ})$$

$$= \frac{15{,}000}{10{,}000} \times .12 - \frac{5{,}000}{10{,}000} \times .02$$

$$= .18 - .01 = .17$$

Standard deviation :

$$[W^2_{ABC}\,\sigma^2(R_{ABC}) + W^2_{XYZ}\,\sigma^2(R_{XYZ})]^{1/2} = \sigma_p$$

$$=[(1.5)^2 \text{ X } (.08)^2 + (-.5)^2 \text{ X } (.10)^2]^{1/2}$$

$$= .130$$

Illustration 29

Suppose we have two portfolio known to be on the minimum variance set for a population of three securities A, B, and C. There are no restrictions on short sales. The weights for each of the two portfolios are as follows:

	W_A	W_B	W_C
Portfolio X	.24	.52	.24
Portfolio Y	-.36	.72	.64

(a) What would the stock weights be for a portfolio constructed by investing Rs. 2,000 in portfolio X and Rs. 1000 in portfolio Y?

(b) Suppose you invest Rs. 1500 of the Rs. 3000 in Security X. How will you allocate the remaining Rs. 1500 between Securities X and Y to ensure that your portfolio is on the minimum variance set ?

Solutions:

(a) Given a Rs. 2000 investment in portfolio X and Rs. 1000 investment in portfolio Y, the investment committed to each security would be :

	A	*B*	*C*	*Total*
Portfolio X	Rs.480	Rs.1040	Rs.480	Rs.2000
Portfolio Y	-360	720	640	1000
Confirmed Portfolio	Rs.120	Rs.1760	Rs.1120	Rs. 3000

Since we are investing a total of Rs.3000 in the combined portfolio, the investment position in three securities are consistent with the following portfolio weights

	W_A	W_B	W_C
Combined portfolio	.04	.59	.37

(b) Since the equation for the critical line takes the following form:

$$W_B = a + bw_A$$

Substituting in the values for W_A and W_B from portfolio X and Y, we get

$$.52 = a + .24\,b$$
$$.72 = a + -.36b$$

By solving these equations simultaneously, we can obtain the slope and the intercept of the critical line

$$W_B = .6 - 1/3\,W_A$$

Using this equation, we can find W for any given W_A if we invest half of the funds in security A (W_A = .5), then

W_B = .6 – 1/3 (.5) = .43

Since $W_A + W_B + W_C = 1$, we know $W_C = 1 – W_A – W_B$

Substituting in our value for W and W, we find

W_C = .1 – .5 - .43 = .07

Illustration 30

A stock that pays no dividends is currently selling at Rs.100. The possible prices for which the stock might sell at the end of one year, with associated probabilities, are

End-of-year Price	Probability
Rs.90	0.1
100	0.2
110	0.4
120	0.2
130	0.1

(a) Calculate the expected rate of return by year-end.

(b) Calculate the standard deviations of the expected rate of return.

Solutions:

(a)

Probable		0.1	0.2	0.4	0.2	0.1
Return		-10	0	10	20	30

E(R) = 0.1(-10) + 0.2(0) + 0.4(10) + 0.2(20) + 0.1(30)

= -1.0 + 0 + 4.0 + 4 + 3.0

= 10.0%

(b) $\sigma = [0.1(-10–10)^2+0.2(0–10)^2+04(10–10)^2+02(20–10)^2+0.1(30 - 10)^2]^{\frac{1}{2}}$

= 10.95%

Key Words

Risk

Systematic risk

Unsystematic risk

Return

Risk return trade off

Standard deviation

Variance

Beta

Alpha

Portfolio

Optimum portfolio

Short Questions :

1. Explain Systematic Risk and Unsystematic Risk
2. Define beta? How does it influence in investment decision making process?
3. Define Alpha
4. How do you measure Historical return and risk?
5. Explain the concept 'Expected return and Risk'
6. Write different steps in calculating Expected return and Risk.
7. What do you mean by portfolio diversification?

Problems to Solve :

1. The returns of Jaz Ltd., stock during the past five years were as follows:

Year	Return
1	0.07
2	0.03
3	0.06
4	- 0.09
5	0.10

Compute the following:

(a) Cumulative wealth Index
(b) Arithmetic Mean
(c) Geometric Mean
(d) Variance
(e) Standard Deviation

2. A stock XY earns the following returns over a five year period:

r_1 = 0.20 , r_2 = - 0.10, r_3 = 0.18, r_4 = 0.16, r_5 = 0.12. What is the standard deviation and variance of returns of stock XY?

3. The probability distribution and the rate of return on Penta Stock and Jade Stock is given below:

Penta Stock		Jade Stock	
Probability	Rate of Return	Probability	Rate of Return
0.50	12%	0.30	15%
0.30	25%	0.40	-09%
0.20	- 6%	0.30	20%

Calculate the standard deviation of return and suggest the best alternative for investment.

4. The return of two assets under four possible states of return are given below

State of Nature	Probability	Return on asset 1	Return on asset 2
1	0.10	5%	0%
2	0.30	10%	9 %
3	0.50	15%	18%
4	0.10	25%	26%

a. What is the Standard deviation of the return on asset 1? And Asset2?

b. What is the covariance between the returns on assets 1 and 2?

c. What is the coefficient between the returns on assets 1 and 2?

5. A portfolio consists of 3 securities, 1, 2 and 3.The proportions of these securities are: w1=0.3, w2=0.5 and w3=0.2.The standard deviations of returns on these securities (in percentage terms) are?s1=6??s 2=9 and s3 =10.The correlation coefficients among security returns are ñ12=0.4, ñ13=0.6, ñ23=0.7.What is the standard deviation of portfolio return?

6. The following information is available.

	Stock A	Stock B
Expected Return	18%	12%
Standard Deviation	5%	8%
Coefficient of correlation 0.60		

(a) What is the covariance between stocks A and B?

(b) What is the expected return and risk of a portfolio in which A and B have weights of 0.6 and 0.4.

7. The return of two assets under four possible states of return are given below:

State of Nature	Probability	Return on asset 1	Return on asset 2
1	0.30	-5%	10%
2	0.20	14%	13%
3	0.10	17%	15%
4	0.40	23%	19%

a. What is the Standard deviation of the return on asset 1and on asset2?

b. What is the covariance between the returns on assets 1 and 2?

c. What is the coefficient of correlation between the returns on assets 1 and 2?

8. The stock of Zeal Ltd. performs well relative to other stocks during recessionary periods. The stock of Tybe Co Ltd., on the other hand, does well during growth periods. But the stocks are currently selling for Rs.50 per share. The rupee return (dividend plus price change) of these stocks for the next year would be as follows:

	Economic Condition			
	High Growth	Low Growth	Stagnation	Recession
Probability	0.3	0.3	0.2	0.2
Return on Alpha stock	55	50	60	70
Return on Beta stock	75	65	5	40

Calculate the expected return and standard deviation of:

a. Rs.1000 in the equity stock of Alpha;

b. Rs.1000 in the equity stock of Beta:

c. Rs.500 in the equity stock of Alpha and Rs.500 in the equity stock of Beta;

d. Rs.700 in the equity stock of Alpha and Rs.300 in the equity of Beta.Which of the above four options would you choose? Why?

9. Consider two stocks, A and B

	Expected Return (%)	Standard Deviation (%)
Stock A	14%	22%
Stock B	20%	35%

The returns on the stocks are perfectly negatively correlated.

What is the expected return of a portfolio comprising of stocks A and B when the portfolio is constructed to drive the standard deviation of portfolio return to zero?

10. From the following information , you are require to compute:

a. Covariance between stocks XML and QRS

b. Expected Return and Risk of a portfolio in which stocks XML and QRS are equally weighted.

	Stock XML	Stock QRS
Expected Return	16%	22%
Standard Deviation	25%	40%
Coefficient of Correlation	0.40	

11. Which of the following portfolio constitute the efficient set:

Portfolio	Expected Return(%)	Standard Deviation (%)
1	12	20
2	14	24
3	8	16
4	9	15
5	10	20
6	15	30
7	14	22
8	16	30

[Answers – Objective questions: 1. b ; 2. b ; 3 b ; 4. c ; 5. a ; 6. a]

3.2 STOCK MARKET EFFICIENCY

Market efficiency/Capital market efficiency : The degree to which the present asset price accurately reflects current information in the market place. Efficient capital market : A market in which new information is very quickly reflected accurately in share prices.

Efficient Market Hypothesis :States that all relevant information is fully and immediately reflected in a security's market price, thereby assuming that an investor will obtain an equilibrium rate of return. In other words, an investor should not expect to earn an abnormal return (above the market return) through either technical analysis or fundamental analysis.

Efficient Market Hypothesis

The efficient market hypothesis (EMH) implies that if new information is revealed about a firm it will be incorporated into the share price rapidly and rationally, with respect to the direction of the share price movement and the size of that movement.

In an efficient market no trader will be presented with an opportunity for making a return on a share (or other security) that is greater than a fair return for the riskiness associated with that share (or any other security). The absence of abnormal profit possibilities arises because current and past information is immediately reflected in current prices. It is only new information, which causes prices to change.

Note: Stock market efficiency does not mean that investors have perfect powers of prediction; all it means is that the current level is an unbiased estimate of its true economic value based on the information revealed.

In the major stock markets of the world prices are set by forces of supply and demand. There are hundreds of analysts and thousands of traders, each receiving new information on a company through electronic and paper media. The moment an unexpected, positive piece of information leaks out investors will act and prices will rise rapidly to a level that gives no opportunity to make further profit.

Types of Efficiency

Efficiency is an ambiguous word and therefore we have to establish some clarity. There are three types of efficiency;

Operational efficiency – refers to the cost to buyers and sellers of transactions in securities on the exchange. It is desirable that the market carries out its operations at as low a cost as possible. This may be promoted by creating as much competition between market makers and brokers as possible so that they earn only normal profits and not excessively high profits. It may also be enhanced by competition between exchanges for secondary-market transactions.

Allocation efficiency – society has a scarcity of resources (that is, they are not infinite) and it is important that we find mechanisms, which allocate those resources to where they can be most productive. Those industrial and commercial firms with the greatest potential to use investment funds effectively need a method to channel funds their way. Stock markets help in the process of allocating society's resources between competing real investments. For example, an efficient market provides vast funds for fast-growth sectors such as electronics, pharmaceuticals and biotechnology industries (through new issues, rights issues, etc.) but allocates only small amounts for slow-growth industries.

Pricing efficiency – in a pricing efficient market the investor can expect to earn merely a risk-adjusted return from an investment as prices move instantaneously and in an unbiased manner to any news. It is pricing efficiency that is the focus of this section and the term efficient market hypothesis applies to this form of efficiency only.

The Value of an Efficient Market

It is important that stock/share markets are efficient for at least three reasons: To encourage share buying – accurate pricing is required if individuals are going to be encouraged to invest in private enterprise. If shares are incorrectly priced many savers will refuse to invest because of a fear that when they come to sell the price may be perverse and may not represent the fundamental attractions of the firm. This will seriously reduce the availability of funds to companies and inhibit growth. Investors need to know they are paying a fair price and that they will be able to sell at a fair price – that the market is a "fair game".

To give correct signals to company managers – Since the maximization of shareholder wealth can be represented by the share price in an efficient market, sound financial decision-making relies on the correct pricing of the company's shares. In implementing a shareholder wealth-enhancing decision the manager will need to be assured that the implication of the decision is accurately ounseli to shareholders and to management through a rise in the share price. It is important that managers receive feedback on their decisions from the share market so that they are encouraged to pursue shareholder wealth strategies.

To help allocate resources – allocation efficiency requires both operating efficiency and pricing efficiency. If a poorly run company in a declining industry has highly valued shares because the stock market is not pricing correctly then this firm will be able to issue new shares, and thus attract more of society's savings for use within its business. This would be wrong for society as the funds would be better used elsewhere.

The Levels of Market Efficiency

Economists have defined different levels of efficiency according to the type of information, which is reflected in prices. Three levels of market efficiency can be identified.

Weak-form efficiency – share prices fully reflect all information contained in past price movements. It is pointless basing trading rules on share price history, as the future cannot be predicted in this way.

A Weak-form Efficiency Test Example: Technical analysts employ a vast range of trading rules. Some recommend buying shares that have performed well relative to the rest of the market, maintaining that their performance will continue in that vein. Others advise a purchase when a share rises in price at the same time as an increase in trading volume occurs. Overwhelmingly the evidence and weight of academic opinion is that the weak form of the EMH is to be accepted. The history of share prices cannot be used to predict the future in any abnormally profitable way.

Semi-strong form efficiency – share prices fully reflect all the relevant publicly available information. This includes not only past price movements but also earnings and dividend announcements, rights issues, technological breakthroughs, resignations of directors, and so on. The semi-strong form of efficiency implies that there is no advantage in analyzing publicly available information after it has been released, because the market has already absorbed it into the price.

A Semi-strong form Efficiency Test Example: The semi-strong form tests focus on the question of whether it is worthwhile expensively acquiring and analyzing publicly available information. If semi-strong efficiency is true it undermines the work of millions of fundamental (professional or amateur) analysts whose trading rules cannot be applied to produce abnormal returns because all publicly available information is already reflected in the share price.

Fundamental analysts try to estimate shares' true value based on future returns. These are then compared with the market price to establish an over- or under valuation. To estimate the intrinsic value of a share the fundamentalists gather as much relevant information as possible. This may include:

- macroeconomic growth projections,
- industry conditions,
- company accounts and announcements,
- details of company's personnel, tax rates,
- technological and social change and so on.

The range of potentially important information is vast, but it is all directed at one objective: forecasting future profits and dividends. Some evidence for and against the semi-strong form of market efficiency has been discovered in the following:

- Information announcements: This concerns the issue of whether trading in shares immediately following announcements of new information (for example announcements on dividends or profit figures) could produce abnormal returns. The evidence supports the EMH, and excess returns are nil. It has been discovered that most of the information in annual reports, profit or dividend announcements are reflected in share prices before the announcement is made.
- Stock splits: Stock splits imply that existing shareholders receive more shares in proportion to their existing holding. Because no new money is raised for the firm, and the fundamentals of the business such as cash flows are unchanged, prices should not react

purely to a stock split. However, the split itself is an insignificant part of the information given to the market around the time of the announcement, as splits tend to occur when firms are doing well. The split is often taken as a final confirming signal that the firm anticipates continued growth and that dividends will rise. Fama et. Al. (1969) showed that share prices rise by an abnormal amount relative to the market prior to the split.

- Manipulation of earnings: Published accounts are an important source of information about companies. An efficient market will incorporate this information into share prices. But, as is well known, there is a great deal of leeway when it comes to drawing up accounts. One way of altering accounts is to openly and honestly reflect the changing underlying economies of the business by changing, say, the depreciation policy.

If this is taken a stage further we have creative accounting, which obeys the letter of the law and accounting body rules but involves the manipulation of the accounts to show the most favourable profit figures and balance sheet. Finally, there is outright fraud and lies. The conclusion of efficiency in this case seems reasonable because investors are aware of the nature of the accounting change, but doubts have been raised about market efficiency if there is wholesale creative accounting.

Strong-form of efficiency – all relevant information, including that which is privately held, is reflected in the share price. Here the focus is on insider trading, in which a few privileged individuals (for example directors) are able to trade in shares, as they know more than the normal investor in the market. In a strong-form efficient market even insiders are unable to make abnormal profits (note that the market is acknowledged as being inefficient at this level of definition).

A Strong form Efficiency - Test Example: It is well known that it is possible to trade shares on the basis of information not in the public domain and thereby make abnormal profits. In this respect stock markets are not strong form efficient. Trading on inside knowledge is thought to be a “bad thing”. It makes those outside of the charmed circle feel cheated. A breakdown of the fair game perception will leave some investors feeling that the inside traders are making profits at their expense. If they start to believe that the market is less than a fair game they will be more reluctant to invest and society will suffer. To avoid the loss of confidence in the market most stock exchanges attempt to curb insider dealing and it is a criminal offence for most exchanges (if not all). Insider trading is considered to be, besides dealing for oneself, either counseling or procuring another individual to deal in the securities or communicating knowledge to any other person, while being aware that he or she (or someone else) will deal in those securities.

Misconceptions about the Efficient Market Hypothesis

There are three classic misconceptions:

1. Any share portfolio will perform as well as or better than a special trading rule designed to outperform the market. A monkey choosing a portfolio of shares from the “Financial Times” for a buy and hold strategy is nearly, but not quite, what the EMH advocates suggest as a strategy likely to be as rewarding as special inefficiency-hunting approaches. The monkey does not have the financial expertise needed to construct broadly based portfolios, which fully diversify away unsystematic risk. A selection of shares in just one or two industrial sectors may expose the investor to excessive risk. So it is wrong to

conclude from EMH evidence that it does not matter what the investor does, and that any portfolio is acceptable. The EMH says that after first eliminating unsystematic risk by holding broadly based portfolios and then adjusting for the residual systematic risk, investors will not achieve abnormal returns.

2. There should be fewer price fluctuations.

   If shares are efficiently priced why is it that they move every day even when there is no announcement concerning a particular company? This is what we would expect in an efficient market. Prices move because new information is coming to the market every hour, which may have some influence on the performance of a specific company. For example, the governor of the Central bank may hint at an interest rate rise, or the latest industrial output figures may be released, etc.

3. Only a minority of investors is actively trading, most are passive therefore efficiency cannot be achieved. This too is wrong. It only needs a few trades by informed investors using all the publicly available information to position (through their buying and selling actions) a share at its semi-strong-form efficient price.

Implications of the Efficient Market Hypothesis

The efficient market hypothesis has a number of implications for both the investors and the companies.

For Investors : For the vast majority of people public information cannot be used to earn abnormal returns (that is, returns above the normal level for that systematic risk class). The implication is that fundamental analysis is a waste of money and that so long as efficiency is maintained the average investor should simply select a suitably diversified-portfolio, thereby avoiding costs of analysis and transaction. Investors need to press for a greater volume of timely information. Semi-strong efficiency depends on the quality and quantity of publicly available information, and so companies should be encouraged by investor pressure, accounting bodies, government rulings and stock market regulation to provide as much as is compatible with the necessity for some secrecy to prevent competitors gaining useful knowledge. The perception of a fair game market could be improved by more constraints and deterrents placed on insider dealers.

For Companies The EMH also has a number of implications for companies:

Focus on substance, not on short-term appearance: Some managers behave as though they believe they can fool shareholders. For example creative accounting is used to show a more impressive performance than is justified. Most of the time these tricks are transparent to investors, who are able to interpret the real position, and security prices do not rise artificially.

There are some circumstances when the drive for short-term boosts to reported earnings could be positively harmful to shareholders. For example, one firm might tend to overvalue its stock to boost short-term profitability, another might not write off bad debts. These actions will result in additional, or at least earlier, taxation payments, which will be harmful to shareholder wealth. Managers, aware that the analysts often pay a great deal of attention to accounting rate of return, may, when facing a choice between a project with a higher NPV but a poor short-term ARR, or one with a lower NPV but higher short-term ARR, choose the latter.

The timing of security issues does not have to be fine-tuned: Consider a team of managers contemplating a share issue who feel that their shares are currently under-priced because the market is low. They opt to delay the sale, hoping that the market will rise to a more "normal level". This defies the logic of the EMH – if the market is efficient the shares are already correctly priced and it is just as likely that the next move in prices will be down as up. The past price movements have nothing to say about future movements.

The situation is somewhat different if the managers have private information that they know is not yet priced into the shares. In this case if the directors have good news then they would be wise to wait until after an announcement and subsequent adjustment to the share price before selling the new shares. Bad news announcements are more tricky – to sell the shares to new investors while withholding bad news will benefit existing shareholders, but will result in loss for the new shareholders.

Short Questions:

1. What do you understand by EMH?
2. State the Implications of Strong, Weak and Semi-Strong Forms of EMH.
3. On what grounds the EMH was refuted?
4. Give reasons in favour and against of the EMH in the current scenario.
5. Is EMH suitable to the Indian Stock Market?

3.3 INVESTMENT ANALYSIS

Introduction:

Unlike natural science and like medicine, law and economics, investing lies somewhere between an art and a science. Certain aspects of investing lend themselves to a scientific approach. The creation of computer skills has accelerated the use of scientific methods.

However, corporations are managed by people and therefore open to problems associated with their faulty judgments. Moreover, the corporations operate in a highly dynamic and competitive environment, and many operate both nationally and internationally. As a result, the judgment factor still dominates investment decisions.

Whether investing will ever be classified as a science is doubtful, but research, training and experience have developed investing into a discipline. Discipline means a structured, consistent and orderly process without rigidity in either concept or methods.

Stock Market Analysis helps the investors in formulating their investing/trading techniques prior to the opening of the market. This helps them to confirm their conviction on trades. Stock Market Analysis deals with the performance of the stocks in particular and the indexes in general.

Stock Market Index typically gives the overall performance of the market or of a specific sector. It is based on the statistical compilations of the prices of the representative set of stocks and reflects a composite value of its component stocks.

There are many factors affecting the collective mood of the stock market. Stock Market is a dynamic one which changes with every information due to change in perception of the investors. Stock Market believes in supremacy of the market and considers that demand-supply mechanism leads to efficient price discovery. It also considers that the market discounts/considers everything and presumes every investor to be rational who invest by considering all the informations (economic and political (domestic and international) scenario, weather condition, company specific news, international relations, monetary and fiscal policies, international Stock Market behavior and many more) available to him.

Stock Market Analysis is a prerequisite for any investor for extracting profit out of the stock market. But most of the investors don't have the time and knowledge for analyzing the market. So, they take the help of professional Stock Market Analysts who guide them through the financial jungle to a profitable outcome.

Stock Market Analysis is basically of two types :-

- Fundamental Analysis
- Technical Analysis

Fundamental Analysis tries to measure the intrinsic value of a **stock** by going through its financial, economic, quantitative and qualitative factors. It also considers the **macroeconomic factors** (both domestic and international) that could have an effect on the value of the **stock**. Some of the company or industry specific factors are Sales figure of the company (Quarterly, Yearly, etc.), Earnings of the Company, Assets and Liabilities of the Company, Management Efficiency of the Company, Company's competitive position among its industry rivals. **Fundamental Analysts** rely on the balance sheets of the company for arriving at its book value. This helps them to compare the actual value of the **stock** in the secondary market with that of the book value in order to evaluate whether the **stock** is overvalued or not. When the Market Value of a **stock** exceeds its Face or Intrinsic value then it signifies that the expectations of the investors are higher than the real value of the company. Hence, a correction in its price is evident. **Fundamental Analysis** studies the **fundamental** strength of the company which is effective in gauging the long run scenario of the **stock** price rather than the short run fluctuations.
Fundamental Analyst look at the following aspects for judging the **fundamental** strength of the company :-

- **Balance Sheet**
- **Return on Assets**
- **Net Income**
- **Revenue**
- **Cash Flow**

Balance Sheet

Financial position of a company is reflected through its Balance Sheet where the detailed numerical of the assets and liabilities are recorded. It is always desirable for a company to have Assets > Liabilities which reflects its sound financial condition.

Return on Assets

It measures the profitability of a company.
Return on Assets = (Net Income of the company for the last 1 year) / (Total Assets of the Company)
This shows the company's strength from the long term perspective and is a good indicator for the long term investors.

Net Income

Net Income =(Total Revenue of the Company) – (Total Cost to the Company)
Revenue of a company comprises of income from the sales of its products, and other incomes. Cost of a company comprises operation costs, servicing of depreciation, interest payments, etc. Another business and economic jargon for Net Income is Bottom Line.

Revenue

Revenue of a company comprises its income from sales of its products, and other associated incomes. It indicates the demand scenario of the company's products which are also an indicator of its growth.

Cash Flow

Cash Flow of a Company (for a particular period of time) = (Cash Receipts of a Company) – (Cash Payments of the Company)

Liquidity Position of the company can be gauged by analyzing this tool.

Hence, **Fundamental Analysis** is a part of the **Stock Market Analysis** which uses the **fundamental** aspects of the companies and the economy for predicting the future direction of the **stock** in particular and the economy in general.

Fundamental Analysis:

As has been mentioned earlier, in the fundamental approach, attempt is made to analyze various fundamental or basic factors that affect the risk-return of the securities. Effort, here, is to identify those securities which perceive to be mispriced in the stock market. The assumption in this case is that the 'market price' of security and the price as justified by its fundamental factors called 'intrinsic value' are different and the capital market provides an opportunity for a discerning investor to detect such discrepancy. The moment such a description is identified, the decision to invest or disinvest is taken. The decision rule under this approach is like this,

If the price of a security at the market place is higher than the one, which is justified by the security fundamentals, sell that security. This is because, it is expected that the market will sooner or later realize mistake and price the security properly, a deal to sell this security should be based on its fundamentals, it should be both before the market correct its mistake by increasing the price of security in question. The price prevailing in market is called "market price' (MP) and the one justified by its fundamentals is called 'intrinsic value' (IV) session rules/ Recommendations.

(1) If IV > MP, buy the security
(2) If IV < MP, sell the security
(3) If IV = MP, No Action.

The fundamental factors mentioned above may relate to the economy or industry or company or all some of this. Thus, economy fundamentals, industry fundamentals and company fundamentals are considered while prizing the securities for taking investment decision. In fact the economy-industry-company framework forms integral part of this approach. This framework can be properly utilized by making suitable adjustments in a regular context. A world of caution? Please remember, the use of an analytical framework does not guarantee a act decision. However, it does guarantee an informed and considered investment decision which would hopefully letter as it based on relevant and crucial information.

Fundamental Analysis and Efficient Market

Before elaborating in detail on the economy-industry-company framework, it is pertinent to mention that .. are expressed about the utility of this approach in the contest of efficient stock market set up. Briefly the market efficiency relates to the speed with which stock market incorporates the information about the economy industry and company in the share prices rather instantaneously. The above given view about share market efficiency implies that no one would be able to make abnormal to given such a set up. Some research studies in the literature also support the above view. Practitioners, However, do not agree to such conclusions of empirical nature.

Fundamental Analysis and Chemistry of Earnings :

The logic for fundamental analysis becomes crystal clear once we understand the chemistry of earnings' and macro and macro factors which influence the future of earnings.

Factors Affecting Distributable Earnings

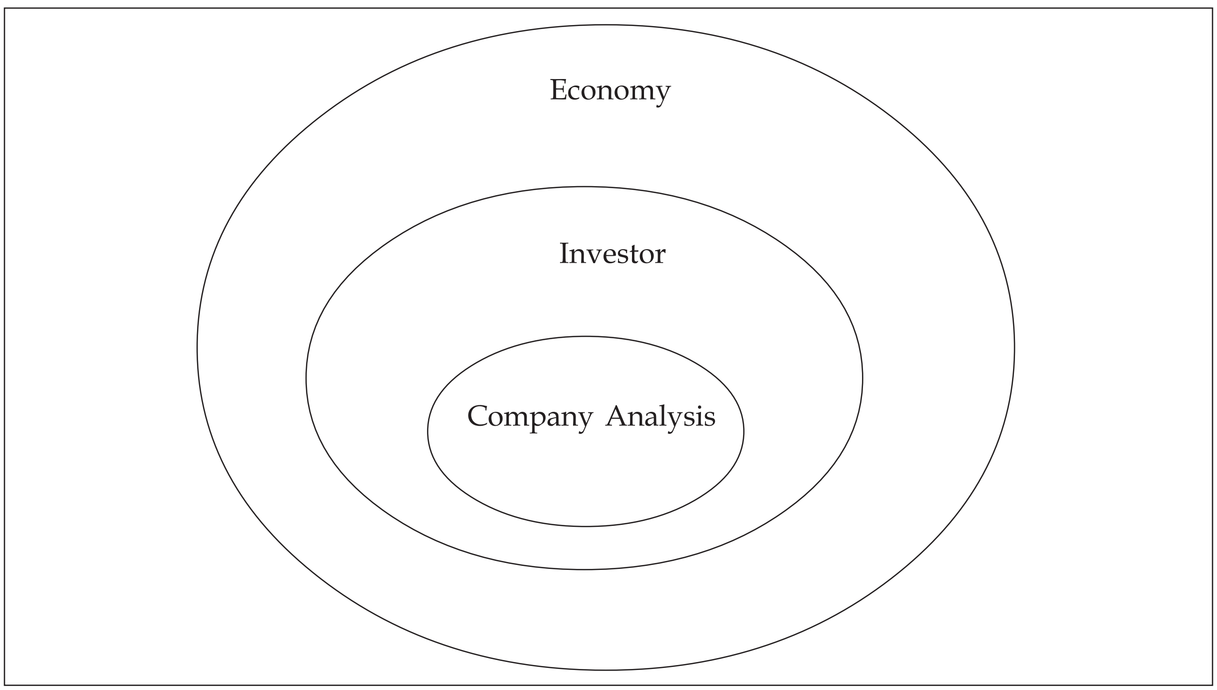
Board Source/form Of Earnings	Company Specific Factors		Industry Factors	Macro- Economic
Sales	Competitive strength	M A	Industry Demand/ Supply	National income, sp.. savings, Monetary.. Credit, Export-Import… Policies, Population Price level.
Less Costs Of sales	Operating Efficiency	N	Industry wage Levels: Industrial Infrastructure Import-Export Policy	National Wage policy Price levels, Economic Infrastructure, Raw … Production.
Earnings Before Interest Depreciation & Taxes (EBIDT)		A G		
Less Interest	Capital Structure/financial Leverage Policy		Industry Cost of capital	Interest Rates in the Economy, Capital Conditions
Less Deprecation	Operational leverage Policy	E	Industry practices	Capital Goods Import
Less Tax	Tax Planning and Management		Industry Lobby	Fiscal Policy
Net Earnings After Tax (NEAT)		M E		
Less (Preference Dividend)	Capital Structure Policy		Industry Practices	Interest Rate Structure, Capital… Conditions
Distributable Earnings Less		N		
Equity Dividend	Dividend Policy		Industry Practices	Fiscal Policy., Credit Capital Market cond…
Retained Earnings		T		

Economy – Industry – Company Analysis: a Framework

The analysis of economy, industry and company fundamentals as mentioned above is the main ingredient of fundamental approach. The analyst should take into account all the three constituents which form different but special steps in making investment decision. These can be looked at as different stages in the investment decision making. Operationally to base the investment decision on various fundamentals, all the three stages must be taken into account. In this Unit, we will concentrate on economy and industry analyses while in the next Unit focus on company level analysis.

Economy Analysis

In actual practice, you must have noticed that investment decision of individuals and the institute made in the economic set up of a particular country. It becomes essential, therefore, to understand the star economy of that country at macro level. The analysis of the state of the economy at macro level incorporate the economy has performed in the past, how it is performing in the present and how it is expected to perform future. Also relevant in this context is to know how various sectors of the economy are expected to grow.



Macro Economic Analysis

The analysis of the following factors indicates the trends in macro economic changes that effect the risk and return on investments.

- Money supply
- Industrial production
- Capacity utilisation

- Unemployment
- Inflation
- Growth in GDP
- Institutional lending
- Stock prices
- Monsoons
- Productivity of factors of production
- Fiscal deficit
- Credit/Deposit ratio
- Stock of food grains and essential commodities
- Industrial wages
- Foreign trade and balance of payments position
- Status of Political and economic stability
- Industrial wages
- Technological Innovations
- Infrastructural facilities
- Economic and industrial policies of the government
- Debt recovery and loans outstanding
- Interest rates
- Cost of living index
- Foreign investments
- Trends in capital market
- Stage of the business cycle
- Foreign exchange reserves

Technical Analysis

Technical Analysis assumes that the historical price movements of **stock**s give indications about its future performances. It uses charts and other statistical tools to identify the pattern of the **stock** and index movements and accordingly predict its future activities. **Technical Analyst** s are not concerned about the intrinsic or fair value of the company but are only interested in the historical price movements along with the volumes. They consider that the price movements are repetitive in nature because the psychological setup of the investors are seen to follow a certain pattern. **Technical Analyst** s analyze a wide array of variables such as **Long term and Short term market trend, Volume of trade, Oscillators, Moving Averages, Cross-overs, Candlesticks, Relative Strength Index** , etc. which could throw an idea about the future movement of the **Stock** .

Thus, **Stock Market Analysis** helps both the investors and the traders in taking calculative risk for churning out money out of the **Stock Market** .

The methods used to analyze securities and make investment decisions fall into two very broad categories: fundamental analysis and technical analysis. Fundamental analysis involves analyzing the charac-

teristics of a company order to estimate its value. Technical analysis takes a completely different approach; it doesn't care one bit about the "value" of a company or a commodity. Technicians (sometimes called chartists) are only interested in the price movements in the market.

The term *Technical analysis* is used to mean fairly wide range of techniques, all based on the concept that past information on prices and trading volume of stocks gives the enlightened investor a picture of what lies ahead. It attempts to explain and forecast changes in security prices by studying only the market data rather than information about a company or its prospects as is done by fundamental analyst. John Magee, whose book Technical Analysis of Stock Trends is considered a classic for technical analysts, says :

"The technician has elected to study, not the mass of fundamentals, but certain abstraction, namely the market data alone. But this technical view provides a simplified and more comprehensible picture of what is happening to the price of a stock. It is like a shadow or reflection in which can be seen the broad outline of the whole situation. Furthermore, it works".

The technical analysts believe that the price of a stock depends on supply and demand in the market place and has little relationship to value, if any such concept even exits. Price is governed by basic economic and psychological inputs so numerous and complex that no individual can hope to understand and measure them correctly. The technician thinks that the only important information to work from is the picture given by price and volume statistics.

The technician sees the market, disregarding minor changes, moving in discernible trends which continue for significant periods. A trend is believed to continue until there is definite information of a change. The past performance of a stock can then be harnessed to predict the future. The direction of price change is as important as the relative size of the change. With his various tools, the technician attempts to correctly catch changes in trend and take advantage of them.

What Is Technical Analysis?

Technical analysis is a method of evaluating securities by analyzing the statistics generated by market activity, such as past prices and volume. Technical analysts do not attempt to measure a security's intrinsic value, but instead use charts and other tools to identify patterns that can suggest future activity.

Just as there are many investment styles on the fundamental side, there are also many different types of technical traders. Some rely on chart patterns, others use technical indicators and oscillators, and most use some combination of the two. In any case, technical analysts' exclusive use of historical price and volume data is what separates them from their fundamental counterparts. Unlike fundamental analysts, technical analysts don't care whether a stock is undervalued - the only thing that matters is a security's past trading data and what information this data can provide about where the security might move in the future.

BASIC TECHNICAL ASSUMPTIONS

Before we embark on the actual methods themselves, let us review the basic and necessary assumptions regarding the technical analysis:

1. The Market Discounts Everything

A major criticism of technical analysis is that it only considers price movement, ignoring the fundamental factors of the company. However, technical analysis assumes that, at any given time, a *stock's price reflects everything that has or could affect the company - including fundamental factors. Technical analysts believe that the company's fundamentals, along with broader economic factors and market psychology, are all priced into the stock, removing the need to actually consider these factors separately. This only leaves the analysis of price movement, which technical theory views as a product of the supply and demand for a particular stock in the market.*

2. Price Moves in Trends

In technical analysis, price movements are believed to follow trends. This means that after a trend has been established, the future price movement is more likely to be in the same direction as the trend than to be against it. Most technical trading strategies are based on this assumption.

3. History Tends To Repeat Itself

Another important idea in technical analysis is that history tends to repeat itself, mainly in terms of price movement. The repetitive nature of price movements is attributed to market psychology; in other words, market participants tend to provide a consistent reaction to similar market stimuli over time. Technical analysis uses chart patterns to analyze market movements and understand trends. Although many of these charts have been used for more than 100 years, they are still believed to be relevant because they illustrate patterns in price movements that often repeat themselves.

Technical analysis and fundamental analysis are the two main schools of thought in the financial markets. As we've mentioned, technical analysis looks at the price movement of a security and uses this data to predict its future price movements. Fundamental analysis, on the other hand, looks at economic factors, known as fundamentals. Let's get into the details of how these two approaches differ, the criticisms against technical analysis and how technical and fundamental analysis can be used together to analyze securities.

The Critics on Technical Analysis

Some critics see technical analysis as a form of black magic. Don't be surprised to see them question the validity of the discipline to the point where they mock its supporters. In fact, technical analysis has only recently begun to enjoy some mainstream credibility. While most analysts on Wall Street focus on the fundamental side, just about any major brokerage now employs technical analysts as well

Much of the criticism of technical analysis has its roots in academic theory - specifically the efficient market hypotheses (EMH). This theory says that the market's price is always the correct one - any past trading information is already reflected in the price of the stock and, therefore, any analysis to find undervalued securities is useless.

There are three versions of EMH. In the first, called weak form efficiency, all past price information is already included in the current price. According to weak form efficiency, technical analysis can't predict future movements because all past information has already been accounted for and, therefore, analyzing the stock's past price movements will provide no insight into its future movements. In the second, semi strong efficiency, fundamental analysis is also claimed to be of little use in finding investment opportunities. The third is strong form efficiency, which states that all information in the market is accounted for in a stock's price and neither technical nor fundamental analysis can provide investors with an edge. The vast majority of academics believe in at least the weak version of EMH, therefore, from their point of view, if technical analysis works, market efficiency will be called into question.

There is no right answer as to who is correct. There are arguments to be made on both sides and, therefore, it's up to you to do the homework and determine your own philosophy.

Some Important Techniques in Technical Analysis :
(A) FIBONACCI NUMBERS

Fibonnacci numbers have intrigued mathematicians and scientists for hundreds of years. Leonardo Fionacci (1170-1240) was a medieval mathematician who discovered the series of numbers while studying the reproductive behaviour of rabbits. The beginning of the Fibonacci series is shown below : 1,1,2,3,5,8,13,21,34,55,89,144,233,…….

After the initial pair of ones, each succeeding number is simply the sum of the previous two.

The remarkable thing about these numbers is the frequency with which they appear in the environment. Sunflowers have seed spiralling around the centre of the plant. Some spirals contain seeds leaning counter clockwise, with other spirals going the other way. On most sunflowers, the number of clockwise spirals and the number of counter clockwise spirals are adjacent Fibonacci numbers. A blossom might have 34 counter clockwise spirals and 55 clock-wise spirals. The structure of pine cones, the number of chambers in a nautilus seashell, (Fig. 3.1) the topology of spiralling galaxies, and the ancestry of bees all reveal Fibonacci numbers. Even a professional journal, the Fibonacci Quarterly, is devoted to the study of this series.

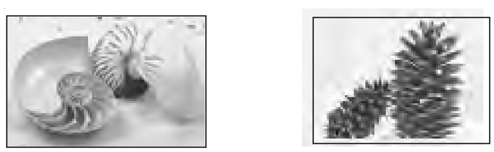


Fig. 3.1

* Technical analysts who follow Fibonacci numbers usually make use of the number 1.613. This number is called the golden mean and appears in ancient writings and architecture. (The golden mean features prominently in the dimensions of the Parthenon). After the first ten or so numbers in the series, each Fibonacci number divided by its immediate predecessor equals 1.618. For example, 89/55 = 1.618, 134/89 = 1.6189, and so on. This magic number is used to calculate Fibonacci ratios as shown in Table 1.

TABLE 1 - Fibonacci Ratios

0/618	1	0.618	1.000	1.618	2.618
-	-	X	X	X	X
1.618	1.618	1.618	1.618	1.618	1.618
0.382	0.618	1.000	1.618	2.618	4.236

* Many Fibonacci advocates in the investment business use the first two ratios, 0.382 and 0.618, to "compute retracement levels of a previous move". For instance, a stock that falls from Rs. 50 to Rs. 35 (aq 30 percent drop) will encounter resistance to further advances after it recoups 38.2 percent of its loss (that is, after it rises to Rs. 40.73).
* Some technical analysts keep close-tabs on resistance and support levels as predicted by the Fibonacci ratios. Even people who do not subscribe to this business know that many other people do, and that when stock prices approach important Fibonacci levels, unusual things can occur.
* A male bee (a drone) has only a mother ; it comes from an unfertilized egg. A female bee (a queen) comes from a fertilized egg and has both a mother and a father. This means one drone has one parent, two grandparents, three great-grandparents, five great-great grandparents, and so on. The number of ancestors at each generation is the Fibonacci series.

ELIOTT WAVE PRINCIPLE

One theory that attempts to develop a rationale for a long-term pattern in the stock price movements is the Eliott Wave Principle (EWP), established in the 1930s by R.N. Eliott and later popularized by Hamilton Bolton. The EWP states that major moves take place in five successive steps resembling tidal waves. In a major bull market, the first move is upward, the second downward, the third upward, the fourth downward and the fifth and final phase upward. The waves have a reverse flow in a bear market.

KONDRATEV WAVE THEORY

Nikolay Kondratev was a Russian economist and statistician born in 1892. He helped develop the first Soviet five-year plan. From 1920 to 1928 he was Director of the Study of Business Activity at the Timiriazev Agricultural Academy. While there he devoted his attention to the study of Western capitalists economies. In the economies of Great Britain and the United States, he identified long-term business cycles with a period of 50-60 years. He became well known after the U.S. market crash of 1929, which Kondratev predicted would follow the U.S. crash of 1870. His hypothesis of a long-term business cycle is called the *Kondratev Wave Theory*.

Note that the market crash for 1987 occurred 58 years after the crash of 1929, a period consistent with Kondratev's theory. Some modern economists believe Kondratev's theory has merit. Many other believe that significant macroeconomic changes, such as floating exchange rates, the elimination of the gold standard, and the reduction of barriers to free trade, make the decision cycle less predictable. Still, many market analysts consider Kondratev's work in their assessment of the stock market and its risks.

CHAOS THEORY

At recent finance conferences, a few researchers have presented papers on chaos theory and its application to the stock market. In physics, chaos theory is growing field of study examining instances in which apparently random behaviour is, in fact, quite systematic or even deterministic. Scientists apply this theory to weather prediction, population growth estimates, and fisheries biology.

* As an example of the latter application, a given volume of ocean water, left free from human interference, will not necessarily reach an equilibrium population of the various species that inhibit it. As fish grow, they consume the smaller fry (of their own or a different species) in increasing numbers. Fewer younger fishes are left to mature ; this, coupled with the natural death of the older fish, eventually results in a sudden drastic reduction in fish population, causing dismay to fishermen and excitement in the local media. At the same time, it results in reduced predation and food competition by the surviving fry, so the population begins to grow dramatically, and the cycle continues. Interactions between species add complexity to the process.
* Investment analysts have sought a pattern in stock market behavior since the origin of the exchanges. Much remains unknown about how security prices are determined, and chaos theory may eventually provide some potential answers. If the apparent randomness of security price changes, can be shown to be nonrandom, much of the theory of finance would need revision.

NEUTRAL NETWORKS

A *neutral network* is a trading system in which a forecasting model is trained to find desired output from past trading data. By repeatedly cycling through the data, the neutral network eventually learns the pattern that produces the desired output. If the desired output remains elusive, more data is included until a pattern is found. Neutral networks may also include a feedback mechanism whereby experience a gained from past errors.

* This topic is a hot one in the investment community. National conferences have been organized dealing exclusively with this topic, and the trade literature publishes many articles on the topic. A problem with concept of a neutral network is that the stock market is seldom deterministic. Situations constantly change, and what may have been true a few years ago will not necessarily prevail tomorrow. Financial academics are especially leery of backtests, or research that tests a hypotheses using past data. Mining the data will almost always result in some apparent cause and effect between past events and stock market performance. Research that tests a hypothesis using subsequent data is much more useful. An article in the popular press describes Wall Street's response to this criticism:
* One way to get around this hazard is to build something called a genetic algorithm into your neutral network. A sexy term that currently causes Wall Street rocket scientists to swoon, genetic algorithms enable neutral nets to adapt to the future buy spawning schools of baby nets, each of which is sent to swim against the changing flow of data, where only the fittest survive to take over the role of the mother.
* No matter what someone's field of study, they are interested in the search for a better mousetrap. Essentially, what all security analysts seek to do is to find improvements in their methodology for security selection.

TOOLS OF TECHNICAL ANALYSIS

The technicians must (1) identify the trend, (2) recognize when one trend comes to an end and prices start in the opposite direction. His central problem is to distinguish between reversals within a trend and real changes in the trend itself. This problem of sorting out price changes is critical since prices do not change in a smooth, uninterrupted fashion.

The two variables concerning groups of stocks or individual stocks are :

(1) Behaviour of prices, and

(2) Volume of trading contributing to and influenced by changing prices.

The use of technical "indicators" to measure the direction of overall market should precede any technical analysis of individual stocks, because of systematic influence of the general market on stock prices. In addition some technicians feel that forecasting aggregates is more reliable, since individual errors can be filtered out.

First, we will examine the seminal theory from which much of the substances of technical analysis has been developed – the Dow theory – after which they key indicators viz., price and volume relating to entire market and individual stock performance as shown in Table 2 will be examined.

Tools of Technical Analysis

Category	Market Indicators	Market and individual stock indicators
Price indicators	Dow theory Breadth of Market Indicators o Plurality o Market breadth index o Advance –Declines o New highs and new lows o The most active list o Confidence indicator (Disparity index)	Line, bar and point and figure charges Moving averages. Relative strength
Volume indicators	New York & American Exchange volume Contrary Opinion Theories o Short selling o Odd Lot trading	Resistance & support charts Price volume bar charts
Other indicators	Mutual fund activity Credit balance theory	

DOW THEORY

The Dow theory is one of the oldest and most famous technical tools. It was originated by Charles Dow, who founded the Dow Jones company and was the editor of The Wall Street journal, Mr. Dow died in 1902. The Dow theory was developed by W.P. Hamilton and Robert

Rhea from the editorial written by Dow during 1900-1929 years, numerous writers have altered, extended and in some cases abridged the original Dow theory. It is the basis for many other techniques used by technical analysts.

The Dow theory is credited with having forecast the Great Crash of 1929. On October 23, 1929. The Wall Street Journal published a still famous editorial. "A Twin in the Tide" which correctly stated that the bull market was then over and a bear market had started. The horrendous market crash which followed the forecast drew much favourable attention to the Dow theory. Greiner and Whitecomb assert that "The Dow Theory provides a time tested method of reading the stock market barometer". There are many versions of this theory, but essentially it consists of three types of market movements : the major market trend, which can often last a year or more; a secondary intermediate trend, which can move against the primary trend for one to several months ; and minor movements lasting only for hours to a few days. The determination of the major market trend is the most important decision to the Dow believer. The Theory : According to Dow, "The market is always considered as having three movement, all going at the same time. The first is the narrow movement from day to day. The second is the short swing running from two weeks to a month or more, the third is the main movement covering atleast four years in duration". These movements are called -

- **Daily fluctuations (minor trends)**
- **Secondary movements (trends), and**
- **Primary trends**

The primary trends is the long range cycle that carries the entire market up or down (bull or bear markets). The secondary trend acts as a restraining force on the primary trend. It ends to correct deviations from its general boundaries. The minor trends have little analytical value, because of their short duration and variations in amplitude. Figure 1 represents Dow theory. The Dow theory is built upon the assertion that measures of stock prices tend to move together. It employs two of the Dow Jones averages.

(i) Dow-Jones Transportation Average (DJTA)

(ii) Dow-Jones Industrial Average (DJTA)

Bear market – If both the averages are rising

Bear market – If both the averages are falling

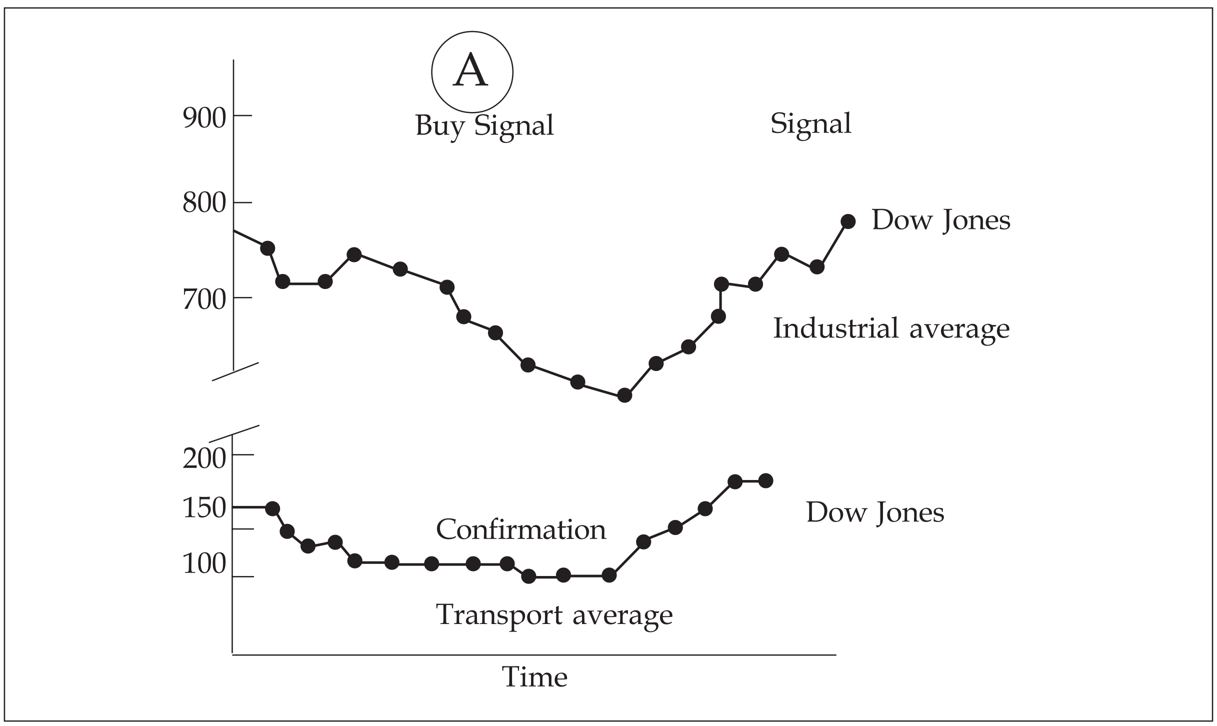
Uncertain - If one is rising and other is falling

Although Charles Dow believed in fundamental analysis, the Dow theory has evolved into a primarily technical approach to the stock market. It asserts that stock prices demonstrate patterns over four to five years and these patterns are mirrored by indices of stock prices. The Dow Theory employs two of the Dow Jones averages, the Industrial average and the transportation average. The utility average is generally ignored.

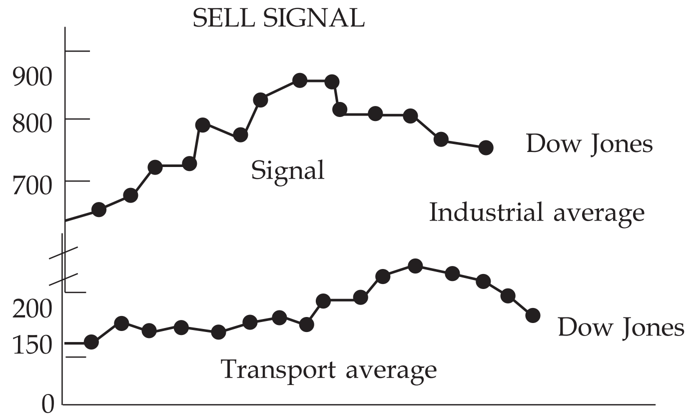
The Dow theory is built upon the assertion that measures of stock prices tend to move together. If the Dow Jones industrial average is rising, then, the transportation average is also rising.

The utility average is rising, then, the transportation average should also be rising. Such simultaneously price movements suggest a strong bull market. Conversely, a decline in both the industrial and transportation averages are moving in opposite directions, the market is uncertain as to the direction of future stock prices. If one of the averages starts to decline after a period of rising stock prices, then the two are at odds. For example, the industrial average may be rising while the transportation average is falling. This suggests that the industrials may not continue to rise but may soon start to fall. Hence, the market investor will use this signal to sell securities and convert to cash.

The converse occurs when after a period of falling security prices one of the averages starts to rise while the other continue to fall. According to the Dow Theory, this divergence suggests that this phase is over and that security prices in general will soon start to rise. The astute investor will then purchase securities in anticipation of the price increase. These signals are illustrated in Fig.1. Part A illustrates a buy signal. Both the industrial and transportation average have been declining when the industrial starts to rise. Although the transportation index is still declining, the increase in industrial average suggests that the declining market is over. This change is then confirmed when the transportation average also starts to rise.



Part B



Time

Figure 1 : The Dow Jones Averages

Criticism on Dow theory:

Several criticisms are levelled against the Dow theory.

1. It is not a theory but an interpretation of known data. A theory should be able to explain why a phenomenon occurs. No attempt was made by Dow or his followers to explain why the two averages should be able to forecast future stock prices.
2. It is not acceptable in its forecast. There was considerable lag between the actual turning points and those indicated by the forecast.
3. It has poor predictive power. According to Rosenberg, the Dow theory could not forecast the bull market which had preceded the 1929 crash. It gave bearish indication in early 1926. The 31/2 years which followed the forecast of Hamilton's editorials for the 26-year period, from 1904 to 1929. Of the 90 recommendations Hamilton made for a change in attitude towards the market (55% were bullish, 18% bearish and 29% doubtful) only 45 were correct. Such a result an investor may get by flipping a coin).

CRITICISMS OF TECHNICAL ANALYSIS

Despite the assertions of technical analysis, technical analysis is not a sure-fire method. The various limitations of technical pointed but by its critics are as given under :

i) **Difficult in interpretation :** Technical analysis is not as simple as it appears to be. While the charts are fascinating to look at, interpreting them correctly is very difficult. It is always easy to interpret the charts long after the actual point of time. As such, fundamentals argue that charting techniques are no different from palmistry.

ii) **Frequent changes :** With changes in market, chart patterns keep on changing. Accordingly, technical analysts change their opinions about a particular investment very frequently. One day they put up a buy signal. A couple of weeks later, they see a change pattern and put up a sell signal.

iii) Unreliable changes : Changes in market behaviour observed and studied by technical analyst may not always be reliable owing to ignorance or intelligence or manipulative tendencies of some participants.

iv) Judgemental Bias: A false piece of information or wrong judgment may result in trade at a lower than market price. If the technicians fail to wait for confirmation, they incur losses.

THE FUTURE OF TECHNICAL ANALYSIS

Although there is much in finance that we do not completely understand, technical analysis has persisted for more than 100 years, and it is not likely to disappear from the investment scene anytime soon. Improved quantitative methods coupled with improved behavioural research will continue to generate ideas for analysts to test. The well-known financial behaviourist Warner De Bont, for instance, recently reported substantial evidence that the public expects the continuation of past price trends. That is, they are bullish in bull markets and pessimistic in bear markets. Perhaps within a decade or more, the fragmentation of technical analysis into such a wide-ranging array of increasingly complex, widely differing formulae will cause a gradual movement away from the entire quasi-science back to some form of more fundamental evaluation.

Key words

- Fundamental analysis
- Technical analysis
- Industry analysis
- Economy analysis
- Company analysis
- Return
- EPS
- P/E Ratio
- Dow Theory
- Charts
- Price indicators

Summary

A commonly advocated procedure for fundamental analysis involves a 3 – step analysis: macroeconomic analysis, industry analysis, and company analysis. In a globalised business environment, the top-down analysis of the prospects of a firm must begin with the global economy. There are two broad classes of macroeconomic policies, viz. demand side policies and supply side policies. Fiscal and monetary policies are the two major tools of demand side economics. Fiscal policy is concerned with the spending and tax initiatives of the government. Monetary policy is concerned with money supply and interest rates. The macroeconomy is the overall economic environment in which all firms operate.

The term *Technical analysis* is used to mean fairly wide range of techniques, all based on the concept that past information on prices and trading volume of stocks gives the enlightened investor a picture of what lies ahead. It attempts to explain and forecast changes in security prices by studying only the market data rather than information about a company or its prospects as is done by fundamental analyst. John Magee, whose book *Technical Analysis of Stock Trends* is considered a classic for technical analysts, says "The technician has elected to study, not the mass of fundamentals, but certain abstraction, namely the market data alone.

Fundamentalists study the cause, not the "should". They make their decisions on quality, value and depending on their specific investment goals, the yield or growth potential of the security. They are concerned with the basis, the corporation's financial strength, record of growth in sales and earnings, profitability, the investment acceptance and so on. They also take into account the general business and market conditions. Finally they interpret these data inductively to determine the current value of the stock and then to project its future price. Fundamentalists are patient and seldom expect meaningful profits in less than one year.

The technicians must (1) identify the trend, (2) recognize when one trend comes to an end and prices start in the opposite direction. His central problem is to distinguish between reversals within a trend and real changes in the trend itself. This problem of sorting out price changes is critical since prices do not change in a smooth, uninterrupted fashion.The two variables concerning groups of stocks or individual stocks are : (1) Behaviour of prices, and (2) Volume of trading contributing to and influenced by changing prices. One school of thought led by William L. Jiler developed a comprehensive technique called "Chart Reading". Charts provide visual assistance detecting the emerging and changing patterns and changing patterns of price behaviour. Technical analysts use three basic type of charts. Line Charts, Bar Charts, Point and Figure Charts The trouble with most chart patterns is that they cause their followers to change their opinion so frequently. Most chart service change like the wind. One day they put out a strong buy signal, two weeks later, they see a change in the pattern and tell their clients to sell, then two weeks later, they tell them to buy again. The result is that these patterns force their followers in and out of the market time and time again. Though this is great for brokers' commission, but not so great for the investor. Most of the technical indicators make sense when examined individually but when once examines many technical indicators simultaneously, the interpretation of their collective meaning is often contradictory and confusing. Once technical analyst issued the following report : The breadth of the market remains pretty bearish, but the odd-lot index is still in balance and is more bullish than bearish. While the short interest is not bearish, brokers loans are at a dangerously high level.

Short questions :

1. Define fundamental analysis.
2. Mention the basic assumptions of Technical analysis.
3. What is economic forecasting?
4. Define EIC analysis?
5. Define Diffusion index?
6. What are the factors which influences on economic analysis?

7. What are the 0pportunities and threats in macro economic Environment? Explain in detail.
8. Write a brief note on technical analysis and Assumptions
9. What is the difference between Technical and Fundamental analysis
10. Write Origins and Development of Technical analysis
11. What are the Techniques of Technical analysis?
12. What do you mean Market indicators?
13. Write a short note on Old Puzzles and New Developments: Fibonacci Numbers, The Dow Theory, Elliott wave Principles; Kondratev Wave Theory, Chaos theory, neutral Net works
14. Write on Charting as a Technical Tools: Types of charts, Important chart patterns
15. Define and explain Moving Average Convergence Divergence (MACD)
16. *Write on major uses of moving averages. What are the Technical analysis indicators and oscillators?*
17. Define an oscillator
18. Write on Relative Strength Index
19. What are the Limitations of charts and Criticisms of technical analysis
20. Write on the future of technical analysis

Objective questions:

1. In a major bull market move there takes place five successive movements, according to _______ principle (Kondratev ; Eliott ; Chaos)

1. ________ analysis is based on past information of prices and trading volume of stocks. (Economic ; Fundamental ; Technical)
2. ________developed a comprehensive technique called "Chart Reading". **(William L. Jiler ; Rosenberg ; Charles Dow)**
3. ______________, for instance, recently reported substantial evidence that the public expects the continuation of past price trends. **(Warner De Bont; Nikolay Kondratev; Hamilton Bolton)**
4. ________ is to measure the intrinsic value of a stock with the help of the company's financial information. (Fundamental analysis; Technical analysis ; Industry analysis)
5. ____________ identified long-term business cycles with a period of 50-60 years. **(Kondratev ; Dow theory ; Moving Average)**

   [Answers : Objective questions : 1. b ; 2. b ; 3. a ; 4. a ; 5. a ; 6. a]

3.4 CAPITAL ASSET PRICING MODEL

Introduction to CAPM

William F. Sharpe and John Litner developed the Capital Asset Pricing Model (CAPM). The model is based on the portfolio theory developed by Harry Markowitz. The model emphasises the risk factor in portfolio theory which is a combination of two risks , systematic risk and unsystematic risk. The model suggests that a security's return is directly related to its systematic risk which cannot be neutralised through diversification. The combination of both types of risks stated above provides the total risk. The total variance of returns is equal to market related variance plus company's specific variance. CAPM explains the behaviour of security prices and provides a mechanism whereby investors could assess the impact of a proposed security investment on the overall portfolio risk and return. CAPM suggests that the prices of securities are determined in such a way that the risk premium or excess return are proportional to systematic risk, which is indicated by the beta coefficient. The model is used for analysing the risk-return implications of holding securities.

CAPM vs. Other Market Models

CAPM refers to the way in which securities are valued in line with their anticipated risks and returns. A risk averse investor prefers to invest in risk free securities. A small investor having few securities in his portfolio, risk is greater. To reduce the unsystematic risk, he must build up well diversified securities in his portfolio.

The asset return depends on the amount for the asset today. The price paid must ensure that the market portfolio's risk / return characteristics improve when the asset is added to it. The CAPM is a model which derives the theoretical required return (i.e. discount rate) for an asset in a market, given the risk-free rate available to investors and the risk of the market as a whole.

The CAPM is usually expressed:

$$E(R_i) = R_f + \beta_i (E(R_m) - R_f)$$

β, Beta, is the measure of asset sensitivity to a movement in the overall market; Beta is usually found via regression on historical data. Betas exceeding one signify more than average "riskiness"; betas below one indicate lower than average.

$\lfloor E(R_m) - R_f \rfloor$ is the market premium, the historically observed excess return of the market over the risk-free rate.

Once the expected return, $E(r_i)$, is calculated using CAPM, the future cash flows of the asset can be discounted to their present value using this rate to establish the correct price for the asset. (*Here again, the theory accepts in its assumptions that a parameter based on past data can be combined with a future expectation.*)

Assumptions of CAPM

Assumptions to Capital Asset Pricing Model

Because the CAPM is a theory, we must assume for argument that...

1. All assets in the world are traded
2. All assets are infinitely divisible
3. All investors in the world collectively hold all assets
4. For every borrower, there is a lender
5. There is a riskless security in the world

6. All investors borrow and lend at the riskless rate
7. Everyone agrees on the inputs to the Mean-STD picture
8. Preferences are well-described by simple utility functions
9. Security distributions are normal, or at least well described by two parameters
10. There are only two periods of time in our world

The asset return depends on the amount for the asset today. The price paid must ensure that the market portfolio's risk / return characteristics improve when the asset is added to it. The CAPM is a model which derives the theoretical required return (i.e. discount rate) for an asset in a market, given the risk-free rate available to investors and the risk of the market as a whole.

A more risky stock will have a higher beta and will be discounted at a higher rate; less sensitive stocks will have lower betas and be discounted at a lower rate. In theory, an asset is correctly priced when its observed price is the same as its value calculated using the CAPM derived discount rate. If the observed price is higher than the valuation, then the asset is overvalued; it is undervalued for a too low price.

Mathematically:

(1) The incremental impact on risk and return when an additional risky asset, **a**, is added to the market portfolio, **m**, follows from the formulae for a two asset portfolio. These results are used to derive the asset appropriate discount rate.

Risk = $\left(w_m^2 \sigma_m^2 + [w_m^2 \sigma_m^2 + 2w_m w_a \rho am \sigma_a \sigma_m]\right)$

Hence, risk added to portfolio = $[w_m^2 \sigma_m^2 + 2w_m w_a \rho am \sigma_a \sigma_m]$

but since the weight of the asset will be relatively low, $w_m^2 \approx 0$

i.e. additional risk = $[2w_m w_a \rho am \sigma_a \sigma_m]$

Return = $(w_m E(R_m) + [w_a E(R_a)])$

Hence additional return = $[w_a E(R_a)]$

(2) If an asset, **a**, is correctly priced, the improvement in risk to return achieved by adding it to the market portfolio, **m**, will at least match the gains of spending that money on an increased stake in the market portfolio. The assumption is that the investor will purchase the asset with funds borrowed at the risk-free rate, R_f; this is rational if

$E(R_a) > R_f$

Thus

$$[w_a (E(R_a) - R_f]/[2w_a w_a \rho_{am} \sigma_a \sigma_m] = [w_a (E(R_m) - R_f)]/[2w_m w_a \sigma_m \sigma_m]$$

$$\text{i.e.}: [E(R_a)] = R_f + [E(R_m) - R_f] * [\rho_{am} \sigma_a \sigma_m]/[\sigma_m \sigma_m]$$

$$\text{i.e.}: [E(R_a)] = R_f + [E(R_m) - R_f] * [\sigma_{am}]/[\sigma_{mm}]$$

$[\sigma_{am}]/[\sigma_{mm}]$ is the "beta", â — the covariance between the asset and the market compared to the variance of the market, i.e. the sensitivity of the asset price to movement in the market portfolio

This is a long list of requirements, and together they describe the capitalist's ideal world. **Everything** may be bought and sold in perfectly liquid fractional amounts. There is a perfect, safe haven for risk-averse investors i.e. the riskless asset. This means that everyone is an equally good credit risk! No one has any informational advantage in the CAPM world. Everyone has already generously shared all of their knowledge about the future risk and return of the securities, so no one disagrees about expected returns. All customer preferences are an open book — risk attitudes are well described by a simple utility function. There is no mystery about the shape of the future return distributions. Last but not least, decisions are not complicated by the ability to change your mind through time. You invest irrevocably at one point, and reap the rewards of your investment in the next period — at which time you and the investment problem cease to exist. Terminal wealth is measured at that time. I.e. he who dies with the most toys wins! The technical name for this setting is "A frictionless one-period, multi-asset economy with no asymmetric information."

Investment Implications

CAPM tells us that all investors will want to hold "capital-weighted" portfolios of global wealth. In the 1960's when the CAPM was developed, this solution looked a lot like a portfolio that was already familiar to many people: the S&P 500. The S&P 500 is a capital-weighted portfolio of most of the U.S.'s largest stocks. At that time, the U.S. was the world's largest market, and thus, it seemed to be a fair approximation to the "cake." Amazingly, the answer was right under our noses — the tangency portfolio must be something like the S&P 500! Not co-incidentally, widespread use of index funds began about this time. Index funds are mutual funds and/or money managers who simply match the performance of the S&P. Many institutions and individuals discovered the virtues of indexing. Trading costs were minimal in this strategy: capital-weighted portfolios automatically adjust to changes in value when stocks grow, so that investors need not change their weights all the time — it is a "buy-and-hold" portfolio. There was also little evidence at the time that active portfolio management beat the S&P index — so why not?

Is the CAPM true?

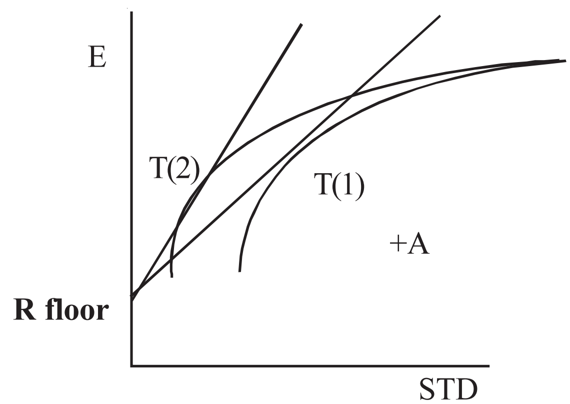
Any theory is only strictly valid if its assumptions are true. There are a few nettlesome issues that call into question the validity of the CAPM:

- Is the world in equilibrium?
- Do **you** hold the value-weighted world wealth portfolio?
- Can you even come close?
- What about "human capital?"

While these problems may violate the letter of the law, perhaps the spirit of the CAPM is correct. That is, the theory may be a good prescription for investment policy. It tells investors to choose a very reasonable, diversified and low cost portfolio. It also moves them into global assets, i.e. towards investments that are not too correlated with their personal human capital. In fact, even if the CAPM is approximately correct, it will have a major impact upon how investors regard individual securities. Why?

Portfolio Risk

Suppose you were a CAPM-style investor holding the world wealth portfolio, and someone offered you another stock to invest in. What rate of return would you demand to hold this stock? The answer before the CAPM might have depended upon the standard deviation of a stock's returns. After the CAPM, it is clear that you care about the effect of this stock on the TANGENCY portfolio. The diagram shows that the introduction of asset A into the portfolio will move the tangency portfolio from T(1) to T(2).



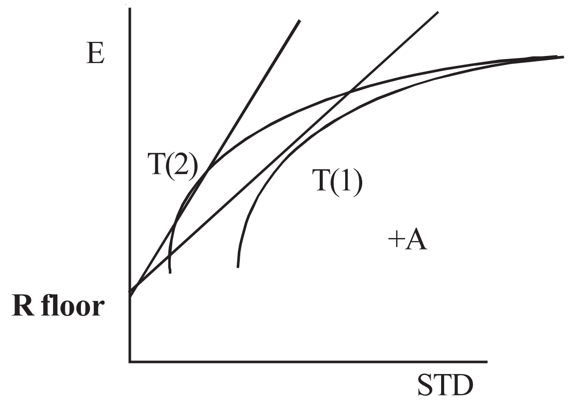
The extent of this movement determines the price you are willing to pay (alternately, the return you demand) for holding asset A. The lower the average correlation A has with the rest of the assets in the portfolio, the more the frontier, and hence T, will move to the left. This is good news for the investor — if A moves your portfolio left, you will demand lower expected return because it improves your portfolio risk-return profile. This is why the CAPM is called the "Capital Asset **Pricing** Model." It explains relative security prices in terms of a security's contribution to the risk of the whole portfolio, not its individual standard deviation.

The CAPM is a theoretical solution to the identity of the tangency portfolio. It uses some ideal assumptions about the economy to argue that the capital weighted world wealth portfolio is the tangency portfolio, and that every investor will hold this same portfolio of risky assets. Even though it is clear they do not, the CAPM is still a very useful tool. It has been taken as a prescription for the investment portfolio, as well as a tool for estimating an expected rate of return. In the next chapter, we will take a look at the second of these two uses.

Further Explorations of the Capital Asset Pricing Model

I. Risk-Return Tradeoff: A Technical Aside

Recall from last chapter that, when investors are well-diversified, they evaluate the attractiveness of a security based upon its contribution to portfolio risk, rather than its volatility *per se*. The intuition is that an asset with a low correlation to the tangency portfolio is desirable, because it shifts the frontier to the left.



This institution was formalized by Stephen Ross in an article called *Finance*, published in *The New Palgrave*. It is a simple argument that shows the theoretical basis for the "pricing" part of the Capital Asset Pricing Model.

Here goes: Suppose you are an investor who holds the market portfolio m and you are considering the purchase of a quantity dx of asset A, by financing it via borrowing at the riskless rate. This augments the return of the market portfolio by the quantity:

$$dE_m = [E_A - R_f]dx$$

Where **d** symbolizes a small quantity change. This investment also augments the variance of the market portfolio. The variance of the market portfolio after adding the new asset is:

$$v + dv = v + 2dx\ cov(A,m) + (dx)^2\ var(a)$$

The change in the variance is then:

$$dv = 2\ dx\ cov(A,m) + (dx)^2\ var(A)$$

For small dx's this is approximately:

$$dv = 2\ dx\ cov(A,m)$$

This gives us the risk-return tradeoff to investing in a small quantity of A:

Risk-Return Tradeoff for A $= dE_m/dv = [E_A - R_f]dx / 2\ dx\ cov(A,m)$

Risk-Return Tradeoff for A $= dE_m/dv = [E_A - R_f]/ 2\ cov(A,m)$

Now, if the expected return of asset A is in equilibrium, then an investor should be indifferent between augmenting his or her portfolio with a quantity of A and simply levering up the existing market portfolio position. If this were NOT the case, then either the investor would not be willing to hold A, or A would dominate the portfolio entirely. We can calculate the same Risk-Return Tradeoff for buying dx quantity of the market portfolio P instead of security A.

Risk-Return Tradeoff for P $= dE_m/dv = [E_m - R_f]/ 2\ var(m)$

The equations are almost the same, except that the cov(A,m) is replaced with var(m). This is because the covariance of any security with itself is the variance of the security. These Risk-Reward Tradeoffs must be equal:

$$[E_A - R_f]/ 2\ cov(A,m) = [E_m - R_f]/ 2\ var(m)$$

Thus, [E $_A$ - R$_f$] = [cov(A,m)/var(m)][E $_m$ - R$_f$]

The value cov(A,m)/var(m) is also known as the **ß** of A with respect to m. **ß** is a famous statistic in finance. It is functionally related to the correlation and the covariance between the security and the market portfolio in the following way:

$$\beta = \rho_{i,m}\frac{\sigma_i}{\sigma_m} = \frac{\sigma_{i,m}}{\sigma_m^2}$$

II. A Model of Expected Returns

In the preceding example, notice that we used the expression *expected* returns. That is, we found an equation that related the expected future return of asset A (in excess of the riskless rate) to the expected future return of the market (in excess of the riskless rate). This expected return is the return that investors will demand when asset prices are in the equilibrium described by the CAPM. For any asset i, the CAPM argues that the appropriate rate at which to discount the cashflows of the firm is that same rate that investors demand to include the security in their portfolio:

$$E[R_i] = R_f + \beta_i(E[R_m] - R_f)$$

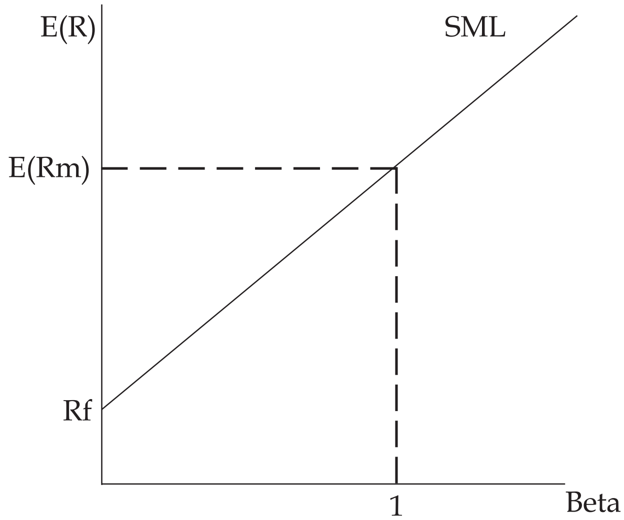
One surprising thing about this equation is what is **not** in it. There is no measure of the security's own standard deviation. The CAPM says that you do not care about the volatility of the security. You only care about its beta with respect to the market portfolio! Risk is now re-defined as the quantity of exposure the security has to fluctuations in the market portfolio.

Assessing the CAPM

The CAPM is a classical model in finance. It is an equilibrium argument that, if true, answers most important investment questions. It tells us where to invest, how to invest and what discount rate to use for project cash flows. Not only that, it is a disarmingly simple model. The expected return of a security depends upon a simple statistic: ß. The relationship between risk and return is linear. Calculation of portfolio risk is trivial. At the same time, the CAPM is revolutionary. It tells us that the variance of a project is NOT a factor in determining the appropriate, risk-adjusted discount rate. It turns financial research from roll-up-your-sleeves fundamental analysis into a statistics problem. In short, the CAPM turned Wall Street on its head.

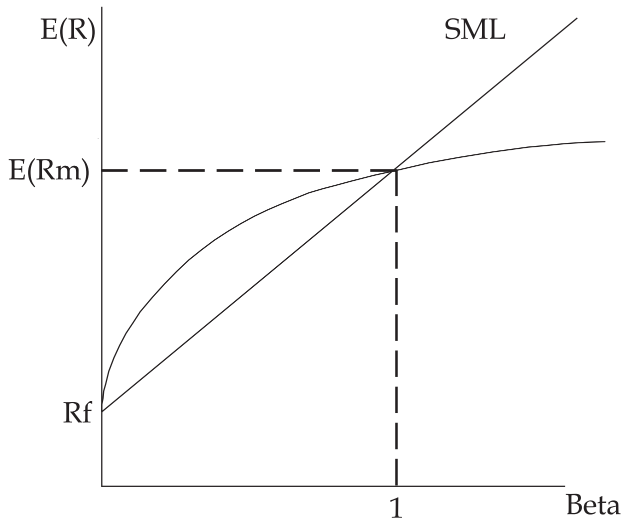
Security Market Line (SML)

The CAPM equation describes a linear relationship between risk and return. Risk, in this case, is measured by beta. We may plot this line in mean and ß space: The security Market Line (SML) expresses the basic theme of the CAPM i.e., expected return of a security increases linearly with risk, as measured by 'beta'. The SML is an upward sloping straight line with an intercept at the risk free return securities and passes through the market portfolio. The upward slope of the line indicates that greater excepted returns accompany higher levels of beta. In equilibrium, each security or portfolio lies on the SML figure 33.3 shows that the return expected from portfolio or investment is a combination of risk free return plus risk premium. An investor will come forward to take risk only if the return on investment also includes risk premium. CAPM provides an intuitive approach for thinking about the return that an investor should require on an investment, given the asses systematic or market risk.



One remarkable fact that comes from the linearity of this equation is that we can obtain the beta of a **portfolio** of assets by simply multiplying the betas of the assets by their portfolio weights. For instance the beta of a 50/50 portfolio of two assets, one with a beta of .8 and the other with a beta of 1 is .9. Easy The line also extends out infinitely to the right, implying that you can borrow infinite amounts to lever up your portfolio.

Why is the line straight? Well, suppose it curved, as the blue line does in the figure below. The figure shows what could happen. An investor could borrow at the riskless rate and invest in the market portfolio. Any investment of this type would provide a higher expected return than a security which lies on the curved line below. In other words, the investor could receive a higher expected return for the same level of systematic risk. In fact, if the security on the curve could be sold short, then the investor could take the proceeds from the short sale and enter into the levered market position –



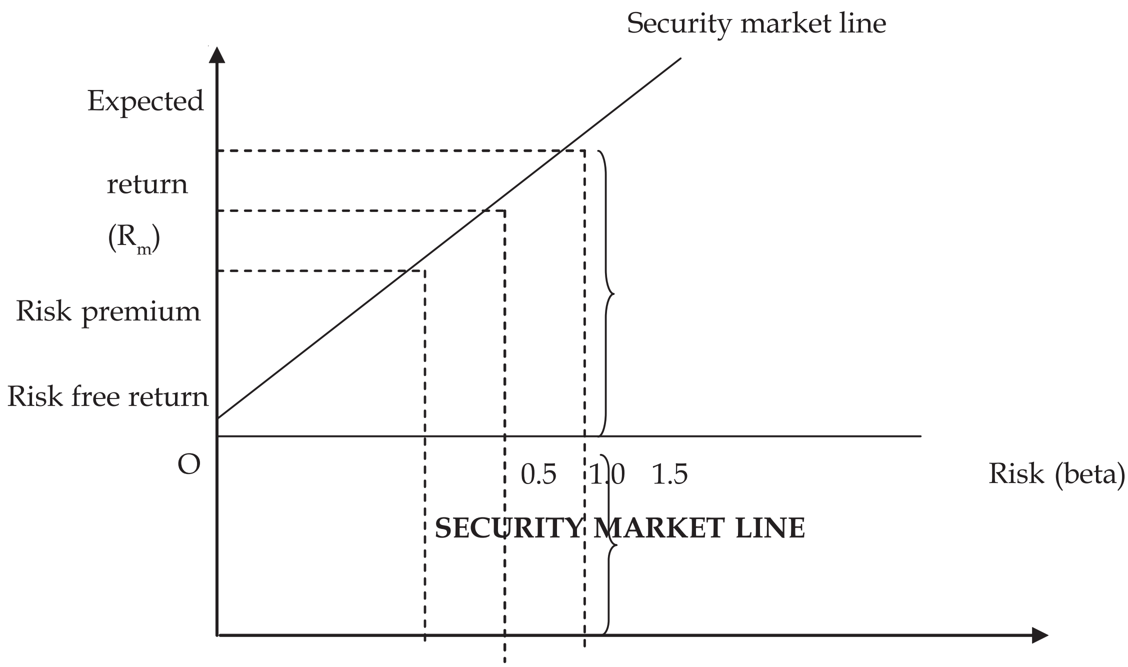
generating an arbitrage in expectation.

Expectations vs. Realizations

It is important to stress that the vertical dimension in the security market line picture is **expected** return. Things rarely turn out the way you expect. However, the CAPM equation also tells us about the **realized** rate of return. Since the realization is just the expectation plus random error, we can write:

$\mathbf{R_i = R_f + ß_i [R_m - R_f] + e_i}$

This is useful, because it tells us that when we look at past returns, they will typically deviate from the security market line — not because the CAPM is wrong, but because random error will push the returns off the line. Notice that the realized R_m does not have to behave as expected, either. So, even the slope of the security market line will deviate from the average equity risk premium. Sometimes it will even be negative!



SECURITY MARKET LINE

CAPM shows the risk and return relationship of an investment in the formula given below:

$E(R_i) = R_f + \beta_i (R_m - R_f)$

Where,

$E(R_i)$ = Expected rate of return on any individual security (or portfolio of securities)

R_f = Risk free rate of return

R_m = Expected rate of return on the market portfolio

$R_m - R_f$ = Risk Premium

β_i = Market sensitivity index of individual security (or portfolio of securities)

Capital Market Line (CML)

The Markowitz mean-variance model is modified by introducing into the analysis the concept of risk-free asset. If it is assumed that the investor has access to risk-free securities (for example, Treasury bills) in addition to the universe of risky securities, then he can construct a new set of portfolios as depicted by the line $R_f M$. At point R_f the investor is investing all his investible fund in risk-free securities, whilst at point M he is holding an all-equity portfolio. The combination of risk-free investment and risky investments in portfolio which may be achieved by points between these two limits are termed 'lending portfolios. Let us now assume that the investor can lend and borrow funds at the same risk-free interest rate. In such circumstances the efficiency boundary simply becomes the straight line drawn from R_f which is a tangent to the original risky portfolio efficiency boundary. The efficiency boundary that arises out of this assumption of the identical risk free lending and borrowing rates leads to some very important conclusions and is termed as 'Capital Market Line' (CML).

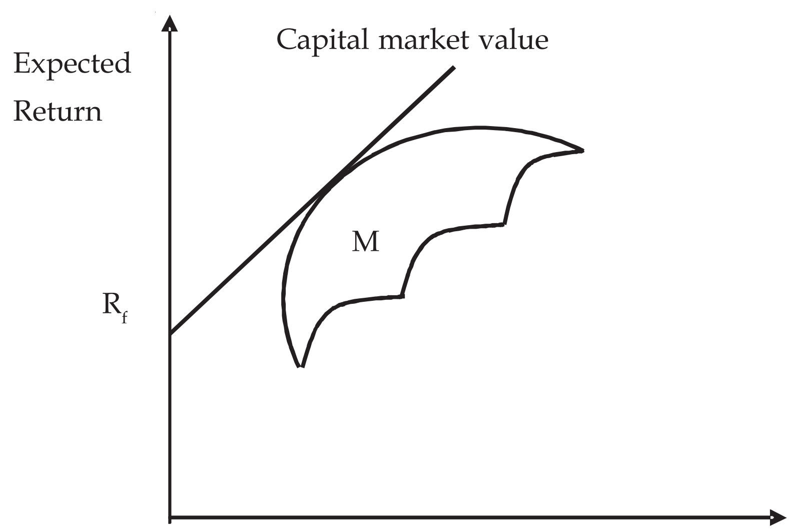


Illustration 4

Dummy Ltd., an investment company has invested in equity shares of a blue chip company. It's Risk free rate of return (R_f) = 10% , Expected total return (R_m) = 16%, Market sensitivity index (β) =1.50, (of individual security)

Calculate the expected rate of return on the investment make in the security.

Solutions;

Total expected return (R_m)	= 16%
Risk free return(R_f)	= 10%
Risk premium (R_m - R_f)	= 6%

$$E(R_i) = R_f + \beta_i (R_m - R_f)$$

10 + 1.50 (16-10) = 19%

Illustration 5

Mr. Rakesh provides you following information compute expected return by using CAPM

$R_m = 16\%$ R_f 9% $\beta_1 = 0.8\%$

Solutions;

The expected return on portfolio

$E(R_1) = R_f + \beta_1 (R_m - R_f)$

$= 9 + 0.8 (16-9) = 14.6\%$

Characteristic Line

A rational investor would not invest in an asset which does not improve the risk-return characteristics of his existing portfolio. Since a rational investor would hold the market portfolio, the asset in question will be added to the market portfolio. MPT derives the required return for a correctly priced asset in this context.

Specific risk is the risk associated with individual assets - within a portfolio these risks can be reduced through diversification (specific risks "cancel out"). Systematic risk, or market risk, refers to the risk common to all securities - except for selling short as noted below, systematic risk cannot be diversified away (within one market). Within the market portfolio, asset specific risk will be diversified away to the extent possible. Systematic risk is therefore equated with the risk (standard deviation) of the market portfolio.

Since a security will be purchased only if it improves the risk / return characteristics of the market portfolio, the risk of a security will be the risk it adds to the market portfolio. In this context, the volatility of the asset, and its correlation with the market portfolio, is historically observed and is therefore a given (there are several approaches to asset pricing that attempt to price assets by modelling the stochastic properties of the moments of assets' returns - these are broadly referred to as conditional asset pricing models). The (maximum) price paid for any particular asset (and hence the return it will generate) should also be determined based on its relationship with the market portfolio.

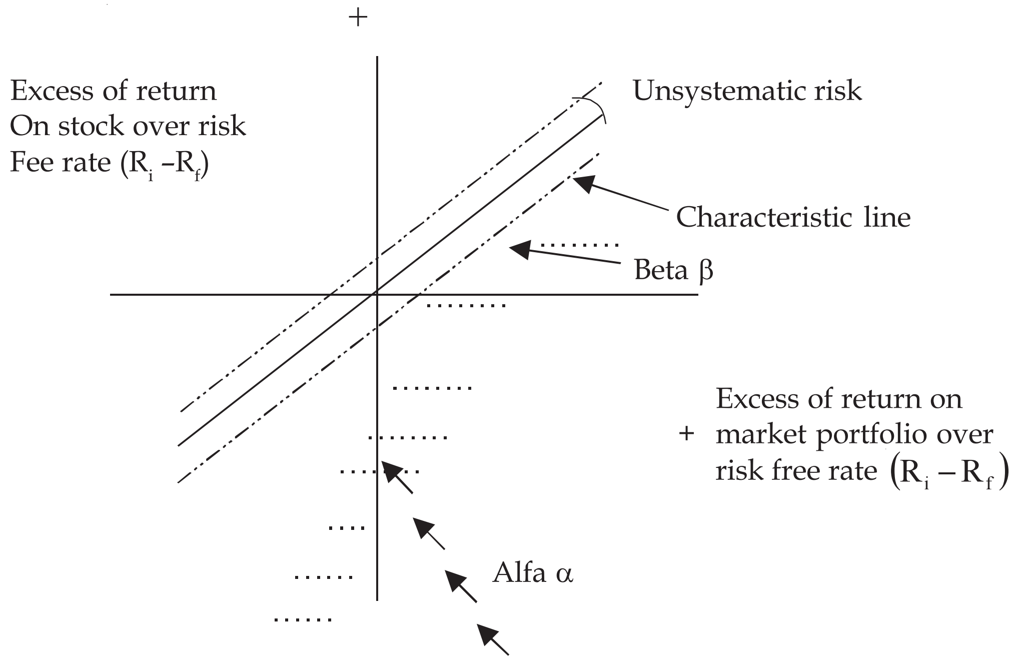
Systematic risks within one market can be managed through a strategy of using both long and short positions within one portfolio, creating a "market neutral" portfolio.

The **Security Characteristic Line** (**SCL**) represents the relationship between the **market return** (r_M) and the return of a given asset i (r_i) at a given time *t*. In general, it is reasonable to assume that the SCL is a straight line and can be illustrated as a statistical equation:

$$SCL: r\,it = \alpha_i + \beta ir\ mt + \in it$$

where α_i is called the asset's alpha coefficient and β_i the asset's beta coefficient

A line that best fits the points representing the returns on the assets and the market is called 'characteristic line'. The slope of the line is the beta of the asset which measures the risk of a security relative to the market. Beta coefficient (p) describes the slope of the characteristic toe and so indicates the degree to which the individual security's risk premium reacts to changes in the market portfolio's risk premium. The greater the beta coefficient value the greater the slope of the characteristic line, greater the systematic risk for an individual security The slope of the characteristic line (regression line) is obtained statistically and it shows the relationship of an individual security with the market.



CHARACTERISTIC LINE

It is observed from the graph that greater the expected return for the market, the greater the expected excess for the stock. The characteristic line equation for the individual security is given below:

$$R_i - R_f = \sigma_1 + \beta_1 (R_m - R_f)$$

Illustration 7

The rates of return on the security of Company wipro and market portfolio for 10 periods are given below:

Period	Return of Security Wipro (%)	Return on market portfolio (%)
1	20	22
2	22	20
3	25	18
4	21	16
5	18	20
6	-5	8
7	17	-6
8	19	5
9	-7	6
10	20	11

(i) What is the beta of Security wipro?

(ii) What is the characterstic line for security Wipro?

Solution:

(i)

Period	R_x	R_m	$(R_x - \bar{R}_x)$	$(R_m - \bar{R}_m)$	$(R_x - \bar{R}_x)(R_m - \bar{R}_m)$	$(R_m - \bar{R}_m)^2$
1	20	22	5	10	50	100
2	22	20	7	8	56	64
3	25	18	10	6	60	36
4	21	16	6	4	24	16
5	18	20	3	8	24	64
6	-5	8	-20	-4	80	16
7	17	-6	2	-18	-36	324
8	19	5	4	-7	-28	49
9	-7	6	-22	-6	132	36
10	20	11	5	-1	-5	1
	150	120	0	0	357	706
	$\sum R_x$	$\sum R_m$			$\sum (R_x - \bar{R}_x)(R_m - \bar{R}_m)$	$\sum (R_m - \bar{R}_m)^2$

$\bar{R}_x = 15, \bar{R}_m = 12$

$$\sigma^2_m = \frac{\sum (R_m - \bar{R}_m)^2}{n-1} = \frac{706}{9} = 78.44$$

$$\text{Cov} = \frac{\sum (R_x - \bar{R}_x) \times (R_m - \bar{R}_m)}{n-1} = \frac{357}{9} = 39.67$$

$$\beta = \frac{\text{Cov}_{xm}}{\sigma^2_m} = \frac{39.67}{78.44} = 0.506$$

(ii) $Y = \alpha + \beta x$

$15 = \alpha + (0.506 \times 12)$

$\alpha = 15 - (0.506 \times 12) = 8.928\%$

Characteristic Line for Security X = $\alpha + (\beta \text{ X } R_m)$

Where R_m = Expected return on market index

∴ Characteristic Line for Security X = 8.928+0.506 R_m

Alpha Coefficient

The alpha coefficient (a) gives the vertical intercept point of the regression line. In a perfect world, the alpha for an individual stock should be zero and the regression line should go through the graph's origin where the horizontal and vertical axis crosses.

If the alpha were positive, the opposite equilibrium process would occur; investors would rush to buy the security which cause the price of the security to rise and the expected rate on it to fall.

Beta Coefficient

The risk of an individual security can be estimated under CAPM model. The market related risk which is also called as 'systematic risk' is unavoidable even by diversification of the portfolio. The systematic risk of an individual security is measured in terms of its sensitivity to market movements which is referred to as security's beta ((3.). Investors can avoid or eliminate the unsystematic risk by investing funds in wide range of securities and by having well diversified portfolio. Beta coefficient is a measure of the volatility of stock price in relation to movement in stock index of the market, therefore, beta is the index of systematic risk.

$$\beta_1 = \frac{Cov_{im}}{Var_m} = \frac{\sigma_i \sigma_m Cor_{im}}{\sigma_m^{\ 2}} = \frac{\sigma_i \sigma_m Cor_{im}}{\sigma_m}$$

Where,

β_1 = Beta of individual security

Cov_{im} = Covariance of returns of individual security with market portfolio

Var_m =Variance of returns of market portfolio $(\sigma_m^{\ 2})$

Cov_{im} = Correlation coefficient between the returns of individual security and the market portfolio

σ_i = Standard deviation of returns of individual security

σ_m = Standard deviation of returns of market portfolio

A beta coefficient is a relative measure of the sensitivity of an assets' return to changes in the return on the market portfolio. Mathematically, the beta coefficient of a security is the security's covariance with the market portfolio divided by the variance of the market portfolio. The beta factor is the measure of volatility of systematic risk of a security or investment in the portfolio. The beta factor of the market as a whole is 1.0. A beta of 1.0 indicates average level of risk while more or less than that the security's return fluctuates more or less than that of market portfolio. A zero beta means no risk. The degree of volatility is expressed as follows:

- If the beta is one, then it has the same risk profile as the market as a whole, the average risk profile.
- If the beta is less than one, it is not as sensitive to systematic or market risk as the average investment.

- If beta is more than one, it is more sensitive to the market or systematic risk than the average investment.

Beta Factor of a Market Portfolio

If the return from the market portfolio rises or falls, we should expect a corresponding rise or fall in the return from an individual share. The amount of this corresponding rise or fall depends on the beta factor of the share. The beta factor of an investor's portfolio is the total of the weighted average beta factors of each security in the portfolio. As the market portfolio represents all shares on the stock market, it follows that the beta coefficient of the market portfolio must be 1, and all other betas are viewed relative to this value. Thus, if the return from the market portfolio rise by says 2%, the coefficient would be:

$$\frac{Increase in return on Investment}{Increase in return on market portfolio} = \frac{2\%}{2\%} = 1$$

CAPM indicates the expected return of a particular security in view of its systematic or market risk. The value of a share price is determined in relation to investment in shares of individual companies, rather than as a portfolio. In practice, for estimation of beta factor the following regression equation is used:

$$R_i = \alpha_i + \beta_i R_m + e_i$$

Where,

R_i = Rate of return of individual security

α_1 = The interest that equals the risk free rate (R_f)

β_i = Beta factor of he individual security

R_m = Market of return

e_I = Random error, which reflects the diversifiable risk of individual security

Illustration 9

WIPRO provides you following information, calculate the expected rate of return of a portfolio:

Expected market return	15%
Risk-free rate of return	9%
Standard deviation of an asset	2.4%
Market Standard deviation	2.0%
Correlation co-efficient of portfolio with market	0.9

Solution:

Calculation Market Sensitivity Index (β_i)
Since, market sensitivity index is not given in the problem, it is calculated by applying the following formula:

$$\beta_i = \frac{\sigma_i}{\sigma_m} = r_m$$

Where, β_i = Market sensitivity index or Beta factor

σ_i = Standard deviation of an asset Ie., 0.024

σ_m = Market Standard deviation i.e. 0.02

r_{im} = Correlation coefficient of portfolio with market i.e. 0.90

$$\beta_i = \frac{0.024}{0.02} \times 0.90 = 1.08$$

we can calculate the expected rate of return of a portfolio by applying capital asset pricing model: $E(R_i) = R_f + \beta_i (R_m - R_f)$

Where,

$E(R_j)$ = Expected rate of return of portfolio

R_f = Risk free rate of return Le., 9%

R_m = Expected return of market portfolio Le. 15%

β_i = Beta coefficient of investment Le. 1.08

By substituting, we get

E(R.) = 9 + 1.08 (15 - 9) = 9 + 1.08(6) = 15.48 or 15.48%

Illustration 10

SCM Portfolio Ltd. has three investments in its portfolio. Its details are given below:

Investment	E(R)	β_i	Proportion of invested funds
Wipro	14%	1.6	50%
SBI	16%	1.2	20%
DCM	12%	0.8	30%

Calculate the weighted average of expected return and Beta factor of the portfolio.

Solution:

Weighted Average of Expected Return of the Total Portfolio:

$E(R_p)$ = (14% X 0.5) + (16% X 0.2) + (12% X 0.3)=7% + 3.2%+3.6%= 13.8%

Weighted Average Market Sensitivity Index of the Total Portfolio:

β_P = (1.6X0.5)+ (1.2X0.2)+ (0.8X0.3)= 0.8 + 0.24 + 0.24 = 1.28

Risk-Return Trade off

$$R_m - r_i = \frac{R_m - R_t}{\sigma_m}$$

Where

R_m = Market rate of return

R_t = Risk free return

σ_m = Standard deviation of returns of market portfolio

r_i = Rate of return on individual investment

Illustration 11.

The beta co-efficient of security 'A' is 1.6. The risk free rate of return is 12% and the required rate of return is 18% on the market portfolio. If the dividend expected during the coming year is Rs. 2.50 and the growth rate of dividend and earnings is 8%, at what price should the security 'A' can be sold based on the CAPM.

Solution :

Expected Rate of Return is calculated by applying CAPM formula:

$E(R_i) = R_f + \beta_i (R_m - R_f)$

$= 12\% + 1.6 (18\% - 12\%) = 12\% + 9.6\% = 21.6\%$

Price of security 'A' is calculated with the use of dividend growth model formula:

$$R_e = \frac{D_1}{P_0} + g$$

Where,

D_1 = Expected dividend during the coming year

R_e = Expected rate of return on security 'A'

g = Growth rate of dividend

P_0 = Price of security 'A'

$$R_e = \frac{D_1}{P_0} + g$$

$$0.216 = \frac{2.50}{P_0} + 0.08$$

$$0.216 = \frac{2.50}{P_0} + \frac{0.08}{1}$$

$$0.216 = \frac{2.50 + 0.08P_0}{P_0}$$

$0.216\,P_0 = 2.50 + 0.08\,P_0$

$0.216\,P_0 - 0.08\,P_0 = 2.50$

$0.136\,P_0 = 2.50$

$P_0 = 2.50/0.136$ = Rs. 18.38

Benefits and Limitations of CAPM

Benefits

CAPM model of portfolio management can be effectively used to:

- Investments in risky projects having real assets can be evaluated of its worth in view of expected return.
- CAPM analyses the riskiness of increasing the levels of gearing and its impact on equity shareholders returns.
- CAPM suggests the diversification of portfolio in minimisation of risk.

CAPM is criticised for the following reasons:

- In real world, assumptions of CAPM will not hold good.
- In practice, it is difficult to estimate the risk free return, market rate of return, and risk premium.
- Investors can estimate the required rate of return on a particular investment in company's securities.
- CAPM is a single period model while most projects are often available only as large indivisible projects. It is therefore more difficult to adjust.

Arbitrage Pricing Model

The Arbitrage Pricing Model (APM) looks very similar to the CAPM, but its origins are significantly different. Whereas the CAPM is a single - factor model, the APM is a multi-factor model instead of just a single beta value; there is a whole set of beta values - one for each factor. Arbitrage Pricing Theory, out of which the APM arises, states that the expected return on an investment is dependent upon how that investment reacts to a set of individual macro-economic factors (the degree of reaction being measured by the betas) and the risk premium associated with each of those macro-economic factors. The APM, which was developed by Ross (1976), holds that there are four factors which explain the risk/risk premium relationship of a particular security.

Basically, CAPM says that:

$E(R_i) = R_f + \beta_i (R_m - R_f)$

Where, λ is the average risk premium = R_m-R_f

$$E(R_i) = R_f + \lambda_1 \beta_{i1} + \lambda_2 \beta_{12} + \lambda_3 \beta_{13} + \lambda_4 \beta_{14}$$

Where,

$\lambda_1 \lambda_2 \lambda_{3,}$ and λ_4 the average risk premium for each of the four factors in the model and β_{il}, β_{i2}, β_{i3} and β_{i4} are measures of the sensitivity of the particular security 'i' to each of the four factors.

Several. factors appear to have been identified as being important (some of which, such as inflation and money supply, industrial production and personal consumption, do have aspects of being inter-related). In particular, researchers have identified:

- Changes in the level of industrial production in the economy
- Changes in the shape of the yield curve

- Changes in the default risk premium (L e., changes in the return required on bonds \ different perceived risks of default)
- Changes in the inflation rate
- Changes in the real interest rate
- Level of personal consumption
- Level of money supply in the economy.

Arbitrage pricing theory (**APT**), in finance, is a general theory of asset pricing, that has become influential in the pricing of shares.

APT holds that the expected return of a financial asset can be modeled as a linear function of various macro-economic factors or theoretical market indices, where sensitivity to changes in each factor is represented by a factor specific beta coefficient . The model derived rate of return will then be used to price the asset correctly - the asset price should equal the expected end of period price discount at the rate implied by model. If the price diverges, arbitrages hould bring it back into line. The theory was initiated by the economist Stephen Rose in 1976.

The APT model

If APT holds, then a risky asset can be described as satisfying the following relation:

$$E(r_j) = r_f + b_{j1}\ RP_1 + b_{j2}\ RP_2 + \ldots + b_{jn}\ RP_n$$

$$r_j = E(r_j) + b_{j1}F_1 + b_{j2}F_2 + \ldots + b_{jn}F_n + \varepsilon_j$$

Where

- $E(r_j)$ is the risky asset's expected return,
- RP_k is the risk premium of the factor,
- r_f is the Risk free
- F_k is the macroeconomic factor,
- b_{jk} is the sensitivity of the asset to factor k, also called factor loading,
- and ε_j is the risky asset's idiosyncratic random shock with mean zero.

Arbitrage and the APT

Arbitrage is the practice of taking advantage of a state of imbalance between two (or possibly more) markets and thereby making a risk free profit.

Arbitrage in expectations

The APT describes the mechanism whereby arbitrage by investors will bring an asset which is mispriced, according to the APT model, back into line with its *expected* price. Note that under true arbitrage, the investor locks-in a *guaranteed* payoff, whereas under APT arbitrage as described below, the investor locks-in a positive *expected* payoff. The APT thus assumes "arbitrage in expectations" - i.e. that arbitrage by investors will bring asset prices back into line with the returns expected by the model portfolio theory.

Arbitrage mechanics

In the APT context, arbitrage consists of trading in two assets – with at least one being mispriced. The arbitrageur sells the asset which is relatively too expensive and uses the proceeds to buy one which is relatively too cheap.

Under the APT, an asset is mispriced if its current price diverges from the price predicted by the model. The asset price today should equal the sum of all future cash flows discounted at the APT rate, where the expected return of the asset is a linear function of various factors, and sensitivity to changes in each factor is represented by a factor-specific beta coefficient

A correctly priced asset here may be in fact a *synthetic* asset - a *portfolio* consisting of other correctly priced assets. This portfolio has the same exposure to each of the macroeconomic factors as the mispriced asset. The arbitrageur creates the portfolio by identifying x correctly priced assets (one per factor plus one) and then weighting the assets such that portfolio beta per factor is the same as for the mispriced asset.

When the investor is long the asset and short the portfolio (or vice versa) he has created a position which has a positive expected return (the difference between asset return and portfolio return) and which has a net-zero exposure to any macroeconomic factor and is therefore risk free (other than for firm specific risk). The arbitrageur is thus in a position to make a risk free profit:

Where today's price is too low:

The implication is that at the end of the period the *portfolio* would have appreciated at the rate implied by the APT, whereas the mispriced asset would have appreciated at *more* than this rate. The arbitrageur could therefore:

Today:

1 Short sell the *portfolio*

2 buy the mispriced-asset with the proceeds.

At the end of the period:

1 sell the mispriced asset

2 use the proceeds to buy back the *portfolio*

3 pocket the difference.

Where today's price is too high:

The implication is that at the end of the period the *portfolio* would have appreciated at the rate implied by the APT, whereas the mispriced asset would have appreciated at *less* than this rate. The arbitrageur could therefore:

Today:

- Short sell the mispriced-asset
- Buy the *portfolio* with the proceeds.
- At the end of the period:
- sell the *portfolio*
- use the proceeds to buy back the mispriced-asset
- pocket the difference.

Relationship with the capital asset pricing model

The APT along with the CAPM is one of two influential theories on asset pricing. The APT differs from the CAPM in that it is less restrictive in its assumptions. It allows for an explanatory (as opposed to statistical) model of asset returns. It assumes that each investor will hold a unique portfolio with its own particular array of betas, as opposed to the identical "market portfolio". In some ways, the CAPM can be considered a "special case" of the APT in that the Security market line represents a single-factor model of the asset price, where Beta is exposure to changes in value of the Market.

Additionally, the APT can be seen as a "supply side" model, since its beta coefficients reflect the sensitivity of the underlying asset to economic factors. Thus, factor shocks would cause structural changes in the asset's expected return, or in the case of stocks, in the firm's profitability.

On the other side, the CAPM is considered a "demand side" model. Its results, although similar to those in the APT, arise from a maximization problem of each investor's utility function, and from the resulting market equilibrium (investors are considered to be the "consumers" of the assets).

Using the APT

Identifying the factors

As with the CAPM, the factor-specific Betas are found via a linear regration of historical security returns on the factor in question. Unlike the CAPM, the APT, however, does not itself reveal the identity of its priced factors - the number and nature of these factors is likely to change over time and between economies. As a result, this issue is essentially empirical in nature. Several a priori guidelines as to the characteristics required of potential factors are, however, suggested:

1. their impact on asset prices manifests in their *unexpected* movements
2. they should represent *undiversifiable* influences (these are, clearly, more likely to be macroeconomic rather than firm-specific in nature)
3. timely and accurate information on these variables is required
4. the relationship should be theoretically justifiable on economic grounds

Chen, Roll identified the following macro-economic factors as significant in explaining security returns:

- surprises in inflation;
- surprises in GNP as indicted by an industrial production index;
- surprises in investor confidence due to changes in default premium in corporate bonds;
- surprise shifts in the yield curve.

As a practical matter, indices or spot or futures market prices may be used in place of macro-economic factors, which are reported at low frequency (e.g. monthly) and often with significant estimation errors. Market indices are sometimes derived by means of factor Analysis. More direct "indices" that might be used are:

- short term interest rates;
- the difference in long-term and short term interest rates;
- a diversified stock index such as the S&P 500
- oil prices
- gold or other precious metal prices
- Currency exchange rates

Questions to ponder:

1. Explain the features and assumptions of CAPM model
2. What Relevance Capital assets pricing module has in modern portfolio management

3. Explain Risk-Return Trade off

1. What are the Benefits and Limitations of CAPM
2. Differentiate Capital Market Line and Security Market Line.
3. State the importance of Beta Coefficient.
4. What is meant by a market portfolio? How would you trade off its risk and return?
5. What is the significance of Alpha coefficient?
6. Explain the assumptions of APT model. How is it considered influential in asset pricing?
7. Define Efficient Frontier
8. Write in detail the relationship of CAPM with APT Model
9. What are the advantages of APT over CAPM? Explain in detail.

Objective Questions:

1. The expected return as per CAPM, when Rm = 22%, Rf = 9%, β = 0.6%.
   (14.6 % ; 16.8% ; 7.8%)
2. Father of Modern Portfolio theory.__________
   (a) John Litner ; (b) Harry Markowitz ; (c) Jensen
3. The security market line depicts the expected return for ________
   (a single portfolio ; all portfolios and assets ; only the efficient portfolio)
4. According to the APT theory , an investor shall increase returns from his portfolio
   (by increasing his funds ; by replacing other assets ; by reducing the risk; without increasing the portfolio funds)
5. The CML represents the relationship between the expected return and _________
   (covariance of the portfolio; standard deviation of the portfolio; sensitivity of the portfolio)
6. The APT Model helps to ________________
   (identify the equilibrium asset price; reduce risk ; eliminate arbitrage)
7. The Security Market Line shows the linear relationship between the expected returns and _______________.
   (alpha of the portfolio ; Betas of the securities ; variance of the portfolio)
8. In an arbitrage portfolio, the change in the proportions of different securities will add upto ________ . (One ; Zero ; Less than One ; Greater than One)

[**Answers:** Objective questions : 1. ; 2.b ; 3 b ; 4. d ; 5. b ; 6. a ; 7. b ; 8. b]

Problems to solve:

1. The following table gives an analyst's expected return on two stocks for particular market returns.

Market Return	Aggressive Stock	Defensive Stock
8%	5 %	8%
22%	32%	8%

A. What are the betas of the two stocks?

B. What is the expected return on each stock if the market return is equally likely to be 8%or 22%?

C. If the risk-free rate is 9% and the market return is equally likely to be 8% or 22% what is the SML.

D. What are the alphas of the two stocks?

2. The returns on the equity stock of an Bajaj Electricals Limited and the market portfolio over a 10 year period are given below.

Year	Return on Bajaj Electricals Ltd. (%)	Return on Market Portfolio (%)
1	15	11
2	-6	2
3	18	15
4	32	26
5	14	18
6	25	30
7	2	-3
8	21	25
9	18	15
10	22	20

(a) Calculate the beta for the stock of Bajaj Electricals Ltd.

(b) Establish the characteristic line for the stock of Bajaj Electricals Ltd.

3. The expected return for the market is 15 percent, with a standard deviation of 25 percent. The risk free rate is 7 percent. The following information is available for four mutual funds, all assumed to be efficient.

Mutual Fund	**Standard Deviation (%)**
Prudent	15
Calibre	22
Obroi	26
Sacrunt	32

(a) Calculate the slope of the capital market line.

(b) Calculate the expected return for each mutual fund.

4. The following table gives an analyst's expected return on two stocks for particular market returns:

Market Return	Aggressive Stock	Defensive Stock
5%	-5%	7%
26%	40%	22%

(a) What are the betas of the two stocks?

(b) What is the expected return on each stock if the market return is equally likely to be 5% and 26%?

(c) If the risk free rate is 8% what is the SML?

(d) What are the alphas of the two stocks?

3.5 PRODUCTS ON STOCK EXCHANGES

Basket Trade:

Basket trades are used by institutional investors or program traders to invest large amounts of money into a particular portfolio or index. A Single order to buy or sell a set of 15 or more securities is referred as Basket Trade. The true lover of derivatives finds them everywhere, under rocks and in the heavens. Indeed, the most surprising things can often be fruitfully interpreted as derivatives. Derivatives can easily become a way of thinking about life.

The Exchange has commenced trading in the Derivatives Segment with effect from June 9, 2000 to enable the investors to, inter-alia, hedge their risks. Initially, the facility of trading in the Derivatives Segment was confined to Index Futures. Subsequently, the Exchange has introduced the Index Options and Options & Futures in select individual stocks. The investors in cash market had felt a need to limit their risk exposure in the market to movement in Sensex.

With a view to provide investors the facility of creating Sensex linked portfolios and also to create a linkage of market prices of the underlying securities of Sensex in the Cash Segment and Futures on Sensex, the Exchange has provided to the investors as well its members, a facility of Basket Trading System on BOLT. In the Basket Trading System, the investors through the members of the Exchange are able to buy/ sell all 30 scrips of Sensex in one go in the proportion of their respective weights in the Sensex. The investors need not calculate the quantity of Sensex scrips to be bought or sold for creating Sensex linked portfolios and this function is performed by the system. The investors can also create their own baskets by deleting certain scrips from 30 scrips in the Sensex. Further, the investors can alter the weights of securities in such profiled baskets and enter their own weights. The investors can also select less than 100% weightage to reduce the value of the basket as per their own requirements.

To participate in this system, the members need to indicate number of Sensex basket(s) to be bought or sold, where the value of one Sensex basket is arrived at by the system by multiplying Rs.50 to prevailing Sensex. For e.g., if the Sensex is 4000, then value of one basket of Sensex would be 4000 x 50= i.e., Rs. 2,00,000/-. The investors can also place orders by entering value of Sensex portfolio to be bought or sold with a minimum value of Rs. 50,000/- for each order.

The Basket Trading System provides the arbitrageurs an opportunity to take advantage of price differences in the underlying Sensex and Futures on the Sensex by simultaneous buying and selling of baskets comprising the Sensex scrips in the Cash Segment and Sensex Futures. This is expected to provide balancing impact on the prices in both cash and futures markets.

The Basket Trading System, thus, meets the need of investors and also improves the depth in cash and futures markets. The facility of Basket Trading has been introduced by the Exchange w.e.f., August 14, 2000. The trades executed under the Basket Trading System on BOLT are subject to intra-day trading and gross exposure limits available to the members. The VaR, MTM margins etc, as are applicable to normal trades in the Cash Segment, are also recovered from the members.

Many derivatives fall into the general categories of forwards, futures and swaps on the one hand and calls and puts on the other. In any case, the market for derivatives is a “zero-sum game” in the sense that total profits and losses across counterparties are zero.

To be sure, while this book uses as examples securities that are commonly considered to be derivatives, the full scope of the subject needs to be appreciated. That is why, at the very outset, we have chosen to list, and briefly discuss, many types of derivatives. We have divided them into thirteen types:

(1) forwards and futures
(2) swaps
(3) exchange-traded calls and puts
(4) explicit corporate options
(5) corporate debt securities
(6) government securities
(7) mortgages and insurance
(8) securities of other financial institutions
(9) exotic options
(10) other financial options
(11) natural resources
(12) capital assets
(13) other non-financial options

Types of derivatives

The most commonly used derivatives contracts are forwards, futures and options, which we shall discuss in detail later. Here we take a brief look at various derivatives contracts that have come to be used.

Forwards: A forward contract is a customized contract between two entities, where settlement takes place on a specific date in the future at today's pre-agreed price.

Futures: A futures contract is an agreement between two parties to buy or sell an asset at a certain time in the future at a certain price. Futures contracts are special types of forward contracts in the sense that the former are standardized exchange-traded contracts.

Options: Options are of two types - calls and puts. Calls give the buyer the right but not the obligation to buy a given quantity of the underlying asset, at a given price on or before a given future date. Puts give the buyer the right, but not the obligation to sell a given quantity of the underlying asset at a given price on or before a given date.

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

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

Warrants: Options generally have lives of upto one year, the majority of options traded on options exchanges having a maximum maturity of nine months. Longer-dated options are called warrants and are generally traded over-the-counter.

LEAPS: The acronym LEAPS means Long-Term Equity Anticipation Securities. These are options having a maturity of upto three years.

Baskets: Basket options are options on portfolios of underlying assets. The underlying asset is usually a moving average or a basket of assets. Equity index options are a form of basket options.

Swaptions: Swaptions are options to buy or sell a swap that will become operative at the expiry of the options. Thus a swaption is an option on a forward swap. Rather than have calls and puts, the swaptions market has receiver swaptions and payer swaptions. A receiver swaption is an option to receive fixed and pay floating. A payer swaption is an option to pay fixed and receive floating.

Debt Market:

The debt raised from the primary markets is predominantly of Government securities on account of borrowing by the Central Government. The other debt instruments constitute a very small percentage of the entire debt market. The debt market in India has not developed as much as the equity market. There is no trading floor where brokers bid and offer debt securities. There is no standardised market lot for purchase and sale of such securities. There is no settlement of transactions by an Exchange. The brokers/traders in the debt market negotiate the deal privately and the deal is struck. This deal is completed by the two parties to the deal. The debt market in India is still not as transparent as the equity market. The predominant security in the debt market is Government security. The debt instrument of corporates, financial institutions and banks constitute a tiny proportion of the entire debt market. The negotiated dealing systems (NDS) have been put in place and the banks, primary dealers and financial institutions having SGL accounts and current accounts with RBI are eligible to participate in NDS. It provides an electronic dealing platform (similar to equity market platform) for these participants in Government securities. It facilitates reporting of trades executed through exchanges. The NDS supports transaction in Government bonds, repos, call money, commercial paper, certificate of deposit and interest rate derivatives. NDS will facilitate submission of bids for auctions of Government securities. It will also facilitate dissemination of information relating to primary issuance through auction/sale on tap and underwriting apart from secondary market.

Segments in Indian Debt Market

Government Securities	67.24
State Loans	7.78
Public Sector Undertaking Bonds	7.00
Mutual Fund Units	6.60
Financial Institutions	5.02
T-Bills	2.90
Corporate Bonds	2.53
Others (Local Debt & Bonds)	0.93
	100.00

Debt Market:

The Debt Markets therefore play a very critical role in any modern economy. And more so in the case of developing countries like India which need to employ a large amount of capital and resources for achieving the desired degree of industrial and financial growth. The Indian Debt Markets are today one of the largest in Asia and includes securities issued by the Government (Central & State Governments), public sector undertakings, other government bodies, financial institutions, banks and corporates. The Indian Debt Markets with an outstanding issue size of close to Rs.14640 Billion (or Rs. 14,64,000 Crores) and a secondary market turnover of around Rs 28500 Billion (in the previous year 2005) is the largest of the Indian financial markets.

The Government Securities (G-Secs) market is the oldest and the largest component of the Indian Debt Market in terms of market capitalization, outstanding securities and trading volumes. The outstanding volumes of Government Securities (Central & State) at the end of March 2005 was around Rs. 14610 billion . The G-Secs. market plays a vital role in the Indian economy as it provides the benchmark for determining the level of interest rates in the country through the yields on the government securities which are referred to as the risk-free rate of return in any economy

Wholesale Debt Market Segment (WDS)

The Reserve Bank of India, vide the following circulars

- DBOD. FSC. BC. No. 39 /24.76.002/2000 dated October 25, 2000
- IDMC. PDRS. PDS. No PDS-2 /03.64.00/2000-01 dated November 13, 2000
- DBS. FID No. C 10 / 01.08.00 / 2000-0122 dated November, 2000

permitted the Banks, Primary Dealers and the Financial Institutions in India to undertake transactions in debt instruments among themselves or with non-bank clients through the members of Bombay Stock Exchange Limited (BSE). This notification paved the way for the Exchange to commence trading in Government Securities and other fixed income instruments. The Wholesale Debt Segment of the Exchange commenced its' operations on June 15, 2001.

The membership of the Debt Segment is being granted only to the Existing (equity segment) Members of the Exchange, who possess a minimum net worth of Rs.1.5 crores.. There is no security deposit applicable for the membership of the Debt Segment. The annual approval/ renewal charges at present is are Rs.25,000/-.(Currently waived)

The BSE Debt Segment offers the market participants in the Wholesale Debt Market an efficient and transparent trading mechanism through it's GILT System. The GILT system is envisaged to become the single point trading platform for all types of Debt securities and instruments. The GILT system will over a period of time provide trading facilities for Central and State Govt. securities, T-Bills, Institutional bonds, PSU bonds, Commercial Paper, Certificates of Deposit, Corporate debt instruments and the new innovative instruments like municipal securities, securitized debt, mortgage loans and STRIPs

GILT facilitates faster and efficient price dissemination through the Touchline of the Trading System. All relevant information which are of crucial importance in the trading process like the Accrued Interest and Delivery Value are readily available in the system A Yield Calculator is made available both separately and as part of the various order Entry and trade reporting screens

Trading, Clearing and Settlement in WDS

The major participants in the Wholesale Debt Market like the Banks, Primary Dealers and Institutions are enabled to execute trades through the Members of the WDS of the Exchange through the participant code (Client Code) allocated to each of them, which is one of the key parameters to be entered by the Member in the GILT system while executing the transaction.

The Settlement for the securities traded in the GILT System is on a Trade by Trade DVP basis. The primary responsibility of settling trades concluded in the wholesale segment rests directly with the participants who would settle the trades executed in the GILT system on their behalf through the Subsidiary Ledger Account of the RBI or the CCIL A/c through the NDS. Each transaction is settled individually and netting of transactions is not allowed. The Exchange monitors the Clearing and Settlement process for all the trades executed or reported through the 'GILT' system. The Members need to report the settlement details to the Exchange for all the trades undertaken by them on the GILT system. The settlements for all the trades executed on the GILT system are on a rolling basis. The Exchange permits settlement on

T+1 basis for all outright secondary market transactions in Government securities from May 24, 2005.

Growth in the WDS: The BSE Debt Segment has shown a gradual but consistent growth in turnover in the past few months with increased participation from the mainstream Banking and Institutional Players. The Wholesale Debt Segment today witnesses active participation today from about 100 Major Banks and Institutions in the Debt Market with Average Daily Turnover of around Rs.50 Crores currently. The Segment expects a sustained rise in turnover and participation in the next few months with the initiation of activity by new Members and the continued support and participation of the major Banks, Primary Dealers and Institutions.

Retail Debt Segment (REDS)

The Retail Debt Markets in the new millennium, presents a vast kaleidoscope of opportunities for the Indian investor whose knowledge and participation hitherto has been restricted to the Equities markets in India.

The development of the Retail Debt Market has engaged the attention of the policy makers, regulators and the Government in the past few years. The potential of the Retail Debt Markets can be gauged from the investor strength of more than 40 million in the Indian Equities market who have powered the tremendous growth and transformation of the stock markets in recent times. Recognizing this opportunity at a very early date, BSE has been consistently in the fore-front of the campaign for the creation of a Retail Debt Market and has consistently expounded the potential and need for the retail trading in G-Secs in the past few years in various important forums and to the key regulatory authorities.

Emergence of the Retail Market: It would be surprising to know that a retail debt market was at one point of time very much present in India. Right through the forties and the fifties and until the early sixties, a good proportion of the holdings of Govt. securities were concentrated with individual investors. Available statistics indicate that more than half of the holdings in Govt. securities was concentrated with retail investors in the early 50s.

Today, there exists an inherent need for households to diversify their investment portfolio so as to include various debt instruments and especially Government securities. The growing investments in the Bond Funds and the Money Market Mutual Funds are a sign of the increasing recognition of this fact by the retail investors.

Retail investors would have a natural preference for fixed income returns and especially so in the current situation of increasing volatility in the financial markets. The Central Government Securities (G-Secs) are the one of the best investment options for an individual investor today in the financial markets due to the following factors:

- Zero Default Risk - due to their sovereign guarantee, ensures the total safety of all investments in G-Secs.
- Lower average volatility in bond prices
- Greater returns as compared to the conventional safe investment avenues like Bank Deposits and Fixed Deposits, which also contain credit risk
- Higher Leverage -Greater borrowing capacity against G-Secs due to their zero risk status.
- Wider range of innovations in the nature of securities like TBills, Index linked Bonds, Partly Paid Bonds and others like STRIPS and Securities with call and put options to follow soon.
- Better and greater features to suit a large range of investment profiles and investor requirements.
- Growing Liquidity and the increased turnover in recent times in the Indian Debt Markets

Retail Trading in G-Secs

The Government of India and RBI, recognizing the need for retail participation had recently announced a scheme for enabling retail participation through a non-competitive bidding facility in the G-Sec auctions with a reservation of 5% of the issue amount for non-competitive bids by retail investors.

The Retail Debt Market Module aims at providing an efficient and reliable trading system for all debt instruments and securities of different types and maturities. The key features of the system are:

1. Trading: by electronic order matching based on price-time priority through the BOLT (BSE OnLine Trading) System with the continuous trading sessions from 9.55 a.m. to 3.30 p.m as is operational in the Equities Segment. Retail Trading in G-secs would be on a Rolling Settlements basis with a T+2 Delivery Cycle.
2. Clearing and Settlement: The Clearing and Settlement mechanism for the Retail trading in G-Secs is based on the existing institutional mechanism available at the Stock Exchanges. The trades executed throughout the continuous trading sessions will be netted out at the end of the trading hours through a process of multilateral netting. The transactions will be netted out member-wise and then scrip-wise so as to determine the net settlement and payment obligations of the members.
3. The Delivery obligations and the payment orders in respect of these members are generated by the Clearing and Settlement system of the Exchange. These statements indicate the

pay-in and pay-out positions of the members for securities and funds who would then give the necessary instructions to their Clearing Banks and depositories.

4. The entire risk management and the clearing and settlement activities for the trades executed in the Retail Debt Market System will be undertaken by the Exchange Clearing House.

5. Holding and Transfer of G-Secs: The G-secs for retail trading through Stock Exchanges can be held by investors in the Same Demat A/c (same as the Constituent SGL A/c which can be held with Banks or PDs) as is used for equities at the Depositories. NSDL and CDSL will hold the combined quantity of G-Secs in their SGL-II A/cs of RBI, meant only for client holdings.

Instruments traded in debt market

Debentures

According to section 2(12) of the Companies Act, a "Debenture" includes debenture stock, bonds and any other securities of a company, whether constituting a charge on the assets of the company or not. From this definition it is not very clear what is a debenture. A debenture has been defined as "acknowledgement of debt, given under the seal of the company and containing a contract for the repayment of the principal sum at a specified date and for the payment of interest at fixed rate per cent until the principal sum is repaid, and it may or may not give the charge on the assets to the company as security of the loan". A debenture is a kind of document acknowledging the money borrowed containing the terms and conditions of the loan, payment of interest, redemption of the loan and the security offered (if any) by the company. Debentures are bonds issued by a company. Such bonds embody terms and conditions of loans, payment of interest, repayment of the loan etc. Debentures may be of the following kinds:

Bearer Debentures - Bearer debentures are similar to share warrants in that they too are negotiable instruments, transferable by delivery. The interest on bearer debentures is paid by means of attached coupons. On maturity, the principal sum is paid to the bearers.

Registered Debentures -These are debentures which are payable to the registered holders Le., persons whose names appear in the Register of debenture holders. Such debentures are transferable in the same way as shares.

Perpetual or Irredeemable Debentures - A debenture which contains no clause as to payment or which contains a clause that it shall not be paid back is called a 'Perpetual or Irredeemable debenture'. These debentures are redeemable only on the happening of a contingency or on the expiration of a period, however long. It follows that debentures can be made perpetual, ie., the loan is repayable only on winding up or after a long period of time.

Redeemable Debentures - These debentures are issued for a specified period of time. On the expiry of that specified time the company has the right to pay back the debenture holders and have its properties released from the mortgage or charge. Generally, debentures are redeemable.

Debentures Issued as Collateral Security for a Loan - The term collateral security or secondary security means, a security which can be realised by the party holding it in the event of the loan being not paid at the proper time or according to the agreement of the parties. At times, the lenders of money are given debentures as a collateral security for loan. The nominal value of such debentures is always more than the loan. In case the loan is repaid, the debentures issued as collateral security are automatically redeemed.

Naked Debentures - Normally debentures are secured by a mortgage or a charge on the company's assets. However debentures may be issued without any charge on the assets of the company. Such debentures are called 'Naked or Unsecured Debentures'. They are mere acknowledgement of a debt due from the company, creating no rights beyond those of unsecured creditors.

Secured Debentures - When any particular or specified property of the company is offered as security to the debentureholders and when the company can deal with it only subject to the prior right of the debentureholders, fixed charge is said to have been created. On the other hand, when the debentureholders have a charge on the undertaking of the company i.e., on the whole of the property of the company, both present and future, and when it can deal with the property in the ordinary course of business until the charge crystallises i.e., when the company goes into liquidation or when a receiver is appointed, the charge is said to be a floating charge. When the floating charge crystallises, the debentureholders have a right to be paid out of the sale proceeds of the assets subject to the right of the preferential creditor but prior to making any payment to unsecured creditors.

Convertible Debentures

A company may also issue Convertible Debentures (CDs) in which case an option is given to the debentureholders to convert them into equity or preference shares at stated rates of exchange, after a certain period. Such debentures once converted into shares cannot be reconverted into debentures. CDs may be fully or partly convertible. In case of fully convertible debentures, the entire face value is converted into shares at the expiry of specified period(s). In case of partly convertible debentures only the convertible portion is converted into shares at the end of the specified period and non-convertible portion is redeemed at the end of certain specified period. Non-convertible debentures do not confer any option on the holder to convert the debentures into shares and are redeemed at the expiry of specified period(s). CDs, whether fully or partly convertible, may be converted into shares at the end of specified period or periods in one or more stages. The company should get a credit rating of debentures done by credit rating agency. CDs are listed on stock exchanges. The Partly Convertible Debentures (PCDs) offers more flexibility to both companies and investors. It has been claimed to be better than fully convertible debentures as it does not automatically entail a large equity base, particularly in case of new companies. Experience shows that servicing of a large base of capital is not easy in case of new projects, especially if the company runs into rough weather due to marketing difficulties.

Mezzanine Finance It is a generic term for financial instruments that have the characteristics of both debt and equity. It may be secured or unsecured, and it may or may not involve a degree of participation in the upside of sale of business. It usually comes in the form of variations on preference shares or loan stock. It is usually provided by mezzanine finance specialists to back management buy-outs and buy-ins.

Hybrid Debt Instruments

In the fast changing financial scenario, it has become imperative for the corporate sector to devise hybrid debt instruments for raising funds from the market. A brief discussion is made here about the hybrid debt instruments of finance.

Zero Interest Bond

Zero Interest Bonds (ZIBs) refer to those bonds which are sold at discount from their eventual maturity value and have zero interest rate. These certificates are sold to the investors for discount. The difference between the face value of the certificate and the acquisition cost is the gain to the investors. The investors are not entitled to any interest and are entitled to only repayment of principal sum on the maturity period. The individual investors prefer ZIB because of lower investment cost and low rate of conversion to equity if ZIBs are fully or partly convertible bonds. This is also a means of tax planning because the bonds do not carry any interest, which is otherwise taxable. Companies also find ZIB quite attractive because there is no immediate interest commitment. On maturity the bonds can be converted into equity shares or non-convertible debentures depending on the requirement of capital structure of a company.

Equity Warrants with NCDs

Equity warrant is a piece of paper attached to a non-convertible debenture which gives the buyer or holder right to apply for and acquire an equity share at a future date.

Secured Premium Notes

Secured Premium Note (SPN) is a tradable instrument with detachable warrant against which the holder gets equity share(s) after a fixed period of time. The SPN have feature of medium to long-term notes. With each SPN, a warrant may be attached to it, which will give the holder the right to apply for and get allotment of equity shares after certain period of time by which the SPN will be fully paid-up. The investor can plan his tax affairs to minimise tax burden. It will be possible to spread interest income evenly over the life of the investment and that the premium as capital gains. For example, those who retire after fifth year of investment can opt for low premium to reduced tax liability.

Illustration 36

KSBS Ltd. issues SPNs, each SPN is of the face value of Rs. 300. No interest will accrue on the instruments during the first three years after allotment. Subsequently, the SPN will be repaid in four equal instalments as follows:

Year	Initial investment	Principal repayment	Premium repayment
0	300	0	0
1	-	0	0
2	-	0	0
3	-	0	0
4	-	75	75
5	-	75	75
6	-	75	75

Deep Discount Bond

The Yes bank for the first time issued Deep Discount Bond (DDE). For a deep discount price of Rs. 2,700 an investor gets a bond with a face value of Rs. 1 lakh. The DDE appreciates to its face value over the maturity period of 25 years. The unique advantage of DDE is the elimination of investment risk. It allows an investor to lock-in the yield to maturity or keep on withdrawing from the scheme periodically after five years by returning the certificate. The deemed face value of Yes bank's DDE is as under:

Period years	Deemed face value Rs.	Nominal rate (compounded half-yearly) %	Effective rate %
After 5	5,700	15.52	16.12
After 10	12,000	15.49	16.09
After 15	25,000	15.40	15.99
After 20	50,000	15.14	15.71
After 25	1,00,000	14.98	15.54

The main advantage of DDE is that the difference between the sale price and original cost of acquisition will be treated as capital gain, if the investor sells the bonds on stock exchange. The DDE is safe, solid and liquid instrument. Investors can take advantage of these new instruments in balancing their mix of securities to minimise risks and maximise returns.

Zero Coupon Convertible Note

It is an instrument which can be converted into common stock of the issuer. If investors choose to convert they will be required to forego all accrued and unpaid interest. Zero coupon can generally be put to the issuer. This allows the issuer to obtain the advantages of convertible debt without too much dilution of common stock. Like any zero coupon bond the issuer gets a tax deduction for imputed interest, even though no cash is paid until maturity. Investors are also benefited since they have the opportunity to participate in the underlying stock appreciation. If the appreciation does not materialise investors still have the regular scheme of interest income. There are risk considerations also in view of the fact that prices of zero coupon bonds are much more sensitive to changing interest rates than coupon bonds. In case if the proposal does not seem to be advantageous to convert, the investor will be left with a relatively low yield to maturity. Since zero coupon convertibles often can be put to the issuer, the issuer may be forced to refinance the debt at a disadvantageous time.

Debt for Equity Swap

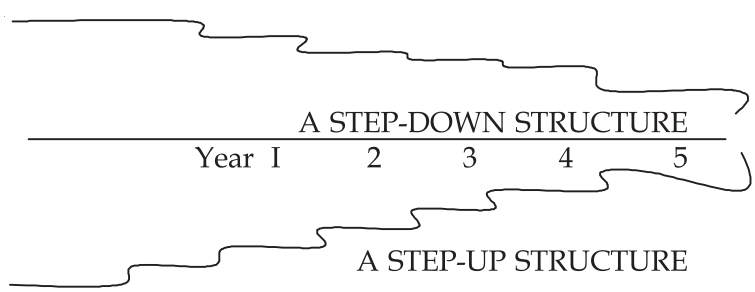
This instrument is an offer from an issuer of debt securities to its debt holders to exchange the debt for the issuer common or preferred stock. The issuer who wishes to offer debt for equity swaps does so with a view to increasing equity capital for the purposes of improving its debt-equity ratio and also enhance its debt raising capacity. It also helps issuers to reduce their interest expenses and enables them to replace it with dividends on stock that are payable at their discretion. Investors get attracted because of the potential appreciation in the value of the stock. There are risk considerations in view of the fact swaps may dilute earnings per share of issuer. In addition, dividends are not tax deductible while interest on tax securities is taxable.

Junk Bonds

Junk bonds are corporate bonds with low ratings from a major credit rating agencies. High-rated bonds are called investment grade bonds, low rated bonds are called speculative-grade bonds or less formally called as 'Junk bonds'. A bond may receive a low rating for a number of reasons. If the financial condition or business outlook of the company is poor, bonds are rated speculative-grade. Bonds are also rated speculative-grade if the issuing company' already has large amounts of debt outstanding. Some bonds are rated speculative-grade; because they are subordinated to other debt i.e. their legal claim on the firm's assets in the event of default stands behind the other claim, so called senior debt. Junk bonds are traded in a dealer market rather than being traded in stock exchanges. Institutional investors hold the largest share of junk bonds. Firms with low credit ratings are willing to pay 3 to 5 percent more than the investment grade corporate debt to compensate for greater risk. Junk bonds are a high yield security, because of this reason junk bonds are widely used as a source of finance in takeovers and leveraged buy-outs. Junk bonds lie between conventional investment as equities and investment-grade bonds. Junk bonds are riskier than investment-grade bonds but less risky than equity. Junk bonds may have cost or tax advantage that allow for some marginal increase in debt. But these advantages are not likely to induce bondholders to invest in junk bonds more recklessly than other safer debt instruments.

Step-up and step-down Debentures

The terms of issue of stepped up debenture contains that instead of making conversion at one go at the end of the tenure, it has designed the instrument in such a way that the equity component is augmented gradually. For example, the stepped up debenture has been priced at the face value of Rs. 50, with a coupon of 18% p.a. (interest payable half yearly) and a tenure of three years. The debt component will be converted into equity in a phased manner over a period of three years from the date of the issue. The conversion will be done at par value at the rate of 20% at the end of first year and 40% each at the end second and third years.



STEP-DOWN AND STEP-UP INTEREST RATE STRUCTURE

As the scale of business increases, via funding through borrowings, proportional increases in equity should also be brought in. A debt instrument with interest rates that either ascend or descend, reaching upto the highest or lowest level in the terminal year.

Other Hybrid Debt Instruments

Multi-option Secured Redeemable Convertible Debentures - Where a debenture gives the holder thereof two or more different options, it may be called a multi-option debenture. It is a species of debenture. It is essentially a debenture in character and is secured redeemable and convertible into equity shares. Its chief feature is the multi-options available to the investor.

Callable Bond - A callable bond is a bond which the issuer has the right to call in and pay off at a price stipulated in the bond contract. The price the issuer must pay to retire a callable bond when it is called is termed as 'call price'. The main advantage in callable bond is the issuers have an incentive to call their existing bonds if the current interest rate in the market is sufficiently lower than the bond's coupon rate. Usually the issuer cannot call the bond for a certain period after issue.

Option Tender Bonds - The option tender bonds are bonds with put option which give the bondholders the right to sell back their bonds to the issuers normally at par. Issuers with puts are aimed both at investors who are pessimistic about the ability of interest rates to decline over the long-term and at those who simply prefer to take a cautious approach to their bond buying.

Guaranteed Debentures - Some businesses are able to raise long term money because their debts are guaranteed, usually by their parent companies. In some instances the State Governments guarantee the bonds issued by the State Government undertakings and corporation like Electricity Supply Board, Irrigation Corporation etc.

Subordinated Debentures - A subordinated debenture is an unsecured debt which is junior to all other debts i.e., other debt holders must be fully paid before the subordinated debentureholders receive anything. This type of debt will have a higher interest rate than more senior debt and will frequently have rights of conversion into ordinary shares. Subordinated debt is often called 'Mezzanine finance' because it ranks between equity and standard debt.

Floating Rate Bonds - The interest paid to the floating rate bondholders changes periodically depending on the market rate of interest payable on the gilt-edged securities. These bonds are also called 'Adjustable Interest Bonds or Variable Rate Bonds'.

Indexed Bonds - Fixed income and fixed sum repayments are uneconomic in times of rapid inflation. Indexed bond is a financial instrument which retains the security and fixed income of the debenture but which also provides some safeguard against inflation.

Inflation Adjusted Bonds - Inflation Adjusted Bonds (lABs) are bonds which promise to repay both the principal and the interest, by floating both these amounts upwards or downwards in line with the movements in the value of the specified index of commodity prices (Inflation rate).

Credit Wrapping - Credit wrapping is a technique by which bonds are issued by a company with a poor rating can be shored up with the assistance of an institution with a strong credit rating. It involves the institution agreeing to underwrite a proportion of the amount payable in the event of default at the time of redemption. In many cases it is the only way in which poorly rated companies can issue bonds.

Interest Rate Futures:

An **Interest Rate Future** is a future contract with an interest-bearing instrument as the underlying asset.

Examples include Treasury-bill futures, Treasury-bond futures and Eurodollars futures.

The global market for exchange-traded interest rate futures is notionally valued by the bank of International settlements at $22,794,200 million in 2008.

Exchange traded funds

If an investor wants to have the cake and eat it too, the exchange traded fund could be the way out. There are five ETFs in India at present, of which three are based on the 50-share S&P CNX Nifty index, one on the 200-share CNX Nifty Junior, and the third on the 30-share BSE Sensex.

How an ETF works: ETFs are open-ended exchange traded funds that are designed to track specific indices and trade just like any other stock, combined with the benefits of a mutual fund. While ETFs are similar to index funds, they differ in some ways. ETFs can be bought and sold over the exchange through a broker on a daily basis at real-time prices unlike traditional equity funds. As they are traded on the exchange they can be bought / sold through any broker across the country thereby reaching out to a larger number of investors at the lowest possible cost. ETFs are the latest and the fastest growing mutual fund structure in the world. Globally, since the introduction in the United States, in 1993, ETFs have grown rapidly with around $163 billion invested in over 291 indices (as on July 2003). ETFs are different from conventional index funds in the sense that ETFs are traded throughout the day unlike index funds whose NAVs are computed.

While many investors have similar outlooks, no two are exactly alike. ETFs allow long-term investors to diversify their portfolio at one shot. As ETFs are no load schemes and annual management fees are generally lower, it is an easy and cost efficient way to invest in a basket of securities. It provides liquidity for those investors with a shorter-term horizon as they can trade intra-day at prices near to the net asset value. Being real-time, it gives investors better control and flexibility to manage their investment. As the initial investment is low, investors find it simple and convenient to buy/sell.

India joined the ETF club in December 2001 with the launch India's first ETF 'Nifty BeES' (Nifty Benchmark Exchange-traded Scheme) by Benchmark Mutual Fund, based on the S&P CNX Nifty Index. Since then Benchmark has launched the Junior BeES and the Liquid BeES.

Nifty BeES has appreciated 42.24 per cent on a monthly average to current price of Rs 138.16 till date from Rs 97.13 in April 2003. While Junior BeES is based on the CNX Nifty Junior Index and has been the best performing fund in 2003, Liquid BeES is the world's first liquid ETF. The star performer among all the ETFs has been CNX Nifty Junior Index which has appreciated a whooping 72.92 per cent during the period since April 2003 from Rs 132.53 to Rs 229.17 till date.

By their nature ETFs are passive funds. But as seen in case of Junior BeES, passive fund management does have a major role to play in the Indian markets. Now the investors are turning smart and are resorting to arbitrage opportunities provided between the spot, future and the ETF. On the other hand, investors got another opportunity in July, when SUNDER, approximately equal to 1/10th of the value of S&P CNX Nifty listed on the stock exchange.

The UTI AMC managed 'Sunder' shares are now embarking on a second round of fund mobilisation. The NAV of Sunder is declared on a daily basis and the asset management company can also declare the dividend in the scheme. The only ETF which trends the key Sensex is SPIcE, managed by Prudential-ICICI. It trades like any other equity share in the cash segment of a stock exchange. The price of SPIcE is linked to the Sensex, which is approximately 1/100th of Sensex. Initially, SPIcE units were created out of IPO *(initial public offering)* proceeds. Subsequently, SPIcE units are being created and redeemed on an on-going basis through a creation and redemption process between the authorized participants and the fund.

Authorized participants are generally large institutions/arbitrageurs/market makers/brokers who hold large chunks of Sensex stocks and exchange the same for SPIcE units. Thus, the trading of SPIcE units on the stock exchanges for investors would be totally separate from the creation process. In fact, we can say that SPIcE unites trade on two markets concurrently: primary and secondary markets. The pricing of SPIcE units is continuous during normal trading hours. Each SPIcE unit will trade at its net asset value, which is approximately 1/100th of Sensex. For example, the price of SPIcE in April (monthly average) was 30.38 when the Sensex was 3036.66 and in September (average) it is Rs 43.75, when the Sensex is 4320.32, a rise of 44.01 per cent as against the appreciation of 42.29 per cent in the Sensex. You can buy an ETF just the way you buy a share — from a stock exchange. You can also buy it from a mutual fund that manages such a scheme.

Mutual Funds

Open-ended Funds

Open-ended or open mutual funds are much more common than closed-ended funds and meet the true definition of a mutual fund – a financial intermediary that allows a group of investors to pool their money together to meet an investment objective– to make money! An individual or team of professional money managers manage the pooled assets and choose investments, which create the fund's portfolio They are established by a fund sponsor, usually a mutual fund company, and valued by the fund company or an outside agent. This means that the fund's portfolio is valued at "fair market" value, which is the closing market value for listed public securities. An open-ended fund can be freely sold and repurchased by investors.

Advantages: Open funds are much more flexible and provide instant liquidity as funds sell shares daily. You will generally get a redemption (sell) request processed promptly, and receive your proceeds by check in 3-4 days. A majority of open mutual funds also allow transferring among various funds of the same "family" without charging any fees.

Open funds range in risk depending on their investment strategies and objectives, but still provide flexibility and the benefit of diversified investments, allowing your assets to be allocated among many different types of holdings. Diversifying your investment is key because your assets are not impacted by the fluctuation price of only one stock. If a stock in the fund drops in value, it may not impact your total investment as another holding in the fund may be up. But, if you have all of your assets in that one stock, and it takes a dive, you're likely to feel a more considerable loss.

Risks: Risk depends on the quality and the kind of portfolio you invest in. One unique risk to open funds is that they may be subject to inflows at one time or sudden redemptions, which leads to a spurt or a fall in the portfolio value, thus affecting your returns. Also, some funds invest in certain sectors or industries in which the value of the in the portfolio can fluctuate due to various market forces, thus affecting the returns of the fund.

Closed-ended Funds

Close-ended or closed mutual funds are really financial securities that are traded on the stock market. Similar to a company, a closed-ended fund issues a fixed number of shares in an initial public offering, which trade on an exchange. Share prices are determined not by the total net asset value (NAV), but by investor demand. A sponsor, either a mutual fund company or investment dealer, will raise funds through a process commonly known as underwriting to create a fund with specific investment objectives. The fund retains an investment manager to manage the fund assets in the manner specified.

Advantages: The prospect of buying closed funds at a discount makes them appealing to experienced investors. The discount is the difference between the market price of the closed-end fund and its total net asset value. As the stocks in the fund increase in value, the discount usually decreases and becomes a premium instead. Savvy investors search for closed-end funds with solid returns that are trading at large discounts and then bet that the gap between the discount and the underlying asset value will close. So one advantage to closed-end funds is that you can still enjoy the benefits of professional investment management and a diversified portfolio of high quality stocks, with the ability to buy at a discount.

Risks: Investing in closed-end funds is more appropriate for seasoned investors. Depending on their investment objective and underlying portfolio, closed-ended funds can be fairly volatile, and their value can fluctuate drastically. Shares can trade at a hefty discount and deprive you from realizing the true value of your shares. Since there is no liquidity, investors must buy a fund with a strong portfolio, when units are trading at a good discount, and the stock market is in position to rise.

a. Risk Management System

Risk Management Strategies

Many corporate executives are faced with the challenge of managing the risks associated with low cost basis and restricted-stock holdings (i.e., concentrated equity positions). There are many strategies available, each with unique characteristics and requirements. In general, these strategies provide holders of concentrated equity positions the ability to protect against a decrease in the value of the stock, generate liquidity, diversify the exposure, and potentially defer capital gains taxes.

Management Strategies include the following:

- Risk Avoidance
- Risk Abatement
- Risk Retention
- Risk Transfer
- Risk Allocation

Risk Avoidance is just that, avoiding the risk associated with a specific task, activity or project. Often, following the review of a contract, it is determined that a project is just too risky. The client may decide not to bid the work at all, or remove that element of the work from their bid, sometimes using an alternate deduct to delineate the exclusion. Risk avoidance is strictly a business decision, and sometimes a very good strategy if construction documents are unclear, ambiguous or incomplete.

Risk Abatement is the process of combining loss prevention or loss control to minimize a risk. This risk management strategy serves to reduce the loss potential and decrease the frequency or severity of the loss. Risk abatement is preferably used in conjunction with other risk management strategies, since using this risk management method alone will not totally eliminate the risk.

Risk Retention is a good strategy only when it is impossible to transfer the risk. Or, based on an evaluation of the economic loss exposure, it is determined that the diminutive value placed on the risk can be safely absorbed. Another consideration in retaining a risk is when the probability of loss is so high that to transfer the risk, it would cost almost as much as the cost of the worst loss that could ever occur, i.e., if there is a high probability of loss, it may be best to retain the risk in lieu of transferring it.

Risk Transfer is the shifting of the risk burden from one party to another. This can be done several ways, but is usually done through conventional insurance as a risk transfer mechanism, and through the use of contract indemnification provisions.

Risk Allocation is the sharing of the risk burden with other parties. This is usually based on a business decision when a client realizes that the cost of doing a project is too large and needs to spread the economic risk with another firm. Also, when a client lacks a specific competency that is a requirement of the contract, e.g., design capability for a design-build project. A typical example of using a risk allocation strategy is in the formation of a joint venture.

Regardless of how the portfolio management and risk management activity is characterized, e.g., investing, trading, speculating, or hedging; regardless of the markets and instruments traded; and, regardless of the strategies and tactics employed; one requirement is common to all applications - the need to understand and manage the risk inherent in the underlying activity. All analytical and decision making and implementation processes are oriented to making sure that risk can be prudently managed before focusing on the potential reward.

Risk Management (Retail Debt Market)

Base Capital & Networth Requirements

- Clearing members of Capital Market and Trading members of the WDM segment of the Exchange will be allowed to participate in clearing and settlement of trades done in Government securities, subject to a minimum net worth of Rs.1 crore.
- An initial contribution to the Settlement Guarantee Fund (SGF) of this market by way of interest free security deposit (IFSD) of Rs.5 lakhs is required to be kept with NSCCL. A member desirous of participating in this segment may opt to set aside a contribution of Rs.5 lakhs from his additional base capital available on the Capital Market segment and / or Futures & Options segment(s) towards this IFSD.

Margins & Gross Exposure Limits

- Mark to market margins will be applicable on all-open positions in government securities and shall be calculated on the basis of ZCYC prices. This margin shall be payable on T + 1 day.
- Institutions that are permitted under the relevant regulations to transact only on the basis of giving and taking delivery will operate through the custodial mechanism and

shall be exempt from margin as in the case of the equities. Custodial trades on behalf of Provident Funds transacting through SGL – II accounts shall also be eligible for margin exemption.

- The gross exposure in respect of these securities shall not exceed 20 times of the IFSD. Any member desirous of a higher exposure will be required to bring in additional base capital as in Capital Market segment.

National Stock Exchanges (NSE)- Derivatives Segment: Risk Management by NSCCL: A sound risk management system is integral to an efficient clearing and settlement system. NSE introduced for the first time in India, risk containment measures that were common internationally but were absent from the Indian securities markets.

NSCCL has put in place a comprehensive risk management system, which is constantly upgraded to pre-empt market failures. The Clearing Corporation ensures that trading member obligations are commensurate with their networth.

Risk containment measures include capital adequacy requirements of members, monitoring of member performance and track record, stringent margin requirements, position limits based on capital, online monitoring of member positions and automatic disablement from trading when limits are breached, etc.

We will discuss the above in more detail individually

Minimum Base Capital: A Clearing Member (CM) is required to meet with the Base Minimum Capital (BMC) requirements prescribed by NSCCL before activation. The CM has also to ensure that BMC is maintained in accordance with the requirements of NSCCL at all points of time, after activation.

Every CM is required to maintain BMC of Rs.50 lakhs with NSCCL in the following manner:

1. Rs.25 lakhs in the form of cash.
2. Rs.25 lakhs in any one form or combination of the below forms:
   - i. Cash
   - ii. Fixed Deposit Receipts (FDRs) issued by approved banks and deposited with approved Custodians or NSCCL
   - iii. Bank Guarantee in favour of NSCCL from approved banks in the specified format.
   - iv. Approved securities in demat form deposited with approved Custodians.

In addition to the above MBC requirements, every CM is required to maintain BMC of Rs.10 lakhs, in respect of every trading member(TM) whose deals such CM undertakes to clear and settle, in the following manner:

1. Rs.2 lakhs in the form of cash.
2. Rs.8 lakhs in a one form or combination of the following:
   - i. Cash
   - ii. Fixed Deposit Receipts (FDRs) issued by approved banks and deposited with approved Custodians or NSCCL
   - iii. Bank Guarantee in favour of NSCCL from approved banks in the specified format.
   - iv. Approved securities in demat form deposited with approved Custodians.

Any failure on the part of a CM to meet with the BMC requirements at any point of time, will be treated as a violation of the Rules, Bye-Laws and Regulations of NSCCL and would attract disciplinary action inter-alia including, withdrawal of trading facility and/or clearing facility, closing out of outstanding positions etc.

Risk Involved in Trading in Derivatives Contracts

The amount of margin is small relative to the value of the derivatives contract so the transactions are 'leveraged' or 'geared'. Derivatives trading, which is conducted with a relatively small amount of margin, provides the possibility of great profit or loss in comparison with the principal investment amount. But transactions in derivatives carry a high degree of risk.

You should therefore completely understand the following statements before actually trading in derivatives trading and also trade with caution while taking into account one's circumstances, financial resources, etc. If the prices move against you, you may lose a part of or whole margin equivalent to the principal investment amount in a relatively short period of time. Moreover, the loss may exceed the original margin amount.

A. Futures trading involves daily settlement of all positions. Every day the open positions are marked to market based on the closing level of the index. If the index has moved against you, you will be required to deposit the amount of loss (notional) resulting from such movement. This margin will have to be paid within a stipulated time frame, generally before commencement of trading next day.

B. If you fail to deposit the additional margin by the deadline or if an outstanding debt occurs in your account, the broker/member may liquidate a part of or the whole position or substitute securities. In this case, you will be liable for any losses incurred due to such close-outs.

C. Under certain market conditions, an investor may find it difficult or impossible to execute transactions. For example, this situation can occur due to factors such as illiquidity i.e. when there are insufficient bids or offers or suspension of trading due to price limit or circuit breakers etc.

D. In order to maintain market stability, the following steps may be adopted: changes in the margin rate, increases in the cash margin rate or others. These new measures may be applied to the existing open interests. In such conditions, you will be required to put up additional margins or reduce your positions.

E. You must ask your broker to provide the full details of the derivatives contracts you plan to trade i.e. the contract specifications and the associated obligations.

Risk-reducing orders or strategies: The placing of certain orders (e.g., "stop-loss" orders, or "stop-limit" orders) which are intended to limit losses to certain amounts may not be effective because market conditions may make it impossible to execute such orders. Strategies using combinations of positions, such as "spread" positions, may be as risky as taking simple "long" or "short" positions.

Suspension or restriction of trading and pricing relationships : Market conditions (e.g., illiquidity) and/or the operation of the rules of certain markets (e.g., the suspension of trading in any contract or contact month because of price limits or "circuit breakers") may increase the risk of loss due to inability to liquidate/offset positions.

Deposited cash and property : You should familiarise yourself with the protections accorded to the money or other property you deposit particularly in the event of a firm insolvency or bankruptcy. The extent to which you may recover your money or property may be governed by specific legislation or local rules. In some jurisdictions, property which has been specifically identifiable as your own will be pro-rated in the same manner as cash for purposes of distribution in the event of a shortfall. In case of any dispute with the member, the same shall be subject to arbitration as per the byelaws/regulations of the Exchange.

Risk of Option holders

1. An option holder runs the risk of losing the entire amount paid for the option in a relatively short period of time. This risk reflects the nature of an option as a wasting asset which becomes worthless when it expires. An option holder who neither sells his option in the secondary market nor exercises it prior to its expiration will necessarily lose his entire investment in the option. If the price of the underlying does not change in the anticipated direction before the option expires to an extent sufficient to cover the cost of the option, the investor may lose all or a significant part of his investment in the option.
2. The Exchange may impose exercise restrictions and have authority to restrict the exercise of options at certain times in specified circumstances

Risks of Option Writers

1. If the price movement of the underlying is not in the anticipated direction the option writer runs the risks of losing substantial amount.
2. The risk of being an option writer may be reduced by the purchase of other options on the same underlying interest-and thereby assuming a spread position-or by acquiring other types of hedging positions in the options markets or other markets. However, even where the writer has assumed a spread or other hedging position, the risks may still be significant. A spread position is not necessarily less risky than a simple 'long' or 'short' position.
3. Transactions that involve buying and writing multiple options in combination, or buying or writing options in combination with buying or selling short the underlying interests, present additional risks to investors. Combination transactions, such as option spreads, are more complex than buying or writing a single option. And it should be further noted that, as in any area of investing, a complexity not well understood is, in itself, a risk factor. While this is not to suggest that combination strategies should not be considered, it is advisable, as is the case with all investments in options, to consult with someone who is experienced and knowledgeable with respect to the risks and potential rewards of combination transactions under various market circumstances.

Trading at the Futures & Options Segment of NSE - Risk Management System

The salient features of risk containment measures on the F&O segment are:

1. The financial soundness of the members is the key to risk management. Therefore, the requirements for membership in terms of capital adequacy (net worth, security deposits) are quite stringent.

2. NSCCL charges an upfront initial margin for all the open positions of a CM. It specifies the initial margin requirements for each futures/options contract on a daily basis. It also follows VaR-based margining computed through SPAN. The CM in turn collects the initial margin from the TMs and their respective clients.
3. The open positions of the members are marked to market based on contract settlement price for each contract. The difference is settled in cash on a T+1 basis.
4. The exposure of a CM cannot exceed 33.3 times the liquid net worth for index options/ futures and 20 times the liquid net worth for stock options/futures.
5. NSCCL's on-line position monitoring system monitors a CM's open position on a real-time basis. Limits are set for each CM based on his base capital. The on-line position monitoring system generates alerts whenever a CM reaches a position limit set up by NSCCL. NSCCL monitors the CMs for MTM value violation, while TMs are monitored for contract-wise position limit violation.
6. A member is alerted of his position to enable him to adjust his exposure or bring in additional capital. Position violations result in disablement of trading facility for all TMs of a CM in case of a violation by the CM.
7. A separate Settlement Guarantee Fund for this segment has been created out of the base capital of members. The fund had a balance of Rs. 1,300 crore at the end of March 2003.

The most critical component of risk containment mechanism for F&O segment is the margining system and on-line position monitoring. The actual position monitoring and margining is carried out on-line through Parallel Risk Management System (PRISM) using SPAN(R) Standard Portfolio Analysis of Risk) system for the purpose of computation of on-line margins, based on the parameters defined by SEBI.

NSE – SPAN : The objective of NSE-SPAN is to identify overall risk in a portfolio of all futures and options contracts for each member. The system treats futures and options contracts uniformly, while at the same time recognising the unique exposures associated with options portfolios, like extremely deep out-of-the-money short positions and inter-month risk. Its overriding objective is to determine the largest loss that a portfolio might reasonably be expected to suffer from one day to the next day based on 99% VaR methodology. SPAN considers uniqueness of option portfolios. The following factors affect the value of an option:

i. Underlying market price.
ii. Volatility (variability) of underlying instrument, and
iii. Time to expiration.
iv. Interest rate
v. Strike price

As these factors change, the value of options maintained within a portfolio also changes. Thus, SPAN constructs scenarios of probable changes in underlying prices and volatilites in order to identify the largest loss a portfolio might suffer from one day to the next. It then sets the margin requirement to cover this one-day loss.

Capital adequacy requirement:

Capital Adequacy of Financial Intermediaries (FI)

The term financial intermediary includes Banks, Investment Companies, Insurance Companies, Development Financial Institutions, Non-Banking Finance Companies, Mutual Funds, etc. All these financial institutions assist in the transfer of savings from economic units/individuals with excess money to those that need capital for investments.

Need for Capital:

Financial Intermediaries need capital for two reasons:

- To run operations of their business.
- To safeguard against the losses, that may arise.

Adequate capital helps financial intermediaries to survive even during substantial losses. It gives time to re-establish the business and avoid any break in operations.

To ensure the good performance of FIs the regulatory authority (RBI) has specified the minimum capital for the FI.

This requirement is called Capital Adequacy, and it is specified for Banks and Non Banking Financial Corporations (NBFCs).

Computation of capital adequacy ratio (CAR) of banks:

For computation of CAR, we need to calculate:

- Tier I capital
- Tier II capital
- Risk Weighted Assets (RWA)

Step 1: Compute Tier I capital:

Tier I capital is the most permanent and readily available support against unexpected losses. It consists of-

1. **Paid up equity capital**
2. **Statutory reserves**
3. **Capital reserves**
4. **Other disclosed free reserves**

Less:

1. **Equity investments in subsidiaries**
2. **Intangible assets**
3. **Current and Accumulated Losses, if any**

Step 2: Compute Tier II capital

These are not permanent in nature or, are not readily available.

Tier II capital consists of-

1. **Undisclosed reserves and cumulative perpetual preference shares-** Cumulative preference shares should be fully paid and should not contain clauses which permit redemption from shareholders.
2. **Revaluation Reserves (RR)-** 45% of RR is only taken in calculation of tier II capital
3. **General Provisions and Loss Reserves (GPLR)-** Actual GPLR or 1.25% of Risk Weighted Assets, whichever is lower, is taken.
4. **Hybrid Debt Capital Instruments-** These combine characteristics of both equity and debt. As they are more or less similar to equity, they are included in the Tier II capital
5. **Subordinated Debts-** These must be fully paid up, unsecured, subordinated to the claims of other creditors, also there should be no such clause which permits redemption. The amount of subordinate debts to be taken as Tier II capital depends upon the maturity of debt. Subordianate Debt Instruments will be limited to 50% of Tier I capital.

Remaining term to maturity	Discount Rate(%)	Amount to be taken in %
1. Where the date of maturity is above 5 years	0	100
2. Where the date of maturity is above 4 years but doesn't exceed 5 years	20	80
3. Where the date of maturity is above 3 years but doesn't exceed 4 years	40	60
4. Where the date of maturity is above 2 years but doesn't exceed 3 years	60	40
5. Where the date of maturity is above 1 year but doesn't exceed 2 years	80	20
6. Where the date of maturity does not exceed 1 year	100	0

Note: Tier II capital cannot be more than Tier I capital.

Capital Adequacy Ratio:

Capital Adequacy Ratio = (Tier I capital + Tier II capital) / RWA

According to the present norm, the Capital Adequacy Ratio of bank as defined earlier should be at least 10%.

Intra day trading: Intraday trading refers to opening and closing a position in a security in the same trading day. This can be buying and selling to capitalize on a potential rise in a security's value or shorting and covering the short to capitalize on a potential drop in value. Intraday traders capitalize on small moves in the value of a security by using "leverage" or "margin", which basically means borrowing money. Most day trading accounts are allowed to take an initial position in a security that is 4X the value of their account (per securities regulations), but some professional accounts get more leverage (i.e. 10X). For instance, a day trader with INR10,000 in his/her account can take a INR 40,000 position in a security for day trading purposes. This amount is not allowed to be held overnight (only about 2X the value of the account can be held overnight per securities registered). The leverage inherent in day trading allows small gains in a position to yield meaningful profits (and losses). Most day traders are very strict about cutting losses with "stop loss" orders. This limits the potential downside (but not the upside) on any particular trade, hence the adage "cut your losses short and let your profits run". With this basic strategy, a day trader can be wrong on 50% of his/her trades and still make good money. Day trading styles vary from "scalpers", which take positions for only a few minutes, to holding a position for most of the day. Some day traders are momentum followers and jump onto any given move, while others try to identify intraday reversals. Virtually all day traders use technical analysis (stock charting) heavily in their decision making.

Exposure limit: The National Stock Exchange (NSE) impose security-wise differential exposure limits for trades executed, a trading member having Rs 1 crore exposure in Group 1 securities (highly liquid securities) will have adjusted gross exposure of Rs 1 crores. Whereas, for exposure of Rs 1 crore in Group two (securities with say medium liquidity) and group three securities (illiquid scrips), the adjusted gross exposure would be Rs 3 crore and Rs 5 crore respectively. Hence, though the outstanding position in the case of Rs 3 crore, the adjusted gross exposure for the members would be considered as Rs 9 crore.

Margining procedures:

Categorisation of stocks for imposition of margins

- The Stocks which have traded atleast 80% of the days for the previous six months shall constitute the Group I and Group II.
- Out of the scrips identified above, the scrips having mean impact cost of less than or equal to 1% shall be categorized under Group I and the scrips where the impact cost is more than 1, shall be categorized under Group II.
- The remaining stocks shall be classified into Group III.
- The impact cost shall be calculated on the 15th of each month on a rolling basis considering the order book snapshots of the previous six months. On the basis of the impact cost so calculated, the scrips shall move from one group to another group from the 1st of the next month.
- For securities that have been listed for less than six months, the trading frequency and the impact cost shall be computed using the entire trading history of the security.

In case any corporate action results in a change in ISIN, then the securities bearing the new ISIN shall be treated as newly listed security for group categorization. Daily margins payable by members consists of the following:

Daily margin, comprising of the sum of VaR margin, Extreme Loss Margin and mark to market margin is payable.

Value at Risk Margin

All securities are classified into three groups for the purpose of VaR margin For the securities listed in Group I, scrip wise daily volatility calculated using the exponentially weighted moving average methodology shall be applied to daily returns in the same manner as in the derivatives market. The scrip wise daily VaR would be 3.5 times the volatility so calculated subject to a minimum of 7.5%.

For the securities listed in Group II, the VaR margin shall be higher of scrip VaR (3.5 sigma) or three times the index VaR, and it shall be scaled up by root 3.

For the securities listed in Group III, the VaR margin would be equal to five times the index VaR and scaled up by root 3.

In case of securities in Trade for Trade segment (TFT segment) VaR as applicable to Group 3 (illiquid securities) shall be applicable.

VaR margin rate for a security constitutes the following:

1. Value at Risk (VaR) based margin, which is arrived at, based on the methods stated above. The index VaR, for the purpose, would be the higher of the daily Index VaR based on S&P CNX NIFTY or BSE SENSEX. The index VaR would be subject to a minimum of 5%.
2. Security specific Margin: NSCCL may stipulate security specific margins for the securities from time to time.

The VaR margin rate computed as mentioned above will be charged on the net outstanding position (buy value-sell value) of the respective clients on the respective securities across all open settlements. There would be no netting off of positions across different settlements. The net position at a client level for a member are arrived at and thereafter, it is grossed across all the clients including proprietary position to arrive at the gross open position.

For example, in case of a member, if client A has a buy position of 1000 in a security and client B has a sell position of 1000 in the same security, the net position of the member in the security would be taken as 2000. The buy position of client A and sell position of client B in the same security would not be netted. It would be summed up to arrive at the member's open position for the purpose of margin calculation.

The VaR margin shall be collected on an upfront basis by adjusting against the total liquid assets of the member at the time of trade. The VaR margin so collected shall be released on completion of pay-in of the settlement. The details of all margins (VAR, extreme loss margin and mark to market) as at end of each day will be downloaded to members in their respective Extranet directory.

Extreme Loss Margin

The Extreme Loss Margin for any security shall be higher of:

1. 5%, or
2. 1.5 times the standard deviation of daily logarithmic returns of the security price in the last six months. This computation shall be done at the end of each month by taking the price data on a rolling basis for the past six months and the resulting value shall be applicable for the next month.

The Extreme Loss Margin shall be collected/ adjusted against the total liquid assets of the member on a real time basis.

The Extreme Loss Margin shall be collected on the gross open position of the member. The gross open position for this purpose would mean the gross of all net positions across all the clients of a member including its proprietary position. There would be no netting off of positions across different settlements. The Extreme Loss Margin collected shall be released on completion of pay-in of the settlement. The details of all margins (VAR, extreme loss margin and mark to market) as at end of each day will be downloaded to members in their respective Extranet directory.

Mark-to-Market Margin

Mark to market loss shall be calculated by marking each transaction in security to the closing price of the security at the end of trading. In case the security has not been traded on a particular day, the latest available closing price at the NSE shall be considered as the closing price. In case the net outstanding position in any security is nil, the difference between the buy and sell values shall be considered as notional loss for the purpose of calculating the mark to market margin payable. The mark to market margin (MTM) shall be collected from the member before the start of the trading of the next day. The MTM margin shall also be collected/adjusted from/against the cash/cash equivalent component of the liquid net worth deposited with the Exchange.

The MTM margin shall be collected on the gross open position of the member. The gross open position for this purpose would mean the gross of all net positions across all the clients of a member including its proprietary position. For this purpose, the position of a client would be netted across its various securities and the positions of all the clients of a broker would be grossed. There would be no netting off of the positions and setoff against MTM profits across two rolling settlements i.e. T day and T-1 day. However, for computation of MTM profits/ losses for the day, netting or setoff against MTM profits would be permitted. In case of Trade for Trade Segment (TFT segment) each trade shall be marked to market based on the closing price of that security. The MTM margin so collected shall be released on completion of pay-in of the settlement

Margins collection from Client

Members should have a prudent system of risk management to protect themselves from client default. Margins are likely to be an important element of such a system. The same shall be well documented and be made accessible to the clients and the Stock Exchanges. However, the quantum of these margins and the form and mode of collection are left to the discretion of the members.

Margin Shortfall

In case of any shortfall in margin:

- The members shall not be permitted to trade with immediate effect.
- Penalty for margin violation

Penalty applicable for margin violation shall be levied on a monthly basis based on slabs as mentioned below:

Instances of Disablement	Penalty to be levied
1st instance	0.07% per day
2nd to 5th instance of disablement	0.07% per day +Rs.5000/- per instance from 2nd to 5th instance
6th to 10th instance of disablement	0.07% per day+ Rs. 20000 (for 2nd to 5th instance) +Rs.10000/- per instance from 6th to 10th instance
11th instance onwards	0.07% per day +Rs. 70,000/- (for 2nd to 10th instance) +Rs.10000/- per instance from 11th instance onwards. Additionally, the member will be referred to the Disciplinary Action Committee for suitable action

Instances as mentioned above shall refer to all disablements during market hours in a calendar month. The penal charge of 0.07% per day shall be applicable on all disablements due to margin violation anytime during the day.

Liquid assets

Members are required to provide liquid assets which adequately cover various margins & base minimum capital requirements. Liquid assets of the member include their Initial membership deposits including the security deposits. Members may provide additional collateral deposit towards liquid assets, over and above their minimum membership deposit requirements The acceptable forms of capital towards liquid assets and the applicable haircuts are listed below:

1. Cash Equivalents: cash, bank fixed deposits, Bank Guarantees, Government securities, other liquid assets.

Exemption for institutional deals

Institutional businesses i.e., transactions done by all institutional investors shall be exempt from margin payments. For this purpose, institutional investors shall include

- Foreign Institutional Investors registered with SEBI. (FII)
- Mutual Funds registered with SEBI. (MF)
- Public Financial Institutions as defined under Section 4A of the Companies Act, 1956. (DFI)
- Banks, i.e., a banking company as defined under Section 5(1)(c) of the Banking Regulations Act, 1949. (BNK)
- Insurance companies registered with IRDA. (INS)

1 Institutional Transactions:

- Institutional transactions shall be identified by the use of the participant code at the time of order entry.
- Transactions entered into on behalf of custodial participants i.e. carrying custodial participant code shall be considered as institutional deals unless not confirmed by the

respective custodians in which case the transactions shall be considered as a normal transactions and all applicable margins shall be levied on the members.

- Non-Custodial Institutional Transactions shall be identified by the use of the participant code 'NCIT'. The 'NCIT' transaction shall be exempted only for margin purposes and the settlement obligation shall remain with the member. Non-Custodial Institutional transactions, which are not marked, as 'NCIT' at the time of order entry, shall not be exempt from margins.
- Members are required to enter only the above five categories, if applicable, while reporting Non-Custodial Institutional deals (NCIT) and contraction of unallocated OTRs.
- Reporting and other procedures regarding 'NCIT' and Institution transactions shall continue as per the current procedure.

2 Retail Professional Clearing Member:

In case of transactions which are to be settled by Retail Professional Clearing Members (PCM), all the trades with PCM code shall be included in the trading member's positions till the same are confirmed by the PCM. Margins shall be collected from respective trading members until confirmation of trades by PCM. On confirmation of trades by PCM, such trades will be reduced from the positions of trading member and included in the positions of PCM. The PCM shall then be liable to pay margins on the same

F&O-

Margins

NSCCL has developed a comprehensive risk containment mechanism for the Futures & Options segment. The most critical component of a risk containment mechanism for NSCCL is the online position monitoring and margining system. The actual margining and position monitoring is done on-line, on an intra-day basis. NSCCL uses the SPAN (Standard Portfolio Analysis of Risk) system for the purpose of margining, which is a portfolio based system

Initial Margin

NSCCL collects initial margin up-front for all the open positions of a CM based on the margins computed by NSCCL SPAN. A CM is in turn required to collect the initial margin from the TMs and his respective clients. Similarly, a TM should collect upfront margins from his clients. Initial margin requirements are based on 99% value at risk over a one day time horizon. However, in the case of futures contracts (on index or individual securities), where it may not be possible to collect mark to market settlement value, before the commencement of trading on the next day, the initial margin may be computed over a two-day time horizon, applying the appropriate statistical formula. The methodology for computation of Value at Risk percentage is as per the recommendations of SEBI from time to time.

Base Capital & Networth Requirements

- Clearing members of Capital Market and Trading members of the WDM segment of the Exchange will be allowed to participate in clearing and settlement of trades done in Government securities, subject to a minimum net worth of Rs.1 crore.

- An initial contribution to the Settlement Guarantee Fund (SGF) of this market by way of interest free security deposit (IFSD) of Rs.5 lakhs is required to be kept with NSCCL. A member desirous of participating in this segment may opt to set aside a contribution of Rs.5 lakhs from his additional base capital available on the Capital Market segment and / or Futures & Options segment (s) towards this IFSD.

Margins & Gross Exposure Limits

- Mark to market margins will be applicable on all-open positions in government securities and shall be calculated on the basis of ZCYC prices. This margin shall be payable on T + 1 day.
- Institutions that are permitted under the relevant regulations to transact only on the basis of giving and taking delivery will operate through the custodial mechanism and shall be exempt from margin as in the case of the equities. Custodial trades on behalf of Provident Funds transacting through SGL – II accounts shall also be eligible for margin exemption.
- The gross exposure in respect of these securities shall not exceed 20 times of the IFSD. Any member desirous of a higher exposure will be required to bring in additional base capital as in Capital Market segment.

Key Words

- Basket Trade
- Forwards
- Futures:
- Options
- Swaps
- LEAPS
- Baskets
- Swaptions
- Debt Market
- Wholesale Debt Market Segment
- Trading, Clearing and Settlement in WDS
- Retail Debt Segment (REDS) Retail Trading in G-Secs
- Debentures
- *Bearer Debentures*
- *Registered Debentures*
- *Redeemable Debentures*
- *Debentures Issued as Collateral Security for a Loan*
- *Naked Debentures*
- *Secured Debentures*
- Mezzanine Finance

- Hybrid Debt Instruments
- Zero Interest Bond
- Equity Warrants with NCDs
- Secured Premium Notes
- Deep Discount Bond
- Debt for Equity Swap
- Junk Bonds
- Step-up and step-down Debentures
- Callable Bond
- Option Tender Bonds
- Guaranteed Debentures
- Subordinated Debentures
- Floating Rate Bonds
- Indexed Bonds
- Inflation Adjusted Bonds
- Credit Wrapping
- Interest Rate Futures
- Exchange traded funds
- Open-ended Funds
- Closed-ended Funds
- Risk Management Strategies
- Risk Avoidance
- Risk Abatement
- Risk Retention
- Risk Transfer
- Risk Allocation
- Capital adequacy requirement
- Itntra day tradeing
- Value at Risk Margin
- Extreme Loss Margin
- Mark-to-Market Margin

Key Questions

1. Write a short note on - Basket Trade, Forwards, Futures:, Options, Swaps, LEAPS, Baskets, Swaptions
2. Explain Indian Debt Market
3. Wholesale Debt Market Segment in BSE and NSE
4. Write on Trading, Clearing and Settlement in WDS

5. Explain Retail Debt Segment (REDS) Retail Trading in G-Secs
6. Write a Short note on – Debentures, *Bearer Debentures, Registered ,Redeemable Debentures, Debentures Issued as Collateral Security for a Loan, Naked Debentures, Secured Debentures,* Mezzanine Finance
7. Write on Hybrid Debt Instruments
8. Define Zero Interest Bond
9. Explain Equity Warrants with NCDs, Secured Premium Notes, Deep Discount Bond, Debt for Equity Swap. Junk Bonds, Step-up and step-down Debentures, Callable Bond, Option Tender Bonds, Guaranteed Debentures, Subordinated Debentures, Floating Rate Bonds, Indexed Bonds, Inflation Adjusted Bonds, Credit Wrapping
10. What do you understand by Interest Rate Futures
11. Explain Exchange traded funds
12. Write of Mutual fund -Open-ended Funds and Closed-ended Funds
13. What do you understand by Risk Management Strategies
14. Explain Intra day trading, Value at Risk Margin, Extreme Loss Margin, Mark-to-Market Margin

3.6 DERIVATIVE MARKETS

Introduction

The emergence of the market for derivative products, most notably forwards, futures and options, can be traced back to the willingness of risk-averse economic agents to guard themselves against uncertainties arising out of fluctuations in asset prices. By their very nature, the financial markets are marked by a very high degree of volatility. Through the use of derivative products, it is possible to partially or fully transfer price risks by locking-in asset prices. As instruments of risk management, these generally do not influence the fluctuations in the underlying asset prices. However, by locking-in asset prices, derivative products minimize the impact of fluctuations in asset prices on the profitability and cash flow situation of risk-averse investors.

Derivative products initially emerged, as hedging devices against fluctuations in commodity prices and commodity-linked derivatives remained the sole form of such products for almost three hundred years. The financial derivatives came into spotlight in post-1970 period due to growing instability in the financial markets. However, since their emergence, these products have become very popular and by 1990s, they accounted for about two-thirds of total transactions in derivative products. In recent years, the market for financial derivatives has grown tremendously both in terms of variety of instruments available, their complexity and also turnover. In the class of equity derivatives, futures and options on stock indices have gained more popularity than on individual stocks, especially among institutional investors, who are major users of index-linked derivatives.

Even small investors find these useful due to high correlation of the popular indices with various portfolios and ease of use. The lower costs associated with index derivatives vis-vis derivative products based on individual securities is another reason for their growing use.

The following factors have been driving the growth of financial derivatives:

1. Increased volatility in asset prices in financial markets,
2. Increased integration of national financial markets with the international markets,
3. Marked improvement in communication facilities and sharp decline in their costs,
4. Development of more sophisticated risk management tools, providing economic agents a wider choice of risk management strategies, and
5. Innovations in the derivatives markets, which optimally combine the risks and returns over a large number of financial assets, leading to higher returns, reduced risk as well as trans-actions costs as compared to individual financial assets.

Derivative is a product whose value is derived from the value of one or more basic variables, called bases (underlying asset, index, or reference rate), in a contractual manner. The underlying asset can be equity, forex, commodity or any other asset. For example, wheat farmers may wish to sell their harvest at a future date to eliminate the risk of a change in prices by that date. Such a transaction is an example of a derivative. The price of this derivative is driven by the spot price of wheat which is the "underlying".

In the Indian context the Securities Contracts (Regulation) Act, 1956 (SC(R) A) defines "equity derivative" to include "A security derived from a debt instrument, share, loan whether secured or unsecured, risk instrument or contract for differences or any other form of security." A contract, which derives its value from the prices, or index of prices, of underlying securities. The derivatives are securities under the SC(R) A and thus the regulatory framework under the SC(R) A governs the trading of derivatives.

According to author derivative can be defined as

Derivatives are those assets whose value is determined from the value of some underlying assets. The underlying asset may be equity, commodity or currency. The list of derivative assets is long.

The derivatives are most modern financial instruments in hedging risk. The individuals and firms who wish to avoid or reduce risk can deal with the others who are willing to accept the risk for a price. A common place where such transactions take place is called the 'derivative market'. As the financial products commonly traded in the derivatives market are themselves not primary loans or securities but can be used to change the risk characteristics of underlying asset or liability position, they are referred to as 'derivative financial instruments' or simply 'derivatives'. These instruments are so called because they derive their value from some underlying instrument and have no intrinsic value of their own. Forwards, futures, options, swaps, caps floor collar etc. are some of more commonly used derivatives. The world over, derivatives are a key part of the financial system.

Characteristics of Derivatives

The important characteristics of derivatives are as follows:

- Derivatives possess a combination of novel characteristics not found in any form of assets.
- It is comfortable to take a short position in derivatives than in other assets. An investor is said to have a short position in a derivatives product if he is obliged to deliver the underlying asset in specified future date.

- Derivatives traded on exchanges are liquid and involves the lowest possible transaction costs.
- Derivatives can be closely matched with specific portfolio requirements.
- The margin requirements for exchange traded derivatives are relatively low, reflecting the relatively low level of credit-risk associated with the derivatives.
- Derivatives are traded globally having strong popularity in financial markets.
- Derivatives maintain a close relationship between their values and the values of underlying assets; the change in values of underlying assets will have effect on values of derivatives based on them.
- In a Treasury bond future contract the derivatives are straight-forward.

Criteria for Derivatives Trading

In the derivatives market there shall be a two-level system of members viz., clearing members and non-clearing members. The clearing member takes the responsibility for settlement of trades on behalf of the non-clearing member. Thus, the clearing member acts as a guarantor for the non-clearing member. The clearing member shall have a minimum networth of Rs. 300 lakhs as per the SEBI's definition and shall made a deposit of Rs. 50 lakhs with the Exchange/ Clearing Corporation in the form of liquid assets such as cash. Fixed deposits pledged in the name of the Exchange, or other securities.

Derivatives Market in India

The most notable development concerning the secondary segment of the Indian capital market is the introduction of derivatives trading in June 2000. SEBI approved derivatives trading based on Futures Contracts at both BSE and NSE in accordance with the rules/by laws and regulations of the Stock Exchanges. A beginning with equity derivatives has been made with the introduction of stock index futures by BSE and NSE.

Stock Index Futures contract allows for the buying and selling of the particular stock index for a specified price at a specified future date. Stock Index Futures, inter alia, help in overcoming the problem of asymmetries in information. Information asymmetry is mainly a problem in individual stocks as it is unlikely that a trader has market-wide private information. As such, the asymmetric information component is not likely to be present in a basket of stocks. This provides another rationale for trading in Stock Index Futures. Trading in index derivatives involves low transaction cost in comparison with trading in underlying individual stocks comprising the index. While the BSE introduced Stock Index Futures for S&P CNX Nifty comprising 50 scrips.

Stock Index Futures in India are available with one month, two month and three month maturities. While derivatives trading based on the Sensitive Index (Sensex) commenced at the BSE on June 9, 2000, derivatives trading based on S&P CNX Nifty commenced at the NSE on June 12, 2000. SIF is the first attempt in the development of derivatives trading.

Exchange-Traded and Over-the-Counter Derivative Instruments

OTC (over-the-counter) contracts, such as forwards and swaps, are bilaterally negotiated between two parties. The terms of an OTC contract are flexible, and are often customized to fit the specific requirements of the user. OTC contracts have substantial credit risk, which is the risk that the counterparty that owes money defaults on the payment. In India, OTC derivatives are generally prohibited with some exceptions: those that are specifically allowed by the Reserve Bank of India (RBI) or, in the case of commodities (which are regulated by the Forward Markets Commission), those that trade informally in “havala” or forwards markets.

An exchange-traded contract, such as a futures contract, has a standardized format that specifies the underlying asset to be delivered, the size of the contract, and the logistics of delivery. They trade on organized exchanges with prices determined by the interaction of many buyers and sellers**.** In India, two exchanges offer derivatives trading: the Bombay Stock Exchange (BSE) and the National Stock Exchange (NSE). However, NSE now accounts for virtually all exchange-traded derivatives in India, accounting for more than 99% of volume in 2003-2004. Contract performance is guaranteed by a clearinghouse, which is a wholly owned subsidiary of the NSE. The Margin requirements and daily marking-to-market of futures positions substantially reduce the credit risk of exchange-traded contracts, relative to OTC contracts.

Development of Derivative Markets in India

Derivatives markets have been in existence in India in some form or other for a long time. In the area of commodities, the Bombay Cotton Trade Association started futures trading in 1875 and, by the early 1900s India had one of the world’s largest futures industry. In 1952 the government banned cash settlement and options trading and derivatives trading shifted to informal forwards markets. In recent years, government policy has changed, allowing for an increased role for market-based pricing and less suspicion of derivatives trading. The ban on futures trading of many commodities was lifted starting in the early 2000s, and national electronic commodity exchanges were created.

In the equity markets, a system of trading called “badla” involving some elements of forwards trading had been in existence for decades. However, the system led to a number of undesirable practices and it was prohibited.

A series of reforms of the stock market between 1993 and 1996 paved the way for the development of exchange-traded equity derivatives markets in India. In 1993, the government created the NSE in collaboration with state-owned financial institutions. NSE improved the efficiency and transparency of the stock markets by offering a fully automated screen-based trading system and real-time price dissemination. In 1995, a prohibition on trading options was lifted. In 1996, the NSE sent a proposal to SEBI for listing exchange-traded derivatives. The report of the L. C. Gupta Committee, set up by SEBI, recommended a phased introduction of derivative products, and bi-level regulation (i.e., self-regulation by exchanges with SEBI providing a supervisory and advisory role). Another report, by the J. R. Varma Committee in 1998, worked out various operational details such as the margining systems. In 1999, the Securities Contracts (Regulation) Act of 1956, or SC(R)A, was amended so that derivatives could be declared “securities.” This allowed the regulatory framework for trading securities to be extended to derivatives. The Act considers derivatives to be legal and valid, but only if they are traded on exchanges. Finally, a 30-year ban on forward trading was also lifted in 1999.

The economic liberalization of the early nineties facilitated the introduction of derivatives based on interest rates and foreign exchange. A system of market-determined exchange rates was adopted by India in March 1993. In August 1994, the rupee was made fully convertible on current account. These reforms allowed increased integration between domestic and international markets, and created a need to manage currency risk. Figure 1 shows how the volatility of the exchange rate between the Indian Rupee and the U.S. dollar has increased since 1991. The easing of various restrictions on the free movement of interest rates resulted in the need to manage interest rate risk.

Development and Regulation of Derivative Markets in India

The SEBI Board in its meeting on June 24, 2002 considered some important issues relating to the derivative markets including :

- Physical settlement of stock options and stock futures contracts.
- Review of the eligibility criteria of stocks on which derivative products are permitted.
- Use of sub-brokers in the derivative markets.
- Norms for use of derivatives by mutual funds

The recommendations of the Advisory Committee on Derivatives on some of these issues were also placed before the SEBI Board. The Board desired that these issues be reconsidered by the Advisory Committee on Derivatives (ACD) and requested a detailed report on the aforesaid issues for the consideration of the Board.

In the meantime, several other important issues like the issue of minimum contract size, the segregation of the cash and derivative segments of the exchange and the surveillance issues in the derivatives market were also placed before the ACD for its consideration.

The Advisory Committee therefore decided to take this opportunity to present a comprehensive report on the development and regulation of derivative markets including a review of the recommendations of the L. C. Gupta Committee (LCGC).

Four years have elapsed since the LCGC Report of March 1998. During this period there have been several significant changes in the structure of the Indian Capital Markets which include, dematerialisation of shares, rolling settlement on a T+3 basis, client level and Value at Risk (VaR) based margining in both the derivative and cash markets and proposed demutualization of Exchanges. Equity derivative markets have now been in existence for two years and the markets have grown in size and diversity of products. This therefore appears to be an appropriate time for a comprehensive review of the development and regulation of derivative markets.

Regulatory Objectives

It is inclined towards positive regulation designed to encourage healthy activity and behaviour. It has been guided by the following objectives:

(a) Investor Protection: Attention needs to be given to the following four aspects:

(i) **Fairness and Transparency:** The trading rules should ensure that trading is conducted in a fair and transparent manner. Experience in other countries shows that in many cases, derivatives brokers/dealers failed to disclose potential risk to the clients. In this context, sales practices adopted by dealers for derivatives would require specific regulation. In some of the most widely reported mishaps in the derivatives market elsewhere, the underlying reason was inadequate internal control system at the user-firm itself so that overall exposure was not controlled and the use of derivatives was for speculation rather than for risk hedging. These experiences provide useful lessons for us for designing regulations.

(ii) Safeguard for clients' moneys: Moneys and securities deposited by clients with the trading members should not only be kept in a separate clients' account but should also not be attachable for meeting the broker's own debts. It should be ensured that trading by dealers on own account is totally segregated from that for clients.

(iii) Competent and honest service: The eligibility criteria for trading members should be designed to encourage competent and qualified personnel so that investors/clients are served well. This makes it necessary to prescribe qualification for derivatives brokers/dealers and the sales persons appointed by them in terms of a knowledge base.

(iv) Market integrity: The trading system should ensure that the market's integrity is safeguarded by minimising the possibility of defaults. This requires framing appropriate rules about capital adequacy, margins, clearing corporation, etc.

(b) Quality of markets: The concept of "Quality of Markets" goes well beyond market integrity and aims at enhancing important market qualities, such as cost-efficiency, price-continuity, and price-discovery. This is a much broader objective than market integrity.

(c) Innovation: While curbing any undesirable tendencies, the regulatory framework should not stifle innovation which is the source of all economic progress, more so because financial derivatives represent a new rapidly developing area, aided by advancements in information technology.

Derivative Products

Derivative is a product/contract which does not have any value on its own i.e. it derives its value from some underlying :-

Forward contracts

- A forward contract is one to one bi-partite contract, to be performed in the future, at the terms decided today.
- (E.g. forward currency market in India).
- Forward contracts offer tremendous flexibility to the parties to design the contract in terms of the price, quantity, quality (in case of commodities), delivery time and place.
- Forward contracts suffer from poor liquidity and default risk.

Future contracts

- Future contracts are organised/ standardised contracts, which are traded on the exchanges.
- These contracts, being standardised and traded on the exchanges are very liquid in nature.
- In futures market, clearing corporation/ house provides the settlement guarantee.

Every futures contract is a forward contract. They :

- are entered into through exchange, traded on exchange and clearing corporation/ house provides the settlement guarantee for trades.

- are of standard quantity; standard quality (in case of commodities).
- have standard delivery time and place.

Forward / Future Contracts

Features	Forward Contract	Future Contract
Operational Mechanism	Not traded on exchange	Traded on exchange
Contract Specifications	Differs from trade to trade.	Contracts are standardised contracts.
Counterparty Risk	Exists	Exists, but assumed by Clearing Corporation/ house.
Liquidation Profile	Poor Liquidity as contracts are tailor maid contracts.	Very high Liquidity as contracts are standardised contracts.
Price Discovery	Poor; as markets are fragmented.	Better; as fragmented markets are brought to the common platform.

Options

Options are instruments whereby the right is given by the option seller to the option buyer to buy or sell a specific asset at a specific price on or before a specific date.

- Option Seller - One who gives/writes the option. He has an obligation to perform, in case option buyer desires to exercise his option.
- Option Buyer - One who buys the option. He has the right to exercise the option but no obligation.
- Call Option - Option to buy.
- Put Option - Option to sell.
- American Option - An option which can be exercised anytime on or before the expiry date.
- European Option - An option which can be exercised only on expiry date.
- Strike Price/ Exercise Price - Price at which the option is to be exercised.
- Expiration Date - Date on which the option expires.
- Exercise Date - Date on which the option gets exercised by the option holder/buyer.
- Option Premium - The price paid by the option buyer to the option seller for granting the option.

Introduction of futures in India

- The first derivative product to be introduced in the Indian securities market is going to be "INDEX FUTURES".
- In the world, first index futures were traded in U.S. on Kansas City Board of Trade (KCBT) on Value Line Arithmetic Index (VLAI) in 1982.

Index Futures

- Index futures are the future contracts for which underlying is the cash market index.

- For example: BSE may launch a future contract on "BSE Sensitive Index" and NSE may launch a future contract on "S&P CNX NIFTY".

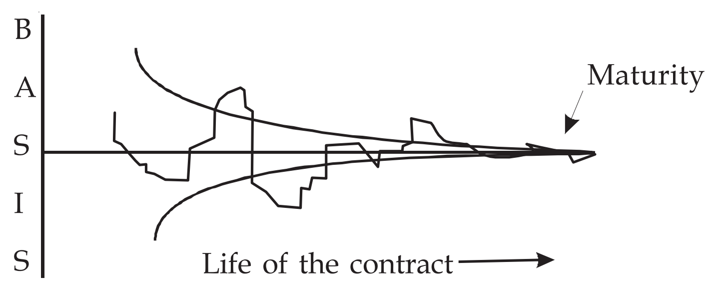
Frequently used terms in Index Futures market

- Contract Size - The value of the contract at a specific level of Index. It is Index level * Multiplier.
- Multiplier - It is a pre-determined value, used to arrive at the contract size. It is the price per index point.
- Tick Size - It is the minimum price difference between two quotes of similar nature.
- Contract Month - The month in which the contract will expire.
- Expiry Day - The last day on which the contract is available for trading.
- Open interest - Total outstanding long or short positions in the market at any specific point in time. As total long positions for market would be equal to total short positions, for calculation of open Interest, only one side of the contracts is counted.
- Volume - No. of contracts traded during a specific period of time. During a day, during a week or during a month.
- Long position- Outstanding/unsettled purchase position at any point of time.
- Short position - Outstanding/ unsettled sales position at any point of time.
- Open position - Outstanding/unsettled long or short position at any point of time.
- Physical delivery - Open position at the expiry of the contract is settled through delivery of the underlying. In futures market, delivery is low.
- Cash settlement - Open position at the expiry of the contract is settled in cash. These contracts are designated as cash settled contracts. Index Futures fall in this category.
- Alternative Delivery Procedure (ADP) - Open position at the expiry of the contract is settled by two parties - one buyer and one seller, at the terms other than defined by the exchange. World wide a significant portion of the energy and energy related contracts (crude oil, heating and gasoline oil) are settled through Alternative Delivery Procedure.

Concept of basis in futures market

- Basis is defined as the difference between cash and futures prices: Basis = Cash prices - Future prices.
- Basis can be either positive or negative (in Index futures, basis generally is negative).
- Basis may change its sign several times during the life of the contract.

Basis turns to zero at maturity of the futures contract i.e. both cash and future prices converge at maturity



Life of the contract

Operators in the derivatives market

Hedgers - Operators, who want to transfer a risk component of their portfolio.

Speculators - Operators, who intentionally take the risk from hedgers in pursuit of profit.

Arbitrageurs - Operators who operate in the different markets simultaneously, in pursuit of profit and eliminate mis-pricing.

Pricing Futures

Cost and carry model of Futures pricing

Fair price = Spot price + Cost of carry - Inflows

- $FP_{tT} = CP_t + CP_t * (R_{tT} - D_{tT}) * (T\text{-}t)/365$
- FP_{tT} - Fair price of the asset at time t for time T.
- CP_t - Cash price of the asset.
- R_{tT} - Interest rate at time t for the period up to T.
- D_{tT} - Inflows in terms of dividend or interest between t and T.
- Cost of carry = Financing cost, Storage cost and insurance cost.
- If Futures price > Fair price; Buy in the cash market and simultaneously sell in the futures market.
- If Futures price < Fair price; Sell in the cash market and simultaneously buy in the futures market

This arbitrage between Cash and Future markets will remain till prices in the Cash and Future markets get aligned.

Set of assumptions

- No seasonal demand and supply in the underlying asset.
- Storability of the underlying asset is not a problem.
- The underlying asset can be sold short.
- No transaction cost; No taxes.
- No margin requirements, and so the analysis relates to a forward contract, rather than a futures contract.

Myths and realities about Derivatives

Derivatives increase speculation and do not serve any economic purpose Numerous studies of derivatives activity have led to a broad consensus, both in the private and public sectors that derivatives provide numerous and substantial benefits to the users. Derivatives are a low-cost, effective method for users to hedge and manage their exposures to interest rates, commodity prices, or exchange rates.

The need for derivatives as hedging tool was felt first in the commodities market. Agricultural futures and options helped farmers and processors hedge against commodity price risk. After the fallout of Bretton wood agreement, the financial markets in the world started undergoing radical changes. This period is marked by remarkable innovations in the financial markets such as introduction of floating rates for the currencies, increased trading in variety of derivatives instruments, on-line trading in the capital markets, etc. As the complexity of instruments increased many folds, the accompanying risk factors grew in gigantic proportions. This situation led to development derivatives as effective risk management tools for the market participants.

Looking at the equity market, derivatives allow corporations and institutional investors to effectively manage their portfolios of assets and liabilities through instruments like stock index futures and options. An equity fund, for example, can reduce its exposure to the stock market quickly and at a relatively low cost without selling off part of its equity assets by using stock index futures or index options.

By providing investors and issuers with a wider array of tools for managing risks and raising capital, derivatives improve the allocation of credit and the sharing of risk in the global economy, lowering the cost of capital formation and stimulating economic growth. Now that world markets for trade and finance have become more integrated, derivatives have strengthened these important linkages between global markets, increasing market liquidity and efficiency and facilitating the flow of trade and finance.

Indian Market is not ready for derivative trading

Often the argument put forth against derivatives trading is that the Indian capital market is not ready for derivatives trading. Here, we look into the pre-requisites, which are needed for the introduction of derivatives and how Indian market fares:

<u>Large market Capitalization</u> - India is one of the largest market-capitalized countries in Asia with a market capitalization of more than Rs.765000 crores.

<u>High Liquidity in the underlying</u> - The daily average traded volume in Indian capital market today is around 7500 crores. Which means on an average every month 14% of the country's Market capitalization gets traded. These are clear indicators of high liquidity in the underlying.

<u>Trade guarantee</u> - The first clearing corporation guaranteeing trades has become fully functional from July 1996 in the form of National Securities Clearing Corporation (NSCCL). NSCCL is responsible for guaranteeing all open positions on the National Stock Exchange (NSE) for which it does the clearing.

<u>A Strong Depository</u> - National Securities Depositories Limited (NSDL) which started functioning in the year 1997 has revolutionalised the security settlement in our country.

<u>A Good legal guardian</u> - In the Institution of SEBI (Securities and Exchange Board of India) today the Indian capital market enjoys a strong, independent, and innovative legal guardian who is helping the market to evolve to a healthier place for trade practices.

Disasters prove that derivatives are very risky and highly leveraged instruments

Disasters can take place in any system. The 1992 Security scam is a case in point. Disasters are not necessarily due to dealing in derivatives, but derivatives make headlines. Some of the reasons behind disasters related to derivatives are:

1. Lack of independent risk management
2. Improper internal control mechanisms
3. Problems in external monitoring done by Exchanges and Regulators
4. Trader taking unauthorized positions
5. Lack of transparency in the entire process

Derivatives are complex and exotic instruments that Indian investors will have difficulty in understanding

Trading in standard derivatives such as forwards, futures and options is already prevalent in India and has a long history. Reserve Bank of India allows forward trading in Rupee-Dollar forward contracts, which has become a liquid market. Reserve Bank of India also allows Cross Currency options trading.

Forward Markets Commission has allowed trading in Commodity Forwards on Commodities Exchanges, which are, called Futures in international markets. Commodities futures in India are available in turmeric, black pepper, coffee, Gur (jaggery), hessian, castor seed oil etc. There are plans to set up commodities futures exchanges in Soya bean oil as also in Cotton. International markets have also been allowed (dollar denominated contracts) in certain commodities. Reserve Bank of India also allows, the users to hedge their portfolios through derivatives exchanges abroad. Detailed guidelines have been prescribed by the RBI for the purpose of getting approvals to hedge the user's exposure in international markets.

Derivatives in commodities markets have a long history. The first commodity futures exchange was set up in 1875 in Mumbai under the aegis of Bombay Cotton Traders Association (Dr.A.S.Naik, 1968, Chairman, Forwards Markets Commission, India, 1963-68). A clearinghouse for clearing and settlement of these trades was set up in 1918. In oilseeds, a futures market was established in 1900. Wheat futures market began in Hapur in 1913. Futures market in raw jute was set up in Calcutta in 1912. Bullion futures market was set up in Mumbai in 1920.

History and existence of markets along with setting up of new markets prove that the concept of derivatives is not alien to India. In commodity markets, there is no resistance from the users or market participants to trade in commodity futures or foreign exchange markets. Government of India has also been facilitating the setting up and operations of these markets in India by providing approvals and defining appropriate regulatory frameworks for their operations. Approval for new exchanges in last six months by the Government of India also indicates that Government of India does not consider this type of trading to be harmful albeit within proper regulatory framework.

This amply proves that the concept of options and futures has been well ingrained in the Indian equities market for a long time and is not alien as it is made out to be. Even today, complex strategies of options are being traded in many exchanges which are called teji-mandi, jota-phatak, bhav-bhav at different places in India (Vohra and Bagari, 1998) In that sense, the derivatives are not new to India and are also currently prevalent in various markets including equities markets.

The existing capital market is safer than Derivatives

World over, the spot markets in equities are operated on a principle of rolling settlement. In this kind of trading, if you trade on a particular day (T), you have to settle these trades on the third working day from the date of trading (T+3).

Futures market allow you to trade for a period of say 1 month or 3 months and allow you to net the transaction taken place during the period for the settlement at the end of the period. In India, most of the stock exchanges allow the participants to trade during one-week period for settlement in the following week. The trades are netted for the settlement for the entire one-week period. In that sense, the Indian markets are already operating the futures style settlement rather than cash markets prevalent internationally.

In this system, additionally, many exchanges also allow the forward trading called badla in Gujarati and Contango in English, which was prevalent in UK. This system is prevalent currently in France in their monthly settlement markets. It allowed one to even further increase the time to settle for almost 3 months under the earlier regulations. This way, a curious mix of futures style settlement with facility to carry the settlement obligations forward creates discrepancies.

The more efficient way from the regulatory perspective will be to separate out the derivatives from the cash market i.e. introduce rolling settlement in all exchanges and at the same time allow futures and options to trade. This way, the regulators will also be able to regulate both the markets easily and it will provide more flexibility to the market participants.

In addition, the existing system although futures style, does not ask for any margins from the clients. Given the volatility of the equities market in India, this system has become quite prone to systemic collapse. This was evident in the MS Shoes scandal. At the time of default taking place on the BSE, the defaulting member of the BSE Mr.Zaveri had a position close to Rs.18 crores. However, due to the default, BSE had to stop trading for a period of three days. At the same time, the Barings Bank failed on Singapore Monetary Exchange (SIMEX) for the exposure of more than US $ 20 billion (more than Rs.84,000 crore) with a loss of approximately US $ 900 million (around Rs.3,800 crore). Although, the exposure was so high and even the loss was also very big compared to the total exposure on MS Shoes for BSE of Rs.18 crores, the SIMEX had taken so much margins that they did not stop trading for a single minute.

Options

«An option is a contractual agreement that gives the option buyer the right, but not the obligation, to purchase (in the case of a call option) or to sell (in the case of a put option) a specified instrument at a specified price at any time of the option buyer's choosing by or before a fixed date in the future. Upon exercise of the right by the option holder, an option seller is obliged to deliver the specified instrument at the specified price.»

The growth in organised option markets has resulted with the developments in Option Pricing. Theory made by Black and Scholes (1973), since when the theory has been modified and extended. The option market is not only extended to stocks dealings but also to foreign currencies, commodities etc. An option is the right but not the obligation to enter into a transaction. An option is the right, but not the obligation, to buy or sell something at a stated date at a stated price. An option contract gives the holder of the contracts the option to buy or sell shares at a specified price on or before a specific date in the future. The buyer of the contract pays the writer (or seller) for the right, but not the obligation, to purchase shares etc. from, or sell shares etc. to the writer at the price fixed by the contract (the striking or exercise price). The right to choose, therefore the option, is sold by the seller (writer) of the option to the Purchaser (holder) in return for a payment (premium). The right conveyed by the option only lasts a certain period of time and then the right expires - at its maturity or expiration. The seller of an option has no choice. He must meet his obligation to buy/sell if the right of the purchaser to do so is exercised at the agreed exercise/strike rate. It is the purchase who has choice, he does not have to exercise the right to buy/sell at the strike rate agreed if it is better from his prospective to buy/sell out spot, he can instead walk away from the option. In this respect options differ from futures where holders of positions do have the obligation to buy/sell the underlying asset. At worst the purchaser will lose the premium, but can gain substantially if the option is worth exercising. Options come in two varieties -European and American. In European option, the holder of the option can only exercise his right (if he so desire) on the expiration date. In an American option he can exercise this right any time between purchase date and the expiration date. Options are categorised into - (a) Call option and (b) Put option.

Features of Options

The important features of options contracts are as follows:

- The option is exercisable only by the owner, namely the buyer of the option.
- The owner has limited liability.
- Owners of options have no right affordable to shareholders such as voting right and dividend right.
- Options have high degree of risk to the option writers.
- Options are popular because they allow the buyer profits from favourable movements in exchange rate.
- Options involve buying counter positions by the option sellers.
- Flexibility in investors needs.
- No certificates are issued by the company.
- An investor who writes a call option against stock held in his portfolio is said to be selling ‘covered options’. Options sold without the stock to back them up are called ‘naked options’.

Differences between Futures and Options

The key difference between futures and options is that the former involve obligations, whereas the latter confer rights. Futures are a contractual obligation to buy and sell at an agreed price at a future date. The contract terms are standardised by futures exchanges, and the obligation, from both buyer and seller, is confirmed when the initial margin, or deposit, changes hands. An option does not carry the same obligations. Buyers pay a premium for the right to purchase (or sell, in the case of put options) an agreed quantity of some underlying asset by a future date. The option buyer then has a further decision to make, which is that of exercising his option if he chooses to buy the underlying asset. In most cases, however, he will take whatever profit there is available by selling his option back at a higher price (this is why they are known as ‘traded options). The futures contract margin is, therefore, the basis of a contractual commitment, while the option premium represents the purchase of exercisable rights. In both, the concept of gearing is crucial, although there are differences. Option premiums are a wasting asset, and are much affected by the volatility of the underlying price. Futures margins are not a wasting asset and are affected differently by volatility. These key variations causes important differences in the risk/reward relationships involved in investing in either futures or options. Both futures and options are useful derivatives but have some fundamental differences between the two types of derivatives. They are:

Futures	*Options*
1. Both the parties are obliged to perform the contract.	1.Only the seller (writer) is obligated to perform the contract.
2. No premium is paid by either parties.	2.The buyer pays the seller (writer) a premium.
3. The holder of the contract is exposed to the entire spectrum of downside risk and has potential for all the upside return.	3. The buyer's loss is restricted to downside risk to the premium paid, but retains upward indefinite potentials.
4. The parties of the contract must perform at the settlement date. They are not obligated to perform before the date.	4.The buyer can exercise option any time prior to the expiry date

Options are of two basic types:

The Call and the Put Option

A call option gives the holder the right to buy an underlying asset by a certain date for a certain price. The seller is under an obligation to fulfill the contract and is paid a price of this which is called "the call option premium or call option price".

A put option, on the other hand gives the holder the right to sell an underlying asset by a certain date for a certain price. The buyer is under an obligation to fulfill the contract and is paid a price for this, which is called "the put option premium or put option price".

The price at which the underlying asset would be bought in the future at a particular date is the **"Strike Price"** or the **"Exercise Price"**. The date on the options contract is called the **"Exercise date"**, **"Expiration Date"** or the **"Date of Maturity"**.

There are two kind of options based on the date. The first is the **European Option** which can be exercised only on the maturity date. The second is the **American Option** which can be exercised before or on the maturity date.

In most exchanges the options trading starts with European Options as they are easy to execute and keep track of. This is the case in the BSE and the NSE **Cash settled options** are those where, on exercise the buyer is paid the difference between stock price and exercise price (call) or between exercise price and stock price (put). **Delivery settled options** are those where the buyer takes delivery of undertaking (calls) or offers delivery of the undertaking (puts).

Call Options

The following example would clarify the basics on Call Options.

A call option give the buyer the right but not the obligation to buy a given quantity of the underlying asset, a given price known as 'exercise price' or 'strike price' on or before a given future date called the 'maturity date' or 'expiry date'. A call option gives the buyer the right to buy a fixed number of shares/commodities in a particular security at the exercise price upto the date of expiration of the contract. The seller of an option is known as 'writer'. Unlike the buyer, the writer has no choice regarding the fulfilment of the obligations under the contract. If the buyer wants to exercise his right, the writer must comply. For this asymmetry of privilege, the buyer must pay the writer the option price, which is known as 'premium'.

Illustration 1

An investor buys one European Call option on one share of Reliance Petroleum at a premium of Rs. 2 per share on 31 July . The strike price is Rs.60 and the contract matures on 30 September. The payoffs for the investor on the basis of fluctuating spot prices at any time are shown by the payoff table. It may be clear form the graph that even in the worst case scenario, the investor would only lose a maximum of Rs.2 per share which he/she had paid for the premium. The upside to it has an unlimited profits opportunity.

On the other hand the seller of the call option has a payoff chart completely reverse of the call options buyer. The maximum loss that he can have is unlimited though a profit of Rs.2 per share would be made on the premium payment by the buyer.

Payoff from Call Buying/Long (Rs.)				
S	**Xt**	**c**	**Payoff**	**Net Profit**
57	60	2	0	-2
58	60	2	0	-2
59	60	2	0	-2
60	60	2	0	-2
61	60	2	1	-1
62	60	2	2	0
63	60	2	3	1
64	60	2	4	2
65	60	2	5	3
66	60	2	6	4

A European call option gives the following payoff to the investor: **max (S - Xt, 0).**

The seller gets a payoff of: **-max (S - Xt,0) or min (Xt - S, 0).**

Notes:

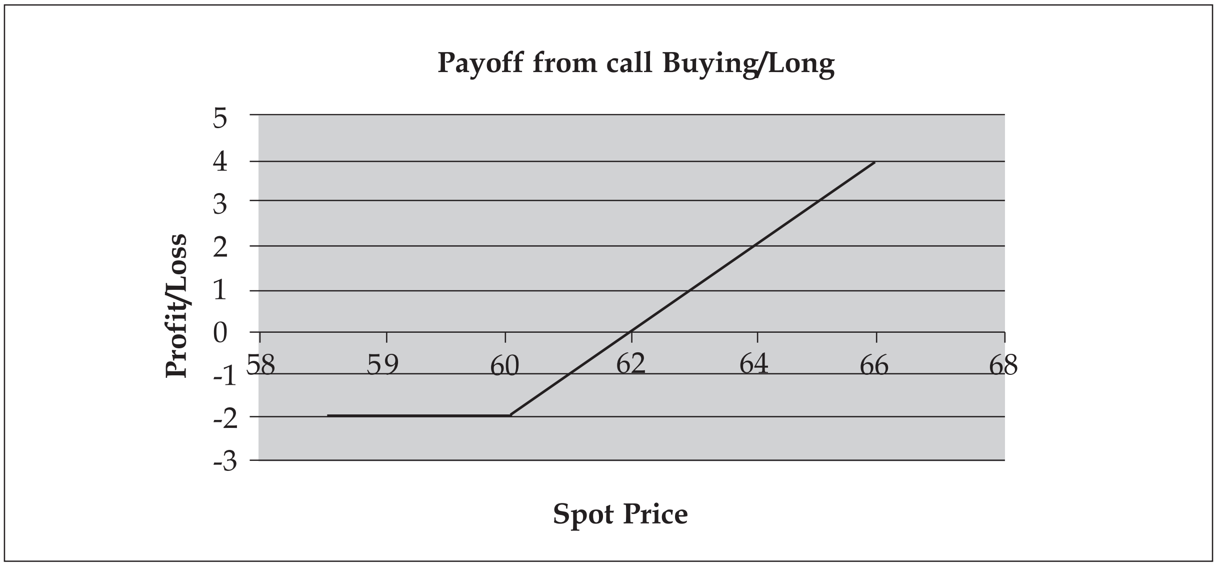
S - Stock Price

Xt - Exercise Price at time 't'

C - European Call Option Premium

Payoff - Max (S - Xt, O)

Graph



Net Profit - Payoff minus 'c'

Option Position and Strategies

The Call option gives the buyer a right to buy the requisite shares on a specific date at a specific price. This puts the seller under the obligation to sell the shares on that specific date and specific price. The Call Buyer exercises his option only when he/ she feels it is profitable. This Process is called "Exercising the Option". This leads us to the fact that if the spot price is lower than the strike price then it might be profitable for the investor to buy the share in the open market and forgo the premium paid.

The implications for a buyer are that it is his/her decision whether to exercise the option or not. In case the investor expects prices to rise far above the strike price in the future then he/she would surely be interested in buying call options. On the other hand, if the seller feels that his shares are not giving the desired returns and they are not going to perform any better in the future, a premium can be charged and returns from selling the call option can be used to make up for the desired returns. At the end of the options contract there is an exchange of the underlying asset. In the real world, most of the deals are closed with another counter or reverse deal. There is no requirement to exchange the underlying assets then as the investor gets out of the contract just before its expiry.

Put Options

The European Put Option is the reverse of the call option deal. Here, there is a contract to sell a particular number of underlying assets on a particular date at a specific price. An example would help understand the situation a little better:

Illustration 2

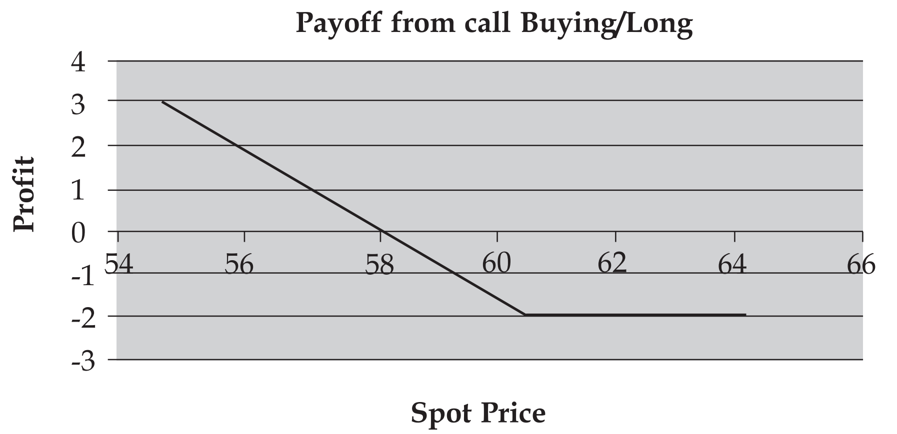
An investor buys one European Put Option on one share of Reliance Petroleum at a premium of Rs. 2 per share on 31 July. The strike price is Rs.60 and the contract matures on 30 September. The payoff table shows the fluctuations of net profit with a change in the spot price.

Payoff from Put Buying/Long (Rs.)				
S	Xt	p	Payoff	Net Profit
55	60	2	5	3
56	60	2	4	2
57	60	2	3	1
58	60	2	2	0
59	60	2	1	-1
60	60	2	0	-2
61	60	2	0	-2
62	60	2	0	-2
63	60	2	0	-2
64	60	2	0	-2

The payoff for the put buyer is :**max (Xt - S, 0)**

The payoff for a put writer is : **-max(Xt - S, 0) or min(S - Xt, 0)**

Graph



These are the two basic options that form the whole gamut of transactions in the options trading. These in combination with other derivatives create a whole world of instruments to choose form depending on the kind of requirement and the kind of market expectations.

Exotic Options are often mistaken to be another kind of option. They are nothing but non-standard derivatives and are not a third type of option.

Market players

Hedgers: The objective of these kind of traders is to reduce the risk. They are not in the derivatives market to make profits. They are in it to safeguard their existing positions. Apart from equity markets, hedging is common in the foreign exchange markets where fluctuations in the exchange rate have to be taken care of in the foreign currency transactions or could be in the commodities market where spiraling oil prices have to be tamed using the security in derivative instruments.

Speculators: They are traders with a view and objective of making profits. They are willing to take risks and they bet upon whether the markets would go up or come down.

Arbitrageurs: Riskless Profit Making is the prime goal of Arbitrageurs. Buying in one market and selling in another, buying two products in the same market are common. They could be making money even without putting there own money in and such opportunities often come up in the market but last for very short timeframes. This is because as soon as the situation arises arbitrageurs take advantage and demand-supply forces drive the markets back to normal.

Options undertakings

Stocks

Forei

Currencies

Stock Indices

Commodities

Others - Futures Options, are options on the futures contracts or underlying assets are futures contracts. The futures contract generally matures shortly after the options expiration

Options are often classified as

In the money - These result in a positive cash flow towards the investor

At the money - These result in a zero-cash flow to the investor

Out of money - These result in a negative cash flow for the investor

Example:

Calls

Reliance 350 Stock Series

Naked Options: These are options which are not combined with an offsetting contract to cover the existing positions.

Covered Options: These are option contracts in which the shares are already owned by an investor (in case of covered call options) and in case the option is exercised then the offsetting of the deal can be done by selling these shares held.

Options Pricing Model

Prices of options are commonly depend upon six factors. Unlike futures which derives there prices primarily from prices of the undertaking. Option's prices are far more complex. The table below helps understand the affect of each of these factors and gives a broad picture of option pricing keeping all other factors constant. The table presents the case of European as well as American Options.

EFFECT OF INCREASE IN THE RELEVANT PARAMETRE ON OPTION PRICES

	EUROPEAN OPTIONS Buying		AMERICAN OPTIONS Buying	
PARAMETERS	**CALL**	**PUT**	**CALL**	**PUT**
Spot Price (**S**)	↑	↓	↑	↓
Strike Price (**Xt**)	↓	↑	↓	↑
Time to Expiration (**T**)	?	?	↑	↑
Volatility ()	↑	↑	↑	↑
Risk Free Interest Rates (**r**)	↑	↓	↑	↓
Dividends (**D**)	↓	↑	↓	↑

PRICES

↑ Favourable
↓ Unfavourable

SPOT PRICES: In case of a call option the payoff for the buyer is max(S - Xt, 0) therefore, more the Spot Price more is the payoff and it is favourable for the buyer. It is the other way round for the seller, more the Spot Price higher are the chances of his going into a loss.

In case of a put Option, the payoff for the buyer is max(Xt - S, 0) therefore, more the Spot Price more are the chances of going into a loss. It is the reverse for Put Writing.

STRIKE PRICE: In case of a call option the payoff for the buyer is shown above. As per this relationship a higher strike price would reduce the profits for the holder of the call option.

TIME TO EXPIRATION: More the time to Expiration more favourable is the option. This can only exist in case of American option as in case of European Options the Options Contract matures only on the Date of Maturity.

VOLATILITY: More the volatility, higher is the probability of the option generating higher returns to the buyer. The downside in both the cases of call and put is fixed but the gains can be unlimited. If the price falls heavily in case of a call buyer then the maximum that he loses is the premium paid and nothing more than that. More so he/ she can buy the same shares form the spot market at a lower price. Similar is the case of the put option buyer. The table show all effects on the buyer side of the contract.

RISK FREE RATE OF INTEREST: In reality the r and the stock market is inversely related. But theoretically speaking, when all other variables are fixed and interest rate increases this leads to a double effect: Increase in expected growth rate of stock prices Discounting factor increases making the price fall In case of the put option both these factors increase and lead to a decline in the put value. A higher expected growth leads to a higher price taking the buyer to the position of loss in the payoff chart. The discounting factor increases and the future value becomes lesser.

In case of a call option these effects work in the opposite direction. The first effect is positive as at a higher value in the future the call option would be exercised and would give a profit. The second affect is negative as is that of discounting. The first effect is far more dominant than the second one, and the overall effect is favourable on the call option.

DIVIDENDS: When dividends are announced then the stock prices on ex-dividend are reduced. This is favourable for the put option and unfavourable for the call option.

Option Pricing Models

These models are mathematical formulas used in determining theoretical values for option contracts. Professional option traders commonly use these models to make bid and ask prices on a timely basis during the trading, to keep the prices of calls and puts in proper numerical relationship, and for monitoring and adjusting their risk. Some individual investors find these models useful when considering a price to buy or sell an option contract. Option pricing models generally require six inputs: underlying price, strike price, time to expiration, interest rates, dividend amount and volatility.

The term "fair value" (also "theoretical value") refers to a theoretical option price generated by an option pricing model. Because pricing models require an assumption about an underlying stock or index's future volatility as input, values produced by these formulas are ultimately subjective.

Volatility is fluctuation, not direction, of stock price movement. It represents the standard deviation of day-to-day price changes, expressed as an annualized percentage.

Option traders are generally interested in two types of volatility: historical and implied.

- An underlying stock's historical volatility represents its actual price fluctuation as observed over a specific period in the past.
- An option's implied volatility (as derived from an option pricing calculator or displayed on many option chains) represents a forecast of the underlying stock's volatility as implied by the option's price in the marketplace. In other words it is the volatility measurement that would be needed as input into a pricing model to generate a theoretical value the same as the options current market price.

It is often asked why an option change in price didn't change as much as the underlying stock. You should expect only deep in-the-money calls and puts to change in price as much as the underlying stock. A theoretical sensitivity of option value to underlying stock price movement can be quantified by an option's "delta," generated by an option pricing model, which can range from 0 to 1.00. At-the-money calls and puts have deltas around .50, which implies an expected change in option price by .50 (or 50%) of underlying stock price change. Deep in-the-money options may have deltas up to 1.00, implying an expected change in option price of up to 100% the change in stock price. Out-of-the-money calls and puts have deltas less than .50, down to a low of 0. Deltas may be generated by an option pricing calculator.

Lets not forget about liquidity. Liquidity is a trading environment characterized by high trading volume. Liquid markets commonly have narrow spreads between the bid and ask prices, and the ability to accept larger orders without significant price changes. Always keep in mind that Index and Equity Options with poor liquidity will serve as a disadvantage to the trader due to wider bid ask spreads and less favorable fills. We should always consider the liquidity issue prior to getting involved in the trading of Options in these areas.

Pricing Models Used

The Black-Scholes model and the Cox, Ross and Rubinstein binomial model are the primary Option pricing models. Both models are based on the same theoretical foundations and assumptions (such as the geometric Brownian motion theory of stock price behaviour and risk-neutral valuation). However, there are also some some important differences between the two models and these are highlighted below.

Black Scholes model

The Black-Scholes model is used to calculate a theoretical call price (ignoring dividends paid during the life of the option) using the five key determinants of an option's price: stock price, strike price, volatility, time to expiration, and short-term (risk free) interest rate.

The original formula for calculating the theoretical option price (OP) is as follows:

$$OP = SN(d_1) - Xe^{-it} N(d_2)$$

Where:

$$d_1 = \frac{\text{In}\left(\frac{S}{X}\right) + \left(r + \frac{v^2}{2}\right)t}{v\sqrt{t}}$$

$$d_2 = d_1 v\sqrt{t}$$

The variables are:
S = stock price
X = strike price
t = time remaining until expiration, expressed as a percent of a year
r = current continuously compounded risk-free interest rate
v = annual volatility of stock price (the standard deviation of the short-term returns over one year). See below for how to estimate volatility.
ln = natural logarithm
N(x) = standard normal cumulative distribution function
e = the exponential function
or
The Black-Scholes model for valuing a European call is:

$$C = SN(d_1) - Xe^{-r(T-t)} N(d_2)$$

Where,

$$D_1 = \frac{\text{In}(S/X) + (r + \sigma^2 / 2(T-t)}{\sigma\sqrt{T-t}}$$

$$D_2 = d_1 - \sigma\sqrt{T-t}$$

C = Call option premium

S = Current asset price

X = Exercise price

T-t = Time to expiry in decimals of a year

σ = The annualized standard deviation of the natural log of the asset price relative in decimals

In = Natural logarithm

$N(d_1)$ = Cumulative standard normal probability distribution

d_1 abd d_2 = Standardised normal variables

r = Risk-free rate on interest in decimals (continuously compounded)

Illustration 11

The current asset price is 35.0, the exercise price is 35.0, the risk-free rate of interest is 10%, the volatility is 20% and the time to expiry is one year. Thus S = 35, X = 35, (T -t) = 1.0, r = 0.1 and σ = 0.2.

Solutions :

First, we calculate d_t, then $d_2$and, finally, the present value of the exercise price $Xe^{-r(T-t)}$

$$d_1 = \frac{\text{In}(35/35) + (0.1 + 0.2^2/2)X\,1.0}{0.2\sqrt{1.0}} = 0.60$$

$$d_2 = d_1 - 0.2\sqrt{1.0} = 0.4$$

$$Xe^{-r(T-t)} = 35e^{-(0.1x1.0)} = 31.66934$$

Then, the equation for the call then looks like this:

c = 35N(0.6)-31.6693N(0.4)

Here d_1 is a standardised normal random variable $N(d_1)$ is a cumulative standardised normal probability distribution. It represents the area under the standardised normal curve from Z.

By referring to mathematical table given at the end of book on the standardised normal distribution we can arrive at the values of -N(dj) and $N(d_2)$ as follows :

The value of $N(d_1)$ when d_1 = 0.6 is 0.7257

The value of $N(d_2)$ when d_2 = 0.4 is 0.6554

When the above values are substituted in the equation, then

c = 35 (0.7257) - 31.6693 (0.6554) - 4.6434

Valuing Put Options with the Black-Scholes Model

An alternative form of valuation is to use the Black-Scholes formula for a put, which is:

$$\boxed{P = Xe^{-r(T-t)} \; [(1-N(d_1)_1]-S[1-N(d_1]}$$

Where d_1 and d_2 are as given in the section deriving a call option.

Note that $[1 - N(d_2)]$ is the same as $N(-d_2)$ and $[1 - N(d_1)]$ is the same as $N(-d_1)$.

Using the same data that we used in valuing the call, the put option value is calculated as follows:

P = 31.6693(0 .3446) - 35(0.2743) = 1.3127

Illustration 12

Calculate the value of option from the following information

S = Rs.20, K = Rs.20, t = 3 months or 0.25 years

r = 1296 = 0.12, σ^2 = 0.16

Solutions:

Since d_1 and d_2 are required inputs for Black-Scholes Option Pricing Model.

$$d_1 = \frac{\text{In}(20/20) + (0.12 + (0.16/2)(0.25)}{0.40(0.50)} = \frac{0 + 0.05}{0.20} = 0.25$$

$$d_2 = d_1 - 0.20 = 0.05$$

$N(d_1)$ = N(0.25)

$N(d_2)$ = N(0.05)

The above two represent area under a standard normal distribution function.

From table given at the end of the book, we see that value d_1 = 0.25 implies a probability of 0.0987 + 0.5000 = 0.5987, so $N(d_1)$ = 0.5987. Similarly, $N(d_2)$ = 0.5199. We can use those values to solve the equation in *Black-Scholes Option Pricing Model*

C = Rs. 20 $[N(d_1)]$ — Rs. 20 $e^{(-0.12x0.25)}$ $[N(d_2)]$

= Rs. 20 [N(0.25)] — Rs. 20(0.9704)[N(0.05)]

= Rs. 20(0.5987) — Rs.19.41 (0.5199)

= Rs. 11.97 —Rs.10.09

= Rs. 1.88

Illustration 13

The stock option has 120 days until expiration and the strike price is Rs. 85. The simple rate of interest is 6 per cent p.a. The underlying asset value is Rs. 80 and the volatility (standard deviation) is 0.30. Calculate the value of the stock option.

Solutions;

Working notes

(1) The number of days to expiration must be converted into years by dividing by 365

Thus t = 120/365 = 0.329

(2) The simple annual interest must be converted to the Black - Scholes continuously compounded equivalent using the relationship that 1+R = e^r, making r = In (1+R).

Now r = In (1.06) = 0.0583

Now we can find the values of $d_1$and d_2 as follows:

$$d_1 = \frac{In(80/85)+(0.0583+0.5x0.3^2)X0.329}{(0.3)(0.329^5)} = -0.155$$

$$d_2 = \frac{In(80/85)+(0.0583-0.5x0.3^2)X0.329}{(0.3)(0.329^5)} = -0.327$$

The next step is to look up the $N(d_1)$ and $N(d_2)$ values in a table of such Values. Note that $N(d_1)$ = N (-0.155) and $N(d_2)$ = (-0.327) represent areas under a standard normal distribution function. From Table given at the end of the book, we see that the value of $d_{\{}$ = 0.155 implies the area under the normal curve to the left of -0.155, which is approximately (interpolating from the table) .438.

The value of $N(d_2)$ is found in a similar fashion to be approximately 0.372.

Now, we can insert the above values in Black - Scholes formula, to obtain the value of the stock option. = 80X.438Xe($-^{00583x329)}$X .372 = Rs. 4.03

Lognormal distribution

The model is based on a normal distribution of underlying asset returns which is the same thing as saying that the underlying asset prices themselves are lognormally distributed. A lognormal distribution has a longer right tail compared with a normal, or bell-shaped, distribution. The lognormal distribution allows for a stock price distribution of between zero and infinity (ie no negative prices) and has an upward bias (representing the fact that a stock price can only drop 100% but can rise by more than 100%).

In practice underlying asset price distributions often depart significantly from the lognormal. For example historical distributions of underlying asset returns often have fatter left and right tails than a normal distribution indicating that dramatic market moves occur with greater frequency than would be predicted by a normal distribution of returns— ie more very high returns and more very low returns.

A corollary of this is the volatility smile—the way in which at-the-money options often have a lower volatility than deeply out-of- the-money options or deeply in-the- money options.

Modified Black-Scholes and binomial pricing (using implied binomial trees) for European and American option pricing with non-lognormal distributions. These models can be used to see the impact on option prices of non-lognormal price distributions (as measured by coefficents of skewness (symmetry) and kurtosis (fatness of distribution tails and height of peaks)), and to calculate and plot the volatility smile implied by these distributions.

Measuring the degree to which historical asset price distributions diverge from the lognormal (as measured by coefficents of skewness and kurtosis).

Advantages and Limitation of Black-Scholes model

Advantage: The main advantage of the Black-Scholes model is speed — it lets you calculate a very large number of option prices in a very short time.

Limitation: The Black-Scholes model has one major limitation: it cannot be used to accurately price options with an American-style exercise as it only calculates the option price at one point in time — at expiration. It does not consider the steps along the way where there could be the possibility of early exercise of an American option.

As all exchange traded equity options have American-style exercise (ie they can be exercised at any time as opposed to European options which can only be exercised at expiration) this is a significant limitation.

The exception to this is an American call on a non-dividend paying asset. In this case the call is always worth the same as its European equivalent as there is never any advantage in exercising early.

Various adjustments are sometimes made to the Black-Scholes price to enable it to approximate American option prices (eg the Fischer Black Pseudo-American method) but these only work well within certain limits and they don't really work well for puts.

The Binominal Model

The binomial model breaks down the time to expiration into potentially a very large number of time intervals, or steps. A tree of stock prices is initially produced working forward from the present to expiration. At each step it is assumed that the stock price will move up or down by an amount calculated using volatility and time to expiration. This produces a binomial distribution, or recombining tree, of underlying stock prices. The tree represents all the possible paths that the stock price could take during the life of the option.

At the end of the tree — ie at expiration of the option — all the terminal option prices for each of the final possible stock prices are known as they simply equal their intrinsic values.

Next the option prices at each step of the tree are calculated working back from expiration to the present. The option prices at each step are used to derive the option prices at the next step of the tree using risk neutral valuation based on the probabilities of the stock prices moving up or down, the risk free rate and the time interval of each step. Any adjustments to stock prices (at an ex-dividend date) or option prices (as a result of early exercise of American options) are worked into the calculations at the required point in time. At the top of the tree you are left with one option price.

To get a feel for how the binomial model works you can use the on-line binomial tree calculators: either using the original Cox, Ross, & Rubinstein tree or the equal probabilities tree, which produces equally accurate results while overcoming some of the limitations of the C-R-R model. The calculators let you calculate European or American option prices and display graphically the tree structure used in the calculation. Dividends can be specified as being discrete or as an annual yield, and points at which early exercise is assumed for American options are highlighted.

Advantages and Limitations

Advantage: The big advantage the binomial model has over the Black-Scholes model is that it can be used to accurately price American options. This is because with the binomial model it's possible to check at every point in an option's life (ie at every step of the binomial tree) for the possibility of early exercise (eg where, due to a dividend, or a put being deeply in the money the option price at that point is less than its intrinsic value).

Where an early exercise point is found it is assumed that the option holder would elect to exercise, and the option price can be adjusted to equal the intrinsic value at that point. This then flows into the calculations higher up the tree and so on.

The on-line binomial tree graphical option calculator highlights those points in the tree structure where early exercise would have caused an American price to differ from a European price.

The binomial model basically solves the same equation, using a computational procedure that the Black-Scholes model solves using an analytic approach and in doing so provides opportunities along the way to check for early exercise for American options.

Limitation: The main limitation of the binomial model is its relatively slow speed. It's great for half a dozen calculations at a time but even with today's fastest PCs it's not a practical solution for the calculation of thousands of prices in a few seconds.

Relationship to Black-Scholes Model

The same underlying assumptions regarding stock prices underpin both the binomial and Black-Scholes models: that stock prices follow a stochastic process described by geometric brownian motion. As a result, for European options, the binomial model converges on the Black-Scholes formula as the number of binomial calculation steps increases. In fact the Black-Scholes model for European options is really a special case of the binomial model where the number of binomial steps is infinite. In other words, the binomial model provides discrete approximations to the continuous process underlying the Black-Scholes model.

Binomial Option Pricing Model

The binomial model has proved over time to be the most flexible, intuitive and popular approach to option pricing. It is based on the simplification that over a single period (of possibly very short duration), the underlying asset can only move from its current price to two possible levels. Among other virtues, the model embodies the assumptions of no riskless arbitrage opportunities and perfect markets. Neither does it rely on investor risk aversion or rationality, nor does its use require estimation of the underlying asset expected return. It also embodies the risk-neutral valuation principle which can be used to shortcut the valuation of European options. In addition, we show later, that the Black-Scholes formula is a special case applying to European options resulting from specifying an infinite number of binomial periods during the time-to-expiration.

Nonetheless, a binomial tree has several curious, and possibly limiting, properties. For example, all sample paths that lead to the same node in the tree have the same risk-neutral probability. The types of volatility – objective, subjective and realized – are indistinguishable; and, in the limit, its continuous-time sample path is not differentiable at any point.

Another way to approach binomial option pricing is through the inverse problem, implied binomial trees. Instead of presuming we know the underlying asset volatility in advance to construct the up and down moves in the tree, we use the current prices of related options to infer the size of these moves.

Binomial trees can also be used to determine the sensitivity of option values to the underlying asset price (delta and gamma), to the time-to-expiration (theta), to volatility (vega), to the riskless return (rho), and to the payout return (lambda). Of these, gamma is particularly important because it measures the times in the life of the option when replication is likely to prove difficult in practice. Fugit measures the risk-neutral expected life of the option and can also be calculated from a binomial tree.

The standard binomial option pricing model for options on assets can easily be extended to options on futures and options on foreign currencies. In addition, the model continues to work even if its parameters are time-dependent, asset price-dependent, or dependent on the prior path of the underlying asset price. But it fails if its parameters depend on some other random variable. A more difficult task is to extend the binomial model to value options on bonds..

Introduction of futures in India

- The first derivative product to be introduced in the Indian securities market is going to be "INDEX FUTURES".
- In the world, first index futures were traded in U.S. on Kansas City Board of Trade (KCBT) on Value Line Arithmetic Index (VLAI) in 1982.

What are Index Futures

- Index futures are the future contracts for which underlying is the cash market index.
- For example: BSE may launch a future contract on "BSE Sensitive Index" and NSE may launch a future contract on "S&P CNX NIFTY".

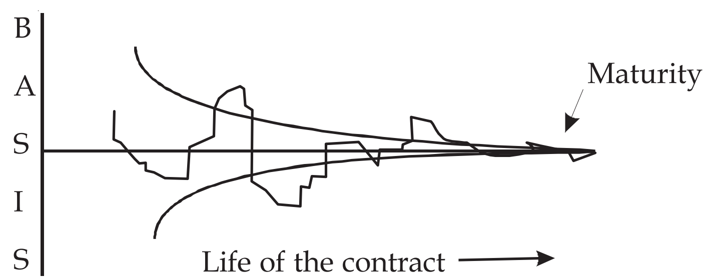
Frequently used terms in Index Futures market

- Contract Size - The value of the contract at a specific level of Index. It is Index level * Multiplier.
- Multiplier - It is a pre-determined value, used to arrive at the contract size. It is the price per index point.
- Tick Size - It is the minimum price difference between two quotes of similar nature.
- Contract Month - The month in which the contract will expire.
- Expiry Day - The last day on which the contract is available for trading.
- Open interest - Total outstanding long or short positions in the market at any specific point in time. As total long positions for market would be equal to total short positions, for calculation of open Interest, only one side of the contracts is counted.
- Volume - No. of contracts traded during a specific period of time, during a day, during a week or during a month.
- Long position- Outstanding/unsettled purchase position at any point of time.
- Short position - Outstanding/ unsettled sales position at any point of time.
- Open position - Outstanding/unsettled long or short position at any point of time.
- Physical delivery - Open position at the expiry of the contract is settled through delivery of the underlying. In futures market, delivery is low.
- Cash settlement - Open position at the expiry of the contract is settled in cash. These contracts are designated as cash settled contracts. Index Futures fall in this category.

- Alternative Delivery Procedure (ADP) - Open position at the expiry of the contract is settled by two parties - one buyer and one seller, at the terms other than defined by the exchange. World wide a significant portion of the energy and energy related contracts (crude oil, heating and gasoline oil) are settled through Alternative Delivery Procedure.

Concept of basis in futures market

- Basis is defined as the difference between cash and futures prices: Basis = Cash prices - Future prices.
- Basis can be either positive or negative (in Index futures, basis generally is negative).
- Basis may change its sign several times during the life of the contract.
- Basis turns to zero at maturity of the futures contract i.e. both cash and future prices converge at maturity



Life of the contract

Operators in the derivatives market

- Hedgers - Operators, who want to transfer a risk component of their portfolio.
- Speculators - Operators, who intentionally take the risk from hedgers in pursuit of profit.
- Arbitrageurs - Operators who operate in the different markets simultaneously, in pursuit of profit and eliminate mis-pricing.

Pricing Futures

Cost and carry model of Futures pricing

- Fair price = Spot price + Cost of carry - Inflows
- $FP_{tT} = CP_t + CP_t * (R_{tT} - D_{tT}) * (T-t)/365$
- FP_{tT} - Fair price of the asset at time t for time T.
- CP_t - Cash price of the asset.
- R_{tT} - Interest rate at time t for the period up to T.

- D_{tT} - Inflows in terms of dividend or interest between t and T.
- Cost of carry = Financing cost, Storage cost and insurance cost.
- If Futures price > Fair price; Buy in the cash market and simultaneously sell in the futures market.
- If Futures price < Fair price; Sell in the cash market and simultaneously buy in the futures market.
  This arbitrage between Cash and Future markets will remain till prices in the Cash and Future markets get aligned.

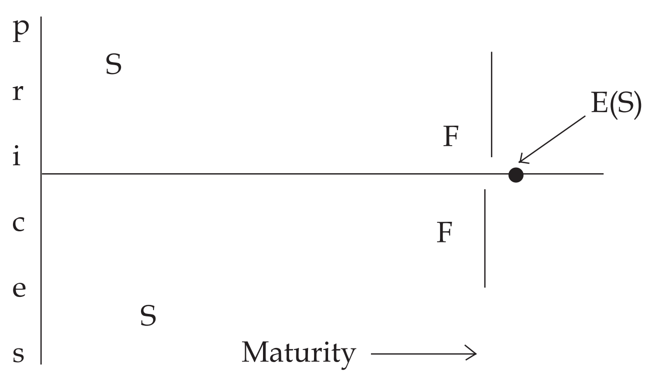
Set of assumptions

- No seasonal demand and supply in the underlying asset.
- Storability of the underlying asset is not a problem.
- The underlying asset can be sold short.
- No transaction cost; No taxes.
- No margin requirements, and so the analysis relates to a forward contract, rather than a futures contract.

Index Futures and cost and carry model

In the normal market, relationship between cash and future indices is described by the cost and carry model of futures pricing.

Expectancy Model of Futures pricing



S - Spot prices.

F - Future prices.

E(S) - Expected Spot prices.

- Expectancy model says that many a times it is not the relationship between the fair price and future price but the expected spot and future price which leads the market. This happens mainly when underlying is not storable or may not be sold short. For instance in commodities market.

- E(S) can be above or below the current spot prices. (This reflects market's expectations)
- Contango market- Market when Future prices are above cash prices.
- Backwardation market - Market when future prices are below cash prices.

Relationship between forward & future markets

- Analyze the different dimensions of Forward and Future Contracts:
  (Risk; Liquidity; Leverage; Margining etc....)
- Assign value to each factor to arrive at the contract price.
  (Perception plays a crucial role in price determination)
- *Any substantial difference in the Forward and Future prices will trigger arbitrage.*

Risk management through Futures

Which risk are we going to manage through Futures

- Basic objective of introduction of futures is to manage the price risk.
- Index futures are used to manage the systemic risk, vested in the investment in securities.

Hedge terminology

- Long hedge- When you hedge by going long in futures market.
- Short hedge - When you hedge by going short in futures market.
- Cross hedge - When a futures contract is not available on an asset, you hedge your position in cash market on this asset by going long or short on the futures for another asset whose prices are closely associated with that of your underlying.
- Hedge Contract Month- Maturity month of the contract through which hedge is accomplished.
- Hedge Ratio - Number of future contracts required to hedge the position.

Some specific uses of Index Futures

- Portfolio Restructuring - An act of increasing or decreasing the equity exposure of a portfolio, quickly, with the help of Index Futures.
- Index Funds - These are the funds which imitate/replicate index with an objective to generate the return equivalent to the Index. This is called Passive Investment Strategy.

Speculation in the Futures market

- Speculation is all about taking position in the futures market without having the underlying. Speculators operate in the market with motive to make money. They take:
- Naked positions - Position in any future contract.
- Spread positions - Opposite positions in two future contracts. This is a conservative speculative strategy.

Speculators bring liquidity to the system, provide insurance to the hedgers and facilitate the price discovery in the market.

Arbitrageurs in Futures market

Arbitrageurs facilitate the alignment of prices among different markets through operating in them simultaneously.

Margining in Futures market

→ Whole system dwells on margins:

→ Daily Margins

→ Initial Margins

→ Special Margins

→ Compulsory collection of margins from clients including institutions.

→ Collection of margins on the Portfolio basis not allowed by L. C. Gupta committee.

Daily Margins

- Daily margins are collected to cover the losses which have already taken place on open positions.
- Price for daily settlement - Closing price of futures index.
- Price for final settlement - Closing price of cash index.
- For daily margins, two legs of spread positions would be treated independently.
- Daily margins should be received by CC/CH and/or exchange from its members before the market opens for the trading on the very next day.
- Daily margins would be paid only in cash.

Initial Margins

- Margins to cover the potential losses for one day.
- To be collected on the basis of value at risk at 99% of the days.
- Different initial margins on:
- Naked long and short positions.
- Spread positions.

Naked positions

Short positions 100 [exp $(3s_t)$ - 1]

Long positions 100 [1 - exp $(3s_t)$]

Where $(s_t)^2 = l(s_{t-1})2 + (1-l)(r_t^2)$

- s_t is today's volatility estimates.
- s_{t-1} is the volatility estimates on the previous trading day.
- l is decay factor which determines how rapidly volatility estimates change and is taken as 0.94 by Prof. J. R. Verma.

- r_t is the return on the trading day [$\log(I_t/I_{t-1})$]
- Because volatility estimate s_t changes everyday, Initial margin on open position will change every day.

  (for first 6 months of futures trading, minimum initial margin on naked positions shall be 5%)

Spread positions

- Flat rate of 0.5% per month of spread on the far month contract.
- Min. margin of 1% and maximum margin of 3% on spread positions.
- A calendar spread would be treated as open position in the far month contract as the near month contract approaches maturity.
- Over the last five days of trading of the near month contract, following percentages of the spread shall be treated as naked position in the far month contract:
- 100% on the day of expiry
- 80% one day before the expiry
- 60% two days before the expiry
- 40% three days before the expiry
- 20% four days before the expiry

Margins on the calendar spread is to be reviewed after 6 months of futures trading.

Liquid assets and Broker's net worth

- Liquid assets
- Cash, fixed deposits, bank guarantee, government securities and other approved securities.
- 50% of Liquid assets must be cash or cash equivalents. Cash equivalents means cash, fixed deposits, bank guarantee and government securities.
- Liquid net-worth = Liquid asset - Initial margin
- Continuous requirement for a clearing member:
- Minimum liquid net-worth of Rs. 50 Lacs.
- The mark to market value of gross open position shall not exceed 33.33 times of member's liquid net worth.

Basis for calculation of Gross Exposure:

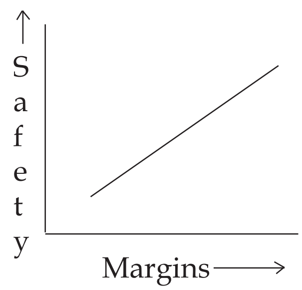
- For the purpose of the exposure limit, a calendar spread shall be regarded as an open position of one third of the mark to market value of the far month contract.
- As the near month contract approaches expiry, the spread shall be treated as a naked position in the far month contract in the same manner as defined in slide no. 49.

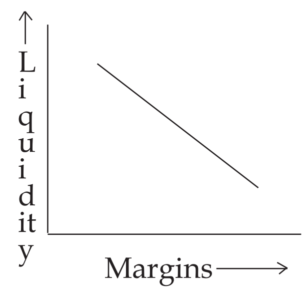
Margining in Futures market

Initial Margin (Value at risk at 99% of the days)

Daily Margin

Special Margins





- ***Striking an intelligent balance between safety and liquidity while determining margins, is a million dollar point.***

Position limits in Index Futures

Customer level

- No position limit. Disclosure to exchange, if position of people acting in concert is 15% or more of open interest.

Trading member level

- 15% of open interest or 100 crore whichever is higher.
- to be reviewed after 6 months of futures trading.

Clearing member level

- No separate position limit. However, C.M. should ensure that his own positions (if C.M. is a T.M. also) and the positions of the T.Ms. clearing through him are within the limits specified above for T.M.

Market level

- No limit. To be reviewed after 6 months of trading in futures.

Expected advantages of derivatives to the cash market

→ Higher liquidity

→ Availability of risk management products attracts more investors to the cash market.

→ Arbitrage between cash and futures markets fetches additional business to cash market.

→ Improvement in delivery based business.

→ Lesser volatility

→ Improved price discovery.

Illustration 3

In May beginning you decide that shares in X Ltd. will rise over the next month or so. The current price is Rs. 100 and you hope that the shares will be at Rs. 150 by the end of July.

Solutions:

When no option is traded

If you buy the shares, say 100 shares for Rs. 10,000 and you are correct in your expectations your 100 shares will be worth Rs. 15,000 within three months showing a profit of Rs. 5,000, 50% of the amount invested less expenses.

The risk attached in this investment, is, you need an investment of Rs. 10,000 for purchase of 100 Shares in X Ltd. And if the amount is invested, there is a risk of price drop on different factors like collapse of X Ltd., fall of shares market index, slump in the market etc. Then you will loose your money, when

your expectations go wrong.

When option is traded

(1) When an option is traded, you could buy an option on the share, say at Rs. 10 premium.

(2) This option would give you the right to buy a share in X Ltd. for Rs. 100 at any time over the next three months.

(3) If X Ltd.'s share price remains at Rs. 100, you have an option with no value and so you have lost Rs. 10 premium per share that you have paid and your total loss is to the extent of Rs. 1,000 (100 shares X Rs. 10).

(4) If the share price go up to Rs. 150 then your option has value worth exercising. The increase in share price from Rs. 100 to Rs. 150 per share amounting to total increase is Rs. 5,000 on 100 shares and your net return is Rs. 4,000 on an investment of Rs. 1,000 and you earn a profit of 400% on your investment by purchasing an option instead of shares in X Ltd.

(5) If the price rose to over Rs. 100 and the option was exercised, then we would be required to part with his shares in X Ltd. at Rs. 100 per share or buy them for onward delivery at the prevailing market price. However, he would get Rs. 10 premium as well, so he would locally be getting Rs. 100 on share and this Rs. 10 would limit the paper loss in his portfolio if the X Ltd. share price falls.

Liquidating Option Positions

When a trader buys an option, he can exit the trade in one of three ways:

- *Sell the option and collect whatever the premium is* - If the premium is more than what is initially cost plus the commission, there's a profit. If the premium is less, it's a loss, but keeping some money is better than losing all the money.

- *Exercise the option, covering it into a futures position* - The broker must be notified before options expire. Not all options have an automatic exercise provision. Therefore, an in-the-money option that expires without any action taken, loses the buyer money (a seller somewhere will be very happy). An option can be exercised if the trader feels the market will continue to move favourably to the trader's position or an option can be exercised if the trading in the option is not very liquid. The trader, in this case feels he can exercise and then liquidate the futures more economically than selling his option position.

- *Ride the option into the dust* - Let it expire worthless, especially if getting out will cost more than the premium is worth.

When a trader sells an option, he or she can exit the trade by buying the option back. If the premium is higher, the option seller has lost money. The option seller cannot exercise his or her option.

'At the' 'Out-of-the' and 'In-the money'

At any time during the life of the option, if the current market price (spot price) is equal to the exercise price, the option is 'at like-money'. If the spot price is less than the exercise price, the options is 'out-of-the money'and if greater than the exercise price the option is in-the-money. The relationship between the intrinsic value (IV), the exercise price (EP), and the share price (S) are summarised below, together with the relevant terminology.

Call options	*Put Options*	
If S > EP	S< EP	then IV > 0 and Option is ' in the money'
If S = EP	S=EP	then IV = 0 and Option is ' at the money'
If S< EP	S>EP	then IV= 0 and Option is ' out of the money'

The time value of an option represents the amount that options buyers are willing to pay, over and above the intrinsic value. Options have time value because in the time between the purchase of the option and its expiration, the price of the underlying stock may change m a way favourable to the option holder. Obviously, the option holder hopes that in this time an option which is currently either 'out-of-the-money'or 'at-the-money'will move 'into-the-money', or that an option which is currently 'in-the-money' will move deeper 'into-the-money'. The longer the time to expiration, the greater the time value of the option.

Advantages and Disadvantages of Options

The advantages and disadvantages of options contracting are given below:

Advantages

- There is limited risk for many options strategies. The trader can lose the entire premium, but that amount is known when the position is initiated.
- There are no margin calls for many strategies.
- Options offer a wide range of strategies for a variety of conditions.
- Options offer a way to add to futures positions without spending any more money or premiums. Thus, the option trader has more leverage.
- With a forward and futures contract, the inventor is committed to a future transaction; with an option, he enjoys the right to go ahead but he can walk away from the deal if he so desires.
- There is limited risk for many options strategies. The trader can lose the entire premium, but that amount is known when the position is initiated.

- There are no margin calls for many strategies.
- Options offer a wide range of strategies for a variety of conditions

Disadvantages

- There are more complex factors affecting premium prices for options. Volatility and time to expiration are often more important than price movement.
- Many options contracts expire weeks before the underlying futures. This can be an occasional often occurs close to the final trading day of futures. However, this should not be construed to mean that commercials cannot use the options to hedge.
- Option premiums don't move tick for tick with the futures (unless they're deep in the money). This can be frustrating to have the market move in your direction, yet lose premium value.
- The trader pays a premium to enter a market when buying options. When volatility is high, premiums can be very expensive. The trade is paying for time, so the premium becomes an eroding asset. On the other side, options sellers can receive price premiums, but they have margin requirements.
- Currently, there is more liquidity in futures contracts than there is in most options contracts. Entry and exist from some markets can be difficult. Even if a positions entered with a limit order, exiting can be a problem, unless the option is in the money. Of course, the option buyer can exercise the option, receive a futures position, then liquidate the futures.

Financial Derivatives

There are three types of financial derivatives viz.,

- Currency futures, where the position involves foreign currencies.
- Interest rate futures, where the position involves fixed income securities.
- Equity futures, where the position involves equities.

Key words

- Commodity
- Derivatives
- Bench Mark
- Index
- Index Future
- Forward
- Options
- Put option and call Option
- Margin
- Arbitragers
- Currency derivatives

- Dow Johns
- Hedging
- Swapping
- Derivative
- Options
- Futures
- In the money
- Strike price
- Call option
- Put option
- Out of money
- At the money
- Risk management

Summary

A derivative security is a financial contract whose value is derived from the value of something else, such as a stock price, a commodity price, an exchange rate, an interest rate, or even an index of prices. , some simple types of derivatives: forwards, futures, options and swaps.

Derivatives may be traded for a variety of reasons. A derivative enables a trader to hedge some preexisting risk by taking positions in derivatives markets that offset potential losses in the underlying or spot market. In India, most derivatives users describe themselves as hedgers (FitchRatings, 2004) and Indian laws generally require that derivatives be used for hedging purposes only. Another motive for derivatives trading is speculation (i.e. taking positions to profit from anticipated price movements). In practice, it may be difficult to distinguish whether a particular trade was for hedging or speculation, and active markets require the participation of both hedgers and speculators.3

A third type of trader, called arbitrageurs, profit from discrepancies in the relationship of spot and derivatives prices, and thereby help to keep markets efficient. Jogani and Fernandes (2003) describe India's long history in arbitrage trading, with line operators and traders arbitraging prices between exchanges located in different cities, and between two exchanges in the same city.

Short questions & Easy Questions

1. Write on Derivative market in India
2. Explain Clearing and settlement in the case of derivative
3. What are the factors have been driving the growth of financial derivatives
4. Explain briefly Characteristics of derivatives
5. What are the criteria for derivatives trading
6. Explain Indian Derivative Market
7. What is the difference between Forward and future?
8. Write a brief note on Equity Derivatives in India

9. What is Index future in India?
10. Write Concept of basis in futures market
11. Write a Short note on Major Equity Derivative Exchanges in the World
12. Explain step by step development of derivative markets in India
13. Explain development and regulation of derivative markets in India
14. What are the objective of regulatory of derivative market
15. Define Hedging
16. What do you mean Portfolio rebalancing
17. Write on derivative products
18. Explain futures in India
19. Write about Myths and realities about derivatives

Student Activity

1. Study on Indian Commodity trading Growth in recent years. Author say that commodity trading will lead to inflation, do you agree with this? Justify.
2. Study on Derivative Market – Future and Option with special reference to BSE and NSE. Compare with the Global Market.
3. Study on Mid Cap, Small Cap and Large Cap with special reference to BSE.

Objective Questions :

1. The spot value of Sensex is 12140. An investor buys a one month Index 12157 call option for a premium of Rs. 8. The option is _____
   (in the money ; at the money ; out of the money)
2. The option Premium is _____
   (Sum of intrinsic value and time value ; Greater than Sum of intrinsic value and time Value ; Less than Sum of intrinsic value and time value)
3. Mr.X agrees to exchange 100 Kgms of basmati rice three months later at Rs. 80 per Kgm. This is an example of _______
   (Spot contract ; Forward Contract ; Futures Contract)
4. The Spot is currently selling at Rs. 270. The call option to buy the stock at Rs. 265 costs Rs. 12 . What will be the Time Value of the option?
   (Rs. 17 ; Rs. 5 ; Rs. 7)
5. The spot value of Nifty is 4430. An investor bought a one month Nifty for 4410 call option for a premium of Rs.12. The option is ______
   (in the money ; at the money ; out of the money)
6. The RComm is currently selling at Rs. 530. The call option to buy the stock at Rs. 550 Costs Rs. 15. What would be the Time Value of the option?
   (5 ; 20 ; 0)
7. In question No.5 ; what will be the Intrinsic value. _______ (Rs. 0 ; Rs. 8 ; Rs.20)

8. A special contract under which the owner of the contract enjoys the right to buy or sell something without the obligation to do so. ______
(Forward , Option, Future)

9. The ________ can be exercised only on the expiration date
(American option ; European option; Index option)

10. When the Exercise price is equal to the Spot Price it is ________
(ITM ; OTM ; ATM)

11. The fixed price at which the option holder can buy / sell the underlying asset is called the ______

(Strike price ; Spot Price ; market price)

12. The value of the option contract on individual securities shall not be less than Rs. __________ (Rs. 200000 ; Rs.500000; Rs. 100000)

[Answers: 1. c ; 2. a ; 3. b ; 4. c ; 5. a ; 6. c ; 7. c ; 8. b ; 9. b ; 10. c ; 11. a ; 12 a]

3.7 DEBT MARKET

The Debt Market is the market where fixed income securities of various types and features are issued and traded. Debt Markets are therefore, markets for fixed income securities issued by Central and State Governments, Municipal Corporations, Govt. bodies and commercial entities like Financial Institutions, Banks, Public Sector Units, Public Ltd. companies and also structured finance instruments.

Benefits of an efficient Debt Market to the financial system and the economy

- Reduction in the borrowing cost of the Government and enable mobilization of resources at a reasonable cost.
- Provide greater funding avenues to public-sector and private sector projects and reduce the pressure on institutional financing.
- Enhanced mobilization of resources by unlocking illiquid retail investments like gold.
- Development of heterogeneity of market participants
- Assist in development of a reliable yield curve and the term structure of interest rates.

Introduction to Fixed Income Instruments

Fixed Income securities are one of the most innovative and dynamic instruments evolved in the financial system ever since the inception of money. Based as they are on the concept of interest and time-value of money, Fixed Income securities personify the essence of innovation and transformation, which have fueled the explosive growth of the financial markets over the past few centuries.

Fixed Income securities offer one of the most attractive investment opportunities with regard to safety of investments, adequate liquidity, flexibility in structuring a portfolio, easier monitoring, long term reliability and decent returns. They are an essential component of any portfolio of financial and real assets, whether in form of pure interest bearing bonds, innovative and varied type of debt instruments or asset-backed mortgages and securitised instruments.

Fixed Income Markets - Powering the World

The Fixed Income securities market was the earliest of all the securities markets in the world and has been the forerunner in the emergence of the financial markets as the engine of economic growth across the globe. The Fixed Income Securities Market, also known as the Debt Market or Bond Market, is easily the largest of all the financial markets in the world today. The size of the world Bond markets last year was around US $ 35 trillion, which is nearly equivalent to the total GDP of all the countries in the world. The Debt Markets have therefore a very prominent role to play in the efficient functioning of the world financial system and in catalyzing the economic growth of nations across the globe.

Indian Debt Markets - Pillars of the Indian Economy

The Debt Markets therefore play a very critical role in any modern economy. And more so in the case of developing countries like India which need to employ a large amount of capital and resources for achieving the desired degree of industrial and financial growth. The Indian Debt Markets are today one of the largest in Asia and includes securities issued by the Government (Central & State Governments), public sector undertakings, other government bodies, financial institutions, banks and corporates. The Indian Debt Markets with an outstanding issue size of close to Rs.14640 Billion (or Rs. 14,64,000 Crores) and a secondary market turnover of around Rs 28500 Billion (in the previous year 2006) is the largest of the Indian financial markets.

The Government Securities (G-Secs) market is the oldest and the largest component of the Indian Debt Market in terms of market capitalization, outstanding securities and trading volumes. The outstanding volumes of Government Securities (Central & State) at the end of March 2006 was around Rs. 14610 billion. The G-Secs. market plays a vital role in the Indian economy as it provides the benchmark for determining the level of interest rates in the country through the yields on the government securities which are referred to as the risk-free rate of return in any economy.

Transformations in Market Structure

The Indian Debt Markets are today poised on the threshold of momentous change and transition to an efficient, transparent and vibrant market with significant retail participation. The first half of the twentieth century had witnessed a significant amount of retail interest and participation in the G-Sec market with more than half the holdings of G-Secs issued being held by retail investors, a trend which continued until the early sixties. The administered interest rate regime and the emergence of other equity and debt instruments led to a gradual diminution in the investor interest and participation in the G-Sec market.

The Indian Debt Market structure was hitherto that of a wholesale market with participation largely restricted to the Banks, Institutions and the Primary Dealers. The rapidly expanding volumes in the Wholesale Debt Market over the past few years bear the promise of an immense and attractive financial market with a strong potential for retail participation. The Retail Debt Market in India is being created, thanks to the pioneering efforts of the Exchanges and the market participants and the strong leadership and guidance by SEBI, RBI and the Govt. of India.

BSE's Bond with Investors

Bombay Stock Exchange Limited (BSE), the premier stock exchange in the country has heralded the capital market revolution in India and has contributed immensely towards the achievement of global standards of efficiency and safety by the Indian Capitals Markets. The nationwide BSE BOLT Network today, spread across more than 413 cities in the country, represents one of the most formidable and efficient distribution channels for financial securities in the Indian Financial Markets. BSE has always been in the forefront in introducing new and innovative financial products and services suited to the Indian Business Environment during its 130 years of fruitful association with the Indian Investor Community.

BSE, with it's 130 years of association with the Indian investors, has been in the forefront to provide the highest standards of service to the Indian investor Community. The BSE Debt Segment, while reiterating this commitment, promises to provide an integrated trading, clearing and settlement platform for the Fixed Income Markets with information products and services suited to meet all the trading and investment requirements of the market participants.

Wholesale Debt Market Segment (WDS)

The Reserve Bank of India, vide the following circulars

- DBOD. FSC. BC. No. 39 /24.76.002/2000 dated October 25, 2000 IDMC. PDRS. PDS. No PDS-2 /03.64.00/2000-01 dated November 13, 2000 DBS. FID No. C 10 / 01.08.00 / 2000-0122 dated November, 2000

permitted the Banks, Primary Dealers and the Financial Institutions in India to undertake transactions in debt instruments among themselves or with non-bank clients through the members of Bombay Stock Exchange Limited (BSE). This notification paved the way for the Exchange to commence trading in Government Securities and other fixed income instruments. The Wholesale Debt Segment of the Exchange commenced its' operations on June 15, 2001.

The membership of the Debt Segment is being granted only to the Existing (equity segment) Members of the Exchange, who possess a minimum net worth of Rs.1.5 crores.. There is no security deposit applicable for the membership of the Debt Segment. The annual approval/ renewal charges at present is are Rs.25,000/-.(Currently waived)

The BSE Debt Segment offers the market participants in the Wholesale Debt Market an efficient and transparent trading mechanism through it's GILT System. The GILT system is envisaged to become the single point trading platform for all types of Debt securities and instruments. The GILT system will over a period of time provide trading facilities for Central and State Govt. securities, T-Bills, Institutional bonds, PSU bonds, Commercial Paper, Certificates of Deposit, Corporate debt instruments and the new innovative instruments like municipal securities, securitized debt, mortgage loans and STRIPs.

GILT facilitates faster and efficient price dissemination through the Touchline of the Trading System. All relevant information which are of crucial importance in the trading process like the Accrued Interest and Delivery Value are readily available in the system A Yield Calculator is made available both separately and as part of the various order Entry and trade reporting screens.

There are normally two types of transactions, which are executed in the Wholesale Debt Market :

- **An outright sale or purchase and**
- **A Repo trade**

An outright Buy or sell transaction is a one where there is no intended reversal of the trade at the point of execution of the trade. The Buy or sell transaction is an independent trade and is in no way connected with any other trade at the same or a later point of time. A Ready Forward Trade (which is normally referred to as a Repo trade or a Repurchase Agreement) is a transaction where the said trade is intended to be reversed at a later point of time at a rate which will include the interest component for the period between the two opposite legs of the transactions.

So in such a transaction, one participant sells securities to other with an agreement to purchase them back at a later date. The trade is called a Repo transaction from the point of view of the seller and it is called a Reverse Repo transaction from point of view of the buyer.

Repos therefore facilitate creation of liquidity by permitting the seller to avail of a specific sum of money (the value of the repo trade) for a certain period in lieu of payment of interest by way of the difference between the two prices of the two trades.

Repos and reverse repos are commonly used in the money markets as instruments of short-term liquidity management and can also be termed as a collateralised lending and borrowing mechanism. Banks and Financial Institutions usually enter into reverse repo transactions to manage their reserve requirements or to manage liquidity.

Trading, Clearing and Settlement in WDS

The major participants in the Wholesale Debt Market like the Banks, Primary Dealers and Institutions are enabled to execute trades through the Members of the WDS of the Exchange through the participant code (Client Code) allocated to each of them, which is one of the key parameters to be entered by the Member in the GILT system while executing the transaction. Trading on the GILT system is currently permitted from 10.00 a.m. to 5.45 p.m. from Monday to Friday and 10.00 a.m. to 2.15 p.m. on Saturday.

The Settlement for the securities traded in the GILT System is on a Trade by Trade DVP basis. The primary responsibility of settling trades concluded in the wholesale segment rests directly with the participants who would settle the trades executed in the GILT system on their behalf through the Subsidiary Ledger Account of the RBI or the CCIL A/c through the NDS. Each transaction is settled individually and netting of transactions is not allowed. The Exchange monitors the Clearing and Settlement process for all the trades executed or reported through the 'GILT' system. The Members need to report the settlement details to the Exchange for all the trades undertaken by them on the GILT system. The settlements for all the trades executed on the GILT system are on a rolling basis..

Growth in the WDS

The BSE Debt Segment has shown a gradual but consistent growth in turnover in the past few months with increased participation from the mainstream Banking and Institutional Players. The Wholesale Debt Segment today witnesses active participation today from about 100 Major Banks and Institutions in the Debt Market with Average Daily Turnover of around Rs.50 Crores currently. The Segment expects a sustained rise in turnover and participation in the next few months with the initiation of activity by new Members and the continued support and participation of the major Banks, Primary Dealers and Institutions.

Retail Debt Segment (REDS)

The Retail Debt Markets in the new millennium, presents a vast kaleidoscope of opportunities for the Indian investor whose knowledge and participation hitherto has been restricted to the Equities markets in India.

The development of the Retail Debt Market has engaged the attention of the policy makers, regulators and the Government in the past few years. The potential of the Retail Debt Markets can be gauged from the investor strength of more than 40 million in the Indian Equities market who have powered the tremendous growth and transformation of the stock markets in recent times. Recognizing this opportunity at a very early date, BSE has been consistently in the forefront of the campaign for the creation of a Retail Debt Market and has consistently expounded the potential and need for the retail trading in G-Secs in the past few years in various important forums and to the key regulatory authorities.

Emergence of the Retail Market

It would be surprising to know that a retail debt market was at one point of time very much present in India. Right through the forties and the fifties and until the early sixties, a good proportion of the holdings of Govt. securities were concentrated with individual investors. Available statistics indicate that more than half of the holdings in Govt. securities was concentrated with retail investors in the early 50s.

Today, there exists an inherent need for households to diversify their investment portfolio so as to include various debt instruments and especially Government securities. The growing investments in the Bond Funds and the Money Market Mutual Funds are a sign of the increasing recognition of this fact by the retail investors.

Retail investors would have a natural preference for fixed income returns and especially so in the current situation of increasing volatility in the financial markets. The Central Government Securities (G-Secs) are the one of the best investment options for an individual investor today in the financial markets due to the following factors:

- Zero Default Risk - due to their sovereign guarantee, ensures the total safety of all investments in G-Secs.
- Lower average volatility in bond prices
- Greater returns as compared to the conventional safe investment avenues like Bank Deposits and Fixed Deposits, which also contain credit risk
- Higher Leverage -Greater borrowing capacity against G-Secs due to their zero risk status.
- Wider range of innovations in the nature of securities like TBills, Index linked Bonds, Partly Paid Bonds and others like STRIPS and Securities with call and put options to follow soon.
- Better and greater features to suit a large range of investment profiles and investor requirements.
- Growing Liquidity and the increased turnover in recent times in the Indian Debt Markets

Retail Trading in G-Secs

The Government of India and RBI, recognizing the need for retail participation had recently announced a scheme for enabling retail participation through a non-competitive bidding facility in the G-Sec auctions with a reservation of 5% of the issue amount for non-competitive bids by retail investors.

The Retail Trading in G-Secs. commenced on January 16, 2003 in accordance with the SEBI Circular bearing ref. no. SMD/Policy/GSEC/776/2003 dated 10th January 2003. The Indian Fixed Income Markets, which until some time ago was the mainstay of the wholesale investors were made accessible to the Retail Indian Investors, thanks to some path-breaking initiatives by the Government of India - Ministry of Finance, the RBI and SEBI to enable retail trading in G-Secs through the Stock Exchanges. BSE has, for long, been an ardent advocate of the need to enable the participation of the 28 Million Indian investor multitude in the Indian Fixed Income Markets. The Indian Investor is today able to buy or sell G-Secs through the nationwide BSE

BOLT Network of more than 7000 Terminals spread across 410 cities around the country.

The Retail Debt Market Module aims at providing an efficient and reliable trading system for all debt instruments and securities of different types and maturities. The key features of the system are:

1. Trading: by electronic order matching based on price-time priority through the BOLT (BSE OnLine Trading) System with the continuous trading sessions from 9.55 a.m. to 3.30 p.m as is operational in the Equities Segment. Retail Trading in G-secs would be on a Rolling Settlements basis with a T+2 Delivery Cycle.
2. Clearing and Settlement: The Clearing and Settlement mechanism for the Retail trading in G-Secs is based on the existing institutional mechanism available at the Stock Exchanges. The trades executed throughout the continuous trading sessions will be netted out at the end of the trading hours through a process of multilateral netting. The transactions will be netted out member-wise and then scrip-wise so as to determine the net settlement and payment obligations of the members. The Delivery obligations and the payment orders in respect of these members are generated by the Clearing and Settlement system of the Exchange. These statements indicate the pay-in and pay-out positions of the members for securities and funds who would then give the necessary instructions to their Clearing Banks and depositories.

   The entire risk management and the clearing and settlement activities for the trades executed in the Retail Debt Market System will be undertaken by the Exchange Clearing House.
3. Holding and Transfer of G-Secs: The G-secs for retail trading through Stock Exchanges can be held by investors in the Same Demat A/c (same as the Constituent SGL A/c which can be held with Banks or PDs) as is used for equities at the Depositories. NSDL and CDSL will hold the combined quantity of G-Secs in their SGL-II A/cs of RBI, meant only for client holdings.

The BSE Debt Market solution would also provide live Internet trading on its state of the art BSEWebx Trading System which will offer among others a number of quintessential features and facilities, critical for the investor in the fixed Income markets. The BSE Debt Market solution would seek to provide in the course of time an integrated trading and settlement platform for the entire variety of debt securities and instruments, which are bound to expand in an enormous way in terms of variety and numbers in the near future.

BSE, in keeping with the dramatic strides in the expansion of the Indian Debt Market, is all set to offer our investors an enlightening

and satisfying investment and trading experience which will truly unleash the magic and potential of the Bond Markets for the Indian Investors.

BSE - Bonding with the Future

The BSE Debt segment would seek to pave the way for the development of an healthy, efficient and active debt market mechanism and market structure in line with world class standards and greater integration with the global economy. The BSE vision for the Indian Debt Market foresees the markets growing in leaps and bounds in the near future, soon attaining global standards of safety, efficiency and transparency. This will truly help the Indian capital markets to attain a place of pride among the leading capital markets of the world.

3.8 COMMODITY MARKET

The vast geographical extent of India and her huge population is aptly complemented by the size of her market. The broadest classification of the **Indian Market** can be made in terms of the **commodity market** and the bond market. Here, we shall deal with the former in a little detail.

The **commodity market in India** comprises of all palpable markets that we come across in our daily lives. Such **markets** are social institutions that facilitate exchange of goods for money. The cost of goods is estimated in terms of domestic currency**. India Commodity Market** can be subdivided into the following two categories:

- **Wholesale Market**
- **Retail Market**

Let us now take a look at what the present scenario of each of the above markets is like.

The traditional **wholesale market in India** dealt with whole sellers who bought goods from the farmers and manufacturers and then sold them to the retailers after making a profit in the process. It was the retailers who finally sold the goods to the consumers. With the passage of time the importance of whole sellers began to fade out for the following reasons:

- The whole sellers in most situations, acted as mere parasites who did not add any value to the product but raised its price which was eventually faced by the consumers.
- The improvement in transport facilities made the retailers directly interact with the producers and hence the need for whole sellers was not felt.

In recent years,the extent of the **retail market** (both organized and unorganized) has evolved in leaps and bounds. In fact, the success stories of the **commodity market** of India in recent years has mainly centered around the growth generated by the **Retail Sector.** Almost every commodity under the sun both agricultural and industrial are now being provided at well distributed retail outlets throughout the country.

Moreover, the retail outlets belong to both the organized as well as the unorganized sector. The **unorganized retail outlets** of the yesteryears consist of small shop owners who are price takers where consumers face a highly competitive price structure. The **organized sector** on the other hand are owned by various business houses like Pantaloons, Reliance, Tata and others. Such markets are usually sell a wide range of articles both agricultural and manufactured, edible and inedible, perishable and durable. Modern marketing strategies and other techniques of sales promotion enable such markets to draw customers from every section of the society. However the growth of such markets has still centered around the urban areas primarily due to infrastructural limitations.

Considering the present growth rate, the total valuation of the **Indian Retail Market** is estimated to cross Rs. 10,000 billion by the year 2010. Demand for commodities is likely to become four times by 2010 than what it presently is.

Commodity Futures Markets in India

Agriculture sector in India has always been a major field of government intervention since long back. Government tries to protect the interests of the poor Indian farmers by procuring crops at remunerative prices directly from the farmers without involving middlemen in between. This way Government maintains sufficient buffer stocks and at the same time provides the farmers safeguard against the fluctuating food crop prices. But government at the same time has restricted this traditional sector by fixing prices of crops at a particular level and also by imposing several other restrictions on export and import of agricultural commodities. All these restrictions prevented this sector to move out its traditional features. So according to many economists liberalization of this traditional agricultural sector could have been of great benefit to our economy. But questions will naturally come up about the maintenance of buffer stocks and provisions of remunerative prices to the farmers. In absence of government's intervention farmers will not be getting any prior information about the future markets of their products. Naturally a sudden price crash of food crops will have devastating effects on farmers. Here comes the significant role of futures market. If the buyers in the commodity market anticipate shortage of a particular crop in the coming season, future price of that crop will increase now and this will act as a signal to the farmers who will accordingly plan their seeding decisions for the next season. In the same way, an increase in future demand of food crops will be reflected in the today's price in futures market. In this way the system of futures market can be of great help to the Indian farmers preventing them from being directly exposed to the unexpected price changes all of a sudden. It also helps towards evolving a better cropping pattern in our country.

If the peasants are farming some crop now and are very much concerned that price will crash by the time the crop comes in, then if there is futures market, they will have the option to sell their products in it. Price in the future markets being fixed; by selling products in future markets they get rid of their worries about the about the unexpected price fall. This helps them to take the risk of innovations, by using new high yielding varieties of seeds, fertilizers and new techniques of cultivation. Futures Market will act as a smoothing agent between the present and future commodity market. If the price, which is going to prevail in future, is high compared to what is it now, then the arbitragers would like to buy the commodities now to sell those in future. The reverse process is also true. So the existence of a futures market is always good for any economy. It opens up a new opportunity to people to protect themselves from unexpected risks.

Bonus issues

A bonus issue is the issue of shares to existing shareholders in proportion to their existing holdings. It differs from a rights issue in that the shareholder is not obliged to make payment for the shares. Instead the company's capital reserves are used to effect payment, and for this reason a bonus issue is sometimes called a 'capitalisation issue'. Bonus issues are also sometimes called 'scrip issues'

The effect of a bonus issue is to increase the capitalisation of the company, so that the permanent capital available to it can more realistically reflect the assets employed by the company. As the number of shares in issue increases, the value of each share is reduced. This can make the shares more marketable. However, as the bonus shares are issued in proportion to existing holdings, the overall value of the shareholding is not affected. For example, if before the bonus issue the shareholder had 100 shares worth INR 10 each and after the bonus issue he has 200 shares worth INR 5 each, in both cases the value of the holding is INR 1,000.

Issue of Bonus Shares by Public Sector Undertakings simplifying the Procedures.

1. The issue of Bonus Shares helps in bringing about at proper balance between paid up capital and accumulated reserves, elicit good public response to equity issues of the public enterprises and helps in improving the market image of the company.
2. Therefore, the Government has decided that the public enterprises, which are carrying substantial reserves in comparison to their paid up capital sold issue Bonus Shares to capitalize the reserves for which the following norms/conditions and criteria may be followed and fulfilled.

SEBI guidelines may be followed in deciding the correct proportion of reserves to be capitalized by issuing Bonus Shares. A copy of the bonus issue guidelines of SEBI is enclosed. For the purpose of determining the quantum of bonus issue, PSUs should be guided by the following factors:

(i) Likely increase in capital base from fresh public issues by PSUs in the next two to three years (which will dilute the GOI's equity).

(ii) PSUs should prepare profit projections for the next three years on realistic basis as projected by them in their corporate plan and estimate their ability to service the enlarged equity after taking into account any fresh equity issue they expect to make for their expansion/diversification needs.

6. PSUs are at liberty to engage public/private sector merchant bankers to determine the quantum of bonus and provide advice on related matters. The mode of selection of merchant bankers and any fee payable for their services may be decided by PSU Boards.
7. While recommending proposals for capitalizing reserves, PSUs should also consider the need for increasing their authorized capital to accommodate the release of bonus shares and any subsequent public issues and recommend increase in the capital where necessary.
8. PSUs should ensure that after making the bonus there are enough reserves left which together with future plough-back of profit will be sufficiently large to inspire confidence and support from existing and potential shareholders. This is necessary to remain as an attractive scrip in the market.
9. Each administrative Ministry may direct the enterprises under their control that PSUs having reserves in excess of three times their paid-up capital should immediately consider the scope for issuing bonus shares to GOI (and pro-rata to other existing shareholders if partial disinvestment had occurred so far). PSUs having large reserves may be allowed to make any public issue only after examining the scope for capitalizing a portion of reserves.
10. Ministries/Departments should expeditiously examine and approve bonus issue proposals if the quantum of bonus and profit projections are found to be properly assessed and the PSUs certify that the proposals are in conformity with the SEBI guidelines.
11. Bonus issue proposals need not be referred to Ministry of Finance (MoF) for approval unless there are special reasons to do so. Likewise proposals involving increase in authorized capital need not be referred to MoF. It has been clarified earlier that increase in authorized capital does not require Cabinet approval.

12. Ministries should keep the Department of Public Enterprises informed about bonus issue proposals and authorized capital increases approved by them.
13. The above conditions shall cut down the procedural delays in obtaining the approval for bonus shares besides enabling the PSUs to finalize public issue plans quickly and tap the capital market when conditions are favourable.
14. The Financial Advisers in the administrative Ministries shall keep a control over the fulfillment of various conditions/criteria as mentioned above before agreeing to the bonus issues.

Copy of Securities and Exchange Board of India (SEBI)'s guidelines Bonus Issue Guidelines.

SEBI believes that the Board of Directors of the companies wishing to make bonus issues will take into due consideration the relevant financial factors while deciding on bonus issues and observe the following guidelines.

Section M

(i) These guidelines are applicable to existing listed companies who shall forward a certificate duly signed by the issuer and duly countersigned by its statutory auditor or by a company secretary in practice to the effect that the terms and conditions for issue of bonus shares as laid down in these guidelines, have been complied with.

(ii) Issue of bonus shares after any public/right issue is subject to the condition that no bonus issue shall be made which will dilute the value or rights of the holders of debentures, convertible fully or partly.

In other words, no company shall, pending conversion of FCDs/PCDs, issue any shares by way of bonus unless similar benefit is extended to the holders of such FDCs/PCDs, through reservation of shares in proportion to such convertible part of FCDs or PCDs. The shares so reserved may be issued at the time of conversion(s) of such debentures on the same terms on which the bonus issues were made.

(iii) The bonus issue is made out of free reserves built out of the genuine profits or share premium collected in cash only.

(iv) Reserves created by revaluation of fixed assets are not capitalized.

(v) The declaration of bonus issue, in lieu of dividend, is not made.

(vi) The bonus issue is not made unless the partly-paid shares, if any existing, are made fully paid-up.

(vii) The Company –

1. has not defaulted in payment of interest or principal in respect of fixed deposits and interest on existing debentures or principal on redemption thereof and.
2. has sufficient reason to believe that it has not defaulted in respect of the payment of statutory dues of the employees such as contribution to provident fund, gratuity bonus etc.

(viii) A company, which announces bonus issue after the approval of the Board of Directors must implement the proposals within a period of six months from the date of such approval and shall not have the option of changing the decision.

(ix) There should be a provision in the Articles of Association of the company for capitalization of reserves, etc. and if not, the company shall pass a Resolution at its General Body Meeting making provisions in the Articles of Association for capitalization.

(x) Consequent to the issue of bonus shares if the subscribed and paid-up capital exceed the authorized capital, a Resolution shall be passed by company at its General Body Meeting for increasing the authorized capital.

Rights issues

A rights issue is an issue of shares to existing shareholders in proportion to their existing shareholding. Rights issues are usually used when the company wishes to raise further capital from its existing shareholders.

A shareholder who is provisionally allocated shares under a rights issue may sell his right to acquire the shares by renouncing their allotment in favour of another person.

SEBI's role in an issue: Any company making a public issue or a listed company making a rights issue of value of more than Rs 50 lakh is required to file a draft offer document with SEBI for its observations. The company can proceed further on the issue only after getting observations from SEBI. The validity period of SEBI's observation letter is three months only i.e. the company has to open its issue within three months period. SEBI does not recommend any issue nor does take any responsibility either for the financial soundness of any scheme or the project for which the issue is proposed for or for the correctness of the statements made or opinions expressed in the offer document. It is to be distinctly understood that submission of offer document to SEBI should not in any way be deemed or construed that the same has been cleared or approved by SEBI. The Lead manager certifies that the disclosures made in the offer document are generally adequate and are in conformity with SEBI guidelines for disclosures and investor protection in force for the time being. This requirement is to facilitate investors to take an informed decision for making investment in the proposed issue.

Dividend

Law relating to dividends - Recent developments

Dividend is the return that a shareholder gets from a company out of its profits, on his shareholding. The Companies Act has been amended by the Companies (Amendment) Act, 1999 and the Companies (Amendment) Act, 2000. The Government has permitted the issue of shares with differential rights. Dividend can be now paid through Electronic Clearing Services (ECS) by the banks. Foreign Exchange Management Act (FEMA), 1999 has been enacted to replace Foreign Exchange Regulation Act, 1973. Many investors hold shares in a electronic mode. On account of all these changes, a re-look at various aspects of the law relating to dividend has become necessary. In this comprehensive article, on the subject of dividend, the author goes through the entire gamut of the payment/distribution of dividend, including the aspect of tax deduction at source - Editor What is dividend The term 'dividend' refers to that part of the profits of a company which is distributed amongst its shareholders. It may, therefore, be defined as the return that a shareholder gets from the company, out of its profits, on his shareholding. According to the Institute of Chartered Accountants of India, dividend is a distribution to shareholders out of profits or reserves available for this purpose - See the Guidance Note on Terms used in Financial Statements. Definition of 'dividend' According to section 2(14A) of the Companies Act, 1956, the term 'dividend' includes any interim dividend. It is an inclusive and not an exhaustive definition. According to the generally accepted definition, 'dividend' means the profit of a company, which is not retained in the business and is distributed among the shareholders in proportion to the amount paid up on the shares held by them. The Supreme Court in CIT v. Giridharidas & Co. (P.) Ltd. AIR 1967 SC 795 has defined the term 'dividend' in the following manner : (i) As applied to a company which is a going concern, it ordinarily means the portion of the profits of the company, which is allocated to the holders of shares in the company. (ii) In the case of winding up, it means a division of the net realised assets among creditors and contributories according to their respective rights.Payment of dividend Every company (other than section 25 company) has an implied power to pay dividend to its members. However, the power to pay dividend is subject to the following two fundamental rules:

(1) Dividend must not be paid out of capital.

(2) Dividend should be paid out of profits. Company law provisions regarding dividend Section 205 of the Act provides as under

No dividend shall be declared or paid by a company for any financial year except :(1) Out of the profits for that year arrived at after providing for depreciation in accordance with sub-section (2) ; or

(2) Out of the profits of the company for any previous year or years arrived at after providing depreciation in the prescribed manner and remaining undistributed or out of both;

(3) Out of (a) and (b) above ;

(4) Out of moneys provided by the Central or State Government for this purpose in pursuance of a guarantee given by that Government.

Arrears of depreciation : If the company has not provided for depreciation for any previous financial year or years, it shall, before declaring or paying dividend for any financial year, provide for such depreciation out of the profits of that year or any other previous year. Past losses to be set off If the company has suffered any loss in any financial year after December 28, 1960, then the amount of loss or the amount of depreciation, whichever is less, shall be set off against the profits of the company for that year for which dividend is declared or against the profits for any financial year or years.

Transfer to reserve : Before declaring any dividend, every company is required to transfer a percentage, not exceeding 10 per cent of the current profit to the reserves of the company as prescribed by the Companies (Transfer of Profits to Reserves) Rules, 1975. The percentage of profits required to be transferred to reserves is linked to the rate of dividend proposed for the year and is given hereunder:

Rate of dividend % of profit required to be

Transferred to reserves

Up to 10% Nil

Exceeding 10% but not exceeding 12.5% not less than 2.5% of the current profits
Exceeding 12.5% but not not less than 5% of the current
exceeding 15% profits
Exceeding 15% but not not less than 7.5% of the current exceeding 20% profits

Exceeding 20% not less than 10% of the current profits. The rules, however, do not prohibit the voluntary transfer by a company of a percentage higher than 10 per cent of its current profits to reserves for any financial year subject to certain conditions. Under rule 3, voluntary transfer by a company of a percentage higher than 10 per cent of its profits to reserves is allowed, provided that: (a) where a dividend is declared by a company in that financial year, a minimum distribution sufficient to maintain a rate of dividend equal to the average rates of dividend declared by it over the three years immediately preceding the financial year is ensured; (b) where bonus shares have been issued in the year in which the dividend is declared or in the three years immediately preceding the financial year, a company can transfer a higher percentage of profits to reserves, provided a minimum distribution of dividend to shareholders of an amount equal to the average amount (quantum) of dividend declared over the three years immediately preceding the financial year is maintained. However, maintenance of such minimum rate or quantum of dividend is not necessary if the net profits after tax in a financial year are lower by 20 per cent or more than the average profits after tax of the two immediately preceding financial years. Where no dividend is declared, the amount proposed to be transferred to its reserves from the current profits shall be lower than the average amount of the dividends to the shareholders declared by it over the three years immediately preceding the financial year. [The term 'reserves' referred to in the said rules means only free reserves]. A newly incorporated company is prohibited from transferring more than 10 per cent of its profits to its reserve - Circular No. 20/76(5)/10/76-CL-XIV and 1/1/76-CL-VI, dated July 26, 1976 issued by the Department of Company Affairs.

Current profits : The term 'current profits' for the purpose of transfer of specified percentage thereof to reserve means profits after statutory transfer to the Development Rebate Reserve and also after providing for arrears of depreciation, if any. The term 'dividend' referred to in the above-mentioned Rules is the dividend on equity shares and dividend payable on participating preference shares over and above the fixed rate of dividend on such preference shares. - Clarification issued by the Department of Company Affairs - Circular No. 8/76 (1/1/76-CL.V), dated May 18, 1976 read with 12/76 (1/1/-76-CL.V), dated June 10, 1976.

Compliance with section 80A : Section 80A of the Act provides that if a company has issued irredeemable preference shares, they must be redeemed within 5 years from June 15, 1988. Preference shares which are redeemable after 10 years should be redeemed as they fall due, but the period of redemption should not exceed 10 years. If a company is unable to redeem the preference shares as aforesaid, it should make a petition to the Company Law Board (CLB), which may permit their renewal under a 10 year scheme and then they shall be deemed to have been redeemed. If a company fails to comply with the provisions of section 80A, it shall not, so long as the failure continues, declare any dividend on its equity shares.

Time limit for payment : Where a dividend, whether interim or final, is declared, it should be deposited in a separate bank account within 5 days from the date of declaration. Dividend should be paid within 30 days from the date of declaration.Transfer to unpaid dividend account [Section 205A] The total amount of dividend remaining unpaid or unclaimed within 7 days from the date of expiry of 30 days from the date of declaration thereof should be transferred to a separate bank account called 'Unpaid Dividend Account of . . . Company Ltd.'.

This requirement does not apply to the Government companies. The company should pay interest at the rate of 12 per cent per annum on any unpaid dividend amount, if the same is not transferred to the unclaimed dividend account within 37 days from the date of declaration of dividend. The interest so accruing shall be paid to the shareholders in proportion to the dividend amount remaining unpaid to them. Proportion in which dividend is payable Section 93 of the Act provides that a company may, if so authorised by its articles, pay dividend in proportion to the amount paid-up on each share where a larger amount is paid-up on some shares than on others. Companies which adopt the regulations contained in Table A of the Act can pay dividend in proportion to the amount paid-up on shares article 88 of Table A. However, if a company has excluded Table A and has its own articles, and its articles do not contain a regulation similar to article 88 of Table A, it has to pay dividend on the nominal amount of each share and not on the amount paid-up on the share - Oakbank Oil Co.'s case. Dividend on preference shares Preference shares are generally issued as cumulative, which means that the holders of such shares can claim the arrears of dividend on such shares. Arrears of dividend on preference shares can be paid only out of divisible profits. Preference shareholders are entitled to dividend before any dividend is paid on equity shares. Sometimes, preference shares are redeemed in the middle of the year. At the time of redemption, if the company has not declared dividend on preference shares, the company cannot pay dividend for the accounting year in which preference shares are redeemed. The dividend due at the time of redemption can be paid by the company only after the company declares dividend for the relevant year in its annual general meeting or the preference dividend due is declared by way of interim dividend.Sometimes preference shares are issued on non-cumulative basis. The non-cumulative preference shares give right to fixed percentage as dividend out of the profits of each year. If no profit is available in any year, the non-cumulative preference shareholders get nothing, nor can they claim unpaid fixed dividend in subsequent years.The preference shareholder cannot claim dividend as a matter of right, unless the dividend is declared by the company. Payment of dividend out of reserves Companies can declare dividend out of the accumulated profits earned in previous years and transferred to the reserves in case of inadequacy or absence of profits in any year in accordance with the Companies (Declaration of Dividends out of Reserves) Rules, 1975. The rules prescribe the following norms for declaration of dividend out of reserves, namely:(i) The rate of dividend is not to exceed the average of the rates of dividends declared in the preceding five years or 10% of the paid-up capital whichever is less. (ii) The amount drawn from the reserves shall not exceed one-tenth of the aggregate of its paid-up capital and free reserves. The amount so drawn is to be first utilized to set off the losses incurred in the financial year before any dividend is declared. (iii) The balance of reserves after such withdrawal shall not fall below 15% of its paid-up share capital. Payment of dividend from P & L account Since the conditions prescribed in the above-mentioned Rules are rigid, many companies follow the practice of keeping adequate surplus in the profit and loss account. Keeping such surplus in the profit and loss account will help the dividend to be paid at a higher rate permissible in the above-mentioned Rules as drawing the surplus from profit and loss account is not hit by these Rules. Declaration of dividend The Act does not specifically provide as to who should declare dividend. Section 217(1)(c) of the Act states that there shall be attached to every balance sheet laid before a company in general meeting a report by its board of directors, with respect to the amount, if any, which it recommends should be paid by way of dividend. This section indicates that the board of directors is entitled to determine and recommend to the general meeting, the rate and quantum of dividend to be declared by the shareholders. If the directors do not recommend any dividend, the general meeting has no power to declare dividend. Section 173(1)(a) of the Act states that declaration of dividend is a routine business at the annual general meeting. Regulation 85 of Table A states that the company in general meeting may declare dividends, but no dividend shall exceed the amount recommended by the board. So, the general meeting at which dividend is declared has no power to increase the rate of dividend. However, the general meeting can reduce the rate of dividend. Though the right to declare dividend is given to the general meeting, the real control over dividend vests with the board of directors. Dividend to be paid to registered shareholder The dividend shall be paid only to the registered shareholder or to his order or to his bankers, or, in case a share warrant has been issued, to the bearer of such share warrant or to his bankers. In the case of joint holders, the dividend should be paid to the first joint holder. Payment of dividend to non-resident shareholders In term of the FEMA (Current Account Transactions) Rules, 2000, read with AD (MA Series) Circular No. 11, dated, May 16, 2000, an authorised dealer is empowered to remit payment of dividend by Indian Companies to non-resident shareholders and for this purpose, the Authorised dealers are empowered to devise their own documentation complying with section 10(5) of FEMA, 1999. Premium on issue of securities cannot be distributed as dividend According to section 205, dividend can be paid only out of profits or out of moneys provided by the Government for the purpose. Premium on issue of securities cannot be distributed legally, as dividend because, according to section 78(2), it can be applied only for the following four purposes, namely:

(i) for issuing bonus shares;

(ii) for writing off the preliminary expenses of the company;

(iii) for writing off the expenses of or the commission paid or discount allowed on, any issue of shares or debentures of the company;

(iv) for providing for the premium payable on the redemption of any redeemable preference shares or of any debentures of the company.

Recent developments : The Department of Company Affairs has issued a notification stating that the payment of dividend to the shareholders involving the fraction of 50 paise and above be rounded off to the rupee and the fraction of less than 50 paise may be ignored - Notification No. GSR No. 598(E), dated July 28, 1994. Whenever a company issues dividend warrant, banks insist that the dividend warrants should be printed with MICR coding with a view to facilitating clearance of the dividend warrants in the RBI/Bankers' clearing house. Before issuing dividend warrants, banks should get Reserve Bank's clearance for the quality of paper used for printing dividend warrants and the quality of printing. This clearance is given by the National Clearing Cell in the Reserve Bank. The Budget for 2002-2003 has proposed that tax should be deducted at source on dividends paid as provided in section 194 of the Income-tax Act. In this connection, the Department of Company Affairs has issued general Circular No. 17 of 2002 vide F. No. 17/36/2002-CL-V, dated July 5, 2002. The Circular is reproduced below: "Section 205(3) of the Companies Act, 1956 ('the Act') provides for payment of dividend except in cash and section 205(5)(b) of the Act further provides that the dividend payable in cash may be paid either by cheque or warrant. Subsequent to the amendment to section 10(33) of the Income-tax Act, 1961, dividend would be taxable in the hands of the recipient in respect of dividend income and this would, in the opinion of the Department of Revenue, involve huge amount of paper work as persons responsible for paying the income would be required to deduct tax at source from the amount of dividend paid and issue of TDS certificate. The Department of Revenue in order to reduce the additional paper work involved in the above method had suggested that the dividend warrant or intimation sent to the shareholders by company may be modified to contain the TDS also. Accordingly, in consultation with the Department of Revenue, it is hereby, clarified that henceforth, companies may adopt a format for dividend warrants to include information on TDS as under:

Ledger folio No. of equity shares Warrant No Gross dividend (Rs) Rate of tax Tax deducted (Rs) Net amt. payable(Rs) Certified that a sum of Rs. (in words).............has been deducted at source and paid to the credit of the Central Government.

Place........... ....

Signature of person responsible

for deduction of tax

Date........... Full Name..........Designation........

The above format of TDS may be printed on the reverse side of the warrant duly signed by persons responsible for deduction of tax. You are requested to kindly bring to the notice of your constituents about the circular and request them to adopt the same. Wherever demat and transfer of dividend by electronic mode is used, the companies may, however, issue TDS in the same format. While dividend is paid by cash or cheque, companies may issue TDS certificate in the above format along with dividend intimation.

Equity shares with differential rights : The Companies (Amendment) Act, 2000 has introduced a new type of equity shares which may carry differential rights as to voting, dividend, etc. Issue of such shares is governed by the Companies (Issue of Share Capital with Differential Rating Rights), Rules, 2001. It is now possible to issue equity shares carrying a higher rate of dividend, say 1 per cent or 2 per cent more than the dividend on ordinary equity shares. If such shares are issued by the company, the dividend payable on those shares should be separately calculated as per the terms of issue of such shares. Dividend on dematerialised shares Many companies have entered into agreement with National Securities Depository Ltd. (NSDL) and Central Depository Services (India) Ltd. (CDSL) for converting physical shares into dematerialised shares (that is, shares are converted into electronic form). The shares held in electronic form are transferred by the depository. Companies collect the list of members holding shares in the depository and pay them the dividend. Stock exchange requirements In case of listed companies, the following clauses of Listing Agreement have to be complied with. (i) At least 42 days' notice in advance of the closure of the Register of Members or Record Date is to be given to the Stock Exchanges where the company's shares are listed. This notice should be sent to other recognised Stock Exchanges in India. [Clause 16 of the Listing Agreement] 30 days advance notice should be given to the Depositories if the company's shares are dematerialised, about Closure of Register of Members.(ii) Date of Board Meeting at which dividend is declared/recommended is due to be considered [Clause (19) of

Standard Listing Agreement] is to be notified 7 days in advance to Stock Exchange where the shares of the company are listed. (iii) The dividend will be recommended/declared at least 5 days before commencement of closure of Transfer books or record date fixed for the purpose [Clause (19) of Listing Agreement]. (iv) The Stock Exchange on which shares are listed should be intimated immediately by letter, (telegram, fax, e-mail if the meeting is held outside the city) the Board meeting has been held to consider or decide the dividend to be declared (Clause 20 of Standard Listing Agreement), about all the dividend recommended or declared.(v) The Stock Exchange should be informed at least 21 days in advance of the date on and from which the dividend on shares shall be payable and issue simultaneously the dividend warrants which should be collectable at par with collection charges, if any, being borne by the company, in any bank in the country at the centres other than the centres agreed to between the company and the exchange [clause (21) of Standard Listing Agreement]. Revocation of declared dividend As stated earlier, a dividend including interim dividend once declared becomes a debt. So, it cannot be revoked, except with the consent of the shareholders. Dividend can be paid through Electronic Clearing Services (ECS)The shareholders have complained in the past about loss of dividend warrants sent by post due to pilferage in transit or undue delay in receipt of dividend warrants through post. According to section 205(5)(b), a company may remit dividend in cash or by cheque or by warrant. It is, however, well-known that the amount of dividend can also be transmitted electronically to shareholders after obtaining their consent in this regard and asking them to nominate a specific bank account number to which the dividend due to them should be remitted. The Central Vigilance Commission has issued an order dated November 27, 1998 directing that the banks may switch over to remittance of dividends by computerised means as it will help to improve the vigilance administration. The Central Vigilance Commissioner has also requested the Department of Company Affairs that in the interest of greater transparency, listed companies in India may be directed that they should go in for computerised cash transaction so far as payments of dividend, interest, refund, etc., are concerned. Consequently, the Department of Company Affairs, has recently advised listed companies to encourage their shareholders to send their authorisation to remit dividend to their designated bank account by means of electronic transfer as this will result in avoiding delay in remittance of dividend, etc., SEBI has also asked the listed companies to use Electronic Clearing Service facility for payment of dividend wherever such facility is available. [SEBI Circular DCC/FITT/CIR 3/2001, dated October 15, 2001]. ECS facility is extended by Reserve Bank of India (RBI) in 15 Centres, State Bank of India (SBI) in 30 Centres.

State Bank of Indore : Indore. Procedure for transfer of unpaid or unclaimed dividend to the Investor Education Protection Fund Sub-section (5) of section 205A provides that, if any, money transferred to an 'unpaid dividend account' in a scheduled bank remains unpaid or unclaimed for a period of 7 years from the date of such transfer, the company should transfer the same to the Investor Education and Protection Fund established under section 205C(1). For this purpose the following procedure should be followed by the company: Prepare the statement in the prescribed form stating all sums to be transferred from the unpaid dividend account with the bank to the fund, the nature of the sum, the names and last known addresses of the persons entitled to receive the same, the amount to which each person is entitled and nature of his claim thereto and other particulars prescribed. Get a DD from the bank where the company maintains its unpaid dividend account in favour of Punjab National Bank and remit the amount with any of the specified branch of Punjab National Bank by presenting the challan in triplicate in the prescribed form. The Head of Account in which the amount is to be remitted is:

Major Head 0075 - Miscellaneous General ServicesMinor Head 104 - Unclaimed and unpaid dividends, deposits and debentures, etc., of investors in companies. The remittance should be made within 30 days from the date of expiry of 7 years - Rule 3 of Investor Education and Protection Fund [Awareness and Protection of Investors] Rules, 2001. The bank will return 2 copies of the challan to the company as token of having received the amount. The company should file one copy of the challan with the Registrar of Companies and file with him a statement in Form-I duly certified by a Chartered Accountant or a Company Secretary or a Cost Accountant or the Statutory Auditors. Deduction of tax at source on dividend General Provision. - According to section 194 of the Income-tax Act, a company has to ensure that income-tax is deducted at source from the dividends payable to the shareholders at the appropriate rate as contained in the Annual Finance Act. The tax deducted at source should be rounded off to the nearest rupee as provided in section 288B of the Income-tax Act. The Government has clarified that rounding off is to be done in relation to the total amount of the tax finally payable and not in relation to the amount under the various heads, namely, income-tax, surcharge, etc., (Letter F.N.O. F. No. 12/40/66-IT(B) dated January 25, 1967). Exemptions. - Tax need not be deducted at source on dividend, if the company which pays dividend, is a company in which public are substantially interested and the person who is entitled to the dividend is a resident individual and the dividend does not exceed Rs. 2,500 and it is paid by an account-payee cheque (in the case of a closely held company, tax is to be deducted at source even if the dividend is below Rs. 2,500). Tax at source should not be deducted from the dividend payable to notified mutual funds notified under clause (23D) of section 10 of the Income-tax Act. No deduction of income-tax is to be made on the dividend payable to the Unit Trust of India in view of section 32(2)(a) of the Unit Trust of India Act, 1963. Tax should not be deducted on dividend paid to the General Insurance Corporation of India and its four wholly owned subsidiaries, viz., The National Insurance Company Limited, The New India Assurance Company Limited, The Oriental Insurance Company Limited and the United India Insurance Company Limited in view of section 35A of General Insurance (Nationalisation) Act, 1972. Where the shareholder has filed a declaration in Form No. 15G in duplicate to the company, tax should not be deducted at source from the dividend. If the shareholder has made an application in Form No. 13 to the ITO and the ITO has granted a certificate in Form No. 15 to the company authorising the company to pay dividend without deducting income-tax at source, the company need not deduct income-tax from the dividend payable to the shareholder concerned. Double taxation avoidance agreements and TDS. - Foreign income of a person generally becomes liable to tax in two countries - the country in which the income is earned and the country in which the person is resident. Double taxation of such income is avoided by means of Double Taxation Avoidance Agreement entered into by the Government of India with the Government of other countries under section 90 of the Income-tax Act. The Government of India has entered into agreement for avoidance of double taxation with about 57 countries. In such cases, the rate of tax on dividend income is specified in the agreement. If the rate of tax specified is less than the rate of tax to be deducted at source on the dividend income, the tax to be deducted at source on the dividend is the lower rate. This aspect has to be taken into account while deducting income-tax at source on dividend payable by companies to non-residents. TDS account number. - Every company which pays dividend should have obtained a TDS account number from the assessing authority. If the company has not got the TDS account number, it should apply for allotment of TDS account number to the assessing authority (TDS circle) in Form No. 49B in duplicate within one month from the end of the month in which tax on dividends was deducted. The TDS account number (TAN) should be quoted on all TDS challans, certificates and returns. Some other obligations of company regarding TDS. - The tax deducted at source should be remitted to the Government within 7 days from the date of payment of dividend and the company has to issue a tax deduction certificate in Form No. 16A to the shareholders concerned. The tax deduction certificate should be issued to the shareholder within one month from the end of the month in which dividend warrant was issued [Rules 31(3) of Income-tax Rules, 1962]. The company has to file an annual return in Form No. 26 with the income-tax department on or before 30th April. Further, the company has to furnish an annual return in Form No. 27B on or before 30th April of each year, furnishing details of dividend paid without deduction of tax. The company has to file a copy of the declaration filed by the shareholders in Form No. 15G with the Commissioner, who has jurisdiction over the Assessing Officer on or before 7 days of the month next following the month in which the declaration is furnished to the company. Case of NRI's. - In case a shareholder entitled to dividend is a non-resident Indian, tax at the appropriate rate has to be deducted at source from the dividend even if the dividend is below Rs. 2,500. However, if the non-resident shareholder has made an application to the ITO in Form No. 13 for grant of a certificate under section 197 for non-deduction of tax at source for dividends and the ITO has granted a certificate in Form No. 15 to the company authorising the company to pay dividend without the deduction of tax, the company should not deduct tax on dividends to the non-resident shareholder concerned. In the case of investments made by the non-residents in the shares issued in accordance with the Foreign Currency Convertible Bonds and Ordinary Shares (Through Depository Receipt Mechanism) Scheme, 1993, income-tax is to be deducted at source at the rate of 10 per cent on dividends as provided in section 115AC of the Income-tax Act. Wherever dividend is paid to non-residents, the company has to file Form No. 27 to the Assessing Officer having jurisdiction in terms of rule 36A of Income-tax Rules, 1962, within 14 days after expiry of two months from the date of payment of dividend. Case of HUF. - Many HUF's are now-a-days investing in the shares of companies and such shares are held in the name of the Karta of the family. Wherever the shares are held by the Karta, the exemption provided under section 194, for payment of dividend up to Rs. 2,500 without deduction of tax at source cannot be applied, as a HUF is a distinct entity for income-tax purpose. The exemption for payment of dividend up to Rs. 2,500 without tax deduction at source applies only to resident individuals and not to HUF. Hence, the company has to deduct income-tax at the rates applicable to HUF at the time of paying dividend to the Karta of the HUF.

BUYBACK TO REVIVE CAPITAL MARKET

The Government promulgated the much awaited Ordinance on October 31 allowing companies to buyback their shares. The measure is generally welcomed by Industry as it is seen as a major step to revive the sagging capital market, which has been bearish for quite some time now. The Ordinance followed the Prime Minister's announcement in the Annual General Meeting of the Federation of Indian Chambers of Commerce and Industry (FICCI) on October 24 that the Government would come out with a package of economic reforms to enable the capital market look up.

Salient Features

One of the salient features of the Ordinance is to allow companies to buyback their own shares up to 25 per cent of paid-up capital and free reserves. It also gives full freedom to make inter-corporate investments and loans to other corporate bodies. But this could be only up to 60 per cent of paid-up share capital and free-reserves with the approval of board of directors. Beyond this limit, the companies will have to pass a special resolution in the general meeting.

These two major provisions along with permission to issue sweat equity by companies in the Ordinance which amends the 1956 Companies Act for this purpose, is seen as a major liberalisation effort to enable the country move towards international standards in this regard.

The Ordinance also provides for nomination facility to the holders of shares/debentures/ deposits, setting up of investor education and protection fund and declaring Infrastructure Development as a Public Financial Institution. There are also provisions for mandatory compliance of Accounting Standards by companies.

Regulatory Mechanism

Some analysts point out that the ordinance could make the capital market volatile unless proper surveillance system is put in place as in developed countries to take timely action in regulating the market. The Ordinance has set a punishment of a two-year imprisonment or a fine of Rs.50,000 in the event of a company violating the rules. Butit does not mention on violation of Securities and Exchange Board of India (SEBI) guidelines. SEBI, the main regulator of the Capital Market, is yet to fine tune its guidelines as it does not want to do anything in hurry without making a proper study of prevalent practices elsewhere.

The amendments in Companies Act should be followed by a proper regulatory mechanism and surveillance system. This is only a first step to free the companies from the shackles of bureaucratic controls so as to move towards international standards in this area. The amendments to the 1956 Companies Act through this Ordinance are some immediate Government initiatives to revive the sagging capital markets.

Comprehensive Companies Bill

In fact, the Government, more so SEBI, is aware of certain pitfalls and is seized of the matter. Most of these concerns are addressed in the Comprehensive Companies Bill 1997 which is pending before Parliament. The Bill, which has been referred to a Parliamentary Standing Committee, is to replace the outmoded 1956 Companies Act. It has several features to facilitate not only further growth of the capital market but also in an orderly manner as in developed countries.

There are indications that the Bill may come up in the winter session of Parliament scheduled to begin on November 30. By then SEBI would have come to terms with the details of the Ordinance and put in place broad guidelines to ensure orderly implementation of the provisions of the Ordinance. The Dhanuka Panel has made some suggestions based on certain models adopted in developed markets.

Buyback Conditions

As it is, the Ordinance has provided certain safeguards to ensure that buyback and intercorporate investments are not misused by companies.They include: buyback of shares will not be allowed if the companies have defaulted in repayment of deposits, redemption of debentures/preferences shares and repayment to financial institutions. Also buyback of shares can be done only out of company+s free reserves, securities premium account or proceeds of any earlier issue specifically made for buyback purposes.

Thirdly, buyback is permitted only if the Article of Association of the companies authorise the same and that the process has to be completed within 12 months and shares bought back have to be extinguished and physically destroyed within seven days. Also the companies will have to comply with SEBI regulations and guidelines. The Ordinance also stipulates transparency in the buyback operations.

In the case of Inter-Corporate investments and loans, the Companies will not be allowed to give loan to any corporate body at an interest rate lower than the prevailing bank rate.

Sweat Equity

On the issue of Sweat Equity, the Ordinance makes it clear that it would be subject to SEBI regulations and all limitations, restrictions and provisions relating to equity shares will be applicable to Sweat Equity as well. It also defines Sweat Equity as those shares allotted either on discount or for consideration other than cash for providing know-how and intellectual rights for value addition.

Once Companies start resorting to buyback and intercorporate investments, it would be clear if capital markets behave in an orderly manner and course correction if any can be taken at the time of the passage of the Comprehensive Companies Bill, 1997 in Parliament. ***(PIB)***

SEBI Guidelines on Buy Back of Shares

The provisions regulating buy back of shares are contained in Section 77A, 77AA and 77B of the Companies Act,1956. These were inserted by the Companies (Amendment) Act,1999. The Securities and Exchange Board of India (SEBI) framed the SEBI(Buy Back of Securities) Regulations,1999 and the Department of Company Affairs framed the Private Limited Company and Unlisted Public Company (Buy Back of Securities) Rules, 1999 pursuant to Section 77A(2)(f) and (g) respectively.

Objectives of Buy Back: Shares may be bought back by the company on account of one or more of the following reasons

i. To increase promoters holding
ii. Increase earning per share
iii. Rationalise the capital structure by writing off capital not represented by available assets.
iv. Support share value
v. To thwart takeover bid
vi. To pay surplus cash not required by business

Infact the best strategy to maintain the share price in a bear run is to buy back the shares from the open market at a premium over the prevailing market price.

Resources of Buy Back

A Company can purchase its own shares from

(i) free reserves; Where a company purchases its own shares out of free reserves, then a sum equal to the nominal value of the share so purchased shall be transferred to the capital redemption reserve and details of such transfer shall be disclosed in the balance-sheet or

(ii) securities premium account; or

(iii) proceeds of any shares or other specified securities. A Company cannot buyback its shares or other specified securities out of the proceeds of an earlier issue of the same kind of shares or specified securities.

Conditions of Buy Back

(a) The buy-back is authorised by the Articles of association of the Company;

(b) A special resolution has been passed in the general meeting of the company authorising the buy-back. In the case of a listed company, this approval is required by means of a postal ballot. Also, the shares for buy back should be free from lock in period/non transferability.The buy back can be made by a Board resolution If the quantity of buyback is or less than ten percent of the paid up capital and free reserves;

(c) The buy-back is of less than twenty-five per cent of the total paid-up capital and fee reserves of the company and that the buy-back of equity shares in any financial year shall not exceed twenty-five per cent of its total paid-up equity capital in that financial year;

(d) The ratio of the debt owed by the company is not more than twice the capital and its free reserves after such buy-back;

(e) There has been no default in any of the following

   i. in repayment of deposit or interest payable thereon,

   ii. redemption of debentures, or preference shares or

   iii. payment of dividend, if declared, to all shareholders within the stipulated time of 30 days from the date of declaration of dividend or

   iv. repayment of any term loan or interest payable thereon to any financial institution or bank;

(f) There has been no default in complying with the provisions of filing of Annual Return, Payment of Dividend, and form and contents of Annual Accounts;

(g) All the shares or other specified securities for buy-back are fully paid-up;

(h) The buy-back of the shares or other specified securities listed on any recognised stock exchange shall be in accordance with the regulations made by the Securities and Exchange Board of India in this behalf; and

(i) The buy-back in respect of shares or other specified securities of private and closely held companies is in accordance with the guidelines as may be prescribed.

Disclosures in the explanatory statement

The notice of the meeting at which special resolution is proposed to be passed shall be accompanied by an explanatory statement stating -

(a) a full and complete disclosure of all material facts;

(b) the necessity for the buy-back;

(c) the class of security intended to be purchased under the buy-back;

(d) the amount to be invested under the buy-back; and

(e) the time-limit for completion of buy-back

Sources from where the shares will be purchased

The securities can be bought back from

(a) existing security-holders on a proportionate basis; Buyback of shares may be made by a tender offer through a letter of offer from the holders of shares of the company or

(b) the open market through

(i) book building process;

(ii) stock exchanges or

(c) odd lots, that is to say, where the lot of securities of a public company, whose shares are listed on a recognized stock exchange, is smaller than such marketable lot, as may be specified by the stock exchange; or

(d) purchasing the securities issued to employees of the company pursuant to a scheme of stock option or sweat equity.

Filing of Declaration of solvency

After the passing of resolution but before making buy-back, file with the Registrar and the Securities and Exchange Board of India a declaration of solvency in form 4A. The declaration must be verified by an affidavit to the effect that the Board has made a full inquiry into the affairs of the company as a result of which they have formed an opinion that it is capable of meeting its liabilities and will not be rendered insolvent within a period of one year of the date of declaration adopted by the Board, and signed by at least two directors of the company, one of whom shall be the managing director, if any: No declaration of solvency shall be filed with the Securities and Exchange Board of India by a company whose shares are not listed on any recognized stock exchange.

Register of securities bought back

After completion of buyback, a company shall maintain a register of the securities/shares so bought and enter therein the following particulars

a. the consideration paid for the securities bought-back,

b. the date of cancellation of securities,

c. the date of extinguishing and physically destroying of securities and

d. such other particulars as may be prescribed

Where a company buys-back its own securities, it shall extinguish and physically destroy the securities so bought-back within seven days of the last date of completion of buy-back.

Issue of further shares after Buy back

Every buy-back shall be completed within twelve months from the date of passing the special resolution or Board resolution as the case may be. A company which has bought back any security cannot make any issue of the same kind of securities in any manner whether by way of public issue, rights issue up to six months from the date of completion of buy back.

Filing of return with the Regulator

A Company shall, after the completion of the buy-back file with the Registrar and the Securities and Exchange Board of India, a return in form 4 C containing such particulars relating to the buy-back within thirty days of such completion. No return shall be filed with the Securities and Exchange Board of India by an unlisted company.

Prohibition of Buy Back

A company shall not directly or indirectly purchase its own shares or other specified securities -

(a) through any subsidiary company including its own subsidiary companies; or

(b) through any investment company or group of investment companies; or

Procedure for buy back

a. Where a company proposes to buy back its shares, it shall, after passing of the special/ Board resolution make a public announcement at least one English National Daily, one Hindi National daily and Regional Language Daily at the place where the registered office of the company is situated.

b. The public announcement shall specify a date, which shall be "specified date" for the purpose of determining the names of shareholders to whom the letter of offer has to be sent.

c. A public notice shall be given containing disclosures as specified in Schedule I of the SEBI regulations.

d. A draft letter of offer shall be filed with SEBI through a merchant Banker. The letter of offer shall then be dispatched to the members of the company.

e. A copy of the Board resolution authorising the buy back shall be filed with the SEBI and stock exchanges.

f. The date of opening of the offer shall not be earlier than seven days or later than 30 days after the specified date

g. The buy back offer shall remain open for a period of not less than 15 days and not more than 30 days.h. A company opting for buy back through the public offer or tender offer shall open an escrow Account.

Penalty

If a company makes default in complying with the provisions the company or any officer of the company who is in default shall be punishable with imprisonment for a term which may extend to two years, or with fine which may extend to fifty thousand rupees, or with both. The offences are, of course compoundable under Section 621A of the Companies Act, 1956.

Self Study Question

1. Study on the Indian Debt market
2. What are the guidelines given by SEBI on Buy back of shares?
3. Write different instruments traded in debt market
4. Explain in detail wholesale and retail debt market
5. Write on SEBI regulation on Dividend, rights issue and bonus issue
6. Write a note on the Bonus issues and Rights issues

3.9 PORTFOLIO MANAGEMENT

Old School Investing

We have been conditioned to think of market timing, stock selection, and manager performance as the keys to success. Because these beliefs are deeply ingrained, even superior investment strategies like Strategic Global Asset Allocation take a little getting used to.

What I'm advocating is so different from public expectations that sometimes people look at me as if I'm not quite right or a few bricks short of a full load. For instance:

- As an investment advisor, I'm expected to have an opinion on where the market is going. Well, I have an opinion, but it's no more likely to come true than yours or your dog's. People are offended and disappointed when I tell them that.

  Thanks to the media, we are exposed daily to countless "experts" who are worried about the market. Their indicators and forecasts point to a possible "correction." They are prepared to retreat to the "safety" of cash. This allows them to look responsible, conservative, and caring. By pandering to the public's fear, they hope thousands of anguished investors will decide to trust them with their money. On the other hand, advisors who insist on remaining fully invested at all times appear wild and crazy
- Advisors are supposed to beat somebody or something. Often the first question people will ask is: "What kind of numbers have you achieved this year?" Those numbers become the chief yardstick to determine if the advisor is good or bad.
- I'm still waiting for the first investor to ask: "What's the best long-term allocation?" Or, "How much risk do I need to take to meet my goals?"

Without tools to evaluate risk or choose between alternative strategies, investors are left with just one number to compare performance. By default, year-to-date or last year's performance figures are the only criteria for measurement. If those figures alone determined a successful investment plan, we could all buy one copy of *Money Magazine* each year, pick the single, top-performing mutual fund, and go sailing. Unfortunately, the *Money Magazine* approach is often the worst way to form a strategy.

PHASES OF PORTFOLIO MANAGEMENT

1. Specification of investment objectives and constraints
2. Choice of asset mix

3. Formulation of portfolio strategy
4. Selection of securities
5. Portfolio execution
6. Portfolio revision
7. Portfolio evaluation

Turning Your Goals into a Strategy

Every strategy has certain performance implications. The word *strategy* implies a conscious effort to achieve stated goals. Their concern is to at least meet their minimum acceptable return levels without taking excessive risk. They want a comfortable and stress-free retirement.

The asset-allocation design will determine results in both short- and long-term periods. What's more, both risk and returns will be driven far more by asset allocation than stock selection or market timing.

We could have looked at the 20-year, asset-class returns and seen that foreign, small-company stocks produced the highest return. But putting all the Joneses' money in foreign, small-company stocks will not produce a comfortable and stress-free retirement. Any asset class can and will have extended periods of serious under-performance from its long-term trend. And foreign, small-company stocks can and do have wild swings in short-term performance.

SPECIFICATION OF INVESTMENT OBJECTIVES

The commonly stated investment goals are : income, growth, and stability Since income and growth represent two ways by which return is generated and stability implies containment of risk, investment objectives may be expressed more succinctly in terms of return and risk.

Constraints

You might be familiar with the risk-reward concept, which states that the higher the **risk** of a particular investment, the higher the possible return. But, many investors do not understand how to determine the level of risk their individual portfolios should bear. This article provides a general framework that any investor can use to assess his or her personal level of risk and how this level relates to different investments.

Risk-Reward Concept

This is a general concept underlying anything by which a return can be expected. Anytime you invest money into something there is a risk, whether large or small, that you might not get your money back. In turn, you expect a return, which compensates you for bearing this risk. In theory the higher the risk, the more you should receive for holding the investment, and the lower the risk, the less you should receive.

Asset Allocation / ASSET MIX

It's no secret that throughout history common stock has outperformed most financial instruments. If an investor plans to have an investment for a long period of time, his or her portfolio should be comprised mostly of stocks. Investors who don't have this kind of time should diversify their portfolios by including investments other than stocks. For this reason, the concept of asset allocation was developed. Asset allocation is an investment portfolio technique that aims to balance risk and create diversification by dividing assets among major categories such as bonds, stocks, real estate, and cash. Each asset class has different levels of return and risk, so each will behave differently over time. At the same time that one asset is increasing in value, another may be decreasing or not increasing as much.

The underlying principle of asset allocation is that the older a person gets, the less risk he or she should take on. After you retire, you may have to depend on your savings as your only source of income. It follows that you should invest more conservatively because asset preservation is crucial at this time in life.

Determining the proper mix of investments in your portfolio is extremely important. Deciding what percentage of your portfolio you should put into stocks, mutual funds, and low risk instruments like bonds and treasuries isn't simple, particularly for those reaching retirement age. Imagine saving for 30 or more years only to see the stock market decline in the years before your retirement.

Portfolio Strategies

Passive

One of the most profound ideas affecting the investment decision process, and indeed all of finance, is the idea that the securities markets, particularly the equity markets, are efficient. In an efficient market, the prices of securities do not depart for any length of time from the justified economic values that investors calculate for them. Economic values for securities are determined by investor expectations about earnings, risks, and so on, as investors grapple with the uncertain future. If the market price of a security does depart from its estimated economic value, investors act to bring the two values together. Thus, as new information arrives in an efficient marketplace, causing a revision in the estimated economic value of a security, its price adjusts to this information quickly and, on balance, correctly. In other words, securities are efficiently priced on a continuous basis.

Passive strategies do not seek to outperform the market but simply to do as well as the market. The emphasis is on minimizing transaction costs and time spent in managing the portfolio because any expected benefits from active trading or analysis are likely to be less than the costs. Passive investors act as if the market is efficient and accept the consensus estimates of return and risk, accepting current market price as the best estimate of a security's value.

Active

Investors who do not accept the EMH, or have serious doubts, pursue active investment strategies, believing that they can identify undervalued securities and that lags exist in the market's adjustment of these securities' prices to new (better) information. These investors generate more search costs (both in time and money) and more transaction costs, but they believe that the marginal benefit outweighs the marginal costs incurred.

Most investment techniques involve an active approach to investing. In the area of common stocks the use of valuation models to value and select stocks indicates that investors are analyzing and valuing stocks in an attempt to improve their performance relative to some benchmark such as a market index. They assume or expect the benefits to be greater than the costs.

Pursuit of an active strategy assumes that investors possess some advantage relative to other market participants. Such advantages could include superior analytical or judgment skills, superior information, or the ability or willingness to do what other investors, particularly institutions, are unable to do. For example, many large institutional investors cannot take positions in very small companies, leaving this field for individual investors. Furthermore, individuals are not required to own diversified portfolios and are typically not prohibited from short sales or margin trading as are some institutions.

Most investors still favor an active approach to common stock selection and management, despite the accumulating evidence from efficient market studies and the published performance results of institutional investors. The reason for this is obvious - the potential rewards are very large, and many investors feel confident that they can achieve such awards even if other investors cannot.

The most traditional and popular form of active stock strategies is the selection of individual stocks identified as offering superior return-risk characteristics. Such stocks typically are selected using fundamental security analysis, but technical analysis is also used, and sometimes a combination of the two. Many investors have always believed, and continue to believe despite evidence to the contrary from the EMH, that they possess the requisite skill, patience, and ability to identify undervalued stocks.

Building an Investment Portfolio

Asset Allocation

We now consider how investors go about selecting stocks to be held in portfolios. Individual investors often consider the investment decision as consisting of two steps:

- **Asset allocation**
- **Security selection**

The asset allocation decision refers to the allocation of portfolio assets to broad asset markets; in other words, how much of the portfolio's funds is to be invested in stocks, how much in bonds, money market assets, and so forth. Each weight can range from zero percent to 100 percent. Examining the asset allocation decision globally leads us to ask the following questions:

1. What percentage of portfolio funds is to be invested in each of the countries for which financial markets are available to investors?
2. Within each country, what percentage of portfolio funds is to be invested in stocks, bonds, bills, and other assets?
3. Within each of the major asset classes, what percentage of portfolio funds is to go to various types of bonds, exchange-listed stocks versus over-the-counter stocks, and so forth?

Many knowledgeable market observers agree that the asset allocation decision may be the most important decision made by an investor. According to some studies, for example, the asset allocation decision accounts for more than 90 percent of the variance in quarterly returns for a typical large pension fund.

According to some analyses, asset allocation is closely related to the age of an investor. This involves the so-called *life-cycle theory of asset allocation.* This makes intuitive sense because the needs and financial positions of workers in their 50s should differ, on average, from those who are starting out in their 20s. According to the life-cycle theory, for example, as individuals approach retirement they become more risk averse.

Asset Classes

Portfolio construction begins with the basic building blocks of asset classes, which are the following major categories of investments:

- Cash (or cash equivalents such as money market funds)
- Stocks
- Bonds
- Real Estate (including Real Estate Investment Trusts)
- Foreign Securities

Each investor must determine which of these major categories of investments is suitable for him/her. The next step, as discussed in the preceding section on asset allocation, is to determine which percentage of total investable assets should be allocated to each category deemed appropriate. Only then, should individual securities be considered within each asset class.

Diversification

The insurance principle illustrates the concept of attempting to diversify the risk involved in a portfolio of assets (or liabilities). In fact, diversification is the key to the management of portfolio risk because it allows investors to minimize risk without adversely affecting return.

Random or naïve diversification refers to the act of randomly diversifying without regard to relevant investment characteristics such as expected return and industry classification. An investor simply selects a relatively large n umber of securities randomly – the proverbial "throwing a dart at *The Wall Street Journal* page showing stock quotes."

Risk Reduction in the Stock Portion of a Portfolio

Law of Large Numbers

Assume that all risk sources in a portfolio of securities are independent. As we add securities to this portfolio, the exposure to any particular source of risk becomes small. According to the *Law of Large Numbers*, the larger the sample size, the more likely it is that the sample mean will be close to the population expected value. Risk reduction in the case of independent risk sources can be thought of as the *insurance principle*, named for the idea that an insurance company reduces its risk by writing many policies against many independent sources of risk.

A Strategy for Everyone

We have demonstrated a superior investment strategy. Looking forward, our strategy should yield superior results while limiting risk for long-term investors in almost any economic environment short of unlimited nuclear war or total global economic collapse.

Whether you are playing tennis, flying fighters, or practicing medicine, you should be constantly looking for the highest probability shot. The combination of Strategic Global Asset

Allocation and Modern Portfolio Theory (with an appreciation of the cross section of expected returns in various parts of the world's markets) offers investors the highest probability shot of making their objectives a reality.

VALUE INVESTING

This style of investing termed as conservative investing. In the case of value investing, bargains are often measured in terms of market prices that are below the estimated current economic value of tangible and intangible assets. Value investors pick up shares at attractive low prices. They are characterised by maintaining a portfolio of market under performers. equipment, or other financial holdings in subsidiaries or other companies, and real estate. Value investors, who select only cheap shares that are very infrequently traded are called deep-value investors. Some value investors focus on companies at the brink of bankruptcy or in the midst of bankruptcy proceedings The value investors' portfolio will have shares that have been undervalued by the market. Such value investing is suitable in a market economy that is facing depression. Most value investors' focus on tangible assets such as plant. Cyclical shares also become a favourite with value investors when recession hits and economically sensitive shares get undue importance due to short term investors focussing on temporarily adverse sales and earnings information.

GROWTH INVESTING

The strategy of growth investors is to identify the shares whose future returns are expected to grow at a fast rate. Growth investment style identifies shares based on the growth potential of companies. These types of investors look into the future potential returns from the company. Historical returns need not exhibit a close relationship with growth rate or historical earnings per share.

Growth investors considers several factors to identify superior performing securities for purchase. Some of the factors that are looked into are short run and long run high growth rates from sales and EPS, high profit margin and notable increase in projected earnings for both three and five years. Growth companies are also identified through comparison with industry averages. If the company has superior expected growth rates compared with the industry averages, such companies are considered as growth companies. Growth shares also show distinctive cost advantage over other companies and are marked by high pay scales to attract talented employees. It is not always possible to identify the growth shares in all capital market situations. Many situations might arise, which would make the identification of growth shares very difficult. Also, the identified growth shares might change their characteristics and might often result in unexpected losses for the investor

PERFORMANCE INDEX

Portfolio performance evaluation is a component of the portfolio management process. Specifically, it can be viewed as a feedback and control mechanism that identifies superior performance and makes the investment management process successful. Superior performance of a portfolio may have been the result of good portfolio management decisions/ styles or due to chance. Conversely, inferior performance of a portfolio could also be attributed to a chance factor or due to costs associated with unscientific portfolio management.

Portfolio performance is evaluated over a specific time period. The most often used risk adjusted portfolio performance measures are the:

- Sharpe's Portfolio Performance Measure;
- Treynor Portfolio Performance Measure; and
- Jensen Portfolio Performance Measure

Portfolio Theory

A theory on how risk-averse investors can construct portfolios to optimize or maximize expected return based on a given level of market risk, emphasizing that risk is an inherent part of higher reward. Also called "portfolio theory" or "portfolio management theory."

According to the theory, it's possible to construct an "efficient frontier" of optimal portfolios offering the maximum possible expected return for a given level of risk. This theory was pioneered by Harry Markowitz in his paper "Portfolio Selection," published in 1952 by the *Journal of Finance*.

There are four basic steps involved in portfolio construction:

- Securityvaluation
- Assetallocation
- Portfoliooptimization
- Performance measurement

The Theory

One of the most important and influential economic theories dealing with finance and investment, MPT was developed by Harry Markowitz and published under the title "Portfolio Selection" in the 1952 *Journal of Finance*. MPT says that it is not enough to look at the expected risk and return of one particular stock. By investing in more than one stock, an investor can reap the benefits diversification - chief among them, a reduction in the riskiness of the portfolio. MPT quantifies the benefits of diversification, also known as not putting all of your eggs in one basket.

For most investors, the risk they take when they buy a stock is that the return will be lower than expected. In other words, it is the deviation from the average return. Each stock has its own standard deviation from the mean, which MPT calls "risk".

The risk in a portfolio of diverse individual stocks will be less than the risk inherent in holding any single one of the individual stocks (provided the risks of the various stocks are not directly related). Consider a portfolio that holds two risky stocks: one that pays off when it rains and another that pays off when it doesn't rain. A portfolio that contains both assets will always pay off, regardless of whether it rains or shines. Adding one risky asset to another can reduce the overall risk of an all-weather portfolio.

Portfolio Selection Problem

What is the opportunity set of investments or portfolios from which an investor must take a choice? A quick reflection on equations above equation, would reveal that there are infinite number of possibilities to combine n assets into a portfolio, provided an investor can hold a fraction of an asset if he or she so desires. Each one of these portfolios available for investment corresponds to a set of portfolio weights (i.e., the proportions of fund that investors may allocate to different assets), and is characterized by an expected rate of return and variance (or standard deviation)

Does an investor need to evaluate all the portfolios of 'feasible set' to determine his or her 'best' or 'optimal' portfolio? Fortunately, the answer to this question is 'no'. The investor is required to examine only a subset of feasible set of portfolios.

Generally The investors would, however, prefer some of them to others. Since the investors are assumed to be risk averse and prefer more return to less, their choice of portfolios will be bounded by the following two criteria:

1. Given two portfolios with the same expected return, prefer the one with the least risk exposure.
2. Given two portfolio with the same risk exposures, prefer the one with the higher expected return.

Not all the portfolios will conform to these criteria. And, hence, an investor's choice set will be reduced from an infinite possible combination of assets to the set of portfolio meeting the criteria. This set of portfolios is termed as 'efficient set1 or 'efficient frontier'.

Selection of Optimal Portfolio

The actual computational procedure for locating efficient frontier is much more complex that what it might appear to be from our geometric interpretations. We need to employ some optimisation technique, and this we will discuss in next unit. Meanwhile, let us search for an optimal portfolio from the efficient set.

Once the location and composition of the efficient set have determined, the selection of optimal portfolio by an investor will depend on his her 'risk tolerance' or 'trade-offs between risk and expected return'. For instance, a risk-averse investor, such as person nearing retirement, may prefer an efficient portfolio with low risk (as measured by standard deviation or variance), whereas a risk taker may prefer a portfolio with greater risk and commensurately higher returns.

Portfolio selection process entails four basic steps:

Step 1 : Identifying the assets to be considered for portfolio construction.

Step 2 : Generating the necessary input data to portfolio selection; this involves estimating the expected returns, variances and covariance's for all the assets considered.

Step 3 : Delineating the efficient portfolio.

Step 4 : Given an investor's risk tolerance level, selecting the optimal portfolio in terms of: (a) the assets to be held; and (b) the proportion of available funds to be allocated to each.

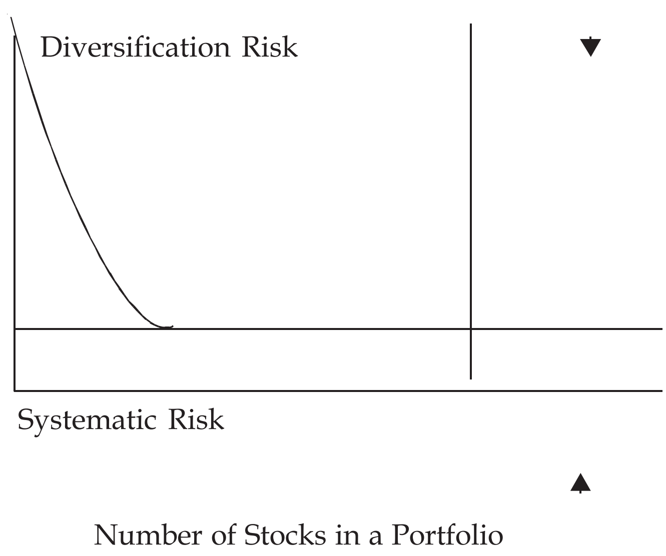
The portfolio selection process as described above is not something new; the model was presented by Harry Markowitz briefly in 1952 and later in a complete book entitled Portfolio Selection-Efficient Diversification of Investments (1959). One important concept that Markowitz emphasized for the first time was that some measure of risk, and not just the expected rate of return, should be considered when dealing with investment decision. Markowitz's approach to portfolio analysis and selection attracted a number of academicians and practitioners, who subsequently began to adjust the basic framework so that practical application could be more readily considered. Another interesting thing happened. Following the presentation of the model, there had been a wide spread realization of how computers could be utilized in investment decision-making. Markowitz's own solution to portfolio selection problem necessitates, as we will see in the next unit, application of computers. As a final remark, we may mention that Markowitz's work marks the beginnings of what is today known as modern portfolio theory.

MARKOWITZ DIVERSIFICATION AND CLASSIFICATION OF RISKS

In all our earlier illustrations, we have seen that the Portfolio Risk is smaller than the risk of individual assets. It indicates that the Portfolios are less risky than the isolated Assets. This phenomenon has been often attributed to Markowiz contribution. If an investor intends to diversify his investment into different assets instead of investing the whole in one security, he is with to benefit from reduced risk level. Further, if he can find assets with negative correlation, the combined risk works out zero or near zero. But in reality it is difficult to find many assets with negative correlation.

What will happen to portfolio risk if we go on adding more and more stocks to a Portfolio? It is logical to believe that the risk is bound to reduce . as the number of stocks in a portfolio increases. Can we eliminate risk completely it all depends an the correlation in between Assets. Smaller the correlations, lower wiII be the risk in the Portfolio. In act, if we car, find stocks with either zero correlation or negative correlation, the portfolilo would he certainly low. But it is impossible to find such stocks to construct our Portfolios. In such a case there exists a minimum level of risk in every portfolio, however large the number of Assets in it may be,

Effect of Portfolio Size on Portfolio Risk



Observe the above diagram which depicts the decline in size of portfolio risk as the number of individual stocks increase in a portfolio. That portion of the total risk which declines due to diversification of investment, from a single asset to others is called diversifiable risk or firm specific risk. It may arise due to the internal firm level or company level or industry level reasons like strikes and lock outs, sudden fall in demand for the product, entry of new technology, specific governmental restrictions, fluctuating growth to the given industry. On the other hand, the diversifiable risk which is also called 'systematic risk', is that portion of risk which cannot be further reduced by adding any number of newer scrips to the given portfolio. It is called 'systematic' or market risk' as the reasons like general changes in the economy, political and market fluctuations, inflation and interest rates which have a common bearing on all stocks. As these factors simultaneously affect all industries as well as firms alike this risk is universal to all risky assets.

This aspect brings a new dimension to the risk return analysis. In efficient markets Assets are expected to be priced in such a way that they yield a return proportional to the size of risk that the asset carries. Which risk is generally rewarded? Is it the total risk that the asset brings or something else? Certainly market is not expected to reward the risk which can be diversified by putting investment across different stocks. Then the relevant individual is its contribution systematic risk of an indivdual stock is its contribution to the systematic risk in well diversified portfolio. How to identify this contribution ? William F. Sharpe has given an answer to this. He has established the contribution of each single asset to the portfolio risk by developing a Single-Index Market Model'.

Traditional Portfolio Analysis

Traditional security analysis recognizes the key importance of risk and return to the investor traditional approaches which really upon intuition and insight. The result of these rather subjective approaches to portfolio analysis.

Most traditional methods recognize return as some dividend receipts and price appreciation over a forward period portfolio or combination of securities are thought of as helping to speared risk over many securities

Modern portfolio theory

Portfolio management is concerned with efficient management of investment in the securities. An investment is defined as the current commitment of funds for a period in order to derive a future flow of funds that will compensate the investing unit:

(a) for the time the funds are committed

(b) for the expected rate of inflation

(c) for the uncertainty involved in the future flow of funds

The portfolio management deals with the process of selection of securities from the number of opportunities available with different expected returns and carrying different levels of risk and the selection of securities is made with a view to provide the investors the maximum yield for a given level of risk or ensure minimise risk for a given level of return.

Markowitz Mean-Variance Model

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, but by diversification of portfolio it is possible to trade off between them. The essence of his theory is that risk of an individual asset hardly matters to an investor. What really counts is the contribution it makes to the investor's total risk. By turning his principle into a useful technique for selecting the right portfolio from a range of different assets, he developed 'Mean Variance Analysis' in 1952. The thrust has been on balancing safety, liquidity and return depending on the taste of different investors. The portfolio selection problem can be divided into two stages, first finding the mean-variance efficient portfolios and secondly 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

This model has taken into account of risks associated with investments - using variance or standard deviation of the return. This model is based on the following assumptions:

- The return on an investment adequately summarises the outcome of the investment.
- All investors are risk averse. For a given expected return he prefers to take minimum risk, obviously for a given level of risk the investor prefers to get maximum expected return.
- Investors are assumed to be rational in so far as they would prefer greater returns to lesser ones given equal or smaller risk and 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.
- 'Return' could be any suitable measure of monetary inflows such as NPV, but yield has been the most commonly used measure of return, in this context, so that where the standard deviation of returns is referred to we shall mean the standard deviation of yield about its expected value.
- The investors can visualise a probability distribution of rates of return.
- The investors' risk estimates are proportional to the variance of return they perceive for a security or portfolio.
- Investors base their investment decisions on two criteria Le., expected return and variance of return.

Efficient Frontier

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

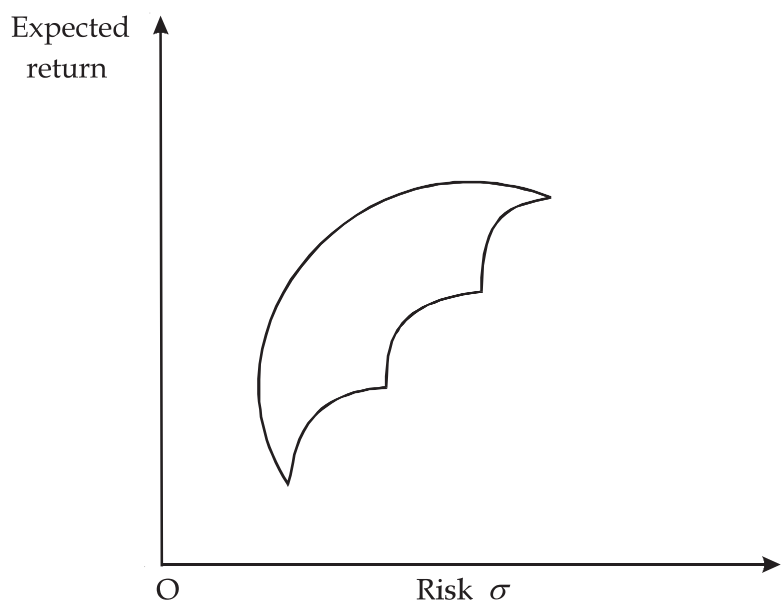
- a higher expected value of return and a lower standard deviation (risk)
- a higher expected value of return and the same standard deviations (risk).
- the same expected value but a lower standard deviation (risk).

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 investor's portfolio is not efficient he may:

- increase the expected value of return without increasing the risk.
- decrease the risk without decreasing the expected value of return, or
- obtain some combination of increase of expected return and decreased risk.

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

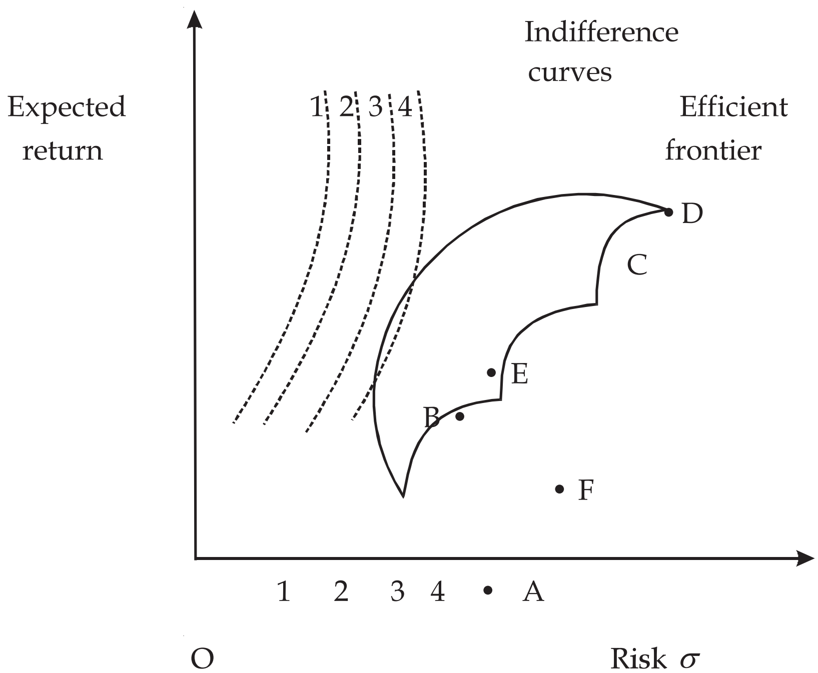
If all the investments are plotted on the risk-return sphere, individual securities would be dominated by portfolios, and the efficient frontier would be taken shape indicating investments which yield maximum return given the level of risk bearable, or which minimises risk given the expected level of return. Figure 34.1 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.



MARKOWITZ 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 that places him on the highest indifference curves, 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. It depicts the tradeoff between risk and expected value of return.

The optimal investment achieved at a point where the indifference curve is at a tangent to 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 optimal point location is explained with help of Figure 34.2. 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 proposals 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.



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

Use of matrix approach in Investment Decision

The product portfolio matrix approach propounded by the Boston Consulting Group may be related to the product life cycle by letting the introduction stage begin in the question mark quadrant; growth starts toward the end of this quadrant and continues well into the star quadrant. Going down from the star to the cash cow quadrant, the maturity stage begins. Decline is positioned between the cash cow and the dog quadrants. Ideally, a company should enter the product/market segment in its introduction stage, gain market share in the growth stage, attain a position of dominance when the product/market segment enters its maturity stage, maintain this dominant position until the product/ market segment enters its decline stage, and then determine the optimum point for liquidation.

Balanced and Unbalanced Portfolios Unbalanced portfolios may be classified into four types:

1. Too many losers (due to inadequate cash flow, inadequate profits, and inadequate growth).
2. Too many question marks (due to inadequate cash flow and inadequate profits).
3. Too many profit producers (due to inadequate growth and excessive cash flow).
4. Too many developing winners (due to excessive cash demands, excessive demands on management, and unstable growth and profits).

The company has just one cash cow, three question marks, and no stars. Thus, the cash base of the company is inadequate and cannot support the question marks. The company may allocate available cash among all question marks in equal proportion. Dogs may also be given occasional cash nourishment. If the company continues its current strategy, it may find itself in a dangerous position in five years, particularly when the cash cow moves closer to becoming a dog. To take corrective action, the company must face the fact that it cannot support all its question marks. It must choose one or maybe two of its three question marks and fund them adequately to make them stars. In addition, disbursement of cash in dogs should be totally prohibited. In brief, the strategic choice for the company, considered in portfolio terms, is obvious. It cannot fund all question marks and dogs equally. The portfolio matrix focuses on the real fundamentals of businesses and their relationships to each other within the portfolio. It is not possible to develop effective strategy in a multiproduct, multimarket company without considering the mutual relationships of different businesses.

Conclusion The portfolio matrix approach provides for the simultaneous comparison of different products. It also underlines the importance of cash flow as a strategic variable. Thus, when continuous long-term growth in earnings is the objective, it is necessary to identify high-growth product/market segments early, develop businesses, and preempt the growth in these segments. If necessary, short-term profitability in these segments may be forgone to ensure achievement of the dominant share. Costs must be managed to meet scale-effect standards. The appropriate point at which to shift from an earnings focus to a cash flow focus must be determined and a liquidation plan for cash flow maximization established. A cash-balanced mix of businesses should be maintained. Many companies worldwide have used the portfolio matrix approach in their strategic planning. The first companies to use this approach were the Norton Company, Mead, Borg-Warner, Eaton, and Monsanto. Since then, virtually all large corporations have reported following it. The portfolio matrix approach, however, is not a panacea for strategy development. In reality, many difficulties limit the workability of this approach. Some potential mistakes associated with the portfolio matrix concept are

1. Overinvesting in low-growth segments (lack of objectivity and "hard" analysis).
2. Underinvesting in high-growth segments (lack of guts).
3. Misjudging the segment growth rate (poor market research).
4. Not achieving market share (because of improper market strategy, sales capabilities, or promotion).
5. Losing cost effectiveness (lack of operating talent and control system).
6. Not uncovering emerging high-growth segments (lack of corporate development effort).
7. Unbalanced business mix (lack of planning and financial resources).

Thus, the portfolio matrix approach should be used with great care.

MULTIFACTOR PORTFOLIO MATRIX

The two-factor portfolio matrix discussed above provides a useful approach for reviewing the roles of different products in a company. However, the growth rate relative market share matrix approach leads to many difficulties. At times, factors other than market share and growth rate bear heavily on cash flow, the mainstay of this approach. Some managers may consider return on investment a more suitable criterion than cash flow for making investment decisions. Further, the twofactor portfolio matrix approach does not address major investment decisions between dissimilar businesses. These difficulties can lead a company into too many traps and errors. For this reason, many companies (such as GE and the Shell Group) have developed the multifactor portfolio approach. It is worthwhile to mention that the development of a multifactor matrix may not be as easy as it appears. The actual analysis required may take a considerable amount of foresight and experience and many, many days of work. The major difficulties lie in identifying relevant factors, relating factors to industry attractiveness and business strengths, and weighing the factors.

Strategy Development The area of the circle refers to the business's sales. Investment priority is given to products in the high area (upper left), where a stronger position is supported by the attractiveness of an industry. Along the diagonal, selectivity is desired to achieve a balanced earnings performance. The businesses in the low area (lower right) are the candidates for harvesting and divestment. Acompany may position its products or businesses on the matrix to study its present standing. Forecasts may be made to examine the directions different businesses may go in the future, assuming no changes are made in strategy. Future perspectives may be compared to the corporate mission to identify gaps between what is desired and what may be expected if no measures are taken now. Filling the gap requires making strategic moves for different businesses. Once strategic alternatives for an individual business have been identified, the final choice of a strategy should be based on the scope of the overall corporation vis-à-vis the matrix.

For example, the prospects for a business along the diagonal may appear good, but this business cannot be funded in preference to a business in the highhigh cell. In devising future strategy, a company generally likes to have a few businesses on the left to provide growth and to furnish potential for investment and a few on the right to generate cash for investment in the former. The businesses along the diagonal may be selectively supported (based on resources) for relocation on the left. For an individual business, there can be four strategy options: investing to maintain, investing to grow, investing to regain, and investing to exit. The choice of a strategy depends on the current position of the business in the matrix (i.e., toward the high side, along the diagonal, or toward the low side) and its future direction, assuming the current strategic perspective continues to be followed. If the future appears unpromising, a new strategy for the business is called for. Analysis of present position on the matrix may not pose any problem. At GE, for example, there was little disagreement on the position of the business. The mapping of future direction, however, may not be easy. A rigorous analysis must be performed, taking into account environmental shifts, competitors' perspectives, and internal strengths and weaknesses. Strategy to maintain the current position may be adopted if, in the absence of a new strategy, erosion is expected in the future. Investment will be sought to hold the position;

hence, the name invest-to-maintain strategy. The second option is the invest-to-grow strategy. Here, the product's current position is perceived as less than optimum vis-à-vis industry attractiveness and business strengths. In other words, considering the opportunities furnished by the industry and the strengths exhibited by the business, the current position is considered inadequate.

A growth strategy is adopted with the aim of shifting the product position upward or toward the left. Movement in both directions is an expensive option with high risk. The invest-to-regain strategy is an attempt to rebuild the product or business to its previous position. Usually, when the environment (i.e., industry) continues to be relatively attractive but the business position has slipped because of some strategic past mistake (e.g., premature harvesting), the company may decide to revitalize the business through new investments. The fourth and final option, the invest-to-exit strategy, is directed toward leaving the market through harvesting or divesting. Harvesting amounts to making very low investments in the business so that in the short run the business will secure positive cash flow and in a few years die out. (With no new investments, the position will continue to deteriorate.) Alternatively, the whole business may be divested, that is, sold to another party in a one-time deal. Sometimes small investments may be made to maintain the viability of business if divestment is desired but there is no immediate suitor. In this way the business can eventually be sold at a higher price than would have been possible right away.

Unit of Analysis The framework discussed here may be applied to either a product/market or an SBU. As a matter of fact, it may be equally applicable to a much higher level of aggregation in the organization, such as a division or a group. Of course, at the group or division level, it may be very difficult to measure industry attractiveness and business strengths unless the group or division happens to be in one business. In the scheme followed in this article, the analysis may be performed first at the SBU level to determine the strategic perspective of different products/ markets. Finally, all SBUs may be simultaneously positioned on the matrix to determine a corporate-wide portfolio.

Directional Policy Matrix

A slightly different technique, the directional policy matrix, is popularly used in Europe. It was initially worked out at the Shell Group but later caught the fancy of many businesses across the Atlantic. The two sides of the matrix are labeled business sector prospects (industry attractiveness) and company's competitive capabilities (business strengths). *Business sector prospects* are categorized as unattractive, average, and attractive; and the *company's competitive capabilities* are categorized as weak, average, and strong. Within each cell is the overall strategy direction for a business depicted by the cell. The consideration of factors used to measure business sector prospects and a company's competitive capabilities follows the same logic and analyses discussed above.

PORTFOLIO MATRIX: CRITICAL ANALYSIS In recent years, a variety of criticisms have been leveled at the portfolio framework. Most of the criticism has centered on the Boston Consulting Group matrix.

1. A question has been raised about the use of market share as the most important influence on marketing strategy. The BCG matrix is derived from an application of the learning

curve to manufacturing and other costs. It was observed that, as a firm's product output (and thus market share) increases, total cost declines by a fixed percentage. This may be true for commodities; however, in most product/market situations, products are differentiated, new products and brands are continually introduced, and the pace of technological changes keeps increasing. As a result, one may move from learning curve to learning curve or encounter a discontinuity. More concrete evidence is needed before the validity of market share as a dimension in strategy formulation is established or rejected.

2. Another criticism, closely related to the first, is how product/market boundaries are defined. Market share varies depending on the definition of the corresponding product/market. Hence, a product may be classified in different cells, depending on the market boundaries used.

3. The stability of product life cycles is implicitly assumed in some portfolio models. However, as in the case of the learning curve, it is possible for the product life cycle to change during the life of the product. For example, recycling can extend the life cycle of a product, sparking a second growth stage after maturity. A related subissue concerns the assumption that investment is more desirable in high-growth markets than in low-growth ones. There is insufficient evidence to support this proposition. This overall issue becomes more problematic for international firms because a given product may be in different stages of its life cycle in different countries.

4. The BCG portfolio framework was developed for balancing cash flows. It ignores the existence of capital markets. Cash balancing is not always an important consideration

Key Words

- Portfolio
- Single portfolio
- Optimum Portfolio
- Portfolio strategies
- Phases of portfolio management
- Passive strategies
- Active strategies
- Balanced strategies
- Asset allocation
- Security selection
- Diversification
- Portfolio theory
- Growth index
- Performance index

- Value investing
- Portfolio matrix

Self Study Questions

1. Explain risk reduction in the stock portion of a portfolio
2. What do you mean by building an investment portfolio?
3. Write on portfolio strategies
4. What are the phases of portfolio management?
5. Write Portfolio investment objectives
6. Explain asset allocation / asset mix
7. What do you mean by value investing?
8. What do you understood by growth investing?
9. Explain in detail performance index
10. Write modern theories of portfolio
11. How helpful is use of matrix approach in investment decision
12. Write on multifactor portfolio matrix

3.10 MUTUAL FUND

Unit Content

- Role of mutual fund in financial market
- Advantages of investing in mutual fund
- Regulations of operation
- Investors right and obligation

Concept of Mutual Fund

Mutual funds are money-managing institutions set up to professionally invest the money pooled in from the public. These schemes are managed by Asset Management Companies (AMC), which are sponsored by different financial institutions or companies. Each unit of these schemes reflects the share of investor in the respective fund and its appreciation is judged by the Net Asset Value (NAV) of the scheme. The NAV is directly linked to the bullish and bearish trends of the markets as the pooled money is invested either inequity shares or in debentures or treasury bills. Indian Mutual Funds unveils this multi-dimensional avenue, with its intricacies, in a fashionable manner as mutual funds up-hold ample scope of generating decent returns by some thoughtful investment

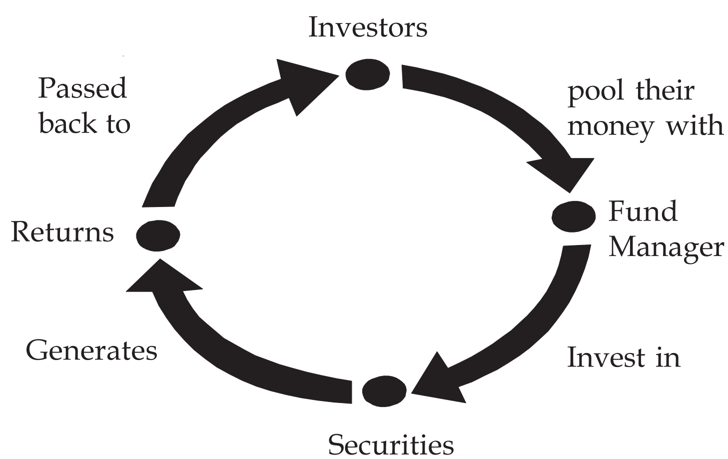
Mutual Fund has been defined by various authors in different ways. According to Pierce, James L, it is a non-depository or non-banking financial intermediary which acts as an "important vehicle for bringing wealth holders and deficit units together directly".

Weston, J. Fred and Brigham, Eugene F, in their book "Essentials of Managerial Finance" state that Mutual Funds are corporations which accept dollars from savers and then use these dollars to buy stock, long term bonds, short term debt instruments issued by business or government. These corporations pool funds and thus reduce risk by diversification.

Mutual Fund is essentially a mechanism of pooling together the savings of a large number of small investors for collective investment, with an avowed objective of attractive yields and capital appreciation, holding the safety and liquidity as prime parameters.

According to Author:

A Mutual Fund is a trust that pools the savings of a number of investors who share a common financial goal. The money thus collected is then invested in capital market instruments such as shares, debentures and other securities. The income earned through these investments and the capital appreciation realised are shared by its unit holders in proportion to the number of units owned by them. Thus a Mutual Fund is the most suitable investment for the common man as it offers an opportunity to invest in a diversified, professionally managed basket of securities at a relatively low cost. The flow chart below describes broadly the working of a mutual fund:



Mutual Fund Operation Flow Chart

History of Mutual Funds Industry in India

The origin of mutual fund industry in India is with the introduction of the concept of mutual fund by UTI in the year 1963. Though the growth was slow, but it accelerated from the year 1987 when non-UTI players entered the industry.

In the past decade, Indian mutual fund industry had seen a dramatic improvements, both qualitywise as well as quantitywise. Before, the monopoly of the market had seen an ending phase, the Assets Under Management (AUM) was Rs. 67bn. The private sector entry to the fund family rose the AUM to Rs. 470 bn in March 1993 and till April 2004, it reached the height of 1,540 bn.

Putting the AUM of the Indian Mutual Funds Industry into comparison, the total of it is less than the deposits of SBI alone, constitute less than 11% of the total deposits held by the Indian banking industry.

The main reason of its poor growth is that the mutual fund industry in India is new in the country. Large sections of Indian investors are yet to be intellectuated with the concept. Hence, it is the prime responsibility of all mutual fund companies, to market the product correctly abreast of selling.

The mutual fund industry can be broadly put into four phases according to the development of the sector. Each phase is briefly described as under.

First Phase - 1964-87

Unit Trust of India (UTI) was established on 1963 by an Act of Parliament. It was set up by the Reserve Bank of India and functioned under the Regulatory and administrative control of the Reserve Bank of India. In 1978 UTI was de-linked from the RBI and the Industrial Development Bank of India (IDBI) took over the regulatory and administrative control in place of RBI. The first scheme launched by UTI was Unit Scheme 1964. At the end of 1988 UTI had Rs.6,700 crores of assets under management.

Second Phase - 1987-1993 (Entry of Public Sector Funds)

Entry of non-UTI mutual funds. SBI Mutual Fund was the first followed by Canbank Mutual Fund (Dec 87), Punjab National Bank Mutual Fund (Aug 89), Indian Bank Mutual Fund (Nov 89), Bank of India (Jun 90), Bank of Baroda Mutual Fund (Oct 92). LIC in 1989 and GIC in 1990. The end of 1993 marked Rs.47,004 as assets under management.

Third Phase - 1993-2003 (Entry of Private Sector Funds)

With the entry of private sector funds in 1993, a new era started in the Indian mutual fund industry, giving the Indian investors a wider choice of fund families. Also, 1993 was the year in which the first Mutual Fund Regulations came into being, under which all mutual funds, except UTI were to be registered and governed. The erstwhile Kothari Pioneer (now merged with Franklin Templeton) was the first private sector mutual fund registered in July 1993.

The 1993 SEBI (Mutual Fund) Regulations were substituted by a more comprehensive and revised Mutual Fund Regulations in 1996. The industry now functions under the SEBI (Mutual Fund) Regulations 1996

The number of mutual fund houses went on increasing, with many foreign mutual funds setting up funds in India and also the industry has witnessed several mergers and acquisitions. As at the end of January 2003, there were 33 mutual funds with total assets of Rs. 1,21,805 crores. The Unit Trust of India with Rs.44,541 crores of assets under management was way ahead of other mutual funds.

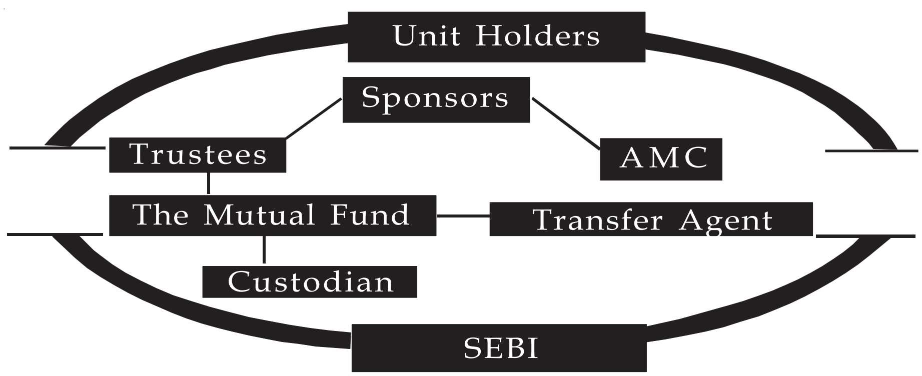
Fourth Phase - since February 2003

This phase had bitter experience for UTI. It was bifurcated into two separate entities. One is the Specified Undertaking of the Unit Trust of India with AUM of Rs.29,835 crores (as on January 2003). The Specified Undertaking of Unit Trust of India, functioning under an administrator and under the rules framed by Government of India and does not come under the purview of the Mutual Fund Regulations.

The second is the UTI Mutual Fund Ltd, sponsored by SBI, PNB, BOB and LIC. It is registered with SEBI and functions under the Mutual Fund Regulations. With the bifurcation of the erstwhile UTI which had in March 2000 more than Rs.76,000 crores of AUM and with the setting up of a UTI Mutual Fund, conforming to the SEBI Mutual Fund Regulations, and with recent mergers taking place among different private sector funds, the mutual fund industry has entered its current phase of consolidation and growth. As at the end of September, 2004, there were 29 funds, which manage assets of Rs.153108 crores under 421 schemes.

Mutual Funds - Organisation

There are many entities involved and the diagram below illustrates the organisational set up of a mutual fund:



Organisation of a Mutual Fund

Organisation of Mutual Funds

A Mutual fund can be constituted either as a corporate entity or as a trust. In India, UTI was set up as a corporation under an Act of Parliament in 1964. Indian banks when permitted to operate mutual funds were asked to create trusts to run these funds. The basic difference between a corporation and a trust is that in the case of the former, the liability is limited whereas in case of the later it is unlimited. Also a corporation enjoys the status of separate legal entity who can act on its behalf. A trust has to work on behalf of its trustees. Indian banks operating mutual funds had made a convincing plea before the government to allow their mutual funds to constitute them as 'Asset Management Companies'. The Department of Company Affairs, Ministry of Law, Justice and Company Affairs has issued guidelines in respect of registration of Asset Management Companies (AMCs), in consultation with Securities and Exchange Board of India, as follows:

(a) Approval of AMC by SEBI

As per guidelines, AMC shall be authorized for business by SEBI on the basis of certain criteria and the Memorandum and Articles of Association of the AMC would have to be approved by SEBI. Accordingly, no company can register an AMC under the Companies Act 1956 without the Memorandum and Articles of Association being approved by SEBI.

(b) Authorised capital of AMC

The primary objective of setting up of an AMC is to manage the assets of the mutual funds and other activities, which it can carry out, such as, financial services consultancy which do not conflict with the fund management activity and are only secondary and incidental. That being so, it may not be practical to expect a company to be set up with a paid up capital of Rs. 5 crores to carry on only incidental activities, without any assurance of its receiving an approval from SEBI to act also as an Asset Management Company for a Mutual Fund. There, should, therefore, be not any objection in registering an AMC if the authorized capital of such a company is approved by SEBI. Major players who help in running a Mutual Fund are as follows:

a) Registers and Transfer Agents

There major responsibilities include:

i) Receiving and processing the application form of Mutual Fund

ii) Issuing of Unit/Share Certificates on behalf of Mutual Fund

iii) Maintain detailed records of Unit holders transactions

iv) Purchasing, selling, transferring and redeeming the Unit/Share Certificates

v) Issuing of income/dividend Warrants, broker Cheques etc.

vi) Creating security interest on Units/Certificates for allowing loans against them

b) Advertiser

Major responsibilities of an advertiser include:

i) Helping mutual funds organizers to prepare a media plan for marketing the fund

ii) Issuing/buying the space in newspapers and other electronic media for advertising the various features of a fund

iii) Arranging or hoardings at public places

c) Advisor/manager:

It is generally a corporate entity who does the following jobs:

i) Professional advice on the Fund's investments,

ii) Advice on Asset Management Services.

d) Trustees:

Trustees provide the overall management services and charge management fee.

e) Custodian:

A custodian which is again a corporate body does the following functions:

i) Holds securities

ii) Receives and delivers securities

iii) Collects income/interest/dividends on the securities

iv) Holds and process cash

Besides the above, other players are as under

i) Fund Administrator; .

ii) Fund Accounting Services;

iii) Legal Advisors;

iv) Fund Officers;

v) Underwriters/Distributors;

vi) Legal Advisors.

All the above agencies play a major role in any mutual fund organized in the US and other European countries as they are separate agencies/corporations independent of the mutual fund. However, in India so far mutual fund. However, in India so far mutual funds have taken the services of the following outside agencies:

i) Registrars and Transfer Agents

ii) Advertisers

iii) Legal Advisors

iv) Custodians

Advantages of Investing in Mutual Funds

By investing in various Mutual Funds schemes, small investors or middle-income investors seek the following advantages compared to other types of investments:

I. Investment variety and spread in different industries

II. Capital appreciation without having to watch the upward or downward performance curves of different scrips.

III. No impulsive decision making regarding purchase or sale of share / securities, since the funds are managed by expert, professional fund managers who have access to latest detailed information regarding the stock market and individual scrips.

IV. Liquidity through buy back arrangements of the mutual fund or listing on some stock exchanges after a certain lock-in period

V. Even the smallest dividend or capital gain gets reinvested, thus enhancing the effective return

VI. Freedom from paperwork

VII. Tax benefits on invested amounts / returns or dividends /capital gains

Apart from above other Advantages of Mutual Funds are

The advantages of investing in a Mutual Fund are:

- **Diversification:** The best mutual funds design their portfolios so individual investments will react differently to the same economic conditions. For example, economic conditions like a rise in interest rates may cause certain securities in a diversified portfolio to decrease in value. Other securities in the portfolio will respond to the same economic conditions by increasing in value. When a portfolio is balanced in this way, the value of the overall portfolio should gradually increase over time, even if some securities lose value.
- **Professional Management:** Most mutual funds pay topflight professionals to manage their investments. These managers decide what securities the fund will buy and sell.
- **Regulatory oversight:** Mutual funds are subject to many government regulations that protect investors from fraud.
- **Liquidity:** It's easy to get your money out of a mutual fund. Write a check, make a call, and you've got the cash.
- **Convenience:** You can usually buy mutual fund shares by mail, phone, or over the Internet.
- **Low cost:** Mutual fund expenses are often no more than 1.5 percent of your investment. Expenses for Index Funds are less than that, because index funds are not actively managed. Instead, they automatically buy stock in companies that are listed on a specific index
- Transparency
- Flexibility
- Choice of schemes
- Tax benefits
- Well regulated

Drawbacks of Mutual Funds

Mutual funds have their drawbacks and may not be for everyone:

- **No Guarantees:** No investment is risk free. If the entire stock market declines in value, the value of mutual fund shares will go down as well, no matter how balanced the portfolio. Investors encounter fewer risks when they invest in mutual funds than when they buy and sell stocks on their own. However, anyone who invests through a mutual fund runs the risk of losing money.
- **Fees and commissions:** All funds charge administrative fees to cover their day-to-day expenses. Some funds also charge sales commissions or "loads" to compensate brokers, financial consultants, or financial planners. Even if you don't use a broker or other financial adviser, you will pay a sales commission if you buy shares in a Load Fund.
- **Taxes:** During a typical year, most actively managed mutual funds sell anywhere from 20 to 70 percent of the securities in their portfolios. If your fund makes a profit on its sales, you will pay taxes on the income you receive, even if you reinvest the money you made.

- **Management risk:** When you invest in a mutual fund, you depend on the fund's manager to make the right decisions regarding the fund's portfolio. If the manager does not perform as well as you had hoped, you might not make as much money on your investment as you expected. Of course, if you invest in Index Funds, you forego management risk, because these funds do not employ managers.

CONSTITUTION AND MANAGEMENT OF MUTUAL FUND AND OPERATION OF TRUSTEES, etc.

Trust Deed to be registered under the Registration Act

14. A mutual fund shall be constituted in the form of a trust and the instrument of trust shall be in the form of a deed, duly registered under the provisions of the Indian Registration Act, 1908 (16 of 1908) executed by the sponsor in favour of the trustees named in such an instrument.

Contents of trust deed

15. (1) The trust deed shall contain such clauses as are mentioned in the Third Schedule and such other clauses which are necessary for safeguarding the interests of the unit holders.

(2) No trust deed shall contain a clause which has the effect of-

(i) limiting or extinguishing the obligations and liabilities of the trust in relation to any mutual fund or the unit holders; or

(ii) indemnifying the trustees or the asset management company for loss or damage caused to the unit holders by their acts of negligence or acts of commissions or omissions.

Disqualification from being appointed as trustees

16. (1) A mutual fund shall appoint trustees in accordance with these regulations.

(2) No person shall be eligible to be appointed as a trustee unless -

(a) he is a person of ability, integrity and standing; and

(b) has not been found guilty of moral turpitude; and

(c) has not been convicted of any economic offence or violation of any securities laws; and

(d) has furnished particulars as specified in Form C.

(3) An asset management company or any of its officers or employees shall not be eligible to act as a trustee of any mutual fund.

(4) No person who is appointed as a trustee of a mutual fund can be appointed as a trustee of any other mutual fund unless -

(a) such a person is an independent trustee referred to in sub-regulation (5); and

(b) prior approval of the mutual fund of which he is a trustee has been obtained for such an appointment.

(5) *Two thirds of the trustees shall be independent persons and shall not be associated with the sponsors or be associated with them in any manner whatsoever [original clause substituted*]4

(6) In case a company is appointed as a trustee then its directors can act as trustees of any other trust provided that the object of the trust is not in conflict with the object of the mutual fund.

Approval of the Board for appointment of trustee

17. (1) No trustee shall initially or any time thereafter be appointed without prior approval of the Board.

[Proviso to Regulation deleted]

(2) The existing trustees of any mutual fund may form a trustee company to act as a trustee with the prior approval of the Board.

Rights and obligations of the trustees

18. (1) The trustees and the asset management company shall with the prior approval of the Board enter into an investment management agreement.

(2) The investment management agreement shall contain such clauses as are mentioned in the Fourth Schedule and such other clauses as are necessary for the purpose of making investments.

(3) The trustees shall have a right to obtain from the asset management company such information as is considered necessary by the trustees.

(4) The trustees shall ensure before the launch of any scheme that the asset management company has;-

(a) systems in place for its back office, dealing room and accounting;

(b) appointed all key personnel including fund manager(s) for the scheme(s) and submitted their bio-data which shall contain the educational qualifications, past experience in the securities market with the trustees, within 15 days of their appointment;

(c) appointed auditors to audit its accounts;

(d) appointed a compliance officer to comply with regulatory requirement and to redress investor grievances;

(e) appointed registrars and laid down parameters for their supervision;

(f) prepared a compliance manual and designed internal control mechanisms including internal audit systems;

(g) specified norms for empanelment of brokers and marketing agents.

(5) The trustees shall ensure that an asset management company has been diligent in empanelling the brokers, in monitoring securities transactions with brokers and avoiding undue concentration of business with any broker.

(6) The trustees shall ensure that the asset management company has not given any undue or unfair advantage to any associates or dealt with any of the associates of the asset management company in any manner detrimental to interest of the unitholders.

(7) The trustees shall ensure that the transactions entered into by the asset management company are in accordance with these regulations and the scheme.

(8) The trustees shall ensure that the asset management company has been managing the mutual fund schemes independently of other activities and have taken adequate steps to ensure that the interest of investors of one scheme are not being compromised with those of any other scheme or of other activities of the asset management company.

(9) The trustees shall ensure that all the activities of the asset management company are in accordance with the provisions of these regulations.

(10) Where the trustees have reason to believe that the conduct of business of the mutual fund is not in accordance with these regulations and the scheme they shall forthwith take such remedial steps as are necessary by them and shall immediately inform the Board of the violation and the action taken by them.

(11) *Each trustee shall file the details of his transactions of dealing in securities with the Mutual Fund on a quarterly basis.]*[6]

(12) The trustees shall be accountable for, and be the custodian of, the funds and property of the respective schemes and shall hold the same in trust for the benefit of the unit holders in accordance with these regulations and the provisions of trust deed.

(13) The trustees shall take steps to ensure that the transactions of the mutual fund are in accordance with the provisions of the trust deed.

(14) The trustees shall be responsible for the calculation of any income due to be paid to the mutual fund and also of any income received in the mutual fund for the holders of the units of any scheme in accordance with these regulations and the trust deed.

(15) The trustees shall obtain the consent of the unitholders -

(a) whenever required to do so by the Board in the interest of the unitholders;or

(b) whenever required to do so on the requisition made by three-fourths of the unit holders of any scheme; or

(c) when the majority of the trustees decide to wind up or prematurely redeem the units; or

(d) when any change in the fundamental attributes of any scheme or the trust or fees and expenses payable or any other change which would modify the scheme or affect the interest of the unitholders is proposed to be carried out unless the consent of not less than three-fourths of the unit holders is obtained:

Provided that no such change shall be carried out unless three fourths of the unit holders have given their consent and the unit holders who do not give their consent are allowed to redeem their holdings in the scheme.

[Provided further that in case of an open ended scheme, the consent of the unitholders shall not be necessary if:

(i) the change in fundamental attribute is carried out after one year from the date of allotment of units.

(ii) the unitholders are informed about the proposed change in fundamental attribute by sending individual communication and an advertisement is given in English daily newspaper having nationwide circulation and in a newspaper published in the language of the region where the head office of the mutual fund is situated.

(iii) the unitholders are given an option to exit at the prevailing Net Asset Value without any exit load.][7]

Explanation: For the purposes of this clause "fundamental attributes" means the investment objective and terms of a scheme.

(16) The trustees shall call for the details of transactions in securities by the key personnel of the asset management company in his own name or on behalf of the asset management company and shall report to the Board, as and when required.

(17) The trustees shall quarterly review all transactions carried out between the mutual funds, asset management company and its associates.

(18) The trustees shall *quarterly*[8] review the networth of the asset management company and in case of any shortfall, ensure that the asset management company make up for the shortfall as per clause (f) of sub-regulation (1) of regulation 21.

(19) The trustees shall periodically review all service contracts such as custody arrangements, transfer agency of the securities and satisfy itself that such contracts are executed in the interest of the unitholders.

(20) The trustees shall ensure that there is no conflict of interest between the manner of deployment of its networth by the asset management company and the interest of the unitholders.

(21) The trustees shall periodically review the investor complaints received and the redressal of the same by the asset management company.

(22) The trustees shall abide by the Code of Conduct as specified in the Fifth Schedule.

(23) The trustees shall furnish to the Board on a half yearly basis, -

(a) a report on the activities of the mutual fund;

(b) a certificate stating that the trustees have satisfied themselves that there have been no instances of self dealing or front running by any of the trustees, directors and key personnel of the asset management company;

(c) a certificate to the effect that the asset management company has been managing the schemes independently of any other activities and in case any activities of the nature referred to in sub-regulation (2) of regulation 24 have been undertaken by the asset management company and has taken adequate steps to ensure that the interest of the unitholders are protected

(24) The independent trustees referred to in sub-regulation (5) of regulation 16 shall give their comments on the report received from the asset management company regarding the investments by the mutual fund in the securities of group companies of the sponsor.][9]

(25) Trustees shall exercise due diligence as under:

General Due Diligence:

i. the Trustees shall be discerning in the appointment of the directors on the Board of the asset management company.

ii. Trustees shall review the desirability of continuance of the asset management company if substantial irregularities are observed in any of the schemes and shall not allow the asset management company to float new schemes.

iii. The trustee shall ensure that the trust property is properly protected, held and administered by proper persons and by a proper number of such persons.

iv. The trustee shall ensure that all service providers are holding appropriate registrations from the Board or concerned regulatory authority.

v. The Trustees shall arrange for test checks of service contracts.

vi. Trustees shall immediately report to Board of any special developments in the mutual fund.

B. Specific Due Diligence:

The Trustees shall:

i. obtain internal audit reports at regular intervals from independent auditors appointed by the Trustees.

ii. obtain compliance certificates at regular intervals from the asset management company.

iii. hold meeting of trustees more frequently.

iv. consider the reports of the independent auditor and compliance reports of asset management company at the meetings of trustees for appropriate action.

v. maintain records of the decisions of the Trustees at their meetings and of the minutes of the meetings.

vi. prescribe and adhere to a code of ethics by the Trustees, asset management company and its personnel.

vii. communicate in writing to the asset management company of the deficiencies and checking on the rectification of deficiencies.

(26) Notwithstanding anything contained in sub-regulations (1) to (25), the trustees shall not be held liable for acts done in good faith if they have exercised adequate due diligence honestly.

(27) The independent directors of the trustees or asset management company shall pay specific attention to the following, as may be applicable, namely:-

i. the Investment Management Agreement and the compensation paid under the agreement.

ii. service contracts with affiliates - whether the asset management company has charged higher fees than outside contractors for the same services.

iii. selection of the asset management company's independent directors

iv. securities transactions involving affiliates to the extent such transactions are permitted.

v. selecting and nominating individuals to fill independent directors vacancies.

vi. code of ethics must be designed to prevent fraudulent, deceptive or manipulative practices by insiders in connection with personal securities transactions.

vii. the reasonableness of fees paid to sponsors, asset management company and any others for services provided.

viii. principal underwriting contracts and their renewals.

ix. any service contract with the associates of the asset management company

TYPES OF MUTUAL FUND SCHEMES

Wide variety of Mutual Fund Schemes exist to cater to the needs such as financial position, risk tolerance and return expectations etc. The table below gives an overview into the existing types of schemes in the Industry.

- **By Structure**
  - Open - Ended Schemes
  - Close - Ended Schemes
  - Interval Schemes
- **By Investment Objective**
  - Growth Schemes
  - Income Schemes
  - Balanced Schemes
  - Money Market Schemes
- **Other Schemes**
  - Tax Saving Schemes
  - Special Schemes
  - Index Schemes
  - Sector Specfic Schemes

Mutual Funds are grouped as under:

Open Ended Funds

In open-ended funds, there is no limit to the size of the funds. Investors can invest as and when they like. The purchase price is determined on the basis of Net Asset Value (NAV). NAV is the market value of the fund's assets divided by the number of outstanding shares/ units of the fund.

Close Ended Funds

These funds are fixed in size as regards the corpus of the fund and the number of shares. In close ended funds, no fresh units are created after the original offer of the scheme expires.

The shares/units of these funds are not redeemable at their NAV during their life as are in the case of open ended funds. The shares of such funds are traded in the secondary market on stock exchanges at market prices that may be above or below their NAV.

Income Oriented Funds

These funds offer a return much higher than the bank deposits but with less capital appreciation. The emphasis being on regular returns, the pattern of investments in general is oriented towards fixed income yielding securities like non-convertible debentures of consistently good dividend paying companies, etc.

Growth Oriented Funds

These funds do not offer fixed regular returns but provide substantial capital appreciation in the long run. The pattern of investment in general is oriented towards shares of high growth companies.

Balanced Funds or Income and Growth Oriented Funds

These offer a blend of immediate average returns and reasonable capital appreciation in the long run. The investment portfolio of these kinds of funds are evenly distributed among fixed income bearing corporate securities and common stock with growth potential.

Area Funds

These are the funds which are raised in other countries for providing access to foreign investors. The India Growth Fund and the India Fund raised in the US and U.K respectively are examples of area funds.

Specialised Funds Or Industry Funds

These funds are invested in a particular industry like cement, steel, jute, power or textile, etc. These funds carry high risks with them as the entire fund is exposed to a particular industry. Money Market funds are another kind of specialized funds. These funds invest in money market instruments only.

Tax Relief Funds

These funds are raised for providing tax relief to those investors whose income comes under taxable limits. Equity Linked Savings Scheme, under Section 80 CCB of the Income Tax Act. 1961, floated by SBI Mutual Fund, PNB Mutual Fund, LIC Mutual Fund and Canbank Mutual Fund in the month of Feb. 1991 are such kinds of funds. These funds provide direct deductions from taxable income up to a certain limit (Rs. 10, 000/- under Sec.80 CCB of Income Tax Act).

Mutual Fund Companies in India

The concept of mutual funds in India dates back to the year 1963. The era between 1963 and 1987 marked the existance of only one mutual fund company in India with Rs. 67bn assets under management (AUM), by the end of its monopoly era, the Unit Trust of India (UTI). By the end of the 80s decade, few other mutual fund companies in India took their position in mutual fund market.

The new entries of mutual fund companies in India were SBI Mutual Fund, Canbank Mutual Fund, Punjab National Bank Mutual Fund, Indian Bank Mutual Fund, Bank of India Mutual Fund.

The succeeding decade showed a new horizon in Indian mutual fund industry. By the end of 1993, the total AUM of the industry was Rs. 470.04 bn. The private sector funds started penetrating the fund families. In the same year the first Mutual Fund Regulations came into existance with re-registering all mutual funds except UTI. The regulations were further given a revised shape in 1996.

Kothari Pioneer was the first private sector mutual fund company in India which has now merged with Franklin Templeton. Just after ten years with private sector players penetration, the total assets rose up to Rs. 1218.05 bn. Today there are 33 mutual fund companies in India.

Types of Mutual Fund Schemes in India

Depending on their objectives, pattern of investment and returns etc, the Mutual Fund schemes in India can be classified into five broad categories:

1. Growth Funds
2. Income Funds
3. Growth & Income Funds
4. Tax Planning Schemes
5. Other Schemes

Let us take a quick view of the important features of these schemes as follows:

1. Growth Funds

i) **Objective:** Generating substantial capital appreciation.

ii) **Investment Pattern:** Nearly all in equity shares.

iii) **Duration:** Seven years

iv) **Investment Risk:** High risk in reinvestment schemes or normal risks of equity investment for periodic capital gains schemes.

v) **Returns:** No assured return but high returns are expected,

vi) **Liquidity:** No repurchase facility except at the end of the scheme,

vii) Listing on stock exchanges after certain lock in period from the date of allotment

viii) Transfer of Units is allowed

ix) **Target Investors:** Individuals in higher tax brackets interested in getting higher gains to beat taxation.

Some Examples of Growth schemes

Scheme	Issued by
a) Master Share, Master Share Plus, Master Gain, UGS-200	Unit Trust of India
b) Magnum Express, Magnum Multiplier	SBI Mutual Fund
c) Canshare, Canstar Cap, Cangrowth, Canbonus	Canbank MutualFund
d) Ind Ratna, Ind Sagar, Ind Moti	Indbank Mutual Fund

Main Advantages

a) Generally high returns due to capital gains.

b) Easy liquidity due listing on stock exchanges and transferability as also bank loan facility

c) Tax exemptions on income as also long-term capital gains

Disadvantages

High risk, No assured returns

2. **Income Funds**

   i) **Objective:** Assured minimum income and safety of capital

   ii) **Duration:** 5-7 years

   iii) **Investment Pattern:** Bulk (75-80%) of funds invested in fixed income securities like government bonds, company debentures, etc. and rest in equity shares,

   iv) **Investment Risk:** Absolute safety,

   v) **Return:** 14.75% p.a. upwards-payable monthly or quarterly plus mid scheme bonus and end of the scheme appreciation (minimum 2%)

   vi) **Liquidity:** No listing on stock exchanges and Units are not transferable. Repurchase facility after initial lock-in period of three years.

Bank loan facility upto 75% of the Unit's face value

Main Advantages

a) Safety of investment and assured minimum income.

b) Reasonable liquidity due to availability of bank loan facility

c) Income / dividend eligible for exemption upto Rs. 10,000/- under section 80Lof In come Tax Act.

Disadvantages

Extraordinary gains not possible.

Some Examples of Income Fund:

a)	Units Scheme of 1964, Growing Income Unit Scheme of 1987	Unit Trust of India
b)	Magnum Monthly Income Schemes	SBI Mutual Fund
c)	Rising Monthly Income Scheme	BOI Mutual Fund
d)	Swarna Pushpa	Indbank Mutual Fund
e)	GIC Safe-1991, GIC-Rise-1991, Big Value.	GIC Mutual Fund
f)	PNBRIPS	PNB Mutual Fund

a) Growth And Income Funds

These are 'No Guaranteed Return' schemes of either all enquiry fund type or balanced fund type.

All Equity Fund Schemes

i). **Objective** : High income combined with growth.

ii). **Duration:** 7 years

iii). **Investment Pattern:** Almost all in equity shares

iv). **Investment Risk:** Risky investment Capital, value can go up or down.

v). **Returns:** No assured return. Annual distribution of minimum 80% of the Trust's net income from dividends, interest etc. Good capital appreciation expected at the end of the scheme,

vi). **Liquidity:** No repurchase facility except at the end of the scheme

Listing on stock exchanges

Transfer of Units allowed

Bank loan upto 75% of the face value of Units allowed

Main Advantages

(a) Good annual returns (though not assured) with good capital appreciation at the end of the scheme

(b) Tax saving on capital gains

Some Examples of All Equity Funds

	Scheme	Issued by
i).	Canstock, Can double	Canbank Mutual Fund
ii).	PNB Premium Plus- 91	PNB Mutual Fund

Balanced Funds

1. **Objective:** Income and growth with reasonable safety
2. **Duration:** seven years
3. **Investment Pattern:** About 50% in equity and the rest in debentures etc
4. **Returns:** No assured return, but steady income due to annual distribution of minimum of 80% of the Trust's income by way of dividends, interest etc.

Reasonably high capital appreciation also expected

5. **Liquidity:** Repurchase facility after initial lock-in period of three years

No listing on stock exchanges

Transfer of Units permitted

Units can be pledged to banks for loans

Main Advantages

(a) Reasonable return with possibility of reasonable capital appreciation

(b) Tax exemptions on income as well as capital gains

Some Examples of Balanced Funds

Scheme	Issued By
MRIS' 87,89,90	SBI Mutual Fund
Cancigo, Cangi	Canbank Mutual Fund

Tax Planning Schemes

The investments made under these schemes are deductible from the taxable income upto certain limits, thus providing substantial tax relief to the investors. **Examples of Tax Planning Schemes:**

a) MTSS' 89, 90, 91 and Magnum GIFTS of Mutual Fund

b) Can 80CC and Canstar 80L of Canbank Mutual Fund

c) Ind 88A of Indbank Mutual Fund

(Here Tax rebate is available on investments as in the case of investments in LIC, Provident Fund, NSC, etc)

d) Equity Linked Savings Schemes (ELSS)

MELS-91	SBI Mutual Fund
Can Pep-91,92	Canbank Mutual Fund
Ind Shelter	Indbank Mutual Fund
MEP-91,92	Unit Trust of India
BOINAANZA 80 CCB	BOI Mutual Fund
PNB ELSS	PNB Mutual Fund

ELSSs are 10-year schemes and the withdrawals (by purchase) are permitted after an initial lock- in period of three years but the entire withdrawn amount again becomes taxable. As such these are only tax deferent schemes.

Main Advantages

i. Substantial tax saving / deferment

ii. Possibility of reasonable capital gains

Main disadvantages

i. No liquidity during lock in period
ii. Withdrawn amounts are again taxable
iii. Units are not transferable

Other Schemes:

These include schemes of 10-15 years duration, which offer multiple benefits. For example:

	Scheme	Benefits
a)	Unit Linked Insurance Plan of UTI	i. Contribution eligible for tax deduction under Sec 88-A of IT Act providing tax rebate of 20%of Contribution
		ii. Insurance Cover upto target amount
		iii. Reasonable income by way of dividend
		iv. Liquidity: withdrawal from the scheme any time on a Month's notice permitted
		v. Safety of capital
b)	Dhanaraksha, Dhansahyog Dhanavirddhi	These offer some or all of the following benefits:
	Schemes of LIC Mutual Fund	i. Life Insurance cover
		ii. Accident insurance cover
		iii. Reinvestment of annual dividends or reasonable dividend
		iv. Safety of capital
		v. Reasonable capital appreciation
		vi. Liquidity: repurchase facility after initial lock-in period of three years.
		vii. Units are not transferable but bank loan facility is available
		viii.Tax exemption on dividends under section 80L and tax benefits under long term capital gains are available

Other Categories

Sector Specific Schemes These are the funds/schemes which invest in the securities of only those sectors or industries as specified in the offer documents e.g. Pharmaceuticals, Software, Fast Moving Consumer Goods (FMCG), Petroleum stocks, etc.

Tax Saving Schemes These schemes offer tax rebates to the investors under specific provisions of the Income-tax Act, 1961 as the Government offers tax incentives for investment in specified avenues e.g. Equity Linked Savings Schemes (ELSS).

Off-Shore Funds These funds will have non-residential investors and are regulated by the provision of the foreign countries where these are registered. Further, these funds are governed by the rules and procedures laid down for the purpose of approving and monitoring their performance by the Department of Economic Affairs, Ministry of Finance and the directions of RBI.

Asset Management Mutual Funds These are also called Asset Management Companies (AMCs). These have special characteristics of dealing with assets other than securities. These funds can acquire various assets and give them on lease basis to needy lessees.

Net Asset Value

NAV is calculated as follows:

$$\text{NAV} = \frac{\text{Fair market value of Scheme's Investments + Receivables + Accrued income + Other assets - Accrued expenses - Payables - Other liabilities}}{\text{Number of units outstanding}}$$

Entry Load and Exit Load

A Load Fund is one that charges a percentage of NAV for entry or exit. That is, each time one buys or sells units in the fund, a charge will be payable. This charge is used by the mutual fund for marketing and distribution expenses.

Calculation of Front-end Load or Entry Load

$$\text{Public Offer Price} = \frac{\text{Net Asset Value}}{1 - \text{Front - end Load}}$$

Calculation of Back-end Load or Exit Load

$$\text{Redemption Price} = \frac{\text{Net Asset Value}}{1 - \text{Back - end Load}}$$

Return on Investment

The investor who invests in mutual fund units can receive returns in the following two ways:

Capital Appreciation	-	Profit earned on sale of units at a higher NAV than the original cost.
Income Distribution	-	When a fund makes a profit on its investment, this (dividend) profit will be given to investor as a dividend which can be re-invested in the fund or retain it in the form of cash.

$$r = \frac{(NAV_t - NAV_{t-1}) + 1_t + G_t}{NAV_{t-1}}$$

Where r = Return on mutual fund

NAV_t = Net asset value at the time period 't'

NAV_{t-1} = Net asset value at time period "t-1"

1_t = Income at time period 't'

G_t = Capital gain distribution at time period 't'

Required Return on Mutual Fund Investment (as a percentage)

$$R_2 = \left[\frac{1}{1 - \text{Initial expenses}\,(\%)} \times R_1\right] + \text{Recurring expenses}\,(\%)$$

Where, R_1 = Personal Return of investor

R_2 = Mutual Fund earnings

Effective Yield on Mutual Fund Investment

$$= \frac{\text{Dividend} + \text{Capital Appreciation}}{\text{Initial Investment}} \times \frac{365}{\text{No. of days}} \times 100$$

Illustration 1

A mutual fund that had a net asset value of Rs. 10 at the beginning of month 1 made income and capital gain distribution of Re.0.05 and Re.0.04 per share respectively during the month, and then ended the month with a net asset value of Rs. 10.03. Calculate monthly return.

Solutions;

Monthly Return on the Mutual Fund

$$r = \frac{(NAV_t - NAV_{t-1}) + 1_t + G_t}{NAV_{t-1}}$$

Where r = Return on mutual fund

NAV_t = Net asset value at the time period 't' i.e. Rs.10.03

NAV_{t-1} = Net asset value at time period "t-1" i.e. Rs.10.00

1_t = Income at time period 't' i.e. Rs. 0.05

G_t = Capital gain distribution at time period 't' i.e Rs. 0.04

By substituting, weget

$$r = \frac{(Rs\,10.03 - Rs.10.00) + Re.\,0.05 + Re.\,0.04}{Rs.10.00} = 0.012$$

= 1.20% p.m. or 14.4% p.a.

Illustration 2

The unit price of RSS Scheme of a mutual fund is Rs. 10. The public offer price (POP) of the unit is Rs. 10.204 and the redemption price is Rs. 9.80. Calculate: (i) Front-end load, and (ii) Back-end load.

Solution :

(i) Calculation of Front-end load

$$\text{Public offer price} = \frac{\text{Net asset value}}{1 - \text{Front} - \text{end load}}$$

Where, Public offer price Rs. 10.204; Net asset value Rs. 10.

$$10.204 = \frac{10}{(1-F)}$$

10.204 (1-F) = 10

10.204 - 10.204 F = 10

10.204 F = 10.204 - 10

F = 0.204/10.204 = 0.01999

$\therefore$ Front-end load =2%

(ii) Calculation of Back-end load (B)

$$\text{Redemption price} = \frac{\text{Net asset value}}{1 - \text{Back} - \text{end load}}$$

$$9.80 = \frac{10}{(1-B)}$$

9.80 (1-B) = 10

9.80 - 9.80 B = 10

-9.80 B = 10 - 9.80

B = 0.20/9.80 = 2.04%

$\therefore$ Back-end load = 2.04%

Illustration 3

Mr. Raja can earn a return of 16 per cent by investing in equity shares on his own. Now he is considering a recently announced equity based mutual fund scheme in which initial expenses are 5.5 per cent and annual recurring expenses are 1.5 per cent. How much should the mutual fund earn to provide Mr. A, a return of 16 per cent ?

Solutions:

$$R_2 = \left[\frac{1}{1-Initial Expenses(\%)}R_1\right] + Recurring\ \ Expenses(\%)$$

Where,

Personal earnings of Mr. A= R_1

Mutual Fund earnings = R_2

$$= \left[\frac{1}{1-0.055}\times 16\%\right] + 1.5\% = 18.43\%$$

∴ Mutual Fund Earnings = 18.43

Illustration 5

RKV has invested in three Mutual Fund Schemes as per detailed below :

	MF X	MF Y	MF Z
Date of investment	01-12-2006	01-01-2007	01-03-2007
Amount of investment	Rs. 50,000	Rs.1,00,000	Rs. 50,000
Net Asset Value (NAV) at entry date	Rs. 10.50	Rs. 10	Rs. 10
Dividend received upto 31-03-2007	Rs. 950	Rs. 1,500	Nil
NAV as at 31-03-2007	Rs. 10.40	Rs. 10.10	Rs. 9.80

What is the effective yield on per annum basis in respect of each of the three schemes to Mr. RKV upto 31-03-2007 ?

Solutions;

Calculation of effective yield on per annum basis in respect of three mutual fund schemes to Mr. RKV upto 31-3-2007.

Particulars		MF X	MF Y	MF Z
(a) Investment	(Rs.)	50,000	1,00,000	50,000
(b) No. of units		4,761.905	10,000	5,000
(c) Unit NAV on 31-3-2007	(Rs.)	10.40	10.10	9.80
(d) Total NAV on 31-3-2007	(b) X (c) (Rs.)	49,523.81	1,01,000	49,000
(e) Increase (Decrease) of NAV (a)-(d)	(Rs.)	(476.19)	- 1,000	(1,000)
(f) Dividend Received	(Rs.)	950	1,500	Nil
(g) Total yield	(e)+(f) (Rs.)	473.81	2,500	(1,000)
(h) Number of days		122	91	31
(i) Effective yield p.a.	(%)	2.835%	10.027%	(-) 24%

Creation of a Portfolio

The portfolio of a mutual fund depends on the objectives of each scheme/fund floated by mutual fund. For example, the objective of an income oriented scheme is to provide regular monthly income to its shareholders. The portfolio of such a fund should consist of fixed income bearing securities so that the fund can achieve its objective. It has been learnt from Indian experience that the portfolio of such a fund consists of mainly the following securities:

- Non Convertible Debentures (NCD's) - 75 to 90%
- Call Money-10 to 25%

A portfolio of income cum growth oriented fund consists of mainly NCD's upto 70% of the portfolio, approximately 25% of equities and 5% of money market instruments. On the other hand, a pure growth of equity fund creates a portfolio of share/stock of growth or blue-chip companies.

The fund manager of a mutual fund is the person responsible for buying these securities in such a way that the fund is able to achieve its objectives. A fund manager tries to create a well-diversified portfolio of securities so that unsystematic risk is reduced significantly and returns expected on individual securities and on portfolio is directly related to 'market risk' or systematic risk. A fund manager has the following investment options in terms of buying securities from the Indian market :

Securities	Returns
1 Call MoneyAverage returns	15%
2 Bills	13 to 14%
3 Treasury Bills	10%
4 Govt. Bonds	11.5%
5 Public Sector Bonds	13%
6 Company Debentures	15% to 16.5% (yield to maturity)
7 Dividend/Return on equity shares	2-3%
8 Capital Gains	Uncertain

The expected returns from a mutual fund are higher than what is provided by bills, treasury bills, Govt. or P. S. bonds. Hence mutual funds concentrate on NCD's, equities and to some extent call money which provide good returns along with liquidity. While buying these securities, the fund manager takes into consideration the following norms for each kind of security.

Non-convertible Debentures

i) Asset Cover or Security Cover:

A company must maintain a minimum asset cover. This cover is calculated on the basis of secured borrowings and debentures charged to fixed assets, whereby fixed assets should be in general more than one time of the total such existing borrowings and debentures secured by equitable mortgage on fixed assets. The movable fixed assets are generally excluded from the calculations.

ii) Interest Cover:

PBIDT (profit before interest, depreciation and taxes) should be around two times the existing interest liability plus the interest liability on the proposed debentures so as to protect the payment of interest on the debentures. This cover is to be calculated on the basis of the average of the preceeding three years profit figures.

iii) Company must have paid dividend for the last three or minimum two preceeding years.

iv) Net worth of the company should be around Rs. One Crore.

Small variations in the above norms are accepted provided the company is otherwise very sound and the rate of return is higher than normal.

Portfolio Revision

There are two broad aspects of portfolio management, namely, effective investment planning and constant review and revision of Investment.

While we have already discussed the first aspect under 16.6, let us discuss the second aspect hereunder.

Constant review and revision of investment requires:

i) Continuous monitoring of the quality management of the companies in which investment has already been made.

ii) Continuous financial analysis and trend analysis of the companies' balance sheets/ profit and loss account to choose sound companies and off-load investment made in companies where the performance is slackening.

iii) Continuous analysis of the securities market trends.

Systems and Controls

For managing a portfolio, it is not only the creation, re-creating and regrouping of various securities which is important for achieving the desired rate of return, but various kinds of systems and controls are needed. A Mutual Fund generally provides the desired controls through its accounting and custodian system. We shall discuss each of them and how these help to manage a portfolio.

Accounting system

An accounting system must clearly disclose:

i) The policy in respect of recognition of revenue and income from investment,

ii) The policies relating to valuation of investments.

iii) The aggregate carrying value and market value of non performing assets under each type of investment,

iv) Provision to be made for depreciation/loss in the value of non performing investments,

v) Per unit Net Asset Value (NAV) at various intervals and at the end of the accounting year.

All the above accounting policies if pursued consistently help to maintain a clear picture about all investments in a portfolio and thus provide the true picture of the portfolio.

Summary

A Mutual Fund is a trust that pools the savings of a number of investors who share a common financial goal. The money thus collected is then invested in capital market instruments such as shares, debentures and other securities. The income earned through these investments and the capital appreciation realised are shared by its unit holders in proportion to the number of units owned by them. Thus a Mutual Fund is the most suitable investment for the common man as it offers an opportunity to invest in a diversified, professionally managed basket of securities at a relatively low cost. The flow chart below describes broadly the working of a mutual fund.

Short Questions:

1. Write a note on Tax Saving Schemes , Special Schemes, Index Schemes , Sector Specific Schemes
2. What do you mean by Creation of a Portfolio
3. Explain Portfolio Revision

Objective Questions:

1. The investors by investing in the Mutual Funds get the benefit of (Potential of Returns; Diversified portfolio ; Flexibility ; All the above)
2. The Mutual Funds that are listed in the stock Exchanges are (Growth schemes ; Closed –End Scheme ; Open –End Scheme)
3. An aggressive portfolio consists of bonds : stock in the ratio of (a. 10 : 90 ; b. 60 : 40 ; c. 50:50)
4. The NSE Nifty Index Fund consists of (90% of stocks of the Index ; All stocks of the Index ; Stocks of High Market Capitalization in NSE)
5. Investment in a mix of equity and debt instruments (Hybrid scheme ; Index scheme ; Sectoral Scheme)
6. A hybrid of a closed- ended index fund and an open-ended index fund. (Diversified equity scheme ; Index scheme ; Exchange Traded Fund)
7. The investor has the choice of investing regular sums of money every month to buy units of a mutual fund scheme resorting to 'Rupee cost Averaging'. (Systematic Investment Plan ; Money Market Scheme ; Closed-Ended Scheme)
8. Security selection involves a search for under-priced securities employing fundamental And/ or technical analysis, to identify stocks which seem to promise superior returns.(Passive Portfolio strategy ; Active Portfolio Strategy ; Portfolio Rebalancing Strategy)
9. ______ measures the difference between a Mutual fund's actual and expected returns. (Beta factor ; Alpha factor ; Net Asset Value)
10. The Return on Mutual Fund is computed from the formula.

(a. $\dfrac{(NAV_t - NAV_{t-1}) + 1_t + G_t}{NAV_{t-1}}$;

b. $\dfrac{(NAV_{t-1} - NAV_t) + 1_t + G_t}{NAV_{t-1}}$

c. $\dfrac{(NAV_t - NAV_{t-1}) + G_t - 1}{NAV_t}$)

[Answers: 1. d ; 2. b ; 3. a ; 4. b ; 5. a ; 6. c ; 7. a ; 8.b ; 9.a ; 10. a]

SOLVED EXAMPLES ON CAPITAL MARKET ANALYSIS

1. You consider investing the following:

Stock	*Qty*	*Price*	*Expected Return*
W	400	34	12%
X	600	22	16%
Y	300	78	15%
Z	500	53	15%

What is the expected return from the portfolio?

Solution:

Portfolio value = 400(Rs. 34) + 600(Rs. 22) + 300(Rs. 78) + 500(Rs. 53) = Rs. 76,700

w_W = 400(Rs. 34)/Rs. 76,700 = 0.1773;

w_X = 600(Rs. 22)/Rs. 76,700 = 0.1721

w_Y = 300(Rs. 78)/Rs. 76,700 = 0.3051;

w_Z = 500(Rs. 53)/Rs. 76,700 = 0.3455

E[R] = 0.1773(0.12) + 0.1721(0.16) + 0.3051(0.15) + 0.3544(0.15) = 14.64%

2. Rahul invests the following sums of money in common stocks having expected returns as follows:

Security	*Amount Invested (Rs.)*	*Expected Return*
Moser Baer	6000	14%
Kirloskar Cummins	11000	16%
FDC Ltd.	9000	17%
Novartis India	7000	13%
GTL	5000	20%
Pfizer	13000	15%
Excel Industries	9000	18%

a. What is the expected % return on his portfolio?

b. What would be his expected return if Rahul quadruples his investment in GTL while leaving everything else the same?

Solution:

a.

Security	*Amount Invested (Rs.)*	*Weights*	*Expected Return*	*Weighted Return*
Moser Baer	6000	0.10	14%	0.014
Kirloskar Cummins	11000	0.18	16%	0.0288
FDC Ltd.	9000	0.15	17%	0.0255
Novartis India	7000	0.12	13%	0.0156
GTL	5000	0.08	20%	0.016
Pfizer	13000	0.22	15%	0.033
Excel Industries	9000	0.15	18%	0.027
TOTAL	**60000**	**1.00**		**0.1599**

The expected % return of the portfolio is 15.99%.

b. If the investment in GTL quadruples, then expected % return of the portfolio is 16.8%.

Security	*Amount Invested (Rs.)*	*Weights*	*Expected Return*	*Weighted Return*
Moser Baer	6000	0.08	14%	0.011
Kirloskar Cummins	11000	0.15	16%	0.024
FDC Ltd.	9000	0.12	17%	0.020
Novartis India	7000	0.09	13%	0.012
GTL	20000	0.27	20%	0.054
Pfizer	13000	0.17	15%	0.026
Excel Industries	9000	0.12	18%	0.022
TOTAL	**75000**	**1.00**		**0.168**

3. You have Rs. 10,000 to invest in a stock portfolio. Your choices are Stock X with an expected return of 15 percent and Stock Y with an expected return of 10 percent. If your goal is to create a portfolio with an expected return of 13.5 percent, how much money will you invest in Stock X and Stock Y?

Solution:

Let w_x & w_y be the respective weights of investments in security X & security Y.

$E[R_p] = 0.135 = 0.15w_X + 0.10(1 - w_X)$; Solving we get, $w_X = 0.70$

Therefore, investment in X = 0.70(Rs. 10,000) = Rs.7,000

And investment in Y = (1 - 0.70) (Rs.10,000) = Rs.3,000

4. The common stocks of Bajaj and TVS have expected returns of 15% and 20% respectively, while the standard deviations are 20% and 40%. The expected correlation coefficient between the two stocks is 0.36. What is the expected value of return and the standard deviation of a portfolio consisting of (a) 40% Bajaj and 60% TVS? (b) 40% TVS and 60% Bajaj?

Solution:

Stock	*Exp. Return*	σ
Bajaj	15%	20%
TVS	20%	40%

Also given ρ = 0.36

a) The expected value of return

for investment of 40% Bajaj and 60% TVS would be = 0.4*0.15+0.6*0.20=18%

And for standard deviation $\sigma_p = \left[\sum_{j=1}^{n} x_i x_j \rho_{ij} \sigma_i \sigma_j\right]^{1/2}$

Substituting we have σ_p =

$[(0.4) \times (0.4) \times (0.2)^2 + (0.6) \times (0.6) \times (0.4)^2 + 2 \times (0.4) \times (0.6) \times 0.36 \times 0.2 \times 0.4]^{1/2}$

$= [0.077824]^{1/2}$

= 27.90%

b) The expected value of return for investment of 60% Bajaj and 40% TVS would be

= 0.6*0.15+0.4*0.2=17%

And for standard deviation $\sigma_p = \left[\sum_{j=1}^{n} x_i x_j \rho_{ij} \sigma_i \sigma_j\right]^{1/2}$

Substituting we have σ_p =

$[(0.4) \times (0.4) \times (0.4)^2 + (0.6) \times (0.6) \times (0.2)^2 + 2 \times (0.4) \times (0.6) \times 0.36 \times 0.2 \times 0.4]^{1/2}$

$= [0.0538]^{1/2}$

= 23.20%

5. An investor holds two equity shares x and y in equal proportion with the following risk and return characteristics.

$E(R_x)$ = 24% $E(R_y)$ = 19%

σ_x = 28% σ_y = 23%

The returns of these securities have a positive correlation of 0.6. You are required to calculate the portfolio return and risk. Further, suppose that the investor wants to reduce the portfolio risk (σ_p) to 15%. How much should be correlation coefficient be to bring the portfolio risk to the desired level?

Solution:

Shares	Exp. Return	σ
x	24%	28%
y	19%	23%

Also given ρ = 0.60

a) The expected value of return for investment of 75% A and 25% C would be

= 0.5*0.24+0.5*0.19=21.5%

And for standard deviation σ_p = $\left[\left[\sum_{i=1}^{n}\sum_{j=1}^{n} x_i x_j \rho_{ij} \sigma_i \sigma_j\right]\right]^{1/2}$

Substituting we have σ_p = 22.84%

If the portfolio risk σ_p to be reduced to 15%, sloving for correlation coefficient should be -0.32

6. Mr. X is presently concerned with the investment of Rs. 100000. He has two securities S_1 and S_2, for this purpose. The relevant details in respect of these two securities are as follows:

Security	σ	Expected Return
S_1	10%	12%
S_2	18%	20%

Coefficient of correlation between S_1 & S_2 = 0.15.

He has decided to consider only five portfolios of S_1 & S_2 as follows.

a. All funds invested is S_1

b. 50% of funds in each of S_1 % S_2

c. 75% in S_1 and 25% in S_2

d. 25% in S_1 and 75% in S_2

e. All funds invested in S_2.

Find out (1) Expected return under different portfolios

(2) Risk factor associated with these portfolios

(3) Which portfolio is best for him from the point of risk,

(4) Which is best for him from the point of view of return.

Solution:

We have $E_p = W_1E_1+W_2E_2+W_3E_3+ \ldots\ldots +W_nE_n$

and for standard deviation $\sigma_p = \left[\left[\sum_{i=1}^{n} \sum_{j=1}^{n} x_i x_j \rho_{ij} \sigma_i \sigma_j\right]\right]^{1/2}$

Substituting the respective values we get,

a. All funds invested in S_1

$E_p = 12\%$

$\sigma_p = 10\%$

b. 50% of funds in each of S_1 & S_2

$E_p = 16\%$

$\sigma_p = 10.9\%$

c. 75% in S_1 and 25% in S_2

$E_p = 14\%$

$\sigma_p = 9.4\%$

d. 25% in S_1 and 75% in S_2

$E_p = 18\%$

$\sigma_p = 14.10\%$

e. All funds invested S_2

$E_p = 20\%$

$\sigma_p = 18.0\%$

In terms of return, we see that portfolio (e) is the best portfolio. In terms of risk we see that Portfolio (c) is the best portfolio.

7. You have two stocks in your portfolio: Baazee.com and Merck (a drug company). Baaze.com has an expected return of 60% and Merck has an expected return of 40%. The standard deviation of Baazee.com's return is 90% and the standard deviation of Merck's return is 30%. The correlation between the two stocks is 0.2. You have 80% of your money in Baazee.com and 20% of your money in Merck.

a. What are the expected return and standard deviation for your portfolio?

b. You sell your Merck stock and replace it with Microsoft. If Microsoft's standard deviaion of returns is also 30%, do you expect your portfolio variance to change? Explain your reasoning.

Solution:

a. Given

Stocks	*Weight*	*Exp. Return*	**σ**
Baazee.com	0.8	60%	90%
Merck	0.2	40%	30%

Also given ρ = 0.20

a) The expected value of return for investment would be

= 0.8*0.6+0.2*0.4 = 56%

And for standard deviation $\sigma_p = \left[\left[\sum_{i=1}^{n}\sum_{j=1}^{n} x_i x_j \rho_{ij} \sigma_i \sigma_j\right]\right]^{1/2}$

Substituting we have σ_p = 73.44%

If Merck is replaced by Microsoft, though the standard deviation of Microsoft and Merck are equal, the variance of a two stock portfolio is also dependent on the correlation coefficient between Baazee.com & Microsoft. It is unlikely that the correlation between these stocks be same as that between Merck & Bazzee.com. Hence the variance would change. Higher the correlation higher would be the variance and vice versa.

8. Securities D, E & F have the following characteristics with respect to expected return, standard deviation, and the correlation between them:

Company	**Return**	**σ**	**Correlation Coefficients**		
			D-E	**D-F**	**E-F**
D	0.08	0.02	0.4	0.6	
E	0.15	0.16	0.4		0.8
F	0.12	0.08		0.6	0.8

What is the expected return and standard deviation of a portfolio composed of equal investments in each?

Solution:

The expected portfolio return is given by $\overline{R}_p = \sum x_i.\overline{R}_i$

Given w1 = w2 = w3 = 1/3

Therefore $R_p = \frac{1}{3}\times 0.08 + \frac{1}{3}\times 0.15 + \frac{1}{3}\times 0.12 = 11.67\%$

The standard deviation is given by

$$\sigma_p = \left[\sum_{j=1}^{n} x_i x_j \rho_{ij} \sigma_i \sigma_j\right]^{1/2}$$

$$= \left[\frac{1}{9}x(0.02)^2 + \frac{1}{9}x(0.16)^2 + \frac{1}{9}x(0.08)^2 + 2x\frac{1}{9}x0.4x0.02x0.16 + 2x\frac{1}{9}x0.6x0.02x0.08 + 2x\frac{1}{9}x0.8x0.08x0.16\right]^{1/2}$$

= 0.0798

= 7.98%

9. Following is data regarding six securities:

	A	B	C	D	E	F
Return (%)	8	8	12	4	9	8
Risk (%) Standard Deviation	4	5	12	4	5	6

(i) Which of these securities will be selected?

(ii) Assuming perfect correlation, analyze, whether it is preferable to invest 75% in Security A and 25% in Security C.

Solution:

(i) Using the risk-return tradeoff, an investor preferring highest return of 12% would prefer security C. A person willing to take a low risk would prefer Security A to security D, as the former gives a higher return for the risk taken. Similarly, a person willing to take a moderate risk would prefer security E to security B or security F.

(ii)

Security	*Proportion*	*Exp. Return*	σ
A	0.75	8%	4%
C	0.25	12%	12%

Also given ρ = 1.00

The expected value of return for investment of 75% A and 25% C would be

= 0.75*0.08+0.25*0.12 = 9%

And for standard deviation $\sigma_p = \left[\sum_{j=1}^{n} x_i x_j \rho_{ij} \sigma_i \sigma_j\right]^{1/2}$

Substituting we have σ_p =

$[(0.75) \times (0.75) \times (0.04)^2 + (0.25) \times (0.25) \times (0.12)^2 + 2 \times (0.75) \times (0.25) \times 1.0 \times 0.04 \times 0.12]^{1/2} = [0.036]^{1/2} = 6\%$

Looking at the table we see that for a 6% risk we get a maximum of 8% return from security F However, to earn 9%, we need to take a risk of only 5% by investing in security E. Thus it is not advisable to invest in the proportion given.

10. Given the following risky portfolios

	A	B	C	D	E	F	G	H
Return (%)	10	12.5	15	16	17	18	18	20
σ %	23	21	25	29	29	32	35	45

a. Which of these portfolios are efficient? Which are inefficient?

b. Suppose one can tolerate a risk of 25%, what is the maximum return one can achieve if no borrowing or lending is resorted to?

c. Suppose one can tolerate a risk of 25%, what is the maximum return one can achieve if borrowing or lending at the rate of 12% is resorted to?

Solution:

a. Using the risk-return tradeoff, an investor would prefer B to A (B gives higher return for lower risk, hence dominant); would perfer C; would prefer E to D (E gives higher return for lower risk and hence dominant); would prefer F to G (F is dominant because it offers 18% at lower risk); and H; Hence portfolios B, C, E & F are efficient. Portfolios A, D & G are inefficient.

b. As seen from the table, if the maximum risk of 25% can be tolerated, then Portfolio C can be chosen to give a maximum return of 15%.

c. However, if borrowing/lending can be resorted @12%, then one can borrow in such a manner that the total risk does not exceed 25%. As we know higher returns can be obtained by borrowing at the risk free rate and investing in a risky portfolio. Obviously risk too would increase. Now we need to find that portion of investment in risky portfolio, which will give us maximum return for a risk not greater than 25%. Therefore let us assume weight of investment in risky portfolio be 'x'. Therefore (1-x) would be the weight in risk free asset. It is clear that since σ of risk free asset is zero, we need to find just that proportion in risky security to get 25%.

Thus we have for Portfolio A investment in proportion of 25/23 and -2/23 in risk free instrument (indicating borrowing) to arrive at a total risk of 25%. We simply used the below formula. [Note substitute σ of Risk free portfolio = 0]

x * σ of Risky portfolio + (1-x)* σ of Risk free portfolio = 25%

'x' found above, would be used it to find total return.

Total return = x* Return of Risky Portrolio + (1-x) * 12

Thus we get the table given below.

	A	B	C	D	E	F	G	H
Proportion in risky security	25/23	25/21	25/25	25/29	25/29	25/32	25/35	25/45
To get Risk	25	25	25	25	25	25	25	25
Return	9.83	12.60	15.00	15.45	16.31	**16.69**	16.29	16.44

We see from the table that a maximum return of 16.69% is obtained for portfolio F, when we invest in a proportion of 25/32 in portfolio F & balance 7/32 in risk free asset.

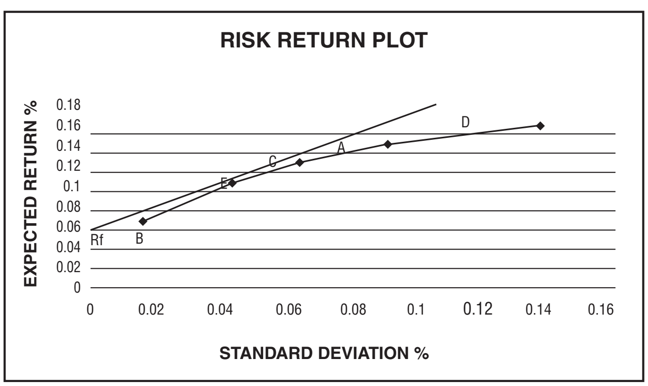
11. The following portfolios are available in the market:

	Portfolio				
	A	B	C	D	E
Expected Return	0.15	0.07	0.13	0.17	0.11
Standard Deviation	0.11	0.02	0.08	0.15	0.05

a. Assume that you can invest in only one of these portfolios; that is, it is not possible to mix these portfolios. Which portfolio you would prefer?

b. Assume now that you are able to borrow and lend at a risk free rate of 6%. Which portfolio is preferred? Would you borrow or lend at the risk free rate to achieve a desired position? What is the effect of borrowing and lending on the expected return and the standard deviation?

Solution:



a. From the above graph it is clear that Portfolio B which has the least variance will be preferred.

b. Assuming now that we are able to borrow and lend at a risk free rate of 6%, we prefer portfolio E. We draw a line from point Rf as tangent to earlier efficient set. This line now becomes the new efficient set. And now Portfolio E would be preferred as this is the only portfolio lying on new efficient set. Any point on the straight line tells us the proportion of the risky portfolio E and the proportion of the loans or borrowings at risk free rate. To the left of point E you would hold both risk free security and portfolio E. To the right we hold only portfolio E and would borrow funds.

The overall expected return in this case=

(w) x (expected return on risky portfolio) + (1-w) x (risk free rate)

where w is the proportion of wealth invested in portfolio E & 1-w proportion of portfolio invested in risk free security. If lending is involved then w < 1. If borrowing is involved then w > 1.

The overall standard devation is simply w times the standard deviation of the risky portfolio.

(because σ of Risk free asset is = 0).

12. Following is the data regarding six securities:

	U	V	W	X	Y	Z
Return (%)	10	10	15	5	11	10
Risk (%) (Standard Deviation)	5	6	13	5	6	7

i. Which of three securities will be selected?

ii. Assuming perfect correlation, analyze whether it is preferable to invest 80% in security U and 20% in security W or to invest 100% in V.

Solution:

(i) When we make risk-return analysis of different securities from U to Z, we observe that security U gives a return of 10% at risk level of 5%. Simultaneously securities V and Z give the same return of 10% as of security U, but their risk levels are 6% and 7% respectively. Security X is giving only 5% return for the risk rate of 5%. Hence, security U dominates securities V, X and Z. Securities W and Y offer more return but it carries higher level of risk. Hence securities U, W and Y can be selected based on individual preferences.

(ii) In a situation where the perfect positive correlation exists between two securities, their risk and return can be averaged with the proportion. Assuming the perfect correlation exists between the securities U and W, average risk and return of U and W together for proportion of 80%:20% i.e. 4:1 is calculated as follow:

Risk =

$[(0.8)^2 x(0.05)^2+(0.2)^2 x(0.13)^2+2x(0.8)x(0.2)x1.0x0.05x0.13]^{1/2} = [0.04356]^{1/2} = 6.6\%$

Return = (4 x 0.10 + 1 x 0.15/5 = 11%)

When we compare risk of 6.6% and return of 11% with security V with 6% risk 11% return, security Y is preferable over the portfolio of securities U and proportion of 4:1.

13. An investor is holding 1000 shares of Fatlass Company. Presently the rate of dividend being paid by the company is Rs. 2 per share and the share is being sold at Rs. 25 per share in the market. However, several factors are likely to change during the course of the year as indicated below:

	Existing	Revised
Risk Free Rate	12%	10%
Market Risk Premium	6%	4%
Beta Value	1.4	1.25
Expected Growth Rate	5%	9%

In view of the above factors whether the investor should buy, hold or sell the shares? And why?

Solution:

The expected return of Fatlass Co., as per existing data, is given by

$R_{Fatlass} = R_f + \beta(R_m - R_f)$

Substituting, we get $R_{Fatlass}$ = 0.12 + 1.4*0.06 = 20.4%

Substituting, this for K_e in the dividend discount model formula $P = \frac{D_0(1+g)}{K_e - g}$

We get,

P = (2*1.05)/(0.204 - 0.05) = Rs. 13.63

Since the share is selling at Rs. 25 it is overpriced. He should sell his shares now.

As per the revised data, we would have

$R_{Fatlass}$ = 0.10 + 1.25*0.04 = 15%

Substituting, this for K_e in the dividend discount model formula $P = \frac{D_0(1+g)}{K_e - g}$

We get,

P = (2*1.09) / (0.15 - 0.09) = Rs. 36.33

Since the share is selling at Rs. 25 it is under priced, on the basis of the revised data he should hold the shares.

14. BBC stock has a beta of 0.95 and an expected return of 13.586%. The market portfolio has an expected return of 14.014%

a. What is the risk free return?

b. What is the risk premium for the market portfolio?

c. What is the risk premium for BBC's stock?

d. If the actual return on the market portfolio at the end of the year turns out to be 17%, what return would you now expect from the stock?

Solution:

a. Applying the SML equation to BBC's stock:

$0.13586 = R_f + 0.95\ [0.14014 - R_f] \Rightarrow R_f\ (1 - 0.95) = 0.13586 - 0.95 * 0.14014\ R_f = (0.13586 - 0.13313)/(0.05) = 5.454\%$

b. Risk premium for the market portfolio = $E(R_m) - R_f = 0.14014 - 0.05454 = 8.560\%$

c. Risk premium for BBC's stock = $E(R_i) - R_f = 0.13586 - 0.05454 = 8.132\%$

d. Since the extra return on the market is 0.17 - 0.14014 = 2.986%, the extra return on the stock will be 0.95 * 0.02986 = 2.837%. This means the return we now expect from the stock = 0.13586 + 0.02837 = 16.423%

15. The beta coefficient of Target Ltd. is 1.4. The company has been maintaining 8% rate of growth in dividends and earnings. The last dividend paid was Rs. 4 per share. Return on GOI Securities is 10%. Return on Market Portfolio is 15%. The current market price of one share of Target Ltd. is Rs. 36.

(i) What will be the equilibrium price per share of Target Ltd.?

(ii) Would you advise purchasing the share?

Solution:

(i) The expected return on Target Co. as per CAPM is given by

$R_{Target} = R_f + \beta(R_m - R_f)$

Given $R_m = 15\%$, $\beta_{Target} = 1.4$, Rf = 10%

Therefore, $R_{Target} = 0.1 + 1.4 \times 0.05 = 17\%$

Substituting, this for K_e in the dividend discount model formula $P = \dfrac{D_0(1+g)}{K_e - g}$

We get the equilibrium price

P = (4*1.08)/(0.17 - 0.08) = Rs. 48

(ii) As the current price is Rs. 36, which is less then the calculated equilibrium/Fair price, it is worth purchasing the share.

16. Monarch Inc.'s stock has an expected return of 16.14%. The risk free rate is 4.95, while the risk premium on the market portfolio is 8.88%.

a) What is the beta of Monarch Inc.'s stock?

b) What is the risk premium for the stock?

c) What is the expected return for the market portfolio?

d) The actual return for the market portfolio at the end of the year turns out to be 8%. What performance would you now expect from Monarch's stock?

Solution:

a) As per CAPM for Monarch's stock:

$0.1614 = R_f + \beta_i * RP_m = 0.0495 + \beta_i * 0.0888$

$=> \beta_i = (0.1614 - 0.0495)/0.0888 = 1.26$

b) Risk premium for the stock = $E(R_i) - R_f = 0.1614 - 0.0495 = 11.19\%$

c) Expected return on the market portfolio = $RP_m + R_f = 0.0888 + 0.0495 = 13.83\%$

d) The extra return on the market is 0.08 - 0.1383 = -5.83%.

The extra return on the stock will be 1.2601 * (-0.0583) = -7.3466%.

The return we now expect from the stock = 0.1614 - 0.073466 = 8.7934%

17. You want to create a portfolio equally as risky as the market and you have Rs. 1,000,000 to invest. Given this information, fill in the rest of the following tabel:

Asset	Investment	Beta
Stock A	Rs. 200,000	0.70
Stock B	Rs. 250, 000	1.10
Stock C	?	1.60
Risk-free asset	?	0

Solution:

Let X_A, X_B, X_C and X_{Rf} be the respective weights of stocks A, B, C and Risk Free asset respectively.

X_A = Rs. 200,000/Rs. 1,000,000 = 0.20; X_B = Rs. 250,000/Rs. 1,000,000 = 0.25;

Now $X_C + X_{Rf} = 1 - X_A - X_B = 0.55$

Given $\beta_p = 1.0 = X_A(.7) + X_B(1.1) + X_C(1.6) + X_{Rf}(0)$;

Solution we get $X_C = 0.365625$.

Therefore we invest 0.365625 (Rs. 1,000,000) = Rs. 365,625 in C.

Now X_{Rf} = 1 - 0.20 -0.25 - 0.365625 = 0.184375

Therefore we invest 0.184,375 (Rs. 1,000,000) = Rs. 184,375 in the risk-free asset.

18. An investor is seeking the price to pay for a security, whose standard deviation is 3%. The correlation coefficient for the security with the market is 0.8 and the market standard deviation is 2.2%. The return from Government Securities is 5.2% and from the market portfolio is 9.8%. The investor knows that, by calculating the required return, he can thus determine the price to pay for the security. What is the required return on the security?

Solution:

a) We have from CAPM model, the expected return given by

$$R_j = R_f + \frac{R_m - R_j}{\sigma_m^2}\left(\rho_{jm}\sigma_j\sigma_m\right)$$

Given

Standard Deviation, Security j = σ_j	0.03
Standard Deviation, Market Portfolio = σ_m	0.022
Expected Return, Market Portfolio = $\mathbf{R_m}$	0.098
Correlation between possible returns for security j and the market portfolio = ρ_{jm}	0.80
Risk Free Rate = $\mathbf{R_f}$	0.052

Subsituting, we have, the expected return as

Rj = 0.052 + [0.046/(0.022*0.022)] x (0.8*0.03*0.022) = **10.22%**

19. You are trying to decide on whether to buy Ford or GM. Ford has a beta of 1.2 and a standard deviation of 15% while GM has a beta of 1.0 and a standard deviation of 18%. The expected return for the market is 11% and the risk-free rate is 5%.

a. a. Which stock has the highest expected return using the CAPM?

b. Within a portfolio framework, which stock is risker?

c. If you were investing all of your money in one of these stocks, which one would be less risky?

Solution:

a) E (Ford) = 5 + 1.2 (11 - 5) = 12.2%

E(GM) = 5 + 1.0(11 - 5) = 11%

Thus Ford has the higher expected return.

b. Ford is riskier, because it has a higher beta.

c. If an investor invests in only one stock, then beta is no longer an accurate measure of the risk. In this case, Ford would actually be less risky since it has a lower standard deviation of returns.

20. A prospective investor has collected the following information pertaining to returns on stocks P and Q.

Stock	Correlation Coefficient (with market)	Standard Deviation	Expected Return
P	0.6	0.3	0.12
Q	0.4	0.2	0.11

Expected market return = 0.10
Risk free rate of return = 0.06
Variance of market return = 0.01

You are **required** to find out

a. The beta for an equally weighted portfolio of stocks P and Q.

b. The required rate of return as per CAPM for portfolio of 50% each of P & Q.

c. Are P & Q are under-priced, overpriced or correctly priced according to CAPM.

Solution:

a. Beta of a stock is given by $\beta_i = \rho_{im} \times \frac{\sigma_i \sigma_m}{\sigma^2_m}$

Where ρ_{im} Correlation coefficient of the stock with the market
σ_i Standard deviation of the stock returns
σ_m Standard deviation of market returns.

Let's β_P, β_Q and β_{PQ} be the beta stock P, stock Q and portfolio of stock P and Q is equal proportion.

$$\Rightarrow \beta_P = 0.6 \times \frac{0.3}{\sqrt{0.01}} = 1.8$$

$$\Rightarrow \beta_Q = 0.4 \times \frac{0.2}{\sqrt{0.01}} = 0.8$$

$$\Rightarrow \beta_{PQ} = 0.5\beta_P + 0.5\beta_Q$$

= 0.5 x 1.8 + 0.5 x 0.8 = 1.3.

b. According to CAPM the equilibrium required rate of return is given by

$$r_i = r_f + \beta_i (r_m - r_f)$$

Here, $r_m = 0.10$

$\beta_i = \beta_{PQ} = 1.3$

$r_f = 0.06.$

$\Rightarrow r_P = 0.06 + 1.3\ (0.10 - 0.06)$

$= 0.112$

$= 11.2\%$

c. Required rate of return for stock P

$r_P = r_f + \beta_P (r_m - r_f)$

$= 0.06 + 1.8\ (0.10 - 0.06)$

$= 0.132$

$= 13.2\%$

The expected rate of return from stock P is 12% therefore security is overpriced.

Required rate of return for stock Q

$r_Q = rf + \beta_P (r_m - r_f)$

$r_Q = 0.06 + 0.8\ (0.10 - 0.06)$

$= 0.092$

$= 9.2\%$

The expected rate of return from stock Q is 11%, therefore security is under priced.

21. you have chosen a risky portfolio, P with an expected return of 0.18 and standard deviation of 0.20. The risk-free rate, R_f, equals 0.06

a. State the equation for CML for portfolio P

b. Suppose you prefer to reduce your risk by investing 30 percent in R_f and 70 percent in portfolio P. What is your expected return now?

c. What is your standard deviation risk of the 30-70 mix between R_f and P?

Solution:

a. We know that a CML is a graph plotting Returns (Y axis) versus Standard deviation, σ (X Axis). It joins the risk free rate R_f, plotted on the Y axis and is drawn as a tangent to the minimum variance portfolio (efficient set), joining R_f and any other risky portfolio (in this case portfolio P). The equation is given by,

$$E(R_P) = 0.06 + \frac{0.18 - 0.06}{0.20}\sigma_P \text{ or } E(R_P) = 0.06 + 0.60\,\sigma_P$$

[Slope = (0.18 - 0.06)/0.20; Y Intercept = 0.06]

b. $E(R_p) = 0.30(0.06) + 0.70(0.18) = 0.144$ or 14.4%

c. $\sigma_p = 0.70 \times (0.20) + 0.30 \times 0 = 0.14$ or 14%

22. Your client is holding the following securities:

Particulars of equity shares	*Cost Rs.*	*Dividends Rs.*	*Market Price Rs.*	*Beta*
Co. X	8000	800	8200	0.8
Co. Y	10000	800	10500	0.7
Co. Z	16000	800	22000	0.5
PSU Bonds	34000	3400	32300	1.0

Risk Free Return may be taken at 15%

You are required to calculate:

(i) Expected rate of returns of portfolio in each using CAPM.

(ii) Average return of the Portfolio.

Solution:

(i) Average return on Market Portfolio = R_m = Returns/Investment

$$= \frac{[Dividends + Cap.\ Appr]}{Initial Invst} \times 100$$

$$= \frac{[5800 + 5000]}{68000} \times 100 = 15.88\%$$

Expected rate of return on individual portfolio, by applying CAPM

$E(r_i) = R_f + \beta(R_m - R_f)$

Investment in equity shares of	*R_f%*	*R_m%*	*Beta Risk Factor*	*$E(R_i)$%*
Co. X	15	15.88	0.8	15.70
Co. Y	15	15.88	0.7	15.62
Co. Z	15	15.88	0.5	15.44
PSU Bonds	15	15.88	1.0	15.88

(ii) Average return of the portfolio = $\frac{15.70 + 15.62 + 15.44 + 15.88}{4} = 15.66\%$

23. The following data for ITC, PTC and DTC were compiled for your information:

Stock	*Expected Return*	*Standard Deviation*	*Systematic Risk*	*Diversifiable Risk*
ITC	0.35	0.20	0.10	0.05
PTC	0.20	0.25	0.15	0.10
DTC	0.35	0.05	0.05	0.00

a. If a client wants to invest in only one stock, which one would you recommend? Can you unequivocally recommend one?

b. Suppose your client already holds a well-diversified portfolio such as the S&P 500 index. Which one stock would you recommend? Why?

c. Your client says that PTC is far too risky with a standard deviation of 0.25, especially compared to the other two firms' standard deviations of 0.20 and 0.05. How would you address his concern? carefully explain, assuming that your client holds a well-diversified portfolio.

Solution:

a. When an investor can invest in only one stock, then only standard deviation is a relevant measure of risk, as there is no possibility of diversification. Thus an investor would choose that security which has lowest standard deviation. A risk averse investor will unequivocally choose DTC over ITC because it has a lower risk for the same return. However, the choice between PTC and DTC is based on the individual risk preference.

b. If your client holds a well-diversified mutual fund, then the only relevant risk is the systematic risk or beta which is a measure of systematic risk. So the client should invest based on the return expected via CAPM. In this case, it is impossible to judge which is better because the returns and systematic risks are relatively very close. However, DTC has the highest expected return (35%) and the lowest systematic risk (5%), so it is the most likely candidate to be a favorable investment. However, others could also be undervalued.

c. The client is right. PTC has a relatively lower expected return (20%) compared to the relevant systematic risk (15%). Though we must calculate the required return (via CAPM) and compare to a predicted return to really determine the answer, the likelihood that it's a good investment is small.

24. The total market value of the equity share of O.R.E. company is Rs. 6000000 and the total value of debt is Rs. 4000000. The treasurer estimate that the beta of the stock is currently 1.5 and that the expected risk premium on the market is 10%. The treasury bill rate 8%.

Required*:*

(i) What is the beta of the company's exsting portfolio of assets?

(ii) Estimate the company's cost of capital and the discount rate for an expansion of the company's present business.

Solution:

(i) Beta of Company's existing portfolio of assets

$$\beta_A = \left[\beta_E \times \frac{E}{D+E}\right] + \left[\beta_D \times \frac{D}{D+E}\right]$$

where β_A = Beta of company assets

β_E = Beta of equity i.e. 1.5

β_D = Beta of debt (company's debt capital is risk less, $\beta_D = 0$)

E = Value of Equity Rs. 60 lacs

D = Value of Debt Rs. 40 lacs

D + E = Total Value = Rs. 100 lacs

Also Given that $R_m - R_f = 10\%$ and $R_f = 8\%$

Substituting we get

$\beta_A = 0.90$

(ii) Estimation of company's cost of capital

= Risk free return + beta x risk premium

= 0.8 + 0.9 x 0.10 = 17%

In the case of expansion plan the company would use 17% as the discout factor. Whereas in the case of diversification company would use appropriate discount factor depending on its risk profile.

25. Consider the following companies:

Name of the Company	Industry	Equity Beta	Asset Beta	Debt Equity Ratio
Gillette	Personal Products	0.250	0.13	1.489
Lakme	Beauty Products	1.616	1.13	0.657
Tata Motors	Automobile	1.429	0.59	2.195
Kraft Foods	Food Products	0.282	0.22	0.453

a. What can you conclude about each company's stock by the value of its beta?

b. Assume a marginal tax rate of 35%. What can you conclude by comparing the two values of beta (current and un-levered) for each company?

Solution:

a. Gillette and Kraft, being companies in personal products and food products, do not observe much variability in their earnings with the business cycle and, thus, their equity betas are quite low. On the contrary, Lakme and Tata Motors are selling more discretionary products and their earnings exhibit more volatility with the business cycle. Therefore, their equity betas are higher. However, the equity beta includes the risk from financial leverage. Thus, we need to obtain the un-levered beta for each company in order to disentangle the determinants of beta.

b. The asset batas that reflect the nature of the business of each company, as well as the company's operations, show again that companies like Gillette and Kraft are in industries with more stable earnings pattern. There is a considerable gap between the asset beta and the equity beta of Tata Motors. Even though the asset beta is quite low, reflecting relatively low risk from the company's business and operations, the equity beta is much higher due to the company's high financial leverage.

26. Fill in the questions in the following table:

Stock	D/(D+E)	β_d	β_e	β_a
A	0.15	0.22	1.53	?
B	0.30	0.15	?	0.56
C	0.25	0.25	?	1.22
D	0.20	?	1.09	0.90
E	?	0.32	1.76	1.11

Solution:

Stock A: β_a = (D/V) β_d + (E/V) β_e = 0.15 * 0.22 + (1 - 0.15) * 1.53 = 1.3335

Stock B: β_a = (D/V) β_d + (E/V) β_e

$\rightarrow$ β_e = β_a + (D/E) [β_a - β_d] [Note: D/E is just D/V divided by E/V]

= 0.56 + (0.3/0.7)*(0.56 - 0.15) = 0.7357

Stock C: β_e = β_a + (D/E) [β_a - β_d] = 1.22 + (0.25/0.75)*(1.22 - 0.25) = 1.5433

Stock D: 0.90 = 0.2 * β_d + 0.8 * 1.09 => β_d = (0.9 - 0.8 * 1.09)/0.2 = 0.14

Stock E: Let x denote the total portion of debt. Then 1-x is the portion of equity in the total.

1.11 = x * 0.32 + (1-x) * 1.76 => (1.76 - 1.11)/(1.76 - 0.32) = 0.45

Total portion of debt = 0.45

27. Let's say that Nike wants to market a new sports drink called "Orangy!" Assume that the beta of Nike is 1.2 the beta of Frooty sports drinks is 1.4, the expected return on the stock market is 12% and the risk-free return is 4%. What discount rate (opportunity cost of capital) should Nike use for Orangy! Why?

Solution:

Nike needs to estimate the risk of going into the sports drink business. Since Frooty operates in the sports drink business, the risk of Frooty is a good measure of the risk of that business. It is inappropriate to use the risk of Nike's current business since that is the risk of athletic footwear and apparel, not the risk of sports drinks. Once it has a good estimate of the risk of the sports drink business, it can use that estimate to compute the appropriate discount rate for that level of risk. we do that using the CAPM:

$E[Ri] = 0.04 + 1.4(0.12 - 0.04) = 0.152$

So they should use 15.2% as their discount rate.

28. The current risk-free rate is 4% and the expected rate of return on the market portfolio is 10%. The BW Corporation has two divisions of equal market value. The debt to equity ratio (D/E) is 3/7. The company's debt can be assumed to present no risk of default. For the last few years, the Brandy division has been using a discount rate of 12% in capital budgeting decisions and the Wine division a discount rate of 10%. You have been asked by their managers to report on whether these discount rates are properly adjusted for the risk of the projects in the two divisions.

(i) What are the betas of typical projects implicit in the discount rates by the two divisions?

(ii) You estimate that the equity beta of BW is 1.6. Is this consistent with the equity beta implicit in the discount rates used by the two divisions?

(iii) You estimate that the stock beta of the KB Corp. is 1.8. This company is purely in the brandy business, its debt to equity ratio is 2/3 and its debt beta is 0.2.

Based on this information (and on your estimate, from section (b), of BW's equity beta), what discount rate would you recommend for projects in the Brandy and in the Wine divisions of BW?

Solution:

(i) For projects in the Brandy division

$0.12 = 0.04 + (0.10 - 0.04)\ \beta_B \quad \rightarrow \quad \beta_B = 1.333,$

while for projects in the wine division

$0.10 = 0.04 + (0.10 - 0.04)\ \beta_w \quad \rightarrow \quad \beta_w = 1.$

(ii) Let β_A and β_E respectively denote the assets beta and the equity beta consistent with the discount rates currently used by BW's two divisions. Then

$\beta_A = 0.5\beta_B + 0.5\ \beta_w = 0.5(1.333) + 0.5(1) = 1.167,$

and

$$\beta_A = \frac{D}{D+E}\beta_D = \frac{E}{D+E}\beta_E = 1.167 = (0.3)(0) + 0.7\,\beta E,$$

so that β_E = 1.667 > 1.6. Therefore, the equity beta implicit in the discount rates used by the two divisions is higher than your estimate.

(iii) The assets beta for the Brandy division can be approximated by the assets beta for KB Corp.

$$\beta_B = \frac{2}{2+3}\,0.2 + \frac{3}{2+3}\,1.8 = 1.16$$

This implies a discount rate for new projects in the Brandy division of

0.04 + (0.10 - 0.04) β_B = 10.96%

To estimate the assets beta for the Wine division, note that an equity beta of 1.6 for BW implies an assets beta of

$$\beta_B = \frac{3}{10}(0) + \frac{7}{10}(1.6) = 1.12$$

Hence,

1.12 = 0.5(1.16) + 0.5 W βW => β_W = 1.08.

Thus, the appropriate discount rate for new projects in the Wine division is

0.04 + (0.10 - 0.04) β_W = 10.48%

29. A closed ended fund starts the year with a NAV of Rs. 12. By year end NAV equals Rs. 12.10. At the beginning of the year the fund was selling at 2% premium to the NAV and at the end of the year the fund is selling at a 7% discount to NAV. The fund paid year end distributions of income and capital gains of Rs. 1.50.

a. What is the rate of return to an investor in the fund during the year?

b. What would have been the rate of return to an investor who held the same securities as the fund manager during the year?

Solution:

a. Investor bought at 12 x 1.02 = Rs. 12.24.
Investor would have sold at 12.10 x 0.93 = 11.253
Return for the investor = 0.987
Investor got income & Capital gains of Rs. 1.50
Rate of return = 1.50 - 0.987/12.24 = 4.19%

b. Had he done on his own the same way the fund has done:
Investor rate of investment = Rs. 12
Investor's rate of sale = Rs. 12.10
Income & Capital Gains = Rs. 1.50
Rate of Return = 0.1 + 1.50/12 = 13.33%

30. You purchased 1000 units of the New Fund at a price of Rs. 20 per unit at the beginning of the year. You paid a front end load of 4%. The securities in which the fund invests increase in value by 12% during the year. The fund's expense ratio is 1.2%. What is your rate of return on the fund if you sell your shares at the end of the year?

Solution:

Market value of investments	=	20 x 1000 = Rs. 20000
Purchase rate of unit	=	Rs. 20 x 1.40 = Rs. 20.80
Total purchase consideration	=	Rs. 20800
Increase in value	=	1000*20*0.12 = Rs. 2400
Expense	=	0.012*1000*20 = Rs. 240
Rate of return	=	2400 - 240 / 20800 = 10.38%

31. Suresh can earn a return of 15% by investing directly in the stock market. He is attracted by an advertisement in the newspaper of a new equity based mutual fund scheme of a popular mutual fund. He asks for the offer document which states that the fund would charge an initial expenses of 5%. As he reads on he finds the fund would also charge an annual recurring expenses of 2%. Also there is an entry load of Rs. 3. Current NAV of this new scheme is Rs. 100. in case he wishes to invest and the Mutual Fund wishes to give him a return of 15%, what return the fund should earn?

Solution:

Let us say Suresh's Initial Investment be 1 unit at Rs. 100 (existing NAV)

As there is an entry Load of Rs. 3, he would pay Rs. 103, but he would be allotted units @ Rs. 100. As given in the problem Suresh requires 15% on 103 i.e. Rs. 118.45.

After Deducting Initial Expenses of 5%, the Mutual Fund would actually invest Rs. 95 only in the market.

Thus it has to earn Rs. 118.45 - Rs. 95 = Rs. 23.45 i.e. $\frac{23.45}{95} \times 100 = 24.68\%$

i.e. As there is a recurring expenses of 2%, the Fund should earn an additional 2% over 24.68% i.e. it has to earn 26.68%.

32. Mr. J purchased a load fund with a NAV of Rs. 50 per unit and a 3% sales load. One year later, J sold the fund with a NAV of Rs. 54 per unit with a back - end load of 3% as well. During the year, the fund paid a Rs. 25 dividend per unit and distributed Rs. 40 in capital gains per unit. If J invested Rs. 10,000 in this fund, what was J's rupee and percentage return over the year? What would have the return been if this was a no-load fund?

Solution:

With a 3% front-end load, 3% is immediately taken out of the Rs. 10,000. Thus only Rs. 9,700 is invested in this fund. At Rs. 50 a unit, J purchased 194 units. J earned Rs. 65

in dividends and capital gains per unit over the year. The fund's new NAV is at Rs. 54 per unit. However, with a 3% back-end load, only 97% of the Rs. 54 wil be paid, so J will only net 52.38 per unit or a Rs. 2.38 per unit profit. Thus, for each unit, J makes Rs. 3.03 (Re. 0.65 + Rs. 2.38). The total rupee return is 194 units * Rs. 3.03 = Rs. 587.82. On Rs. 10,000 investment, J's percentage return was Rs. 587.82/Rs. 10,000 = 5.87%.

If this was a no-load fund, 200 units could have been purchased. They would have been sold at Rs. 54. The profit would have been 200 units * (Rs. 0.65 + Rs. 4) = Rs. 930 and the return would have been Rs. 930/10,000 = 9.3%.

33. A mutual fund has a NAV of Rs. 8.50 at the beginning of the year. At the end of the year NAV increases to Rs. 9.10. Meanwhile fund distributes Re. 0.90 as dividend and Re. 0.75 as capital gains.

a. What is the fund's return during the year?

b. Had these distributions been re-invested at an average NAV of Rs. 8.75, what is the return?

Solution:

(a) Return for the year (all changes on a *per unit* basis):

Change in price (Rs. 9.10 - Rs. 8.50) =	Rs. 0.60
Dividends received	0.90
Capital gains distributions	0.75
Total return	Rs. 2.25

Holding period return = $\frac{\text{Rs. } 2.25}{\text{Rs. } 8.50}$ = 26.47%

(b) When all dividends and capital gains distributions are reinvested into additional units of the fund (Rs. 8.75/unit):

Dividends and capital gains per unit: Rs. 0.90 + Rs. 75 = Rs. 1.65

Total received from 200 units: Rs. 1.65 x 200 = Rs. 330.00

Additional units acquired: Rs. 330/Rs. 8.75 = 37.7 units

Value of 237.7 units held at end of year = 237.7 units x Rs. 9.10 = Rs. 2,163

Price paid for 200 units = 200 units x Rs. 8.50 = Rs. 1,700 at beginning of year

Thus, the holding period return would be: = (2163 - 1700)/1700 = 27.24%

34. Given below are the data for the year 2001 & 2004. Find the holding period return for both the years, in case units are issued at 3% sales load.

	2004	***2001***
Ending NAV	Rs. 64.84	Rs. 44.10
Beginning NAV	58.60	59.85
Dividends received	Rs. 0.83	Rs. 0.72
Capital gains distribution	2.42	9.02

Solution:

Holding period returns for 2004 and 2001 with a 3% load:

With a front-end load of 3% on NAV, the purchase price = Beginning NAV x 1.03.

	2004	***2001***
Ending NAV	Rs. 64.84	Rs. 44.10
Beginning NAV	58.60	59.85
Net increase/(decrease)	Rs. 6.24	(Rs. 15.75)
Return for the year:		
Dividends received	Rs. 0.83	Rs. 0.72
Capital gains distribution	2.42	9.02
Net increase in NAV	6.24	15.75
Total return before any load	Rs. 9.49	(Rs. 6.01)
Less: Load at 3%	(1.76)	(1.80)
Total return with load	Rs. 7.73	(Rs. 7.81)
Purchase price	Rs. 60.36	Rs. 61.65
HPR	12.81%	-12.7%

Since the front-end load decreases the total return and increases the purchase price, the cumulative effect will be a decrease in the HPR.

35. Analyze the performance of the following portfolios using the Jensen Model. Given Risk Free Rate as 6%.

Portfolio	***Realized return on Portfolio***	***Portfolio β***
1	12%	1.1
2	9.5%	0.9
3	15%	1.4
Market Portfolio	10%	1.0

Solution:

Portfolio 1 6% + (10% - 6%) x 1.1 = 10.4%

Portfolio 2 6% + (10% - 6%) x 0.9 = 9.6%

Portfolio 3 6% + (10% - 6%) x 1.4 = 11.6%

Market Portfolio 6% + (10% - 6%) x 1.0 = 10.0%

The difference between the actual realized return and the expected return calculated above gives α (Alpha).

Portfolio 1 12.5% - 10.4% = 2.1%

Portfolio 2 9.5% - 9.6% = -0.1%

Portfolio 3 15% - 11.6% = 3.4%

Market Portfolio 10% - 10% = 0%

These different values of the alpha or differential return indicate the performance of the portfolio managers of the above portfolios. The Alpha of the portfolio 3 is the highest while that of the portfolio 2 is the lowest, being negative. This indicates the best performance of the portfolio 3 and underperformance of portfolio 2. Portfolio 1 has also performed will but not as good as portfolio 3. The market portfolio will always have a equal to zero.

36. Consider the following data;

Fund	Return%	Standard Deviation %	Beta
A	14	6	1.5
B	12	4	0.5
C	16	8	1.0
D	10	6	0.5
E	20	10	2.0

Based on the Zero Beta CAPM< what is Jensen's differential return for the funds if the return on a zero beta asset is 4%, (Assume return on the market to be 13%).

Solution:

Using Jensen' Alpha formula which is = Actual Return - [Expected Return]
Alpha is also called as differential Return and = Actual Return - {Rf + Beta* (Rm-Rf)]

therefore for Portfolio A = 0.14 - [0.04 + 1.5(0.13-0.04)]
= 0.14 - [0.04+0.135]
= 0.14 - 0.175
= -0.035
= -3.5%

Similarly calculating for other portfolios we get

Fund	Expected Return (%)	Differential Return (%)
A	17.5	-3.50
B	8.5	3.50
C	13.0	3.00
D	8.5	1.50
E	22.0	-2.00

Fund B has the highest differential return, while Fund A has the lowest.

37. Calculate the price of 3-month ACC futures, if ACC (FV Rs. 10) quotes Rs. 220 on NSE, and the 3 month futures price quotes at Rs. 230, and the one month borrowing rate is given as 15% and the expected annual dividend yield is 25% p.a. payable before expiry. also examine arbitrage opportunities.

Solution

Future's Price = Spot + Cost of Carry – Dividend

F = 220 + 220 x 0.15 x 0.25 – 0.25** x 10

= 225.75

** Entire 25% dividend is payable before expiry. Hence Rs. 2.50.

Thus we see that Futures price by calculation is Rs. 225.75 and is quoting at Rs. 230 in the exchange.

Analysis

Fair Value of Futures LESS than Actual Futures Price:

Futures Overvalued. Hence SELL. Do Arbitrage by buying stock in Cash Market.

Step I

He will buy ACC stock at Rs. 220 by borrowing at 15% for 3 months. Therefore his outflows are

Cost of Stock	220
Add: Interest @ 15% for 3mths i.e. 0.25 year	8.25 (220 X 0.15 x 0.25)
Total Outflows (A)	**228.25**

Step II

He will sell March 2000 futures at Rs. 230. Meanwhile he would receive dividend for his stock. Hence his inflows are

Sale proceeds of March 2000 futures	230.00
Add: Dividend received for his stock	2.50
Total Inflows (B)	**232.50**

Inflow – Outflow = Profit earned by Arbitrageur

= 232.50 – 228.25 = Rs. 3.75 per share.

38. The following data relates to ABC Ltd.'s share prices.

Current price per share:	Rs. 180
Price per share in the 6m futures market:	Rs. 195

It is possible to borrow money in the market for securities transactions at the rate of 12% per annum. Required:

(i) Calculate the theoretical minimum price of a 6-month forward contract

(ii) Explain if any arbitrage opportunities exist.

Solution:

Theoretical Minimum Price of a 6-month forward contract:

Future's Price = Spot + Cost of Carry - Dividend

F = 180 + 180 x 0.12 x 0.5 - 0

= 190.80

Thus we see that Futures price by calculation is Rs. 190.80 and is quoting at Rs. 195 in the exchange.

Analysis:

Fair Value of Futures LESS than Actual Futures Price;

Futures Overvalued. Hence SELL. Do Arbitrage by buying stock in Cash Market.

Step I

Buy ABC Ltd. stock at Rs.180 by borrowing at 12% for 6 months. Therefore his outflows are:

Cost of Stock	180.00
Add: Interest @12% for 6 mths i.e. 0.5 year	10.80 (180 x 0.12 x 0.5)
Total Outflows (A)	**190.80**

Step II

He will sell 6-month futures at Rs.195. Hence his inflows are

Sale proceeds of March 2000 futures	195.00
Add: Dividend received for his stock	0.00
Total Inflows (B)	**195.00**

Inflow - Outflow = Profit earned by Arbitrageur

= 195-190.80 = Rs.4.20 per share.

39. Which position on the Index future gives a speculator a complete hedge against the following transactions.

    i. The share of Right Ltd. is going to rise. He has a long position on the cash market of Rs. 50 lacs on the Right Ltd. The beta of the Right Ltd. is 1.25.

    ii. The share of Wrong Ltd. Is going to depreciater. He has a short position on the cash market of Rs. 25 lacs on the Wrong Ltd. The beta of the wrong Ltd. is 0.9.

    iii. The share of Fair Ltd. is going to stagnate. He has a short position on the cash market of Rs. 20 lacs of Fair Ltd. The beta of the Fair Ltd. is 0.75.

Solution:

Hedging is taking an equal and opposite position in another market so that loss that may arise in one market would be compensated by a gain in another market. The extent of hedging (hedge ratio) is determined by the beta of a security. If the beta is greater than one (i.e. hedge ratio is greater than one) then the position hedged would be higher than the underlying position and would be proportionate to the beta of the security.

i. In this case the speculator will hedge by selling in the futures market equivalent to 1.25 x Rs. 50 lacs. = Rs. 62.5 lacs.

ii. In this case the speculator will hedge by buying in the futures market equivalent to 0.9 x Rs. 25 lacs. = Rs. 22.5 lacs.

iii. In this case the speculator may remain un-hedged. However, hedging by buying in the futures market equivalent to 0.75 x Rs. 20 lacs. = Rs. 15 lacs. Would protect him from unanticipated losses.

40. A portfolio manager manages a large portfolio of Rs. 300 million with a beta of 1.6 (90% of total portfolio consist of stock and rest 10% is cash) He expects the market to be volatile in the near future and contemplates to reduce his portfolio beta to 1.0. How he can accomplish his goal using stock index futures? (Assume the current index to be quoting at 1000 with a market lot of 100).

Solution:

Equity	Rs. 270 million
Cash	Rs. 30 million
TOTAL	Rs. 300 million

The fund manager has to sell index futures to reduce the beta. He would sell 'N' contracts so that the following equation is satisfied:

(270 million x 1.6) – (1000 x 100 x N) = 300 million x 1.0

Solving the above equation gives N = 1320

The fund manager would sell 1320 contracts i.e. 1320 x 1000 x 100 = Rs. 132 million of index futures and accomplish his goal of reducing the beta to 1.0.

41. A stock market index currently stands at 1050. The multiple of futures contract is 100. The annualized dividend yield on the index is 4 % and 40 % of the stocks included in the index will pay dividends during the next six months.

    A six-month futures contract on the index can be bought at a price of Rs.1,085. The risk free interest rate is 7 % per annum. Ignore transaction costs, margin requirement and taxes.

    You are **required** to

    a. Show how an arbitrageur can earn abnormal profit irrespective of the outcome on the expiration date, (assume two levels as 1020 and 1560)

    b. Calculate implied risk free rate of return on index price.

Solution:

First find the fair value of Index Futures contract

Ft = St[1+(r_t)(n/12) – (d_t) (p/100)]

Where n is the number of months, p is the % of dividend yield.

= 1050 [1+0.07 x 6/12 – 0.04 x 6.4]
= 1069.95

The index futures which is quoting at 1069.95 is obviously overpriced. Thus the arbitrageur can exploit the opportunity by doing the following NOW

Borrow at 7% for 6 months and would buy a portfolio identical to the index

He would sell the futures of an equal value

[**Remember:** Arbitrage involves a buy at one end and sell at the other]

On the expiration date, he would sell his index and would cover back the sell position in the futures market.

[**Remember:** On the expiration date, he squares of both positions.]

If the sensex closed at 1020 on the expiry then we see how the arbitrager has gained money:-

Outflows :		=	4995
Loss on sale of portfolio [1020-1069.95]x100		**=**	**4995**
TOTAL (A)			
Inflows:			
Profit on squaring up futures	[(1085-1020 x 100]	=	6500
Devidend received for the portfolio	[1050x0.04x0.4x100]	=	1680
TOTAL (B)		**=**	**8180**
PROFIT (B-A)		**=**	**3185**

If the sensex closed at 1560 on the expiry then we see how the arbitrager has gained money:-

Outflows :			
Loss on squaring of futures [1560-1085]x100		=	47500
TOTAL (A)		**=**	**47500**
Inflows:			
Profit on squaring up futures	[(1560-1069.95 x 100]	=	49005
Devidend received for the portfolio	[1050x0.04x0.4x100]	=	1680
TOTAL (B)		**=**	**50685**
PROFIT (B-A)		**=**	**3185**

It is seen that the arbitragenur has gained under both the options. The semi annual rate of return on investment = (3185/105000) x 100 = 3.03%

Therefore Annual rate of return on Investment = $(1+0.0303)^2$ - 1= 3.122%

42. The following quotes were observed by Hari on Mar 11, 2005 in the Economic Times.

Contracts	Open	High	Low	Close	Open Interest	Traded quanity	Number of Contracts	Underlying
CE-1950-Mar 2005	**191.05**	**205**	**191.05**	**204.90**	**41000**	**1600**	**8**	**NIFTY**
PE-2100-Mar 2005	**19.50**	**26**	**18.65**	**19.9.**	**2647000**	**1369000**	**6845**	**NIFTY**

Explain what these quotes indicate

Solution:

The first one indicates European Call option of Nifty with March 2005 expiry having a strike price of 1950 and quoting at 204.90 (Premium). The Premium opened a quote of 191.05, touched a high & low of 205 and 191.05 respectively, before closing at 204.90. The open interest was 41000, meaning the Mar 05 options outstanding and yet to be exercised. The traded quanity indicates the total Nifty Index traded and the number of contracts traded was 8. This shows that each Nifty is 1600/8 = 200.

The second one indicates European Put option of Nifty with March 2005 expiry having a strike price of 2100 and quoting at 19.90 (Premium) opened with a quote of 19.50, touched a high & low of 26 and 18.65 respectively, before closing at 19.90. The open interest was 2647000, meaning the Mar 05 options outstanding and yet to be exercised. The traded quantity indicates the total Nifty Index traded and the number of contracts traded was 6845. This shows that each Nifty is 1369000/6845 = 200.

Note: In India all Index Options are European.

43. Identify the hedging strategies under following circumstances:

Stock	Position	Beta	No. of Shares	Price	Hedge Needed
RIL	Long	1.2	1000	500	Full
Satyam	Long	0.8	1000	350	Full
RIL	Short	1.2	1000	500	Full
Satyam	Short	0.8	1000	500	80%
Infosys	Long	1.0	1000	1700	120%

Solution:

The basic hedging strategy is to take an equal and opposite position in the futures market as compared to the spot market. Thus if the current position is long, then one would short in the futures market and vice versa. Similarly, higher the beta, higher will be the hedge ratio, i.e. the value of futures position would be proportionately be higher and vice versa. Also the need for full or partial hedging would also have a bearing on the amount of future exposure.

Futures position = Beta x No. of Shares x Price x % Hedging required

For the first case = 1.2 x 1000 x 500 x 1.0 = Rs. 6 Lacs

Stock	Position	Beta	No. of Shares	Price	Hedge Needed	Futures - Strategy
RIL	Long	1.2	1000	500	Full	Short 6 lacs
Satyam	Long	0.8	1000	350	Full	Short 2.8 lacs
RIL	Short	1.2	1000	500	Full	Long 6 lacs
Satyam	Short	0.8	1000	500	80%	Long 3.2 lacs
Infosys	Long	1.0	1000	1700	120%	Short 20.4 lacs

44. Identify whether the option is In-The-Money(ITM) , At-The-Money (ATM) or Out-of-The-Money (OTM) for the buyer of option.

Sr. No.	Strike Price	Nature of Option	Market Price
1	100	Call	120
2	180	Put	160
3	135	Put	120
4	140	Call	140
5	152	Call	145
6	160	Put	185
7	115	Put	110
8	160	Call	180

Solution:

An option is In-The-Money (ITM) if the exercising of option will bring about gain & an option is Out of-The-Money if the exercising of option will bring about loss.

A call option will be exercised, if the market price on expiry is above the strike price. A put option will be exercised if the market price on expiry is below the strike price. Else the option would be allowed to lapse without exercising.

Sr. No.	Strike Price	Nature of Option	Market Price	Exercise / Lapse	ITM/ ATM/OTM
1	100	Call	120	Exercise	ITM
2	180	Put	160	Exercise	ITM
3	135	Put	120	Exercise	ITM
4	140	Call	140	Lapse	ATM
5	152	Call	145	Lapse	OTM
6	160	Put	185	Lapse	OTM
7	115	Put	110	Exercise	ITM
8	160	Call	180	Exercise	ITM

45. In the example given below, what is the intrinsic & time value of the option?

Nature of Option: NIFTY MAR2005 CALL EUROPEAN 2050.00

Current Price: Rs. 68.25

Nifty Spot: 2057.30

Solution:

As we know that the Option premium is the price at which an option trades. It has two components: Intrinsic value + Time value

Taking the above example:

Intrinsic Value = (2057.3-2050) = 7.30 [a trader would exercise 2050 call option, as it is in the money by 7.30, therefore intrinsic value is greater than zero.]

The balance constitutes Time Value i.e. Rs. 68.25 - 7.30 = Rs. 60.95

In other words:

Intrinsic Value (7.30) = 2057.30 (underlying value) - 2050.00 (Strike Price)

46. An investor has the following position on options of UIL.

a. Long one call option with a premium of Rs. 25 per stock at an exercise price of Rs. 400.

b. Long one put option with a premium of Rs. 5 per stock at an exercise price of Rs. 300.

The prevailing market price of the UIL stock is Rs. 350. Options are European options with expiration period of 3-months.

You are **required** to find out the profit or loss to the investor in the following market situations:

a. At expiration if the price of the UIL remained at present level.

b. At expiration if the price of the UIL rises to Rs. 500.

c. At expiration if the price of the UIL falls to Rs. 250.

Solution:

LONG CALL: Will be exercised if Stock Price increases above Strike Price

LONG PUT: Will be exercised if Stock Price decreases below Strike Price

UIL	**Action**	**Investor's**	
Stock Price	**by the buyer**	**Payoff**	**Profit in Rs.**
Rs.350	Call: Not Exercised Put: Exercised	Rs.0+ Rs.50	-Rs.25 -Rs.5 + Rs.50 = Rs.20
Rs.500	Call: Exercised Put: Not Exercised	Rs. 100 + Rs.0	-Rs.25 + Rs.100 -Rs.5 = Rs.70
Rs.250	Call: Not Exercised Put: Exercised	Rs.0 + Rs.100	-Rs.25 -Rs.5 + Rs.100 = Rs.70

47. On March 28th, the XYZ April, May and June contracts are open for trading on the exchange. All three contracts have exercise prices of Rs.50. The current market price of the stock is Rs. 48. All of the XYZ call options are trading at premiums. Moreover, the premium for June is more than that of May and for May more than that of April. How? Explain.

Solution:

We know that premium is comprised of two parts viz. Intrinsic Value and Time Value. Intrinsic value will be greater than zero only if by exercising we get gains. In this case since the option is not exercised, these premiums reflect the "time value" of the contract. The fact that there is still time left to expiration for the price to move in a favorable direction means that buyers are willing to pay a premium for the contract.

We would expect that the premium for the June contract would be higher than the premium for the May contract and the premium for the May contract would be higher than the premium for the April contract. Obviously, the fact that the June contract expires one month after the May contract, and that the June contract expires two months after the April contract, means that a purchaser would be willing to pay correspondingly higher prices for the later expirations as there is more time available for the buyer to exercise the contract. The premium for the April contract might be 3, the premium for the May contract might be 4.5, and the premium for the June contract might be 5.75.

48. If an individual were to buy the XYZ July 50 call for a premium of Rs. 5 and the price of XYZ never goes above Rs. 50, what happens at around expiry? If an investor were to purchase the ABC October 60 put for a premium of Rs. 4 and the price of ABC never dropped below Rs. 60, what happens at around expiry?

Solution:

If an individual were to buy the XYZ July 50 call for a premium of Rs. 5 and the price of XYZ never goes above Rs. 50, the option would become worthless on the expiration date. If the individual did not sell the option on the exchange prior to expiration to recover at least part of the cost, the entire investment would be lost. If an investor were to purchase the ABC October 60 put for a premium of Rs. 4 and the price of ABC never dropped below Rs. 60, the entire Rs. 4 investment would be lost on the expiration date. This is called limited duration risk: The purchaser of a put or call runs the risk of loss of the entire investment in a relatively short period of time. Option contracts, unlike stock, have a limited duration. If an individual were to purchase an option contract and the price of the underlying stock did not move in a favorable direction, the purchaser could lose his entire investment. For the buyer of a call or a put, the premium represents a cost that must be recovered before a profit can be realized. In order for the buyer to make a profit, it is not only necessary for the price of the underlying stock to move in a favorable direction, but also that it move in a favorable direction by more than the amount of the premium paid. For the buyer of a call, a profit would be realized only if the price of the stock advanced above the exercise price by more than the premium.

49. GESCO has both European call and put options traded on NSE. Both options have same exercise price of Rs. 40 and both expire in one year. GESCO does not pay any dividends. The call and the put are currently selling for Rs. 8 & Rs. 2 respectively. The risk free rate of interest is 10% p.a. What should the stock price of GESCO trade in order to prevent arbitrage?

Solution:

According to Put-Call Parity, for two options with the same strike price and time to expiration, the cost of a call must equal the cost of a put plus the cost of the stock minus the present value of the strike price:

According to Put-Call Parity:

C = P + S - PV (K)

Where C = the cost of a call option

P = the cost of a put option

S = the current price of the underlying asset

PV (K) = the present value of the strike price

Solving for the stock price, this equation shows that the stock price must equal the cost of a call minus the cost of a put plus the present value of the strike price:

Put-Call Parity: S = C - P + PV (K)

The cost of a call with a strike of Rs. 40 written on GESCO Stock is Rs. 8.

The cost of a put with a strike of Rs. 40 written on GESCO Stock is Rs. 2.

The present value of the strike price is Rs. 36.36 (= Rs. 40/1.10).

S = C - P + PV(K)

= Rs. 8 - Rs.2 + Rs. 36.36

= Rs. 42.36

The price of GESCO stock must be Rs. 42.36 per share in order to prevent arbitrage.

50. A share price is currently quoting at Rs. 50. It is known that at the end of six months it will be either Rs. 45 or Rs. 55. The risk free rate is 10% p.a. with continuous compounding. What is value of Six-month European Put Option with a strike price of Rs. 50.

Solution:

S	u	d	E	r	T
50	55	45	50	0.1	0.5

Upper Limit	U	55
Lower Limit	D	45
Difference	U - D =	10
Payoff (at u)	P1 =	5
Payoff (at d)	P2 =	0
	Total	5
Delta	Δ=1/11	0.5
Value of Call	Cu =	22.5
Value of Call	Cd =	22.5
PV of Portfolio	Cu x e^{-rt}	21.40
PV of Stock	= Δ x S	25
Value of Call	**= Δ x S- Cu x e^{-rt}**	**3.60**
Value of Put	**50 + P = 50* e^{-rt} + 3.60**	
Use Put Call Parity Theorem	**[S + P = X e^{-rt} + C]**	**1.16**

51. We have been given the following information about XYZ company's shares and call options: Calculate value of the option.

Current share price = Rs. 165

Option exercise price = Rs. 150

Risk free interest rate = 6%

Time to option expiry = 2 years

Volatility of share price (Standard deviation) = 15%

Solution:

Applying Block Scholes Model

$$d_1 = \frac{1_n\left[\frac{165}{150}\right]+\left[.06-\frac{1}{2}(.15)^2\right]2}{^{15}\sqrt{2}}$$

$$= \frac{.095310 + .1425}{.212132}$$

= 1.12104

$$d_2 = \frac{1_n\left[\frac{165}{150}\right]+\left[.06-\frac{1}{2}(.15)^2\right]2}{^{15}\sqrt{2}}$$

$$= \frac{.095310 + .0975}{.212132}$$

=.9089

$N(d_1)$ = N(1.12104) = .8688

$N(d_2)$ = N(9089) = .8161

Value of Option $= V_s N(d_1) - \frac{x}{e^{rt}} N(d_2)$

$$= 165 \times (.8688) - \frac{150}{e^{(.06)(2)}}(.8161)$$

$$= 143.352 - \frac{150}{e^{.12}}(.8161)$$

= 143.352 - 108.5723

= Rs. 34.779

= Rs. 34.78

52. Milind is interested in purchasing a European call option on Chambal Fertlizers Ltd. a non - dividend paying stock, with a strike price of Rs.25 and six months until expiration. Chambal Fertlizers Ltd. is currently trading at Rs.15 per share and the annual variance of its continuously compounded rate of return is 0.25. The treasury bill that

matures in six months yield a continuously compounded interest rate of 8% per annum. Use the Black Scholes Model to calculate the price of the call option that Milind is interested in buying?

Solution:

The inputs to the Black-Scholes model are the current price of the underlying asset (S), the strike price of the option (K), the time to expiration of the option in fractions of a year (t), the variance of the underlying asset (σ^2), and the continuously-compounded risk-free interest rate (r).

In this problem, the inputs are: S = Rs.15; σ^2 = 0.25; K =Rs.25; r = 0.08; t = 0.50

After identifying the inputs, solve for d1 and d2:

$$d1 = [\ln(S/K) + (r + {}^{1/2}\sigma^2)(t)] \ / \ \sigma^2 t)^{1/2}$$

$$= [\ln(15/25) + \{0.08 + {}^{1/2}(0.25)\}(0.50)\ ]/(0.25^*.50)^{1/2}$$

$$\mathbf{= -1.1549}$$

$$d2 = d1 \mathbf{- (\sigma^2 t)^{1/2}}$$

$$\mathbf{= -1.1549 - (0.25^*.50)^{1/2}}$$

$$\mathbf{= -1.5085}$$

Find N(d1) and N(d2), the area under the normal curve from negative infinity to d1 and negative infinity to d2, respectively.

N(d1) = N(-1.1549) = 0.1241

N(d2) = N(-1.5085) = 0.0657

According to the Black-Scholes formula, the price of a European call option (C) on a non-dividend paying common stock is:

$$C = S.N(d1) - K.e^{-rt}\ N(d2)$$

$$= (15)(0.1241) - (25)\ e^{-(0.08)(0.50)}\ (0.0657)$$

$$= \text{Re. } 0.28$$

The Black-Scholes Price of the call option is Re. 0.28.

53. Indian software major Infosys declared its results for the December ending quarter on 12th January 2005. The bottomline reported at Rs. 497 crs, was better than street's expectation of Rs. 478 crs. The company also revised its full year EPS guidance for FY-05 from Rs. 67.0 to Rs. 68.70. The operating margins for the quarter were also maintained despite rupee having appreciated against dojlar significantly during the quarter. The stock was however hammered down as the overall sentiments in the market were weak. Mr. Amit did not expect a major fall in the stock price from current levels of Rs.1980 but at the same time he feels that the upside can also be restricted due to the subdued sentiments of market participants. Suggest a suitable strategy for Mr. Amit, given that call are available for prices 1920,1980 and 2040 strike prices.

Solution:

Mr. Amit may be advised to do a butterfly spread (call). The butterfly spread is a neutral options strategy position most often involving three different strike price calls. The investor would use this options strategy if he feels that the underlying security is not too volatile and won't experience too much of a net rise or fall by expiration. Both risk and profit are limited. And commission costs are high. The maximum net amount of profit is realized if the stock price closes at expiration at the strike price of the written options.

In view of the above, Butterfly Call Spread on one Infosys can be undertaken by Mr. Amit. As given below:

Buy one contract of Infosys January 1920 strike call

Buy one contract of Infosys January 2040 strike call

Sell two contracts of Infosys January 1980 strike call

54. Call options on a stock are available with strike prices of Rs. 55, Rs. 60 and Rs. 65 and expiration dates in 3 months. Their premium are Rs. 10, Rs. 6 and Rs. 5 respectively.

    (A) Explain how the options can be used to create a butterfly spread.

    (B) Construct a table showing how profit varies with stock price for the butterfly spread.[Consider spot prices ranging between Rs. 50 and Rs. 75]

Solution:

(A) In general a butterfly spread can be created when there are calls available with three different strike prices by shorting two calls with the middle strike price and going long one call for each of the other two strike prices. Hence, the butterfly spread is created by buying one each of the Rs.55 and Rs.65 strike price calls and shorting two of the calls with strike price of Rs.60.

(B)

Price	Payoff from First Long Call (55)	Payoff from Second Long Call (65)	Payoff from Two Short Calls (60)	Total Payoff
50	-10	-5	12	-3
55	-10	-5	12	-3
58	-7	-5	12	0
60	-5	-5	12	2
62	-3	-5	8	0
65	0	-5	2	2
70	5	0	-8	-3
75	10	5	-18	-3

Net Investment	= Net Debit of the Spread	= -10 - 5 + 2 x 6 = -3
Maximum Profit	= Distance between strikes - Net Debit	= 5-3 = 2
Downside Breakeven	= Lowest Strike + Net Debit	= 55 + 3= 58
Upside Breakeven	= Highest Strike - Net Debit	= 65 - 3 = 62

55. Mr. Naresh a Fund Manager, has 10000 Maruti equity shares in his portfolio, purchased at Rs.350. Beta of TISCO is 1.15 with Nifty. Naresh is keen to use simple option strategies for protection. Suggest at least two strategies for Naresh under the following conditions:

a. Naresh feels that Maruti would fall i.e. he is bearish

Solution:

If Mr. Naresh wants to use options, he can either buy a put or write a call, given that he is bearish.

Choice 1:

Mr. Naresh can buy a put option on Maruti at a strike price of Rs.350. This would ensure the following:

a. He would pay premium to the writer of the put.

b. Since he is bearish the chances of exercising would be high. He would not be exercising unless the share prices cross the exercise price i.e. Rs.350.

c. He would make unlimited profit if before expiry the share price falls substantially and he has not exercised it.

d. His returns would be reduced to the extent of premium paid to purchase the put.

Choice 2:

Mr. Naresh can write a call option on Maruti at a strike price of Rs.350. This would ensure the following:

a. He would receive premium for the buyer of the call.

b. Since he is bearish the chances the buyer exercising would be remote. If buyer exercises, he would not be selling the shares below the exercise price i.e. Rs.350.

c. However, the only opportunity loss could be if the share starts moving up. In that case he must be aware that his losses are unlimited and losses would-begin once the stock price crosses Rs.350 - premium received.

CORPORATE LAWS
AND
CORPORATE GOVERNANCE
SECTION - II

STUDY NOTE - 1

COMPANIES ACT 1956

This Study Note includes

- Meaning and Nature of a Company
- Characteristics of a Company

1.1 DEFINITION OF A COMPANY

A company is a voluntary association of persons formed for some common purpose, with capital divisible in parts known as shares, and with a limited liability. It is a creation of law and is sometimes known as artificial person created by law, i.e. it is regarded by the law as a person just as a human being. But it has no physical existence.

As per the Companies Act 1956, a company is defined as 'a company means a company formed and registered under this Act or an existing company as defined in clause [ii] [Section 3 (1)]

Lord Justice Lindley defines a company as, 'By a company is mean an association of many persons who contribute money or money's worth to common stock and employ it for a common purpose. The common stock so contributed is denoted in money and is the capital of the company. The persons who contribute it or to whom it belongs are members. The proportion of capital to which each member is entitles is his share. Such shares are always transferable although the right of such transfer can be more or less restricted.'

According to Honey, ' a company is an incorporated association which is an artificial person created by law having a separate entity with a perpetual succession and common seal.'

1.2 CHARACTERISTICS OF A COMPANY

A company form of organization has proved to be very useful in the modern days. The main reasons are [I] capacity to raise large amount of capital from the public and [II] principle of limited liability. In case of partnership organizations as well as in the case of sole trading organizations, there is a principle of unlimited liability. This means that if the assets of the business are not sufficient to pay off the liabilities of the business, the personal property and assets of the partners or the proprietors can be utilized for the payment of the liabilities of the business. However in the case of the company, the liability of shareholders is limited to the amount of the face value of the shares they have purchased. Therefore they need not pay anything extra even if the company goes into liquidation. [Companies with unlimited liability can be established but this a very rare case] A company has the following features, which distinguish it from other type of organizations.

a) Incorporated association: A company is incorporated or registered under Companies

Act. Minimum number of members required is seven in case of Public Ltd. Company and two in case of Private Ltd. Company, for the purpose of registration. (Section 12).

b) Separate Entity: One of the most important features of a company is that it has a separate legal status from its members or shareholders. Actually the shareholders are the owners of the company but they are different from the company itself. The property of the company is not the property of the shareholders. Similarly shareholders may come and go but a company remains as it is. The following case laws will clarify the point further.

❖ In AB Pvt. Ltd., there are two shareholders, A and B. These shareholders are different and their company is different. Unfortunately if both of them die in an accident, their company will not die. Its existence will remain intact and its existence can be put to an end only when it is liquidated officially.

❖ In a landmark case of Soloman Vs Soloman, the principle of separate legal existence was upheld by the court. The facts of the case were, one Mr. S sold his boot business to a newly formed company for $ 30, 000. His wife, one daughter and four sons took up one share of $ 1 each. S took 23, 000 shares of $ 1 each and $ 10, 000 debentures in the company. The debentures gave S a charge over the assets of the company. Subsequently when the company was wound up, the assets were found to be worth $ 6000 and liabilities worth $ 17000 out of which $10000 were due to S for debentures. Balance $ 7000 were due to other unsecured creditors. It was held that S and his company are separate and so S has a priority over other unsecured creditors.

❖ In Lee v/s Lee's Air Farmings Ltd., the same principle was upheld. In this case one Mr. L was the principle shareholder in his company. He appointed himself as the Managing Director of his company. Incidentally he was also a pilot and when he was on the flight of his company's aeroplane for some official work, his plane crashed and he died in the accident. His widow claimed for compensation as he was on official duty at the time of his death. This claim was opposed on the ground that L and his company are one and the same as he is the principle shareholder and hence no compensation should be payable. However it was held that in spite of being principle shareholder, L and his company are not the same but two separate entities. Therefore compensation should be paid to L's widow as L has died while performing his official duty. Thus from these examples, it will be abundantly clear that the company is different from its members or shareholders. However in certain cases, a court may disregard this principle to find out the unscrupulous persons who are taking undue advantage of the corporate personality. This is known as 'Lifting or piercing the veil of the company'. It is explained in a later part of this chapter.

c) Artificial person: A company is a juristic person and exits only under contemplation of law. Being an artificial person it has to depend on it's natural representatives such as directors, officers, shareholders who work on behalf of the company within their scope of authority and bind the company with their actions.

d) Perpetual Succession And Common Seal: A company has a perpetual succession. It is created by a process of law and it ceases to exist by the process of law only. Shareholders may change but the company's existence is not affected by this change. Similarly it has a common seal. In other words a company is an artificial person created by law and all that a person can do, a company can do under its common seal.

e) Capital: A company is incorporated with an authorized share capital, which is the maximum amount of share capital, which can be raised by it in its lifetime unless it is changed subsequently. Out of this authorized share capital, some amount of capital as per the needs of the company is offered to the members of the public. The amount of capital is divided into small parts, which are called as shares. A company can issue a] Equity shares, which are also called as ordinary shares and b] Preference shares. According to Companies Act, an equity share is that share, which is not a preference share. A preference share is a share, the holder of which, has a priority of receiving dividend ahead of equity shareholders and also a priority regarding repayment of capital when the company goes into liquidation.

f) Transferability of Shares: The shares of a company are freely transferable in case of a public limited company. The directors can refuse transfer of shares only if they conclude that after registering the transfer, the management of company may be passed in the hands of undesirable persons and that will be prejudicial to the interest of the company. In case of a private limited company, the shares are not freely transferable. Now-a-days due to Depository Services and De-mat type of trading of shares, transfer of shares of public limited company has become even more simple.

g) Limited Liability: As mentioned earlier, the liability of members of the shareholders of a limited company is limited. This means that if the face value of a share is Rs.100 and a shareholder has purchased 10 such shares, the total value of the holding will be Rs.1000. Once this amount is paid by the shareholder, he need not pay an additional amount even at the time of winding up of the company. This principle of limited liability has made the company form of organization very popular. However as per Companies Act, 1956, a company with unlimited liability can be incorporated but then there will not be any difference between a partnership and such a company. Therefore these types of companies are very rare or virtually non- existent.

h) Capacity to sue and to be sued: A company is an artificial person created by law as said earlier. It has a capacity to sue others in case of any offence committed against it. Similarly it can be sued by others if it has committed any offence against any party.

Difference Between A Company And Partnership

The difference between a limited company and partnership is as follows.

I. A partnership is governed by the Indian Partnership Act while a limited company is governed by the Companies Act 1956.

II. Minimum of number of partners required to form a partnership is two while the maximum number of partners is ten in case of banking business and twenty in case of other businesses. In case of private limited companies, minimum number of members is two and maximum number is 50 excluding employees. For public limited companies, the minimum number of members is 7 while there is no restriction on maximum number of members.

III. Liability of partners in case of partnership firms is unlimited. This means that if the business assets are less than the business liabilities, private assets of partners can be attached for payment of business debts. In case of limited companies, the liability of members is limited to the face of value of shares purchased by them.

IV. A company has a separate legal entity from its members. A partnership firm does not have such separate entity from its partners.

V. The affairs of a company are managed by its directors, or managing directors or manager while its members cannot have any right to take part in its management. In case of partnership firm, every partner has the right to take part in the management of the firm unless the partnership agreement provides otherwise.

VI. Shares in a limited company are freely transferable, barring shares of a private limited company. A partner cannot transfer his shares without the consent of all partners.

VII. A partnership firm can do anything as per the agreement between the partners. On the other hand, a company's powers are defined by the Memorandum of Association.

VIII. A partner is an agent of his firm and his acts are binding on the firm as long as he acts within the scope of his authority and in the course of ordinary course of the business. On the other hand, a member is not an agent of his company and therefore cannot bind the company by his acts.

IX. If a member of a limited company has given some debt to the company, he can claim the same proportionately from the assets of the company at the time of its winding up. But a partner, who has given any loan to the firm, cannot have any priority over other creditors.

X. Insolvency of firm means insolvency of all the partners. On the other hand, winding up of an insolvent company do not mean insolvency of its members.

XI. Any partner may at any time dissolve a partnership firm unless it is for a specific period of time. Similarly it is also dissolved due to insolvency or death of a partner. A company has a perpetual succession. Members may come and go, but a company is not liquidated. Even if all members of a company die, the company does not die. A company can only be liquidated by operation of law when it is wound up as per Company Law provisions.

STUDY NOTE - 2

FORMATION OF A COMPANY

This Study Note includes

- Introduction- Formalities Regarding the Formation of a Company
- Incorporation of a Company
- Provisions of law regarding Pre-incorporation Contracts
- Promoter

2.1 INTRODUCTION

A company is an artificial person created by law. It has a separate identity from its members and also a perpetual succession. In order to bring a company in existence, certain formalities laid down in the Companies Act must be completed. A company comes into existence after getting the certificate of incorporation. This certificate of incorporation is a conclusive evidence of the fact that the company has come into existence. Formation of a company comprises of four stages, namely:

i) Promotion
ii) Incorporation
iii) Floatation of a Company
iv) Commencement of Business

In this chapter, the formalities, which are to be completed for achieving the certificate of incorporation as well as legal consequences of incorporation and the position of promoters is discussed.

Promotion:

The term Promotion denotes preliminary or ground work undertaken for bringing a company to its existence. The person who assumes such responsibility is known as promoter.

Who is a promoter?

A promoter is a person who does the groundwork or the preliminary work to bring a company into existence. It is a term used to describe a person, who undertakes, does and goes through all the necessary and other preliminary activities with an objective of bringing the company into existence. A promoter is expected to do the work of selecting the name of a company, preparing the memorandum of association as well as articles of association, nominating directors, auditors, secretaries etc. of the company, arranging the payment of prescribed fees for obtaining registration and doing any other work for bringing the company into existence.

As far as the legal position of a promoter is concerned, the company law is silent about this aspect. However it has been accepted that a promoter stands in a fiduciary relationship with the company. Fiduciary relationship implies a relationship of utmost good faith.

This means that a promoter should not make any profits at the expense of the company. If he makes any secret profit at the cost of the company, the company can compel him to account for the same and return it to the company.

It is also expected from a promoter that he should give benefits of any negotiations to the company. Thus where he purchases some property for the company, he cannot rightfully sell that property to the company at a higher price than the purchase price. If he does so, he will be liable to pay back the price to the company and the company can rescind the contract. If a promoter fails to disclose the amount of profit made by him, the company can take legal action against him and recover damages from him.

2.2 INCORPORATION OF A COMPANY

For establishing a public limited company, there is a need of at least 7 members while in case of a private limited company, minimum 2 members are required for its incorporation. For getting a certificate of incorporation from the Registrar of Companies, the following documents along with the requisite registration fees are to be filed with the Registrar of Companies.

i. The Memorandum of Association duly signed by the subscribers. [Minimum 7 in case of public limited companies and 2 in case of private limited companies]

ii. The Articles of Association duly signed by the subscribers.

iii. If a company wishes to appoint a Managing Director, or a whole time Director, the copy of the agreement made between the company and the concerned person proposed to be appointed as a Managing Director or a whole time Director.

iv. In case of a public limited company, the list of persons who have agreed to act as first directors of the company along with their consent letters and also with a letter of undertaking about of purchase of qualification shares from the proposed company.

v. A declaration stating that all the formalities under the Companies Act are fulfilled. This declaration is to be signed at least by one of the following persons.

   - An advocate practicing in High Court or Supreme Court or,
   - An Attorney or a pleader entitled to appear before a High Court or,
   - A Company Secretary or a Chartered Accountant who is in whole time practice or
   - A person named in the Articles as a director, manager or secretary of the company.

CERTIFICATE OF INCORPORATION:

After filing the necessary documents, and after the completion other necessary formalities like the payment of fees etc, the Registrar will examine all these documents. This is done by the Registrar in order to satisfy himself that all the documents are submitted properly and provisions of Companies Act are complied with in a satisfactory manner. After the Registrar has satisfied himself about these things, he will issue a certificate of incorporation to the company certifying that the company has satisfied all conditions of incorporation and it has been incorporated. This certificate is known as 'Certificate of Incorporation' and is one of the most important documents in the life- time of the company.

The importance of the certificate of incorporation is that it is conclusive evidence about the birth of the company. The date, which is mentioned on this certificate, is the date on which the company is born. Similarly this certificate is conclusive evidence that all the formalities laid down under the Companies Act have been duly completed and the prior proceedings cannot be questioned or inquired as regards any regularity and the certificate cannot be disputed or challenged on any grounds whatsoever. Consider the following example in this respect.

In case of one of the companies, six out of seven signatures made on the Memorandum of Association were forged. The validity of the certificate of incorporation was challenged on this ground. However it was held that the certificate of incorporation was conclusive evidence and cannot be challenged on any ground. The validity of the certificate of incorporation thus remains intact despite the forgery.

The following are the legal effects of registration.

- The company becomes a legal entity with a perpetual succession and a common seal. The members may come and go but the company will remain as it is.
- Another important effect of incorporating a company is that as it is separate legal entity, its property is not the property of the shareholders. A company is an artificial person created by law and hence whatever a person can do, a company can do it. It can hold property, sign contracts [through directors and officers] but its property is not the property of the shareholders and similarly its liabilities are not the liabilities of the shareholders. After getting a certificate of incorporation a private company can commence business immediately but a public company has to obtain a certificate to commence business for starting business.

2.3 PRE-INCORPORATION CONTRACTS

The job of floating a company is done by the persons who are known as 'Promoters' of the company. It is customary for the promoters to enter into contract with third parties. The question, which arises is that whether a company is bound by the pre-incorporation contracts? If no, whether these contracts can be ratified after the company comes into existence? The answers to both these questions are as follows.

- The first and the most important thing is that the company is not bound by pre-incorporation contracts. The reason is that at the time of entering into such contracts, the company was not in existence. Even if these contracts are made by the promoters on behalf of the company, still the promoters do not have any powers to enter into any contract on behalf of the company who is yet to come into existence. The promoters cannot act as agents for principal who is not in existence.

- Example: P and Q are the promoters of a company known as PQ Pvt. Ltd. At the time of incorporation of the company but before getting the certificate of incorporation, they entered into a contract with L to purchase his land for the company and assured him that the payment will be made by the company after its incorporation. After the company comes into existence, it refuses to honor the commitment to L. In such situation, L do not have any right to enforce the contract on the company as the pre-incorporation contracts are not binding on the company.
- A company also cannot enforce the preliminary contracts against third parties. Thus in the above example, if L would have refused to give the possession of his land to the company, the company also could not have enforced the contract on L as it is a pre-incorporation contract. Similarly ratification of the preliminary or pre-incorporation contract is also not possible. Again referring back to the example, the company cannot ratify the contract made with L after its incorporation. The promoters who are thus entering into such contracts prior to incorporation are personally liable to third parties. Such a contract is deemed to have been entered into by the promoters personally. If at all the company wants to abide by the terms of the contract, it will have to enter into a fresh contract with fresh terms and conditions and consideration.
- Sections 15 and 16 of the Specific Relief Act 1963, provide that specific performance of such contracts can be enforced against the company provided the company has accepted the contract and has communicated such an acceptance to the another party to the contract.

2.4 FLOATATION OF A COMPANY

After a company is registered and has received Certificate of Incorporation it can start the process of raising capital to commence the business. A private ltd. company is not entitled to raise necessary funds through public. It has to arrange funds privately from friends and relatives.

A public ltd. company can of course invite general public to subscribe to its capital. As per Section 70 a public company has to take either of the following steps:

i) Issue a prospectus in case it decides to go for public subscription.
ii) Issue a statement in lieu of prospectus in case no public allotment is made.

2.5 COMMENCEMENT OF BUSINESS

A public ltd. company having share capital has to obtain certificate to Commence Business from the Registrar of Companies before commencement of business. A company must comply with section 149 in order to obtain the certificate. But a Pvt. Ltd. Co. or a public company without share capital need not do so and can commence business immediately after incorporation.

STUDY NOTE - 3

MEMORANDUM OF ASSOCIATION

This Study Note includes

- Introduction : Meaning and Importance of Memorandum of Association
- Form the contents of Memorandum of Association
- Alteration in Memorandum of Ultra-vires, and its implications
- Doctrine of Ultra-Vires

3.1 INTRODUCTION AND DEFINITION

3.1.1 Definition

The Memorandum of Association is a document, which contains the fundamental rules regarding the constitution and activities of the company. It is the basic document, which lays down how the company is going to be constituted and what work it shall undertake. The purpose of memorandum is to enable the members of the company, its creditors and the public to know that its powers are and what is the range of its activities. The memorandum contains rules regarding the capital structure, the liability of the members, the objects of the company and all other important matters relating to the company. In other words the memorandum defines and confines the powers of the company. Alterations to the memorandum of association are possible only after certain formalities are completed.

3.1.2 Importance of Memorandum of Association

The memorandum shows the range of the enterprise. It is the foundation on which the superstructure of the company has been built up. It enables the shareholders, creditors and outsiders to show the permitted activities of the company. It is to be remembered that Articles of Association and Memorandum of Association are public documents, which may be inspected by anybody at the office of the Registrar of Companies. Any person dealing with a company presumed to have constructive notice of the contents. The members of the company are also entitled to have copies of the memorandum as well as articles on payment of a small fee.

3.2 FORM AND CONTENTS OF MEMORANDUM OF ASSOCIATION

As per Section 13 of the Companies Act, 1956, the Memorandum of Association shall contain the following particulars.

I. Name Clause: A company cannot adopt a name by which another company is registered. If by inadvertence, mistake or otherwise, a name is selected which is too similar to the name of an existing company or closely resembles to it, the name must be changed.

If the name of a company closely resembles to the name of an existing company, it may misled the members of public. In such a case, the court will direct the change of the name of the company. A company cannot use a name, which is considered undesirable by the Central Government. Under the Names and Emblems Act, companies cannot use certain names. These names include, name, emblem or official seal of the United Nations Organization, the World Health Organization, the United Nations Educational, Scientific and Cultural Organization, the Indian National Flag, the name, emblem or seal of the Central Government and State Governments, the names, emblem or official seal of the President of India or Governor of any State.

The Memorandum shall state the name of the company with 'limited' as the last word of the name in case of a public limited company, and with 'private limited' as the last words of the name in case of a private company. In case of a company, which has been formed for the promotion of art, science, religion etc. the Central Government may permit, by a license the omission of the word 'limited' or the words 'private limited' from the name.

As per section 147, every company shall,

- Point or affix its name and the address of its registered office on the outside of every office or place in which its business is carried on,
- Have it engraved in legible characteristics on its seal and
- Have its name and the address of its registered office mentioned in legible characters in all business letters, billheads, negotiable instruments, invoices, receipts etc.

II] Registered Office Clause: As per section 146 of the Companies Act 1956, every company shall have a registered office from the day on which it begins to carry on business or as from the 30th day from its incorporation whichever is earlier. All communications and notices are to be addressed to that registered office. If there is any change in the registered office, notice of the change should be given to the Registrar within 30 days of such change.

III] Objects Clause: This is one of the important clauses of the Memorandum. Adequate care should be taken to see that the drafting of this clause is done in clear words so that there is absolutely no ambiguity in the same. The object clause of every company has to state a] Main objects b] Other objects and c] Other objects not mentioned in a]

IV] Capital Clause: The Memorandum of a company, which is having share capital shall state the amount of share capital with which the company is registered and the division of the same into shares of a fixed amount. The capital with which a company is registered is called as 'Authorized' or 'Nominal' capital. This is the maximum amount of share capital, which a company can raise during its lifetime unless it is subsequently changed by amending the Memorandum. The shares issued by a company can only be equity or preference. However a private company, which is not a subsidiary of a public company may issue shares of any kind and with disproportionate voting rights.

V] Liability Clause: The Memorandum of a company limited by shares or by guarantee shall also state that the liability of its members is limited. This means that the members will be required to pay only the amount of shares that they have purchased and in case of company limited by guarantee, the amount for which they have given guarantee.

VI] Association Clause: This clause states that, 'We, the several persons whose names and addresses are subscribed, are desirous of being formed into a company in pursuance of this Memorandum of Association, and we respectively agree to take the number of shares in the capital of the company set opposite our respective names.' This is followed by the names, addresses and descriptions of the subscribers and the number of shares taken by each one of them. Each subscriber has to take at least 1 share.

The Memorandum must be printed, divided into paragraphs numbered consecutively and signed by each subscriber. It shall be signed by at least 7 subscribers in the case of a public limited company and by at least 2 members in case of a private limited company. The signature of each subscriber shall be attested by at least 1 witness who cannot be any of the other subscribers.

3.3 ALTERATIONS IN MEMORANDUM

Memorandum of Association is an important document for a company. It can be changed or altered but for any change or alteration there should be a proper procedure followed. This procedure is given below.

i. Change of Name: A company may change its name by a special resolution and with the approval of Central Government. A change of name, which merely involves the deletion or addition of the word 'private' on the conversion of a private company into a public company or vice versa does not require the approval of Central Government. If through inadvertence or otherwise, a company is registered by a name which in the opinion of the Central Government is identical with or too nearly resembles to the name of an existing company, the company a] may change its name by ordinary resolution and with the previous approval of the Central Government b] shall change the name if the Central Government so directs within 12 months of its first registration or the registration with new name. In such cases the change shall have to be made within 2 months from the direction by ordinary resolution. The Registrar will issue a new certificate of incorporation after the change.

ii. Change of Registered Office: The provisions in this regard are as follows.

   a. Change of registered office from one place to another in the same city: All that is required in this case is to give a notice within 30 days of the change of the Registrar.

   b. Change of registered office from one city to another city in the same state: A special resolution is to be passed in a general meeting and copy of the same should be given within 30 days with the Registrar of companies. Within 30 days of the change of office, notice must be given to the Registrar about the new location.

   c. Change of registered office from one state to another: A special resolution should be passed in a general meeting and confirmation from National Company Law Tribunal should be obtained. Before allowing the alteration, the Tribunal shall satisfy itself that sufficient notice has been given to every person whose interests will be affected by such shifting and consent of creditors has been obtained. The Tribunal shall also issue notice to Registrar of Companies and hear any objections if any. After listening to all these parties, the Tribunal may confirm the alteration. A certified copy of the order of the Tribunal confirming the alteration together with a printed copy of the Memorandum as altered shall within 3 months from the date of the order, be filed by the company with the Registrar. The Registrar shall register the same and certify the registration within one month from the date of filing of such documents.

iii. Alteration of Object: The object clause of the Memorandum can be changed for the purpose of enabling the company,

- To carry on its business more economically or more efficiently.
- To attain its main purpose by new or improved means
- To enlarge or change the local area of operation
- To carry on some business which under existing circumstances may conveniently or advantageously be combined with the objects specified in the Memorandum.
- To restrict or abandon any of the objects specified in the Memorandum.
- To sell or dispose of the whole, or any part of the undertaking of the company or
- To amalgamate with other company or body of persons.

The following procedure should be adopted for the alteration of object clause in the Memorandum

- A special resolution must be passed.
- A petition should be filed with the National Company Law Tribunal for confirmation of the change.
- The consent of the creditors of the company should be obtained or their claims paid off or secured.
- Notice should be given to the Registrar of companies so that he can appear before the Tribunal and state his objections and suggestions if any.
- After the Tribunal has confirmed the alteration, a certified copy of the Tribunal's order together with a printed copy of the Memorandum as altered shall be filed with the Registrar within 3 months of the date of the order.
- The certificate of the Registrar of Companies is conclusive evidence of the alteration and its validity. The alteration takes effect after it is registered. If no registration is made within 3 months, the alteration and the entire proceedings connected herewith become void.

iv. Change in liability clause: A company limited by guarantee or shares cannot alter its liability clause so as to impose any additional liability on the members or to make them compulsory to take additional shares unless all the members agree in writing to such a change.

v. Change in capital clause: The procedure to be followed for change in capital clause is discussed in detail in the chapter of 'Share Capital'.

3.4 DOCTRINE OF ULTRA VIRES

As mentioned in the first paragraph of this chapter, a Memorandum of Association defines and confines the powers of the company. A company can operate within the scope of the authority given to it by the Memorandum of Association and by the Companies Act 1956. A company should carry on the business to fulfill the objects mentioned in the Memorandum as well as objects, which are incidental to these objects. Every other action by the company is 'ultra vires'. Ultra means beyond and vires means powers and therefore ultra virus means 'beyond powers'. An ultra vires contract is null and void and not binding on the company at all. Even the entire body of shareholders cannot ratify such contracts. The objective behind putting these restrictions is as follows.

- It must be ensured that the capital of the company is applied to the fulfillment of the objects, which are laid down in the Memorandum. The capital has come from shareholders and it should not be utilized for ultra virus purposes.

- Capital of the company is a sort of security to the creditors. Therefore in order to protect creditors, it should be ensured that the capital should not be applied for any unauthorized use.

- It should be remembered that an ultra vires act, which is ultra vires to the directors but intra vires to Articles or Memorandum, the shareholders can ratify the same. Similarly if it is done irregularly, it can be validated by the consent of the shareholders provided it is within the powers of the company. Another important thing is that a company has the right to protect the property of the company, which is acquired as a result of ultra virus contract.

- If an act or transaction is ultra vires the Articles, the company can ratify it by altering the Articles by a special resolution. Again if the act is done irregularly, it can be validated by the consent of shareholders provided it is within the powers of the company.

STUDY NOTE - 4

ARTICLES OF ASSOCIATION

This Study Note includes

- Introduction- Meaning, Contents and Importance of Articles
- Provisions of Company Law regarding the Articles of Association
- Provisions of Company Law regarding the amendment in Articles of Association
- Doctrine of Constructive Notice
- Doctrine of Indoor Management
- Difference between the Memorandum and Aricles of Association

4.1 INTRODUCTION

In a lifetime of a company, three documents play an important role. The first one is the Company Law, the second one is Memorandum of Association and the third one is Articles of Association. As described in the previous chapter, the Memorandum of Association is a document, which defines and confines the powers of a company. By going through the Memorandum, the outsiders get an idea about the powers of the company, its objects, registered office etc. Articles of Association on the other hand, are the rules regarding the internal management of a company. In order to run the administration of a company smoothly, it is essential to have set of rules, which will be followed by everyone working with the company. These rules are incorporated in the Articles of Association. The Articles are subordinate to the Memorandum in importance. Therefore these rules are made in conformity of the objects outlined in the Memorandum. The contents of Articles as well as other relevant provisions are discussed in the following paragraphs.

4.1.1 Contents of Articles

Articles of Association usually have the following contents.

- Share capital, types of shares, rights of shareholders, and meetings of shareholders.
- Calls on shares
- Procedure for forfeiture of shares
- Lien on shares
- Provisions regarding transfer and transmission of shares
- Issue of share warrants
- Issuing of shares at premium or discount

- Surrender of shares
- Alteration of share capital
- Procedure to take poll at a meeting
- Quorum at a meeting
- Directors, their appointment, and qualification shares
- Removal of a director
- Remuneration of Manager, Secretary and Managing Director
- Dividends and bonus shares
- Provisions regarding Accounts and Audit
- Borrowing powers
- Winding up.

4.2 PROVISIONS REGARDING ARTICLES OF ASSOCIATION

Articles are subordinate not only to Memorandum of Association but also to the Company Law. Therefore Articles should not contain any provision, which is contrary to the Memorandum of Association or Company Law. In other words, regulations framed in the Articles should not go beyond the powers given to the company by the Memorandum and the Company Law.

- The following types of companies shall have their own Articles
  - Companies with unlimited liability
  - Companies limited by guarantee
  - Private companies limited by shares.
  - The Articles shall be signed by the subscribers to the Memorandum and registered along with the Memorandum.
  - In case of a company with unlimited liability, along with other particulars, the Articles must contain the following points.
  - The number of members with which the company is registered.
  - Amount of share capital if the company has the share capital
  - In the Articles of a company limited by guarantee, the following particulars must be added.
  - Number of members with which, the company is registered.

- For a private limited company having a share capital, the following contents must be present in the Articles
- Restriction on transfer of shares
- Limiting the number of members to fifty excluding employee members
- Prohibiting public appeal for subscribing to any shares or debentures of the company.

For a public limited company, there is an option given and accordingly it can adopt model Articles given in Table A of the Companies Act. This model can be accepted with or without modifications. Alternatively the company can prepare its own Articles of Association.

Articles should be printed, divided into paragraphs and signed by the subscribers to the Memorandum. Articles printed on computer are also accepted.

4.3 AMENDMENTS TO THE ARTICLES OF ASSOCIATION

A company has a right to alter or amend the Articles. Such an amendment must be made by passing a special resolution in a general meeting. A copy of the amended Articles must be filed with the Registrar of companies within thirty days from such an amendment. Copy of the special resolution must also be filed with the Registrar. The power to amend the Articles has got the following limitations.

I. The Articles should not be altered in such a manner so as to make it inconsistent either with the provisions of the Company Law or the Memorandum of Association. As described above, the Articles are subordinate to both, the Company Law and the Memorandum. If the provisions in the Articles are inconsistent with either of the two, such provisions will be invalid.

II. Amendment in Articles should not result in increasing the liability of the members. The liability of members of a company is limited to the amount [face value] of the shares that they have purchased. This cannot be increased unless all the members agree to such an alteration in writing. However where the company is club or an association, increase in the subscription or membership charges can be effected by alteration in the Articles.

III. The alteration or amendment in the Articles should not sanction anything illegal. Legal acts, which are not expressly prohibited by the Memorandum can be inserted by alteration to Articles.

IV. It is essential to pass a special resolution for altering the Articles. The reason behind this provision must be that for any alteration maximum number of shareholders should give their consent. Even clerical errors in the Articles should be corrected by passing a special resolution.

V. The alteration must be for the benefit of the company. Not only the procedure should be followed while amending the Articles, but it should be ensured that the alteration is really bonafide and for the benefit of the company. If the alteration is beneficial only for a class of shareholders or if it is likely to result in oppression on the minority shareholders, the court may restrain the company from carrying on such an alteration.

VI. Any alteration, which results in empowering the Board of Directors with a power to expel a member is not valid. The reason is that such a provision is against the provisions of the Companies Act regarding the rights of members.

VII. A company is not prevented from altering the Articles even if such an alteration would result in breach of a contract with a third party. The affected party may claim damages for breach of contract. If monetary compensation is not an adequate remedy, the court may restrain the company from altering its Articles.

VIII. The courts do not have any power to amend the Articles. It is the company, which can alter the Articles. Even the clerical errors or drafting errors can be rectified only by the company. The court can only declare some clauses to be ultra virus.

IX. Alteration in the Articles may with retrospective effects. Even it may result in losses to some members, it will be perfectly valid.

4.4 DOCTRINE OF CONSTRUCTIVE NOTICE

Memorandum of Association and Articles of Association are extremely important documents for a company. These documents are to be filed with the Registrar of Companies along with other documents for incorporating a company. The office of Registrar is a public office and therefore the documents like Memorandum and Articles are also public documents. Anybody can have the access to these documents. An outsider who is dealing with the company is expected to read these documents before entering into any contract with the company. If later on it is found out that a particular contract is outside the scope of the authority given by the Memorandum or Articles, there will be no remedy open against the company as it will be presumed that an outsider has read these documents. Thus the Doctrine of Constructive Notice prevents an outsider from alleging that he did not know that the Memorandum and Articles of the company.

4.5 DOCTRINE OF INDOOR MANAGEMENT

The Doctrine of Constructive Notice protects a company from outsiders. There is one limitation to that doctrine. The Doctrine of Indoor Management is an exception to the Doctrine of Constructive Notice. The Doctrine of Constructive Notice provides that an outsider must read the Memorandum and Articles of a company. But he is not expected to do more. As far as internal procedures are concerned, an outsider is entitled to presume that every thing has been done according the procedures laid down and there is no irregularity. An outsider cannot find out what is going inside the doors as the doors of the management are closed to an outsider. Therefore protection to such an outsider becomes necessary. Thus while the Doctrine of Constructive Notice is a protection to the company against an outsider, the Doctrine of Indoor

Management is protection to the outsiders against the company. The following landmark case explains the point.

- Royal British Bank v/s Turquand: The directors of a company had issued a bond to T. As per the Articles of the Company, the directors were authorized to issue the bonds provided that they were authorized by a resolution passed in the general meeting of the shareholders. No such resolution was passed by the company and the company refused to pay the amount on maturity stating that the contract is void due to non- passing of such a resolution. It was held that T can recover the amount of bond as he is entitled to presume that such resolution has been passed. But even this doctrine has got some exceptions. In these exceptional situations, the doctrine of indoor management is not applicable. These exceptions are given below.

- Knowledge of irregularity: If a person dealing with the company has knowledge of irregularity, he cannot claim defense of indoor management. Suppose A Ltd. lent money to B Ltd. on a mortgage of its assets. The procedure laid down in the Articles for such transactions was not complied with. The directors of both the companies were the same. In this case the lender had notice of irregularity and therefore the mortgage was not binding.

- Negligence: Where a person dealing with the company could have discovered the irregularity but due to his negligence, he was not able to do the same, doctrine of indoor management is not applicable. Thus the protection under this rule is not available. In one of the cases, a person accepted a transfer of a company's property from the accountant. It was held that the transfer was void as such a transaction was apparently beyond the scope of the accountant's authority. The person should have verified whether the accountant has such an authority or not.

- Forgery: The doctrine of indoor management is not applicable where a person relies upon a document that turns out to be a forged since nothing validate forgery. A company cannot be hold liable for forgeries committed by its officers.

- Acts Outside The Scope Of Apparent Authority: If an officer of a company enters into a contract with a third party and if the act of the officer is beyond the scope of his authority, the company is not bound.

4.6 DIFFERENCE BETWEEN THE MEMORANDUM AND ARTICLES OF ASSOCIATION

The following is the difference between the Memorandum of Association and Articles of Association.

Memorandum of Association	Articles of Association
1. It is the charter of the company and indicates various things like name, objects, capital, liability etc.	1. They are the regulations for the internal management of the company.
2. It defines and confines the areas of operations of the company	2. Articles are the rule for carrying the objects of the company as set out in the Memorandum.
3. As it is a charter of the company, it is the supreme document.	3. They are subordinate to the Memorandum. In case of any conflict between the two, Memorandum shall prevail
4. Every company must have a Memorandum	4. A limited company by shares may accept Table A as its Articles with or without modifications.
5. Alterations to Memorandum must be according to the laid down in the Act. In some cases approval of National Company Law Tribunal is required.	5. Alterations in Articles are comparatively easy as they can be altered by special resolutions keeping in mind certain limitations.
6. Any act done by the company by going beyond the Memorandum is ultra virus and cannot be ratified even by whole of shareholders.	6. Any act of the company, which is ultra virus the Articles can be ratified by the shareholders.

1. LEGAL EFFECTS OF MEMORANDUM AND ARTICLES:

The legal implications of these documents are as follows.

- Members to the company: Each member is bound by the provisions of the Memorandum and Articles of Association. In other words each member is bound to the company to abide by the Memorandum and Articles.
- Company to the members: As members are bound to the company by provisions of Memorandum and Articles, the company is bound to the members. A company is bound to function within the framework of the Memorandum and Articles. Any ultra virus action proposed by the company can be prevented by any member by claiming injunction.
- Members inter se: As between the members inter se, Memorandum and Articles constitute a contract between them and are also binding on each member as against the other or others.
- Company to outsiders: The Articles do not constitute any binding contract between the company and an outsider. An outsider cannot take advantage of the Articles to lodge a claim thereon against the company.

STUDY NOTE - 5

PROSPECTUS

This Study Note includes

- Introduction
- Prospectus-Meaning
- Contents of Prospectus
- Mis-statement in Prospectus
- Statement in Lieu of Prospectus

5.1 INTRODUCTION

One of the features of a limited company is that it can raise funds through share capital, debentures and also by inviting deposits from public. In case of a public limited company, it can appeal to the members of public to invest money in the company by printing and issuing a document, which is known as 'Prospectus'. However a private limited company is prohibited from making a public appeal for the subscription of its shares or debentures and also for inviting public deposits. Hence it need not issue prospectus. The main objective behind issuing prospectus is to give information about the overall affairs of the company. In other words it is a document, which gives information about the 'prospects' of a company. It is a very important document and the contents of the same are mentioned clearly in the Companies Act. Any false or misleading information given in the prospectus knowingly will attract a severe punishment to all concerned persons. Hence it should be drafted very carefully. The meaning, objectives, contents and other relevant provisions relating to prospectus are discussed in detail in this topic.

5.2 PROSPECTUS – MEANING

Section 2 (36) of the Companies Act 1956, defines prospectus as, 'Any document described or issued as a prospectus and includes any notice, circular, advertisement or other document inviting deposits from the public or inviting offers from the public for the subscription or purchase of shares in, or debentures of a body corporate'.

On analyzing the definition, the following feature of prospectus emerge,

1) Prospectus is a document in writing. An oral invitation to subscribe for the shares or debentures or for inviting public deposits is not a prospectus.

2) It is an invitation to offers from the public for the subscription or purchase of shares or debentures or inviting of public deposits. Whether shares have been 'offered to public' is a matter of fact and will depend on the circumstances of a particular case. It is difficult to say exactly how many persons constitute public. Public includes, 'any section of the public, whether elected as members or debenture holders, or as clients of the persons issuing the prospectus or in any other manner.' This means that if a prospectus is issued to all shareholders or to general public, it will be called as issued to public.

3) The prospectus should contain prescribed information as mentioned in the law.

4) A prospectus issued by or on behalf of a company or in relation to an intended company, shall be dated, and that date unless the contrary is proved, be taken as the date of publication of the prospectus.

3. REGISTRATION OF A PROSPECTUS:

A prospectus can be issued by or on behalf of a company only when a copy thereof has been delivered to the Registrar for registration. The registration must be made on or before the date of publication thereof. The copy must be signed by every person who is named therein as director or proposed director of the company or his authorized agent.

5.3 CONTENTS OF PROSPECTUS

Every prospectus issued by or on behalf of a company or by or on behalf of any person who is or has been engaged or interested in the formation of a company shall state the matters as specified in Part I of Schedule II and set out the reports specified in Part II of that Schedule and the said Part I and II shall have effect subject to the provisions contained in Part III of that Schedule. [Section 56] The details of the contents are given below.

I. Part I of Schedule II

1. General Information: a) Name and address of registered of the company b) Consent of the Central Government for the present issue and declaration of the Central Government about non responsibility for financial soundness or correctness of statements d) Provisions relating to the punishment for fictitious applications e) Declaration about refund of the issue if minimum subscription of 90% is not received within 90 days from closure of the issue f) Date of opening of the issue g) Date of closing issue, date of earliest closing of the issue h) Name and addresses of trustee under debenture trust deed i) Rating from CRISIL or any rating agency obtained for the proposed debenture / preference shares. If no rating has been obtained, this fact should be stated j) Underwriting of the issue, names and addresses of the underwriters and the amount underwritten by them.
2. Capital Structure of the Company: Information about authorized, issued, subscribed, and paid up capital, size of the present issue giving separately reservation for preferential allotment to promoters and others, paid up capital after the present issue and after conversion of the debentures if applicable.
3. Terms of the present issue.
4. Particulars of the present issue such as objects, project costs, means of financing including contribution of promoters.
5. Company, Management and Project: Information about the company as well as directors and the project undertaken.
6. Particulars in regard to the company and other listed companies under the same management.
7. Outstanding litigation if any pertaining to certain matters.

8. Management perception of risk factors such as sensitivity to the foreign exchange rate fluctuations, difficulty in availability of raw materials or in marketing of products, cost / time overruns etc.

II. Part II of Schedule II:

A. General Information:

1. Consent of directors, auditors, solicitors / advocates, managers to the issue, registrar to the issue, bankers to the company, bankers to the issue
2. Experts' opinion obtained if any
3. Change if any in the directors and auditors during the last 3 years and reasons thereof
4. Authority for the issue and details of the resolution passed for the issue
5. Procedure and time schedule for allotment and issue of certificates.
6. Names and addresses of the Company Secretary, Legal Adviser, Lead Managers, Co-managers, Auditors, Bankers to the company, Bankers to the issue and Brokers to the issue.

B. Financial Information:

1. Report by the auditors: A report by the auditors of the company with respect to its profits and losses [distinguishing items of non recurring nature] and assets and liabilities and the rates of dividends paid by the company during the preceding five financial year. If, however, no accounts have been made up in respect of any part of the period of 5 years, ending on a date 3 months before the issue of the prospectus, the report shall contain a statement of that fact. If the company has subsidiaries, the report shall, in addition, deal with either the combined profits and losses and assets and liabilities of the subsidiaries or each of the subsidiary, so far as they concern the members of the company.
2. Report by the Accountants: A report by the accountants [who shall be qualified under the Act for appointment of auditor of a company and who shall be named in the prospectus] on the profits or losses of the business for the preceding 5 financial years, and on the asset and liabilities of the business on a date, which shall not be more than 120 days, before the date of the issue of the prospectus. This report is to be given if the proceed of the issue of the shares or debenture are to be applied directly in the purchase of any business.

A similar report on the accounts of a body corporate by an accountant, who shall be named in the prospectus if the proceeds of the issue are to be applied in the purchase of shares of the body corporate so the body corporate becomes a subsidiary of the acquiring company.

Principal terms of loans and assets charged by the company.

C. Statutory and Other Information: This will include the following.

1. Minimum subscription
2. Expenses of the issue giving separately fees payable to Advisers, Registrars to the issue, Managers to the issue, Trustees for the debenture holders.

3. Underwriting commission and brokerage
4. Previous issue for cash
5. Previous public or rights issue if any during the last 5 years, giving the particulars of date of allotment including the closing date, date of refunds and date of listing on the stock exchange and premium if any on each share, which had been issued within 2 years preceding the date of the prospectus
6. Commission or brokerage on previous issue
7. Issue of share otherwise than cash
8. Debentures and redeemable preference shares and other instruments issued by the company outstanding as on the date of prospectus
9. Option to subscribe
10. Details of purchase of property
11. Details of directors, proposed directors, whole-time directors, their remuneration, appointment and remuneration of managing directors, interests of director, their borrowing powers and qualification shares.
12. Rights of members regarding voting, dividend, lien on shares and the process for modification of such rights and forfeiture of shares
13. Restriction, if any, on transfer and transmission of shares / debentures
14. Revaluation of assets, if any during last 5 years
15. Material contracts and inspection of documents.

Part III of schedule II – provisions applying to parts I and II of schedule II

1. Every person shall, for the purposes of this Schedule be deemed to be a vendor who has entered into any contract, absolute or conditional, for the sale or purchase of any property to be acquired by the company in any case where, a) the purchase money is not fully paid at the date of the issue of the prospectus, b) the purchase money is to be paid or satisfied, wholly or part, out of the proceeds of the issue offered for subscription by the prospectus, c) the contract depends for its validity or fulfillment on the result of that issue.
2. In the case of a company, which has been carrying on business for less than 5 financial years, reference to 5 financial years means reference to that number of financial years for which business has been carried on.
3. Reasonable time and place at which copies of all balance sheets, and profit and loss accounts on which the report of the auditors is based and material contracts and other documents may be inspected.
4. ‘Year’ means financial year
5. STATEMENT BY EXPERTS:

Section 57 of the Companies Act states that a prospectus inviting persons to subscribe for shares in or debentures of a company shall not include a statement purporting to be made by an expert, unless the expert is a person, who is not and has not been, engaged or interested in the formation or promotion, or in the management, of the company. In other words, the expert should be totally impartial so that his statement will be totally un -biased. Section 58 states that, a prospectus inviting of persons to subscribe for shares in or debentures of a company and including a statement purporting to be made by an expert shall not be issued unless the expert has given his written consent to the statement and has not withdrawn such consent before the delivery of a copy of the prospectus for registration. The expert should also give a statement in writing that he has not withdrawn his consent to the statement and the same is appearing in the prospectus.

5.4 MIS-STATEMENT IN PROSPECTUS

A prospectus is an important document in the administration of a company. It contains a very crucial information as described above. A company has to take care that the entire information given in the prospectus should be true and not false. A company should not induce people in investing in the company by making a false and misleading statement purposely. Hence in a landmark case of Brunswick and Canada Railway and Land Company V/s Muggeridge [1860], it was mentioned that, 'Those who issue prospectus holding out to the public the great advantage, which will accrue to persons, who will take shares in a proposed undertaking, and inviting them to take share on the faith of the representations therein contained, are bound to state everything with strict and scrupulous accuracy and not only to abstain from stating as fact that which is not so, but to omit no one fact within their knowledge, the existence of which might in any degree affect the nature or extent and quality of the privileges and advantages, which the prospectus holds as inducement to take shares'. In other words, it means that there should be a full and true of disclosure of all the facts concerned, in the prospectus. A fraud is committed by not only making a false or misleading statement knowingly but also by concealing vital information, which has bearing on the judgment of a common man and hence utmost care should be taken to ensure that the prospectus contains true information so that it will not misleading. This is in fact the 'golden rule' of framing the prospectus. If there is any misstatement of a material fact in a prospectus, the liabilities arising out of this, are discussed below.

Civil Liability for Mis-Statement in Prospectus

If there is a misstatement or withholding of a material information in a prospectus, and if it has influenced any shareholder to purchase shares he has the right to treat the contract as cancelled [Rescission of contract] and claim damages from the company whether the statement is fraudulent or an innocent one. He shall also have remedies against the directors, promoters and experts. All these points are discussed below.

A] Rescission of Contract: If there is a misstatement in the prospectus i.e. if the statements are false or fraudulent or if some material information is withheld, he can apply to the Court for the rescission of the contract. However he should apply within reasonable time and before the company goes into liquidation. He will also have to surrender the shares and his name will be removed from the register of members. After completing these formalities, he will get his money back along with the interest. However, it should be noted that the right of rescission shall be available to the shareholder only in the event of the following.

i. The statement must be a material misrepresentation of fact. In other words, the statement should be false and misleading about the facts. It should be remembered that there is a difference between an honest opinion and statement of fact. Thus when it is mentioned that due to the hard work and efficiency of directors, the profits of the company are expected to reach a certain figure, it becomes a statement of opinion. On the other hand, if a prospectus states that 'certain persons have agreed to become directors of the company', it can be material misrepresentation if it prove to be a false statement. A shareholder can avail of the right to rescission of a contract if there is a material misrepresentation.

ii. The statement must have induced the shareholder to take the shares. Though it is very difficult to prove that the shareholder has been induced to take the shares on the basis of the misstatement in the prospectus, it will have to be dependent on the circumstances of each case. The crucial point is that if the statement is such as it would influence a common man, the Tribunal will infer that it influenced the applicant. If the applicant's acts show, that he did not rely on the statement, he is not entitled to rescind.

iii. The statement must be untrue. A statement included in a prospectus is deemed to be untrue if it is misleading in the form and context in which it is included. In one of the leading case [Rex V/s Lord Kyslant], a prospectus was issued by a company, stating that the company had paid a dividend every year between 1921 and 1927 [years of depression] thus giving the impression of a financially stable company. Actually, the company was able to pay dividends in all these years out of the accumulated profits and it has incurred a heavy loss during each of the years from 1921 to 1927. This fact was suppressed. It was held that the prospectus was 'false' as it conveyed a false impression.

iv. The deceived shareholder is an allottee and he must have relied on the statement made in the prospectus. If a person purchases share in the open market, he has no rights against the company.

v. The omission of material fact must be misleading before rescission is granted. If the omission is misleading, then only the rescission is granted.

vi. The proceedings for rescission must be started as soon as possible. There is a well known statement that 'delay defeats equity', which means that the proceedings against the company must start at the earliest, i.e. as soon as after the person comes to know about the cheating, otherwise, he will loose the right of action against the company.

B] Claim for damages: Any person induced by a fraudulent statement in a prospectus to take shares is entitled to sue the company for damages. He must prove all the above mentioned aspects for claiming damages. He cannot, both retain the shares and get damages against the company. He must show that he has repudiated the contract for shares and has not acted as shareholder after discovering the fraud or misrepresentation.

C] Remedies against the directors, promoters and experts: Damages can be claimed for any loss or damage to the subscribers for any shares or debentures on the faith of a prospectus containing untrue statements against the following persons.

i. Directors at the time of issue of the prospectus.
ii. Persons who have authorized themselves to be named as directors in the prospectus
iii. Promoters and
iv. Persons who have authorized the issue of the prospectus.

These persons can be held liable for compensation for misstatement in prospectus, and for non- compliance with section 56 as well as under general law including Contract Act for fraud.

Criminal Liability

Under section 63 (1), where a prospectus includes any untrue statement, every person, who authorized the issue of the prospectus shall be punishable, with imprisonment for a term, which may extend to two years, or with fine, which may extend to fifty thousand rupees or with both. However, if he is able to prove that such statement was immaterial or that he had reasonable ground to believe the same that the statement was true, he will not be held responsible under this section. Section 63 (2) states that if a person has given the consent required by section 58 to the inclusion therein of a statement purporting to be made by him as an expert or the consent required by sub section (3) of section 60, then he shall not be deemed to have authorized the issue of a prospectus.

5.5 STATEMENT IN LIEU OF PROSPECTUS

A public company has to issue a prospectus if the shares or debentures are offered to the public. However a public company may not offer shares or debentures to general public but arranges to get money from private sources, it need not issue a prospectus to the public. In such cases, the company need not issue prospectus. Instead of that, 'Statement in lieu of prospectus' should be issued with contents as mentioned in Schedule III of the Act. A company having a share capital, and which does not issue a prospectus shall not allot any of its shares or debentures unless at least 3 days before the allotment of shares or debentures, it files with the Registrar a statement in lieu of prospectus. Every person, who is named as director in the statement should sign this statement and the statement shall be in the form and have the contents as mentioned in Schedule III of the Act. This section is not applicable to a private company.

5.6 SHELF PROSPECTUS & INFORMATION MEMORANDUM [SECTIONS 60A & 60B]

"Shelf Prospectus" u/s 60A, means a prospectus issued by any financial institution or bank for one or more issues of the securities or class of securities specified in that prospectus. This will help to reduce the expenses of preparation and issue of prospectus on the part of the issuer and will give the investors up-to-date position of the issue.

"Information Memorandum" u/s 60B, means a process undertaken prior to the filling of a prospectus by which a demand for the securities is assessed, by means of a notice, circular, advertisement or document [Section 2(19B)].

STUDY NOTE - 6

SHARE CAPITAL

This Study Note includes:

- Introduction
- Types of Share Capital
- Alteration of Share Capital
- Reduction of Share Capital
- Variation of Shareholders Rights
- Further Issue of Capital

6.1 INTRODUCTION

Capital is required for any business, whether run by a sole proprietor or by a partnership organization or by a private or public limited company. The capital of a company is divided into a number of indivisible units, the amount of which are fixed. These units are called shares. As per Section 2(46) of the Companies Act, 1956, a share is a share in the share capital of a company, and includes stock except where a distinction between stock and share is expressed or implied. It may be said that a share represents certain rights and liabilities of a shareholder in the company. A limited company raises capital by issue of shares. A public limited company can make a public appeal for the offer of its shares and debentures, while a private limited company cannot make a public appeal for the sale of its shares or debentures. Various types of share capital and the provisions of the Companies Act 1956 regarding the increase and decrease of share capital are explained in detail in the following paragraphs.

6.2 TYPES OF SHARE CAPITAL

The following are the types of share capital.

I] Authorized: This is the maximum amount of share capital that a company can raise during its life time unless it is subsequently increased. This amount is mentioned in the Memorandum of Association of the company. The amount of authorized capital is divided into different types of shares and can be increased in future in case there is a need.

II] Issued Capital: This is a part of the authorized capital, which is offered to the public for subscription. Normally, a company do not issue the entire capital in one installment and hence, certain portion of the authorized capital is offered to the public for subscription. For example, if ABC Ltd. is formed with an authorized capital of Rs.500 crores, divided into equity shares of Rs.100 each, which means that there are 5 crores shares of Rs.100

each, it may offer in the beginning shares of Rs.200 crores of Rs.100 each, which will be the issued share capital of this company.

III] Called Up Capital: A company do not call the entire amount of the share capital in a single installment. For example, if the face value of a share is Rs.100, it may called in installments, i.e. on application, allotment and on first and final call as decided by the Board of Directors. The amount called up on each share is the called up capital. For example, if the face value of a share is Rs.100 and as on 31st March 2008, Rs.50 has been called up, the called up capital will be Rs.50 per share.

IV] Paid Up Capital: The entire amount of called up capital may not be received by the company. There may be some outstanding amount on shares. The amount actually received is known as paid up capital. For example, if amount called up is Rs.50 per share on 10000 shares and actual amount received is Rs.50 on 9000 shares only. The paid up capital will be Rs.50 X 9000 shares, i.e. Rs.450000.

V] Uncalled Capital: This is the amount of capital, which is not called up. Thus in the above example, if the face value of share is Rs.100 and Rs.50 has been called up, the balance of Rs.50 is the uncalled capital. The company may call this amount in the future as per their requirements.

VI] Reserve Capital: This is also uncalled capital but this amount can be called up only in the event of winding up of the company. A company may pass a special resolution decide to call a certain portion of its uncalled capital only in the event of the winding up of the company. [Section 99] Therefore this amount cannot be called during the lifetime of the company. Such capital is called as 'Reserve Capital' and it cannot be turned into uncalled capital without the sanction of the Court. The company is prohibited from charge reserve capital and similarly it cannot cancel such capital.

6.3 ALTERATION OF SHARE CAPITAL

A company can alter its share capital by various methods. As per Section 94 of the Companies Act 1956, a limited company having a share capital, may alter its share capital if authorized by its Articles of Association in the following manner.

I] Increase its authorized capital by issuing new shares

II] Consolidate its shares, either all the shares or certain number of shares into shares of larger amount. For example, if a company has shares of the face value of Rs.10, it may consolidate them into shares of Rs.100 each by consolidating 10 shares of Rs.10 each into one share of Rs.100 each.

III] Convert its fully paid up shares into stock or vice versa

IV] Sub-divide its shares, either all of them or a part thereof into shares of smaller denomination. For example, if face value of shares is Rs.100 each, they may be divided into 10 shares of Rs.10 each. Thus number of shares will increase but the total amount of share capital will remain the same.

V] A company can also cancel shares, which has not been taken up and the impact of the same is that the authorized capital will be reduced to that extent.

PROCEDURE FOR ALTERATION:

A company can alter its share capital in any of the above manner by passing an ordinary resolution in a general meeting. Cancellation of shares as per Section 94, shall not be deemed to be a reduction of share capital under the Companies Act. The company shall have to give the notice of alteration of capital to the Registrar within 30 days after effecting the change. However for reduction of share capital, there is a stringent procedure which should be followed. The procedure is given in the following paragraphs.

6.4 REDUCTION OF SHARE CAPITAL

Share Capital of a company is an extremely important component and is looked upon as a security for the creditors as well as for the shareholders. Therefore, reduction of share capital shall not be permitted unless it is as a result of,

I] Forfeiture of shares or under statutory authority

II] Strictly as per the procedure laid down in the Articles of Association. Any reduction of capital contrary to the principle is illegal and ultra vires.

PROCEDURE FOR REDUCTION OF SHARE CAPITAL:

The following are the provisions relating to the reduction of share capital.

I. Section 100 (1) provides that, subject to the confirmation by the Tribunal, a company limited by shares or a company limited by guarantee and having a share capital, may reduce its share capital if authorized by its articles of association and by passing a special resolution by any of the ways as mentioned below.

a) Extinguish or reduce the liability on any of its shares in respect of share capital not paid up

b) Either with or without extinguishing or reducing liability on any of its share capital, cancel any paid up share capital, which is lost or is un represented by available assets or

c) Either with or without extinguishing or reducing liability on any of its shares, pay of any paid up share capital, which is in excess of the wants of the company and it may amend the memorandum of association by reducing the amount of share capital and of its shares accordingly.

II. After passing a special resolution to that effect, it may apply by petition, to the Tribunal for an order confirming the reduction.

III. Where the proposed reduction of share capital involves either the diminution of liability in respect of the unpaid share capital or the payment to any shareholder of any paid up share capital, and in any other case, if the Tribunal so directs, the following provisions shall be applicable subject to the provisions of sub section (3). Section 101 (2)

a) Every creditor of the company shall be entitled to object the reduction.

b) The Tribunal shall prepare a list of creditors who are entitled to object and may publish notices fixing a day or days within which creditors not entered on the list should claim to be entered on the list.

c) Where a creditor, who is entered on the list of the creditors, whose claim is not settled or has not determined and hence does not consent to the reduction, the Tribunal may dispense with the consent of that creditor, on the company securing payment of his debt or claim by proper appropriation of the relevant amounts.

IV] The Tribunal may direct that provisions of the above sub section (2) shall not be applicable to any class or classes of creditors if it feels it appropriate.

V] If the Tribunal is satisfied that if the interests of all creditor, who are entitled to take objection have been properly protected, it may order confirming the reduction of share capital on certain terms and conditions as it may deem fit. [Section 102 (1)]

VI] The Tribunal may pass an order directing the company to add the words 'and reduced' after the name of the company for a specific period. [Section 102 (2)]

VII] The Tribunal may also direct the company to publish the reasons for reduction or such other information in regard thereto with a view to give the information to the public. [Section 102 (3)]

VIII]Where a company has been ordered to add to its name, the words 'and reduced', those words shall, until the expiration of the period specified in the order, be deemed to be part of the name of the company.

IX] The Registrar shall register the order given by the Tribunal and minute of reduction on receipt of the certified copy of the same and shall certify the registration of order and minute.

6.5 VARIATION OF SHAREHOLDERS' RIGHTS

According to section 106 of the Companies Act, the rights attached to any class of shares may be varied with the consent in writing of the holders of not less than $3/4^{th}$ of the issued shares of that class or with the sanction of the special resolution passed at a separate meeting of the holders of the issued shares of that class provided that such provision exists in the memorandum or articles of association of that company. If such provision does not exist, a company can effect such changes provided the terms of issue of the particular class of shares do not prohibit such variation. Section 106 is applicable where a company has issued shares of different class.

6.5.1 RIGHTS OF DISSENTIENT SHAREHOLDERS :

Section 107 gives the following rights to the dissentient shareholder if any.

I. If the rights attached to any class of shares are varied as per the provisions of section 107 as mentioned above if some of the shareholders are not consenting to such variation, the holders of at least 10% of the issued shares of that class, who has not so consented to such variation, may apply to the Tribunal for cancellation of the variation and till the Tribunal confirms the variation, it shall not have any effect.

II. An application to this effect shall be made to the Tribunal within 21 days of passing the resolution, and may be made on behalf of the shareholders who want to apply, by any one of them duly authorized in writing by them.

III. After receipt of such an application and hearing of the same, if the Tribunal is satisfied that the variation would unfairly prejudice the shareholders of the class represented by the applicant, disallow the variation, otherwise it shall confirm the variation.

IV. The decision of the Tribunal on such an application shall be final.

V. The company shall, within thirty days after the receipt of the order, make an application along with the order to the Registrar. In case of any default, the company and every officer of the company, who is in default, shall be punishable with a fine, which may extend to five hundred rupees.

6.6 FURTHER ISSUE OF CAPITAL

A company can issue further share capital as per the provisions of Section 81. This section provides for further issue of capital through allotment of new share [Rights issue] and also through conversion of debentures or loans into shares. Both these aspects are discussed below.

I] Rights Issue: Section 81 (1) provides that, where at any time after the expiry of two years from the formation of a company or at any time after the expiry of one year from the allotment of shares in that company made for the first time after its formation, whichever is earlier, it is proposed to increase the subscribed capital of the company by allotment of further shares, then,

a) Such issue shall be offered to the persons who, at the date of offer, are holders of the equity shares of the company in the same proportion as far as possible.

b) The offer shall be given by notice specifying the number of shares offered and limiting a time not being less than fifteen days from the date of the offer within which the offer, if not accepted, will be deemed to have been declined.

c) A person, who is the holder of the shares, can renounce the shares offered to him or any of them in favour of any other person if the articles of association do not provide otherwise. The notice, mentioned above, shall include a clause to that effect subject to the provisions of the articles of association.

d) After the expiry of the time specified in the notice, or on receipt of an earlier intimation from the person to whom such notice is given that he declines to accept the shares offered, the Board of Directors may dispose them off in such a manner as they think most beneficial to the company.

e) New shares may be offered to outsiders or any persons if a special resolution to that effect is passed by the company. Such an offer can be made by an ordinary resolution also with the approval of the Central Government. If the existing shareholders to whom the offer is made, refuse to accept the shares, new shares may be offered to outsiders. If the new shares are issued within 2 years from the formation of the company or 1 year of the allotment made for the first time, these new shares may be offered to outsiders.

II] Conversion of Debentures of Loans into shares: As per provisions of Section 81 [Sub sections (4) to (7)], a company can convert debentures or loans into shares. The sections provide that where a company has taken any loans from the Central Government by issuing any debentures or otherwise, the Central Government may, in the public interest, convert such debentures or loans into shares of the company. The terms and conditions of such a conversion shall be as per determined by the Central Government. The terms and conditions shall be determined by the Central Government after considering various aspects like financial position of the company, terms of issue of the debentures or the terms of loans as the case may be, the rate of interest payable on the debentures or the loans, the capital of the company, its loan liabilities, its reserves, and its profits during the preceding 5 years and the current market price of the shares in the company. A copy of every order proposed to be issued by the Central Government shall be put in front of Each House of Parliament.

The authorized capital of the company shall stand increased after passing of the order to that effect by the Central Government.

STUDY NOTE - 7

SHARES

This Study Note includes

- Introduction - Meaning and types of shares
- Legal provisions regarding various aspects - allotment, calls, forfeiture of shares etc.

7.1 INTRODUCTION

In the previous study notes, we have seen the meaning of 'Company', its types and the formation procedures and formalities. A company raises its capital by issue of shares as well as by issue of debentures and raising term loans. In this topic, we will see the procedure regarding the issue of shares and the accounting methods. These are explained in the following paragraphs.

7.1.1 Definition

The total capital of a company is divided into units of small denominations. One unit is called as a 'share'. For example, if the total capital of a company is Rs.50,00,000 and it is divided into a unit of Rs.10 each, there will be 5,00,000 number of shares, each one of them of Rs.10 each. Thus we can say that the company has 5,00,000 shares of Rs.10 each. According to Companies Act 1956, section 2 [46], share has been defined as a share in the share capital of the company and includes stock except where a distinction between stock and share is expressed or implied. Shares must be numbered so that they may be identified, these are movable property and are transferable in the manner provided by the Articles of Association.

7.1.2 Types of Shares

Under the Companies Act, 1956, a company can issue three types of shares.

I] Preference Shares

II] Equity Shares

III] Sweat Equity Shares

These types of shares are discussed below.

I] Preference Shares: Preference shares are defined as those, which have a preferential right regarding,

A] Payment of dividend at a fixed rate during the life of the company and,

B] Return of capital when the company goes into liquidation.

It should be noted that the preference shareholders have a preferential right regarding the dividend over the equity shareholders when the dividend is paid. They do not have any right to get the dividend. Preference shareholders do not have voting right but they can exercise the same when their dividend is in arrears for more than two years in case of cumulative preference shares and for more than three years in case of non- cumulative preference shares. The following are the types of preference shares.

i. Cumulative Preference Shares: A preference share is a cumulative preference share when the arrears of dividend are accumulated and such arrears are paid in priority as and when dividends are paid and in priority to the equity shareholders. For example, if a company is not able to pay dividends for two years due to insufficient profits, the arrears of this dividend will be paid when the dividends are declared in the third year. In other words, the preference shareholders do not loose the dividend even if it is not paid in some years due to insufficiency of profits. However if the company goes into liquidation, arrears of dividends are not payable unless they are either declared or Articles of Association contain express provision in this respect.

ii. Non- cumulative Preference Shares: A non- cumulative Preference Share is a share where the dividends do not accumulate. In other words, if dividend is not paid for a particular year, it will lapse.

iii. Participating Preference Share: The holder of these types of shares get a right to participate in the residual profits left after paying the preference and equity dividend.

iv. Non-participating Preference Shares: The holder of these types of shares do not have the right to participate in the residual profits left after paying the preference and equity dividend.

v. Convertible Preference Shares: A convertible Preference Share is that share which can be converted into Equity Share

vi. Non-convertible Preference Share: This type of share is not convertible into Equity Share

vii. Redeemable Preference Share: A redeemable Preference Share is a share, which is redeemable as per provisions of Section 80 of Companies Act 1956. It should be noted that no company limited by shares shall issue any Preference Share, which is redeemable after the expiry of a period of ten years from the date of its issue. Any Preference Share, called irredeemable, issued be a company before the commencement of the Companies [Amendment] Act 1988, shall be redeemed by the company within a period of five years from such commencement or which is not redeemable before expiry of 10 years from the date of issue shall be redeemed by the company on the date on which such share is due for redemption or within a period of 10 years from such commencement, whichever is earlier. Thus maximum period for redemption of the existing Preference Shares is 10 years.

II] Equity Shares: An Equity Share is that share which is not a Preference Share. This means that the holders of Equity Shares do not have any preferential rights of receiving dividends. They will receive dividend only after the preference dividend has been paid. They also do not have any priority over Preference Shares regarding the repayment of capital at the time of liquidation of the company. Equity shareholders, however have voting rights. The following are the points of difference between the Equity Shares and Preference Shares.

Sr. No.	Main Point	Equity Shares	Preference Shares
01	Voting Rights	Have the voting rights in general meetings of the company on all matters	Have no voting rights, however can vote when the dividend is in arrears for more than two years in case of cumulative preference shares and for more than three years in case of non cumulative preference shares.
02	Payment of dividend	No priority regarding dividend, gets dividend only after the preference dividend is paid	Have priority regarding dividend over equity shares as and when dividend is paid
03	Conversion	Cannot be converted	Can be converted into equity shares

04	Rate of dividend	Rate of dividend may fluctuate depending on the profits	Rate of dividend is fixed
05	Arrears of dividend	Arrears of dividend cannot accumulate	Arrears are accumulated in case of cumulative preference shares
06	Redemption	Cannot be redeemed during the life time of the company	Redemption can be made during the life time of the company

III] Sweat Equity Shares: A company may issue Sweat Equity Shares as per the provisions of Section 79 A of the Companies [Amendment] Act 1999. The relevant provisions are as follows.

i. A company may issue Sweat Equity Shares of a class of shares already issued if the following conditions are fulfilled, namely

- The issue of these shares is authorized by a special resolution passed by the company in the general meeting.
- The resolution shall specify the number of shares, current market price, consideration if any and the class or classes of directors or employees to whom such equity shares are to be issued.
- Not less than one year has, at the date of the issue elapsed since the date on which the company was entitled to commence the business.
- The sweat equity shares of a company whose equity shares are listed on a recognized stock exchange are issued in accordance with the regulations made by the Securities Exchange Board of India in this behalf. However in the case of a company whose equity shares are not listed on any recognized stock exchange, the sweat equity shares are issued in accordance with the guidelines as may be prescribed.

7.2 LEGAL PROVISIONS REGARDING VARIOUS ASPECTS - ALLOTMENT, CALLS, FORFEITURE OF SHARES ETC.

7.2.1. Allotment of Shares

The procedure for allotment starts after the company receives application money on the shares offered to the public. Inviting applications is thus the first step and it is an invitation to offer.

The offer given by the applicants is either accepted or accepted in part or rejected. Allotment of shares in response to the applications is an acceptance of the offer given by the applicants and thus the contract between the company and the applicants if formed. Allotment of shares must be valid in the sense; the provisions of the Companies Act 1956 must be followed while allotting the shares to the applicants. The relevant provisions are as follows.

7.2.2 Allotment – Legal Provisions

The following are the provisions of the Companies Act regarding allotment of shares.

a) Allotment shall not be made of any share capital of a company offered to the public for subscription, unless the amount stated in the prospectus as the minimum amount [minimum subscription] has been subscribed and the sum payable on application for the amount so stated has been paid to and received by the company, whether in cash or by cheque or other instrument, which has been paid.

b) The amount payable on application of each share shall not be less than five per cent of the nominal [face] value of the share.

c) All moneys received from applicants for shares shall be deposited and kept deposited in a Scheduled Bank till the certificate to commence the business is obtained under section 149 or if the certificate is already obtained till the amount of minimum subscription has been received by the company.

d) If these conditions mentioned above have not been complied with on the expiry of 120 days after the first issue of the prospectus, all moneys received from applicants for shares shall be forthwith repaid to them without interest and interest @ 6% shall be charged if the amount is not repaid within 130 days after the first issue of the prospectus. It should be noted that the directors of the company, jointly and severally liable to pay the amount of interest at 6% per annum. A director shall not be so liable if he proves that the default in the repayment of money was not due to any misconduct or negligence on this part.

e) Any condition purporting to require or bind any applicant for shares to waive compliance with any requirement of this section shall be invalid.

f) The aforesaid conditions shall not apply in relation to any allotment of shares subsequent to the first allotment of shares offered to the public for subscription.

g) A company, which has issued prospectus, shall not make any allotment of shares or debentures until the beginning of the fifth day after that on, which the prospectus is first so issued or such later time, if any, as may be specified in the prospectus. However, where, after a prospectus is first issued generally, a public notice is given by some person responsible under section 62 for the prospectus, which has the effect of excluding, limiting or diminishing his responsibility, no allotment shall be made until the beginning of the fifth day after that on, which such public notice is first given.

h) The beginning of the fifth day or such later time as mentioned in the above point (g) in both the cases, is mentioned as 'the time of opening of the subscription list'.

i) An application for shares in or debentures of, a company, which is made in pursuance of a prospectus issued generally shall not be revocable until after the expiry of the fifth day after the time of the opening of the subscription list or the giving, before the expiry of the said fifth day by some person responsible under section 62 for the prospectus, of a public notice having the effect under that section of excluding, limiting or diminishing the responsibility of the person giving it.

j) In case of a company, which does not issue prospectus, but a statement in lieu of prospectus is issued, the company shall not allot any shares or debentures to the public, unless at least three days, before the first allotment of its shares or debentures, there has been delivered to the Registrar for registration a statement in lieu of prospectus signed by every person, who is named therein as a director or proposed director of the company or by his agent authorized in writing in the prescribed form and having contents as prescribed in Part I of Schedule III and , in cases mentioned in Part II of that Schedule, setting out the reports specified therein, and the said Parts I and II shall have effect subject to the provisions contained in Part III of that Schedule. Any adjustments made in these schedules shall be duly mentioned in writing and a written statement signed by the persons making such adjustments. [Section 70 (1)] This section shall not apply to a private company. Any contravention to this will attract a penalty for the company and every director who willfully authorizes or permits the contravention, which may extend to Rs.10,000.

k) Every company, which intends to offer shares or debentures to the public for subscription by the issue of prospectus, shall before such issue, make an application to one or more recognized stock exchanges for permission for the shares and debentures intending to be so offered to deal with in the stock exchange or each stock exchange. [Section 73] Where a prospectus, whether issued generally or not, states so, any allotment made on an application, in pursuance of such prospectus shall, whenever made, be void if the permission has not been granted by the stock exchange or each of the stock exchange as the case may be, before the expiry of ten weeks from the date of closing of the subscription lists. However if an appeal is made against the order of the stock exchange refusing the permission, such allotment shall not be void until the dismissal of the appeal.

- Where such permission has not been applied or has been applied but not granted, the company shall forthwith repay all the moneys received from the applicants in pursuance of the prospectus within a period of eight days after the company becomes liable to repay the money. If any such money is not repaid within eight days, the company and every director of the company who is officer in default will be jointly and severally liable to repay that money with interest not less than 4% and not more than 15% as may be prescribed, having regard to the length of the period of delay in making the repayment of such money.

- Where such permission has been granted and the money received from applicants for shares or debentures are in excess of the aggregate of the application moneys relating the issue of such shares or debentures, in respect of which the allotment is to be made, the company shall repay forthwith the excess application money without interest. If such moneys are not repaid within eight days, from the day the company becomes liable to pay it, the company and every director of the company, who is officer in default shall, on and from the expiry of the eighth day, be jointly and severally liable to repay that money with interest at such rate, not less than 4% and not more than 15% as may be prescribed, having regard to the length of the period of delay in making the repayment of such money.

- All moneys received as mentioned above shall be kept in a separate bank account maintained in a Scheduled Bank until the permission is granted or when an appeal has been preferred against the refusal, till the disposal of such an appeal. If permission has been refused, the moneys become immediately payable as mentioned above. If default is made in complying these provisions, the company and every officer of the company who is in default, shall be punishable with a fine, which may extend to Rs.50000.
- Amount standing to the credit of the bank account as mentioned above, shall be used only for the following purposes and not for any other purpose.
- ❖ Adjustments against allotment of shares, where the shares have been permitted to be dealt in on the stock exchange or each stock exchange specified in the prospectus.
- ❖ Repayment of moneys received from applicants in pursuance of the prospectus, where shares have not been permitted to be dealt in on the stock exchange or each stock exchange specified in the prospectus, as the case may be, or where the company is for any other reason unable to make the allotment of shares.
- For the purpose of this section, it shall be deemed that permission has not been granted if the application for permission, where made, has not been disposed of within the time specified in sub section (1)

l) In reckoning for the purpose of the aforesaid sections, the fifth day or the eighth day after another day, any intervening day, which is a public holiday under the Negotiable Instruments Act 1881, shall be disregarded and if the fifth or eighth day itself is a public holiday, the next preceding day shall be taken.

7.2.3 Effect Of Irregular Allotment

An allotment made by a company in contravention of the above- mentioned provisions shall be voidable at the instance of the applicant,

- Within two months after the holding of the statutory meeting of the company and not later or,
- In any case, where the company is not required to hold a statutory meeting or where the allotment is made after the holding of the statutory meeting, within two months after the date of the allotment and not later.
- The allotment shall be voidable as aforesaid, notwithstanding that the company is in course of winding up.
- Any director of a company, who willfully contravenes, or willfully authorize or permits the contravention of any of the provisions mentioned above in respect of the allotment, he shall be liable to compensate the company and the allottee respectively for any loss, damages or costs, which the company or the allottee may have sustained or incurred thereby.

7.2.4 Return as to Allotments

1) A company having share capital and making allotment of the shares shall file a return within 30 days thereafter, stating in the same, the number and nominal amount of shares allotted, the names, addresses and occupations of the allottees and the amount if any paid or due and payable on each shares. Shares allotted for cash and if cash is not received on the same, shall not be included in this return.

2) The contract in writing with the allottees in case fully paid or partly paid shares are issued for consideration other than cash. The return shall show the nominal value and the number of shares allotted, the extent to which they are to be treated as paid up and the consideration for which they have been allotted. If the contract is not reduced in writing, the company shall within thirty days after the allotment, file with the Registrar, the prescribed particulars of the contract with the proper stamp duty.

3) In case of bonus shares, the return shall state the number and nominal value of shares, along with the names, addresses and occupations of the allottees and a copy of the resolution authorizing the issue shall be enclosed.

4) In case of shares issued at discount, a copy of the resolution authorizing the issue together with the a copy of the order of the Tribunal sanctioning the issue and where the maximum rate of discount exceeds 10%, a copy of the order of the Central Government permitting the issue at the higher percentage.

7.2.5 Issue of Shares at Premium and Discount

Issue of Shares at Premium

A company can issue shares at premium, which means issue of shares at more than face value. For example, a share of the face value of Rs.10 may be issued at Rs.15, which means there is a premium of Rs.5 per share. The following are the provisions of the Companies Act 1956 regarding the shares issued at premium. [Section 78]

1) The amount equal to the amount of premium received on issue of shares shall be transferred to an account to be called as 'Securities Premium Account' and the provisions of the Act, relating to the reduction of the share capital of a company shall, except as provided in this section, apply as if the Securities Premium Account were paid up share capital of the company.

2) The Securities Premium Account shall be applied by the company –

   a) In paying up the unissued shares of the company to be issued to the members of the company as full paid bonus shares.

   b) In writing off the preliminary expenses of the company.

   c) In writing off the expenses of, or the commission paid or discount allowed on, any issue of shares or debentures of the company.

   d) In providing for the premium payable on the redemption of any redeemable preference shares or of any debentures of the company.

3) Where a company has, before the commencement of this Act, issued any shares at a premium, this section shall apply as if the shares had been issued after the commencement of the Act.

Shares Issued at Discount

A company can issue shares at discount, which means receiving of less amount as compared to the face value of the shares. For example, if the face value of shares is Rs.10 and if it is issued at a discount of 10%, it means that the amount receivable on each share will be Rs.9. The provisions of the Companies Act 1956 regarding the issue of shares at discount are as follows. [Section 79]

1) A company shall issue shares at discount as per the provisions of the section 79

2) A company may issue shares at discount of a class already issued if the following conditions are fulfilled.

   i. Issue of shares at discount should be authorized by a resolution passed by the company in general meeting and sanctioned by the Central Government.

   ii. The maximum rate of discount is specified in the resolution. However the Central Government shall not sanction any resolution if the maximum rate of discount specified in the resolution exceeds 10% unless it is of the opinion that the higher rate of discount may be allowed in the special circumstances.

   iii. Not less than one year has at the date of the issue have elapsed since the date on which the company was entitled to commence business.

   iv. The shares to be issued at a discount are issued within two months after the date on which the Central Government sanctions the issue or within any extended time as allowed by the Central Government.

3) A company may apply to the Central Government for sanctioning the issue of shares at discount after passing a resolution authorizing the issue of shares at a discount.

4) Particulars of the discount allowed shall be disclosed in the prospectus. Any such discount not written off at the date of issue of the prospectus shall also be mentioned. Any default committed shall attract a penalty to the company and every officer of the company who is in default, which may extend to Rs. 500.

7.2.6 Calls on Shares

Section 91 of the Companies Act 1956 provides that where any calls are to be made on shares, such calls shall be made on uniform basis on all shares of the same class.

7.2.7 Transfer of Shares:

One of the features of a company is the transferability of its shares. Shares of a public limited company are transferable freely, while in case of private limited companies, there can be restrictions on the same. The procedure for share transfer is mentioned in the Articles of Association of a company. Legal provisions of transfer of shares are discussed below. [Section 108]

1) For registering transfer of shares or debentures, a proper instrument of transfer, which is duly stamped and executed by or on behalf of transferor and by or on behalf of transferee, should be delivered to the company. The instrument should contain the names, addresses and occupations of the transferor and transferee and should be submitted along with the share or debenture certificates or if no such certificates are in existence, along with the letter of allotment of shares or debentures.

2) Every instrument shall be in the prescribed form and before it is signed by the transferor and before any entry is made therein, shall be presented to the prescribed authority, which shall stamp or otherwise endorse thereon the date on which it is presented. [Section 108 (1 A)]

3) Every instrument getting stamped or getting endorsed, and complete in all respect and executed by or on behalf of the transferor and the transferee, be delivered to the company within a period of 12 months from the date of such presentation in case of shares and debentures are dealt in or quoted on a recognized stock exchange.

4) In any other case, the instrument of transfer shall be delivered to the company within a period of 2 months of such presentation to the prescribed authority.

5) Every body corporate or bodies corporate under the same management, holding, whether singly or in the aggregate, ten per cent or more of the nominal value of the subscribed equity share capital of any other company shall, before transferring one or more of such shares, give to the Central Government an intimation of its or their proposal to transfer of such shares, and every such intimation shall include a statement regarding the particulars of the shares to be transferred, the names and addresses of the person/s to whom the transfer is to be made and the shareholding of the transferee if any in the concerned company and any such particulars as may be prescribed. [Section 108 B (1)]

6) If the Central Government is of the opinion that as a result of transfer mentioned in the above section 108 B (1), a change in the composition of the Board of Directors of the company is likely to take place and such a change would be prejudicial to the interests of the company or the public interest, it may direct that the shares should not be transferred to the proposed transferee. [Section 108 B (2) (a)]

7) Where such shares are held in a company engaged in any industry specified in Schedule XV, such shares shall be transferred to the Central Government or to such corporation owned or controlled by that Government as may be specified in that direction. [Section 108 B (2) (a)]

8) As per the direction of the Central Government, the shares mentioned in the above point, shall be transferred to the Central Government or the specified corporation as the case may be and the Central Government or the specified corporation as the case may be, shall pay cash to the body corporate equal to the market value of such shares. [The

market value means in the case of shares quoted on the registered stock exchange, the values quoted on such stock exchange on the date immediate preceding date on which the order for transfer is made and in any other case, such value as may be mutually agreed upon between the holder of the share and the Central Government or the specified corporation or in the absence of such an agreement, as decided by the Court. [Section 108 B (3)]

9) If there is no dispute, the market value shall be paid forthwith. If there is a dispute, an estimated value shall be paid by the Central Government or the concerned corporation forthwith and the balance shall be paid within 30 days from the date of settlement of dispute by the Court.

10) If the Central Government does not give any direction under sub section 1 of Section 108 [Mentioned in point no.5] the provisions in the sub section (2) shall not apply.

11) Transfer of Shares of Foreign Companies: Section 108 C provides for restrictions on the transfer of shares of foreign companies. According to this section, no body corporate or bodies corporate under the same management, which holds or hold in the aggregate, ten per cent or more of the nominal value of the equity share capital of a foreign company, having an established place of business in India, shall transfer any share in such foreign company to any citizen in India or any body corporate incorporated in India except with the previous approval of the Central Government and such previous approval shall not be rejected unless the Central Government is of the opinion that such transfer would be prejudicial to the public interest.

12) Direction by the Central Government for Refusal of Transfer: According to section 108 D, the Central Government has the power to direct a company to refuse transfer of shares. Sub section (1) of section 108 C provides that if the Central Government is satisfied that due to transfer of share or a block of shares of a company, there will be change in the controlling interest of the company and such change would be prejudicial to the interest of the company or to the public interest, it may direct the company not to give effect to the transfer. However if the transfer of shares or a block of shares has already been recorded, the Central Government shall direct the transferee or his nominee, not to exercise the voting rights or other rights attached to these shares. If the transfer is not registered, the Central Government shall direct the transferor or his nominee not to exercise any voting right or any rights attached to the shares. Where the Central Government directs for not to register the transfer of shares or block of shares, the shares or block of shares shall stand re transferred to the person from whom it was acquired, and the amount paid by the transferee for the acquisition shall be repaid to the transferor. [Section 108 D (2)] If the refund is not made within thirty days from the direction given by the Central Government, the Central Government shall direct the transferor to refund of the amount, on the application of the person entitled for such refund. After making such refund, the person to whom such shares or block of shares have been re transferred shall be entitled to the voting or other rights attached to such shares or block of shares. The Central Government shall have to communicate its approval to the transfer of shares within a period of sixty days for any application made under section 108 A or 108 C and if the same has

not been accorded within this time limit, the approval shall be deemed to have been granted.

13) Penalty for Offences: If any person or body corporate contravenes with any provisions regarding the transfer of shares, it shall be punishable with a fine, which may extend to Rs.50000.

14) Application for Transfer: According to section 110 (1), an application for the registration of transfer of the shares or other interest of a member in a company may be made by either by the transferor or transferee. If the transfer is for partly paid shares, the company before registering the transfer, shall give notice to the transferee for procuring a no objection from him within a period of two weeks from the receipt of the notice. The notice shall have to be served by a registered post.

7.2.8 Transmission of Shares:

There is a difference between transfer of shares and transmission of shares. While result of both of them is the same, transfer is for value while transmission means transfer of title of shares to a nominee on the death of the original owner of the shares. The provisions of Companies Act 1956, regarding the transmission of shares are as follows. [Section 109 B]

1) A person becomes nominee of shares under section 109 A. The procedure is that any holder of shares or debentures nominates a person as his nominee by declaration in a prescribed form. The result of nomination is that the shares or debentures standing in the name of the holder shall vest in the name of nominee in the even of death of the original holder. If the nominee is a minor, the holder of the share shall have to nominate a person in whom the shares or debenture shall vest in the even of his death during the minority of the nominee.

2) On the death of the original holder, the nominee shall have to produce evidence of his nomination and he can either choose to become shareholder or transfer his shares as the deceased shareholder or debenture holder would have been made as the case may be.

3) If the nominee elects to become shareholder, he shall give a notice to the company about his intention to become shareholder accompanied by the death certificate of the original shareholder/debenture holder.

4) All restrictions, limitations and provisions of the Act relating to the right to transfer and the registration of transfer of shares or debentures shall be applicable to any such notice and transfer.

5) A person becoming shareholder by virtue of his nomination shall be entitle to all membership rights including dividends and voting rights after he is registered as member but not before that.

6) The Board of Directors may give a notice to such nominee either to elect to become member or transfer his shares. If no reply is received within 90 days of the serving of such notice, the Board shall withhold payment of all dividends, bonuses or other moneys payable in respect of the shares or debentures until the requirements of the notice have been complied with.

7.2.9 Appeal Against Refusal for Registration: [Section 111]

1) If a company refuses to register transfer or transmission of shares in pursuance of power given to it by the articles of association or otherwise, it must inform to the transferor and transferee within two months from the date of lodging the instrument of transfer. [Section 111 (1)
2) The transferor or transferee or the person who has given intimation of transmission, may appeal to the Tribunal within two months of the receipt of notice of refusal or when no notice has been sent, within four months of lodging the instrument of transfer.
3) A person may also appeal to the Tribunal for rectification of register of members if either his name is entered into the register of members without sufficient cause or after having registered in the register, is without sufficient cause omitted there from or a default is made or unnecessary delay is made in entering in the register the fact that the person has become member or has ceased to be the member.
4) After hearing the appeal, the Tribunal shall either allow or dismiss such appeal and give appropriate directions to the company.
5) If any default is made by the company in giving effect to the orders of the Tribunal, the company and every officer in default shall be punishable with a fine, which may extend to Rs.10000 and up to Rs.1000 per day for every day after the first day after which the default continues.

7.2.10 Share Certificates:

SHARE WARRANTS: Share Warrant is a bearer instrument. A public company, limited by shares can issue share warrant for its fully paid up shares provided it is authorized by the articles of association and with the previous approval of the Central Government. The holder of the warrant shall be entitled to the shares therein specified, and the company may provide, by coupons or otherwise, for the payment of the future dividends on the shares specified in the warrant. The following are the provisions in this respect of the Companies Act 1956.

1) On the issue of a share warrant, the company shall strike out of its register of members, the name of the member who is now holder of the share warrant and shall enter in that register the following particulars.
   a) The fact of the issue of the warrant.
   b) A statement of the shares specified in the warrant, distinguishing each share by its member and,
   c) The date of issue of the warrant.
2) The bearer of the share warrant shall be entitled to cancel the share warrant as per the procedure laid down in the articles of association and after payment of the prescribed fees to the Board of Directors.

7.2.11 Forfeiture of Shares

If a shareholder defaults in the payment of the installments in the issue price of a share called by the company, the Board of Directors may decide to forfeit the shares held by the defaulting shareholders by following the procedure as laid down in the Articles of Association of the company. In the absence of the Articles of Association, Table A requires that a notice of 14 days is to be given before the forfeiture is made and if the shareholder fails to pay the dues within this period, the Board of Directors, may be passing resolution in the Board meeting, decide to forfeit the shares. As a result of forfeiture, the shares are cancelled and the name of the concerned shareholder is struck off the Register of Members. Forfeited shares can be re-issued by the company if they are not cancelled.

7.2.12 Surrender of Shares

BUY BACK OF SHARES: Section 77A (1) of the Companies Act, provides for power of a company to buy back of its shares or other securities. Subject to the provisions of 77A, sub section 2 and section 77B, a company may purchase its own shares or other specified securities [called as buy back] out of,

i. Its free reserves, or

ii. The securities premium account or

iii. The proceeds of any shares or other specified securities.

Buy-back of shares shall not be allowed out of the proceeds of an earlier issue of the same kind of shares or same kind of other specified securities.

Section 77A, sub section (2) provides that buy back of shares as mentioned in sub section (1) above, shall be effected subject to the following provisions.

(2) a) The buy back is authorized by the articles of association.

b) A special resolution has been passed in the general meeting of the company authorizing the buy back. This clause shall not be applicable, where the buy back is or less than 10% of the total paid up equity capital and free reserves of the company and such buy back has been authorized by the Board by means of a resolution passed at its meeting.

No offer of buy back shall be made within a period of three hundred and sixty five days reckoned from the date of the preceding offer of buy back if any.

c) The buy back is either 25% or less than 25% of the total paid up capital and free reserves of the company. Buy back of equity shares in a financial year shall not exceed 25% of its total paid up equity capital in the financial year.

d) The debt equity ratio of the company should not be more than 2:1 after such buy back. [Equity will include capital + Free reserves] However, the Central Government may provide for a higher ratio under this clause for a class or classes of companies. Debt for this clause includes all secured and unsecured debts.

e) All the shares subject to buy back should be fully paid up.

f) The buy back of shares or other securities listed on any stock exchange should be as per the regulations made by the Securities and Exchange Board of India.

g) The buy back of the shares or other specified securities other than those specified in (f) should be as per the prescribed guidelines.

Sub section (3) provides that, the notice of the meeting at which special resolution is proposed to be passed; shall be accompanies by an extra ordinary statement stating,

a) A full and complete disclosure of all material facts

b) The necessity for buy back

c) The class of security intended to be purchased under the buy back

d) The amount to be invested under the buy back and

e) The time limit for completion of buy back.

(4) Every buy back shall be completed within a period of 12 months from the date of passing a special resolution

(5) The buy back under sub section (1) may be,

a) From the existing security holders on a proportionate basis or

b) From the open market or

c) From the odd lots or

d) By purchasing the securities issued to employees of the company pursuant to a scheme of stock option or sweat equity.

(6) Where the company has passed a special resolution under clause (b) of sub section (2) or the Board has passed a resolution under the first proviso to clause (b) of that sub section to buy back of its own shares or other securities under this section, it shall before making such buy back, file with the Registrar and the SEBI, a declaration of solvency in the form as may be prescribed and verified by an affidavit to the effect that the Board has made full enquiry into the affairs of the company as a result of which, they have formed an opinion that it is capable of meeting its liabilities and will not be rendered insolvent within a period of one year of the date of declaration adopted by the Board, and signed by at least two directors of the company, one of whom shall be the managing director, if any. Such declaration shall not be required if the shares of a company are not listed on any stock exchange.

(7) After buy back of its own securities, the company shall extinguish and physically destroy the securities so brought back within seven days of the last date of completion of buy back.

(8) When a company has made a buy back of its shares or other specified securities, it shall not make any fresh issue of the shares of the same kind or other specified securities within a period of six months except by way of bonus shares or in the discharge of subsisting obligations such as conversion of warrants, stock option schemes, sweat equity or conversion of preference shares or debentures into equity shares.

(9) A register of the securities purchased, giving details of the consideration paid for the buy back, the date of cancellation of securities, the date of extinguishing and physically destroying of securities and such other particulars as may be specified shall be maintained by the company.

(10) A return showing the prescribed particulars of buy back shall be filed by the company with the Registrar within 30 days of the date completion of buy back.

(11) Any default made in complying with the above mentioned provisions, shall attract a punishment, which shall be imprisonment up to 2 years or with a fine which may extend to Rs.50000 or with both to the company or any officer of the company who is in default.

Section 77AA provides that, when a company purchases its own shares out of free reserves, then an amount equal to the nominal value of shares so purchased, shall be transferred to the capital redemption reserve account and details of such transfer shall be disclosed in the Balance Sheet.

Section 77B, prohibits buy back of in certain circumstances. This section provides that,

(1) No company shall directly or indirectly purchase its own shares or other specified securities,

   a) Through any subsidiary company including its own subsidiary companies or

   b) Through any investment company or group of investment companies or

   c) If a default by the company in repayment of deposit or interest payable thereon, redemption of debentures or preference shares or payment of dividend to any shareholder or repayment of any term loan or interest payable thereon to any financial institutions or bank is subsisting.

(2) No company shall directly or indirectly purchase its own shares or other specified securities in case such company has not complied with the provisions of sections 159, 207 and 211.

DIVIDENDS:

1. INTRODUCTION: Dividend is a part of profit, which is distributed among the shareholders in proportion to the shares held by them. A company has to strike a balance between too liberal dividend policy and too conservative dividend policy. The Companies Act 1956 does not make it compulsory for a company to pay dividend on equity shares. Similarly there are no restrictions also on the rate of dividend declared by a company. In case of preference shares, the rate of dividend is fixed as per the terms of issue. If the preference shares are cumulative preference shares, dividend on the same goes on accumulating. Thus if in a particular year, the company is not able to declared dividend and in the next year, it is able to do so, the preference shareholders will get the dividend of the current year along with the arrears of the previous year. There are exhaustive provisions in the Companies Act 1956, regarding the declaration of dividends. These provisions are discussed in the following paragraphs.

2. DIVIDENDS – LEGAL PROVISIONS: The following are the provisions regarding the declaration and payment of dividends.

I] No dividend shall be declared or paid by a company for any financial year except out of profits of the company for that year arrived at after providing depreciation in accordance with the provisions of sub-section (2) of section 205. Dividends can also be paid out of profits of the company for any previous financial year or years arrived at after providing for depreciation as per the provisions of the sub-section mentioned above or can paid be paid out of both, current years profit as well as the previous years profit or out of moneys provided by the Central Government or State Government for the payment of dividend in pursuance of a guarantee given by that Government.

II] The Board of Directors recommends the dividends. The recommendation is to be approved by the annual general meeting by passing an ordinary resolution. The annual general meeting can suggest reduction in the rate of dividend as recommended by the Board of Directors, but it cannot suggest increase in the rate of dividend.

III] The Board of Directors may declare interim dividend. Interim dividend is a dividend declared between two annual general meetings. Interim dividend does not require the sanction of the annual general meeting.

IV] The amount of dividend including the interim dividend if any shall be deposited in a separate bank account within five days from the date of declaration of such dividend.

V] After the commencement of Companies [Amendment] Act 1974, no dividend shall be declared or paid by a company for any financial year out of profits of the company for that year arrived at after providing for depreciation in accordance with the provisions of sub-section (2) except after the transfer to the reserves of the company of such percentage of its profits for that year, not exceeding ten per cent, as may be prescribed. However, a company can transfer voluntarily more than ten per cent of the profits to reserves in accordance with the rules, which may be made by the Central Government in this regard.

VI] Dividends shall be payable only in cash.

VII] Dividends shall be paid only to the registered shareholder or to his order or to his banker. In case a share warrant has been issued as per section 114, the dividend shall be paid to the bearer of such warrant or to his bankers.

VIII] Where any instrument of transfer of shares has been delivered to any company for registration and the transfer of such shares has not been registered by the company, it shall,

a) Transfer the dividend on such share to the special account as mentioned in section 205 A unless the company is authorized by the registered holder of such share in writing to pay such dividend to the transferee specified in the instrument of transfer and,

b) Keep in abeyance in relation to such shares any offer of rights shares as per section 81 and any issue of fully paid up bonus shares.

IX] Dividends shall be paid within 30 days from the date of declaration. If it remains unpaid to or unclaimed by any shareholder, who is entitled to the dividend, the company shall within 7 days of the expiry of such period transfer the total amount of such unpaid or unclaimed dividend to a special account to be called as, 'Unpaid Dividend Account of — Company Ltd./Pvt.Ltd.

X] Any amount transferred to 'Unpaid Dividend Account' and remaining unpaid or unclaimed for a period of seven years from the date of such transfer shall be transferred by the company to the Fund established under sub-section (1) of section 205 C. [Section 205 C sub section (1)]

XI] At the time of transfer of such amount of the unpaid or unclaimed dividend to the fund, mentioned above, the company shall furnish to the prescribed authority or committee as the Central Government may appoint, a statement showing the amounts of such transfer, the names and last known addresses of the concerned persons entitled to receive the amount and the nature of his claim and other particulars as may be prescribed. The company shall be entitled to get a receipt of all such amounts deposited in the funds and the receipt shall be an effective discharge of the company in respect thereof.

XII] If a company declares dividend but does not pay the same within 30 days or the dividend warrant has not been posted within 30 days from the date of declaration, to any shareholder who is entitled to such dividend, every director shall be punishable with a simple imprisonment of a term, which may extend to 3 years and shall also be liable to a fine of Rs.1000 per day for every day during which such default continues of the director is knowingly a party to such default. The company shall also be liable to pay simple interest of 18% per annum during the period for which such default continues. [Section 207]

XIII] Under the following circumstances, there shall be no offence under the above section.

- ❖ Where the dividend could not be paid by reason of the operation of any law.
- ❖ Where shareholder has given directions to the company regarding the payment of the dividend and those directions cannot be complied with
- ❖ Where there is a dispute regarding the right to receive the dividend.
- ❖ Where the dividend has been lawfully adjusted by the company against any sum due to it from the shareholder or
- ❖ Where, for any other reason, the failure to pay dividend or to post the warrant within the period aforesaid was not due to any default on the part of the company

- ❑ PAYMENT OF INTEREST OUT OF CAPITAL: As per the provisions of section 208, a company has the power of payment of interest out of capital in certain cases. The provisions are summarized as given below.

- Sometimes shares of a company are issued for raising money to defray the expenses of the construction of any work or building or the provision of any plant, which cannot be made profitable for a long period. In such cases, the company may pay interest on the paid up capital on certain conditions and restrictions as mentioned in sub sections (2) to (7). The amount of such interest can be charged to capital as part of the cost of construction of the work or building or the provision of the plant. The conditions and restrictions as mentioned in sub sections (2) to (7) are as follows.

a) Such payment should be authorized by the articles or by a special resolution.

b) There should be a prior sanction of the Central Government for the payment though it is sanctioned by the articles or by a special resolution.

c) Before sanctioning the payment, the Central Government may conduct an inquiry by appointing a person, who is required to submit a report to the Central Government. Such an inquiry will be made at the expenses of the company and the Central Government may ask the company to furnish security towards the payment of the costs of the inquiry.

d) The period for which the payment is to be made shall be determined by the Central Government and it shall not exceed beyond the close of the half year next after half year during which the work or building has been actually completed or the plant provided.

e) The rate of interest shall not exceed in no case, four per cent per annum or such other rate as the Central Government may direct and published in the official gazette.

f) The payment of interest shall not operate as a reduction of the amount paid up on the shares in respect of which it is paid.

7.2.13 Underwriting

According to SEBI guidelines, 'underwriting' is an agreement with or without conditions to subscribe to the securities of a body corporate when the existing shareholders of such body corporate or the public do not subscribe to the securities offered to them. Underwriting thus acts as a cushion against possible undersubscription of share capital. Those who carry out underwriting function are known as Underwriters.

Section 76 permits payment of underwriting commission not exceeding 5% in case of shares or 2.5% in case of debentures, provided it is authorized by Articles of Association. Such commission should be disclosed in the prospectus or statement in lieu of prospectus as the case may be.

STUDY NOTE - 8

ACCOUNTS AND AUDIT

This Study Note includes

- Introduction
- Legal Provisions regarding Accounts and Audit
- Powers and duties of Auditors
- Cost Audit
- Special Audit

8.1 INTRODUCTION

In this chapter we will be discussing the legal provisions regarding Accounts and Audit. Preparation of final accounts of a company is followed by audit of the same before they are presented to the Annual General Meeting. Audit of accounts is supposed to ensure that the accounts reflect 'true and fair' views about the affairs of the company.

8.2 LEGAL PROVISIONS REGARDING ACCOUNTS

According to Section 209 of Companies Act, every company is required to maintain proper books of account at its registered office with regard to:

i) All receipts and payments & income and expenditure.
ii) All sales and purchases of goods made.
iii) All assets and liabilities.
iv) In case of a company engaged in production, processing, manufacturing and mining activities, such particulars relating to utilization of material, labour and other items of cost as may be prescribed, if it is required by Central Government for such class of Companies.

Section 209(1) read with section 541(2) of Companies Act, requires maintenance of proper books of account which include stock records [541(2)], and cost accounting records [section 209(1)(d)], apart from financial books of account.

8.2.1 Inspection of Books of Account:

The following persons have right to inspect the books of account during the business hours.

i) Any Director [Sec.209(4)]
ii) The ROC [Sec.209(A)]
iii) Authorised officer of Central Govt. [Sec.209(A)]
iv) Authorised officer of SEBI. [Sec.209(A)]

A shareholder has no statutory right to inspect the books of account. He can do so if the Articles specifically allows him the right.

8.2.2 Persons responsible for keeping proper books of account:

a) Where the company has a managing director or manager, such managing director or manager;
b) Where there is no managing director or manager, every director of the company;
c) All officers and other employees of the company in addition to the group of persons mentioned above.

8.2.3 The books of account along with the relevant vouchers should be kept in good condition for a period of not less than eight years immediately preceding the current year.

8.2.4 Annual Accounts:

At the end of 'financial year' every company is required to prepare a Profit & Loss A/c and Balance Sheet which should be presented at its Annual General Meeting (AGM) [sec 210(1)].

8.2.5 Section 211 along with Schedule VI to the Act deals with preparation and presentation of B/S and P&L A/c. This section requires that every B/S and P&L A/c should reflect true and fair view of the state of affairs of a company.

8.2.6 A copy of B/S (including P&L A/c, auditor's report, director's report and every other documents required to be annexed/attached thereto) should be sent to every member at least 21 days before AGM. (sec 219(1)). A copy each must also be sent to all other persons entitled. Adoption of the Annual Accounts is one of the important busineses to be transacted at an AGM.

8.2.7 Section 220 of the Act requires every company to file with the Registrar three copies of B/S and P&L A/c together with three copies of all annexures and attachments:

i) within 30 days from the date on which the B/S and P&L A/c were laid before the AGM;
ii) where AGM has not been held, within 30 days from latest date on or before which the AGM should have been held.

8.3 LEGAL PROVISIONS REGARDING AUDIT

The following are the provisions of Companies Act regarding audit.

A] Appointment and Remuneration of Auditors:

I] The first auditor or auditors of the company shall be appointed by the Board of Directors within one month of the date of registration of the company, and the auditor/auditors so appointed shall hold office until the conclusion of the first annual general meeting. [Section 224 (5)]

It can be understood from the above section that the authority to appoint the first auditor/s vests with the Board of Directors. Actually the authority to appoint auditor/s is with the annual general meeting, but since in case of the first auditor/s it is not practically possible, the authority is given to the Board of Directors.

The Company Law further provides that,

a) the company may, at a general meeting, remove any such auditor or all or any of such auditors and appoint in his or their place any other person or persons who have been nominated for appointment by any member of the company and of whose nomination notice has been given to the members of the company not less than fourteen days before the date of the meeting and,

b) if the Board fails to exercise its powers under this sub section, the company in general meeting may appoint the first auditor or auditors.

II] As the first auditor/s will hold the office till the conclusion of the first annual general meeting, every company shall, at each annual general meeting appoint an auditor or auditors to hold office from the conclusion of that meeting until the conclusion of the next annual general meeting, and shall give intimation to every auditor or auditors appointed within seven days of the appointment.

III] The remuneration to be paid to the auditor or auditors shall be decided by the annual general meeting except in case of an auditor appointed by the Board or Central Government, the remuneration may be fixed by the Board or by the Central Government.

IV] Subject to the provisions of Sub-section [1-B] and Section 224-A, at any annual general meeting, a retiring auditor, by whatsoever authority appointed, shall be re-appointed, unless,

i) he is not qualified for re-appointment

ii) he has given the company a notice in writing of his unwillingness to be re-appointment

iii) a resolution has been passed at that meeting appointing somebody instead of him or providing expressly that he shall not be re-appointed, or

iv) where a notice has been given of an intended resolution to appoint some person or persons in the place of the retiring auditor, and by reason of the death, incapacity or disqualification of that person or all those persons, as the case may be, the resolution cannot be proceeded with.

V] If at an annual general meeting, no auditors are appointed or re-appointed, the Central Government may appoint a person to fill the vacancy.

VI] The company shall, within seven days of the Central Government's powers mentioned above, becoming exercisable, give notice of that fact to that Government, and if a company fails to give such notice, the company and every officer of the company who is in default, shall be punishable with fine, which may extend to five hundred rupees.

VII] If there is any casual vacancy in the office of an auditor, the Board may fill up the same. However the remaining auditor or auditors may continue to Act during such vacancy. If the vacancy is caused by resignation of an auditor, the vacancy shall be filled only by the company in the general meeting. Any auditor appointed in such a casual vacancy shall hold office until the conclusion of the next annual general meeting.

B] **Appointment Of An Auditor By Special Resolution**: An auditor is appointed by the company in annual general meeting by an ordinary resolution. However in the following case, an auditor is to be appointed by special resolution only.

In the case of a company in which not less than 25% of the subscribed capital is held, whether singly or in any combination, by –

a) A public financial institution or a Government company or Central Government, or

b) Any financial or other institution established by any Provincial or State Act, in which a State Government holds not less than fifty one per cent of the subscribed share capital, or

c) A nationalized bank or an insurance company carrying on general insurance business.

In such case, the appointment or re-appointment at each annual general meeting of an auditor shall be made by a special resolution.

C] **Restrictions on the appointment of Auditors:** A company shall not appoint or re-appoint any person, who is in full time employment elsewhere or firm as its auditor if such person or firm is, at the date of such appointment or re-appointment, holding appointment as auditor of more than the specified number of companies. The specified number of companies is as follows.

a) In the case of a person or firm holding appointment as auditor of a number of companies, each of which has a paid up share capital of less than rupees twenty five lakh, twenty such companies.

b) In any other case, twenty companies, out of which not more than ten shall be companies each of which, has a paid up share capital of rupees twenty five lakhs or more.

c) In the case of a firm of auditors, specified number of companies shall be construed as the number of companies specified for every partner of the firm who is not in full time employment elsewhere.

D] **Qualifications And Disqualifications of Auditors:** Section 226 makes provisions regarding the qualifications and disqualifications of an auditor. These provisions are as follows.

I. A person shall not be qualified for appointment as auditor of a company unless he is a chartered accountant within the meaning of the Chartered Accountants Act of 1949. [Section 226 (1)]

II. A firm, where all partners are chartered accountants can also be appointed as auditors of a company.

III. The person should be holder of a Certificate of Practice from the Institute of Chartered Accountants of India.

IV. The following persons shall not be eligible of being appointed as auditors of a company.

- A body corporate
- An officer or employee of the company
- A person, who is a partner or who is in the employment, of an officer or employee of the company
- A person who is indebted to the company for an amount exceeding rupees one thousand or who has given any guarantee or provided any security in connection with the indebtedness of any third person to the company for an amount exceeding one thousand rupees.
- A person holding any security of that company after a period of one year from the date of commencement of the Companies [Amendment] Act, 2000

V. A person shall also not be qualified for appointment as auditor of a company if he is, by virtue of sub section (3), disqualified for appointment as auditor of any other body corporate, which is that company's subsidiary or holding company or a subsidiary of that company's holding company, or would be so disqualified if the body corporate were a company.

VI. If an auditor becomes subject, after his appointment, to any of the disqualifications mentioned above, he shall be deemed to have a vacated his office as such.

8.3.1 Power and duties of auditors

Section 227 of the Companies Act specifies the powers and rights of an auditor. Accordingly the rights and powers of an auditor are as follows.

1) Every auditor shall have a right to access at all times to the books and accounts and vouchers of the company, whether they are kept at the head office or elsewhere. He shall also be entitled to require from the officers of the company such information and explanations as required by him. [Section 227 (1)]

2) The auditor shall have the right to inquire about the following. [Section 227 (1A)]

   a) Whether loans and advances made by the company on the basis of security have been properly secured and whether the terms on which they have been made are not prejudicial to the interests of the company or its members.

   b) Whether transactions of the company, which are represented merely by book entries are not prejudicial to the interests of the company.

   c) Where the company is not an investment company within the meaning of section 372 or a banking company, whether so much of the assets of the company as consist of shares, debentures and other securities have been sold at a price less than at which they are purchased by the company.

d) Whether loans and advances made by the company have been shown as deposits.

e) Whether personal expenses have been charged to revenue account

f) Where it is stated in the books and papers of the company that any shares have been allotted for cash, whether cash has actually been received in respect of such allotment, and if no cash has actually been so received, whether the position as stated in the account books and the balance sheet is correct, regular and not misleading.

3) The auditor has the right to make a report to the members of the company on the accounts examined by him and on every balance sheet and profit and loss account and on every other document examined by him. The report shall state whether, in his opinion and to the best of his information and according to the explanations given to him, the said accounts give the information as required by the Act in the prescribed manner and give a true and fair view of the state of affairs of the company as regards to the balance sheet and in the case of profit and loss account, of the profit or loss due for its financial year.

4) The auditor shall have a right to visit branch office and have a right to access the books of accounts and vouchers maintained at the branch office.

5) The auditor shall have a right to receive notice of the annual general meeting and to attend the same.

6) The auditor shall have the right to receive remuneration for auditing the accounts of a company.

DUTIES OF AUDITORS: The following are the duties of auditors.

1) The auditor of a company should acquaint himself with the articles of association and memorandum of association of the company as well as with the Companies Act.

2) The auditor has to perform his work in a professional manner and he should exercise reasonable care and skill in the performance of his duties. He need not be suspicious all the time but whenever he feels that a particular matter is suspicious, he should probe the same thoroughly. It is said that, 'an auditor should be watch dog and not a blood hound'.

3) An important duty of an auditor is to make a report on the accounts of the company and submit the same to the members in an annual general meeting. It should be noted that the auditor is appointed by the members in the annual general meeting and he is accountable to them. He has to state in his report, whether the accounts of the company show a true and fair view of the affairs of the company.

4) In addition to the above mentioned duties, the auditor has the other duties like preparation of statutory report, certifying specified things in the prospectus and providing assistance in investigation.

8.4 COST AUDIT

The Companies Act, under section 209 (1) (d), has incorporated a provision that proper books of cost accounts should be maintained in the case of companies engaged in production, processing, manufacturing or mining activities indicating utilization of materials, labour and other items of cost as may be prescribed by the Central Government. This provision is in addition to the information relating to all sums of moneys received and spent, all sales and purchases of goods and assets and liabilities of a company.

Section 233 (b) provides that where in the opinion of the Central Government, it is necessary so to do in relation to any company required under section 209 (1) (d) to keep prescribed cost accounts, it may direct that an audit of cost accounts of the company of the company shall be conducted in such a manner as may be specified in the order by an auditor who shall be a Cost Accountant within the meaning of the Cost and Works Accountants Act 1959. The auditor under this section shall be appointed by the company in accordance with the provisions of sub section 1 b of section 224. An audit conducted under this section shall be in addition to an audit conducted by an auditor appointed under section 224. A person shall be qualified for appointment as a cost auditor of a company if he satisfies the following conditions.

a) He is a cost accountant within the meaning of the Cost and Works Accountants Act 1959

b) He has obtained from the Council of the Institute of Cost and Works Accountants of India, a certificate of practice under section 7 of the Cost and Works Accountants Act 1959.

c) A firm of cost accountants can also be appointed as Cost Auditor provided all the partners of the firm are qualified to be appointed as Cost Auditor as per the aforesaid qualifications. In such case, any partner may Act in the name of the firm.

The following are the disqualifications of a cost auditor. The following persons cannot be appointed as cost auditors.

a) A body corporate

b) An officer or employee of the company

c) A person, who is a partner or who is in the employment of an officer or employee of the company.

d) A person who is indebted to the company for an amount exceeding Rs.1000 or who has given any guarantee or provided any security in connection with the indebtedness of any third person to the company for an amount exceeding Rs.1000

e) A person is also not qualified for appointment as a cost auditor of a company, if he is disqualified under any of the above four clauses, for appointment as a cost auditor of any other body corporate or would be so disqualified if that body corporate were a company, which is, that company's subsidiary or its holding company or a subsidiary of its holding company.

f) A person appointed under section 224 as an auditor of a company [Financial Auditor] shall not be appointed or reappointed as cost auditor of that company. A person is also not qualified for appointment as cost auditor if he is in full time employment elsewhere or if he has already accepted cost audit assignments of 20 companies.

8.5 SPECIAL AUDIT

Under section 233 A, Central Government has the powers to direct special audit in certain cases. These powers are discussed below.

I. Where the Central Government is of the opinion that,

- The affairs of the company are not being managed in accordance with the sound business principles or prudent commercial practices or
- The company is being managed in a manner likely to cause serious injury or damage to the interests of the trade, industry or business to which it pertains or
- The financial position of any company is such as to endanger its solvency,

The Central Government may at any time by order direct that a special audit of the company's accounts for such period or periods as may be specified in the order, shall be conducted and may by the same or a different order appoint either a chartered accountant in practice or the company's auditor himself to conduct such a special audit.

II] The special auditor shall have the same powers and duties in relation to the special audit as an auditor of a company under section 227.

III] The report of the special auditor shall, as far as may be, include all the matters required to be included in an auditor's report under section 227 and if the Central Government so directs, shall also include a statement on any other matter, which may be referred to him by that Government.

IV] The Central Government may direct any person to provide all the necessary information for the purpose of conducting the special audit.

V] On receipt of such report, the Central Government may take such action on the report as it fees it necessary in accordance with the provisions of this Act or any other law for the time being in force.

VI] The expenses of and incidental to any special audit under this section including the auditor's remuneration shall be determined by the Central Government and paid by the company. In case of default, the expenses shall be recovered from the company.

STUDY NOTE - 9

MEMBERSHIP OF A COMPANY

This Study Note includes

- Introduction - Meaning of 'Membership' of Company
- Legal Provisions about the 'Membership'

9.1 INTRODUCTION - MEANING OF 'MEMBERSHIP' OF COMPANY

One of the distinguishing features of company form of organization from other organizations like partnership concerns is that a company has a share capital, which is contributed by different persons known as 'shareholders' or 'members'. Though the terms 'members' and 'shareholders' are used interchangeably, there is a difference between the two in case of a company, which is not having a share capital or a company who has issued share warrants. A person holding share warrant is a shareholder but he will not be a member of that company. Various legal provisions regarding membership of a company are discussed in this chapter in the following paragraphs.

9.1.1 Difference Between Member and Shareholder

A registered shareholder is a member of a company but a registered member shall not be a shareholder of a company, as the company may not have share capital. Another point of difference between the member and shareholder is that a person who is holding share warrant is shareholder but not a member.

9.1.2 Persons Eligible to Become Member of a Company

Subject to the provisions of the memorandum and articles of association of a company, any person who is competent to contract can be a member of a company. The following persons can be members of a company.

i. Partnership firms: A partnership firm may hold shares in a company in the individual names of the partners. Since the separate existence of a partnership firm is not recognized by the law, a firm cannot hold the shares in its name. However partners can hold shares jointly in their names.

ii. Company: A company can hold shares of another company provided it is permitted by its articles and memorandum of association. However, a company cannot be member of itself. In other words, a company cannot hold the shares of itself. There are provisions regarding buy back of shares of a company but as per the law, the shares which are purchased by the company should be cancelled immediately.

iii. Foreigner: There are no restrictions on a foreigner becoming a member of the company. The Law shall prevent him from being a member only if he is alien enemy.

iv. Insolvent: An insolvent can be a member and as long as his name appears in the register of members, he is a member and is entitled to vote even though his shares may be in the custody of official receiver or assignee.

9.2 LEGAL PROVISIONS ABOUT THE 'MEMBERSHIP'

A person can become a member of a company in any of the following ways.

i. A person can become a member in regular course by making application for getting shares and getting the allotment of shares. An application for shares is an offer made by the person to the company and when the allotment is made, the acceptance is given and the contract is complete. Thus membership can be obtained by application and allotment.

ii. A person may not apply for getting shares from the company, but he can acquire membership by getting shares transferred in his favor by another person. A person may purchase shares in the open market and thus become member by registering transfer of shares in his name.

iii. Subscribers to the memorandum of association of a company become members of a company.

iv. Membership can also be acquired by transmission of shares. If a person holding shares of a company, dies, the shares standing in his name are transmitted in favor of this legal heirs. Thus the legal heirs become the members of the company.

v. Every person, holding equity share capital of a company and whose name is entered as beneficial owner in the records of a depository shall be deemed to be a member of the concerned company.

9.2.2 Termination of Membership

A member ceases to be a member either by his own Act or as per the provisions of the Companies Act. If shares are transferred or forfeited or if the company sells his shares under some provisions in its articles or if he rescinds the contract made with the company, the concerned person shall cease to be the member of the company.

9.2.3 Members' Register:

As per section 150 of the Companies Act, every company shall keep a register of its members and the following particulars shall be recorded in the same.

❖ Name and address as well as occupation of the member

❖ Shares held by each member and the amount paid or agreed to be paid on those shares

❖ The date on which, each person was entered in the register as a member

❖ Date on which the member has ceased to be a member

9.2.4. Index of Members

The provisions of section 151 are as follows.

1) Every company having more than fifty members shall keep an index, which may be in the form of a card index, of the names of the members of the company and shall, within fourteen days after the date on which any alteration is made in the register of members, make the necessary alteration in the index.

2) The index shall, in respect of each member, contain a sufficient indication to enable the entries relating to that member in the register to be readily found.

3) The index shall, at all times, be kept at the same place as the register of members.

4) If any default is made in complying the provisions of this section, the company and every officer of the company who is in default, shall be punishable with fine, which may extend to five hundred rupees.

5) The register and index of beneficial owners maintained by a depository under section 11 of the Depositories Act 1996 shall be deemed to be an index of members and register and index of debenture holders, as the case may be, for the purposes of this Act. [Section 152 A]

9.2.5 Closing the Register: [Section 154]

A company may close the register of members [register of debenture holders also] for a period not exceeding 45 days in a year and not exceeding 30 days at any one time. Actually the Company Law does not make it mandatory for a company to close the register. It is the requirement of the stock exchanges that a company has to close the registers for the purpose of registering transfer and for the purpose of declaring and payment of the dividends. A notice of not less than 7 days shall be required to be given by the company by way of advertisements in some newspaper, which has circulation in the district where the registered office of the company is situated.

9.2.6 Foreign Register:

Section 157 of the Companies Act makes provisions regarding the foreign register. The provisions are as follows.

- A company, which has a share capital or which has issued debentures may, if so authorized by its articles, keep in any State or country outside India, a branch register of members or debenture holders resident in that State or country. This register is called as a foreign register in this Act.

- The company shall within thirty days from the date of the opening of any foreign register, file with the Registrar notice of the situation of the office, where such register is kept and in the event of any change in the situation of such office or of its discontinuance, as the case may be, file notice with the Registrar of such change or discontinuance. [Section 157 (2)]

- In case of any default made in complying with the requirements of the above sub section (2), the company and every officer of the company who is in default, shall be punishable with fine which may extend to Rs.500 for every day during which the default continues.
- A foreign register shall be deemed to be part of the company's register of members or of debenture holders as the case may be. [Section 158 (1)]
- A foreign register shall be kept, shall be open to inspection and may be closed, and extracts may be taken there from and copies thereof may be required as per the relevant provisions of the Act. A newspaper advertisement should be given before the register is closed. [Section 158 (2)]
- Subject to the provisions of the Act, a company may by its articles make such regulations as it thinks fit in regard to its foreign registers.

9.2.7 Power To Rectify Register

Section 164 provides that the register of members as well as the register of debenture holders and the annual returns, certificates and statements as mentioned in sections 159 to 161 is an important prima facie evidence of any matter contained in the same. Thus it can be understood that the register of members is a valuable document for the company as well as for the creditors. Entry in the register of members is actually displaying the rights and liabilities of the members. Sometimes there may be some discrepancies in the entries made in this register or sometimes there may be need to rectify the same due to various reasons. Rectification of members register, thus becomes necessary in the following cases. [Section 111]

1. Where a persons' name is wrongfully removed from the register of members
2. Where a person is included to buy shares by misrepresentation
3. Where there is no valid allotment of shares, e.g where there is allotment without observing the provisions of articles
4. Where the allotment is not made within a reasonable time or where it is irregular
5. Where transfer of shares has been improperly registered or where a company improperly neglects or refuses to register a transfer
6. Where shares have been improperly surrendered to a company by a member and the company claims to have his name restored.
7. Where shares have been transferred to avoid liability
8. Where shares have been issued at a discount improperly
9. Where shares have been forfeited improperly
10. Where a forged transfer has been registered
11. Where the application for shares is conditional and the condition precedent is not fulfilled.

STUDY NOTE - 10

DIRECTORS

This Study Note includes

10.1 INTRODUCTION

We have discussed in the earlier chapters that the real owners of the company are the shareholders. However as they are large in numbers and also spread over a wide geographical area, it is impossible for them to pay attention to the day-to-day administration of the company. Hence they elect their representatives, who are called as 'directors' of the company. They can be called as 'brains' of the company. A company is an artificial person created by law. There is no physical existence to a company. It doesn't have a body or soul and hence cannot act on its own. It has to act only through the directors who are the elected representatives of the shareholders. Thus director's position in company administration is extremely important. There are exhaustive provisions regarding their appointment, powers and duties, position, removal etc. in the Companies Act 1956. These provisions are discussed in detail in the following paragraphs.

Who is a Director?

According to section 2 (13) of the Companies Act 1956, a director includes any person occupying the position of a director, by whatever name called. Thus it is clear that merely the designation as a director does not mean that the person is indeed a director. What really matters is the functions discharged by him. If a person is discharging the duties and functions of a director, he will be called as a director even though his designation may be different. Thus a person who has control over the direction, conduct and management of the business of the company is the director of the company. The Companies Act also provides that only individuals can be directors. A body corporate, association of persons or firm cannot function as director of a company.

Number of Directors

As per section 252 of the Companies Act, every public company [except a public company, which has become such by virtue of section 43 A] shall have at least three directors. A public company having,

a) a paid up capital of five crore rupees or more,

b) one thousand or more small shareholders, may have a director elected by such small shareholders in the manner as may be prescribed. [For this section, small shareholders means a shareholder holding shares of nominal value of twenty thousand rupees or less in a public company to which this section applies.]

Every other company shall have two directors.

- Subject to the provisions of sections 252, 255 and 259, a company can increase or decrease the number of directors by passing an ordinary resolution in a general meeting within the limits fixed by its articles of association. According to the section 259, in the case of a public company or a private company, which is a subsidiary of a public company, any increase in the number of its directors, except,
- In the case of a company, which was in existence on the 21st day of July 1951, an increase, which was within the permissible maximum under its articles as in force on that date, and
- In the case of a company, which came or may come into existence after that date, an increase, which is within the permissible maximum under its articles as first registered,

Shall not have any effect unless approved by the Central Government and shall become void, if and in so far as, it is disapproved by the Central Government.

Who can be a Director?

The Company Law provides for the disqualifications of a person for being appointed as a director of any company. As mentioned in the above paragraph, only individuals can become directors and a body corporate or a firm or an association of persons cannot be appointed as director or directors. As per section 274 (1) any person shall not be capable of being appointed as a director of company if –

a. He has found to be of unsound mind by a Court of competent jurisdiction and the finding is in force.

b. He is an undischarged insolvent.

c. He has applied to be adjudicated as an insolvent and his application is pending.

d. He has been convicted by a Court of any offence involving moral turpitude and sentenced in respect thereof to imprisonment for not less than six months, and a period of five years has not been elapsed from the last date of expiry of the sentence.

e. He has not paid any call in respect of shares of the company held by him, whether alone or jointly with others, and six months have elapsed from the last day fixed for the payment of the call.

f. An order disqualifying him for appointment as director has been passed by a Court in pursuance of section 203 and is in force, unless the leave of the Court has been obtained for his appointment in pursuance of that section or,

g. Such person is already a director of a public company which, A] has not filed the annual accounts and annual returns for any continuous three financial years commencing on and after the first day of April 1999 or

B] Has failed to repay its deposit or interest thereon on due date or redeem its debentures on due date or pay dividend and such failure continues for one year or more.

Provided that such person shall not be eligible to be appointed as a director of any other public company for a period of five years from the date on which such public company, in which, he is a director failed to file annual accounts and annual returns under sub-clause (a) or has failed to repay its deposit or interest or redeem its debentures on due date or pay dividend referred to in clause (B) above.

As per section 274 (2), the Central Government may remove, by notification in the official gazette, the disqualification mentioned in clause (d) or clause (e) as mentioned above either generally or in relation to any company or companies.

Additional grounds of disqualifications may be prescribed by the Articles of Association of a private company, which is not a subsidiary of a public limited company.

10.2 VARIOUS PROVISIONS OF COMPANY LAW REGARDING APPOINTMENT, QUALIFICATIONS

We have seen in the earlier paragraphs, that the directors are the elected representatives of the shareholders. They are elected in the general meeting of the shareholders. However there are certain issues like the appointment of first directors, subsequent appointment, directors retiring by rotation, appointment of additional directors, casual vacancies of the directors etc. Section 253 provides that no company shall appoint or re-appoint any individual as director of a company unless he has been allotted a Director Identification Number under section 266 B] The provisions of the Company Law regarding these matters are discussed in the following paragraphs.

Appointment of First Directors

The first directors of the company are to be appointed and not elected as the general meeting will be held after the completion of a year. Normally the names of the first directors are mentioned in the articles of association of a company. However if the names of the directors are not mentioned in the articles, the subscribers to the memorandum of association or their majority shall decide the names and the numbers of the first directors. If first directors are not appointed even in this manner, the subscribers to the memorandum themselves shall be deemed to be the directors of the company, until the directors are duly appointed in accordance with section 255. [Section 254] These directors shall hold office till the first annual general meeting.

Subsequent Appointment

Section 255 provides that at least 2/3rd of the total number of directors of a public company or a private company, which is a subsidiary shall be liable to retire by rotation every year, unless the articles of the said company provides for retirement of all directors at every annual general meeting. Sub-section 2 of section 255 provides that the remaining directors in case of such company and the directors in case of private limited company, which is not a subsidiary of a public company, shall, in the absence of a provision to the contrary, in the articles of association, shall also be appointed by the company in a general meeting.

Retirement By Rotation: Section 256 has made exhaustive provisions regarding the retirement of directors by rotation. These provisions are as follows.

(1) One third of the directors, who are appointed as per the provisions of section 255, shall be liable for retirement by rotation in the first and subsequent annual general meeting held after their appointment. If the number of directors is not three or in multiples of three, the number nearest to three shall be taken.

(2) The directors to retire by rotation, at every annual general meeting, shall be those, who have been longest in the office since their last appointment. However, if some directors have been appointed on the same day, the director retiring by rotation shall be decided either by mutual agreement or in the absence of the same by drawing lots.

(3) At the annual general meeting at which, a director retires as mentioned above, the company may fill up the vacancy by appointing the retiring director or any other person.

(4) If no such appointments are made and the vacancy is not filled up and the meeting does not expressly resolve not to fill up the vacancy, the meeting shall stand adjourned till the same day in the next week, at the same time and place. If the day is a public holiday, the meeting shall be held on the next succeeding day, which is not a public holiday at the same time and place.

(5) If the vacancy is not filled up even in the adjourned meeting, and the meeting also has not expressly resolved not to fill up the vacancy, the retiring director shall be deemed to have been re-appointed at the adjourned meeting, unless –

   i. At that meeting or at the previous meeting, a resolution for the re-appointment of such director has been put up and lost.

   ii. The retiring director has communicated in writing his unwillingness to be so re-appointed.

   iii. He is not qualified or disqualified for appointment.

   iv. A resolution, whether special or ordinary is required for his appointment or re-appointment in virtue of any provision of this Act.

According to Section 257 (1), a person other than retiring director shall also be eligible to be appointed as director at any general meeting. The section further provides that in such cases, he or some member intending to propose him has to give a notice of not less than 14 days before the date of meeting, duly signed by him signifying his candidature for the office of the director along with a deposit of Rs.500. The amount of deposit shall be refunded to the person if he is elected as director. The company shall serve notice individually to its members informing them about the candidature of such a person at least seven days before the date of meeting. If serving of notice is not possible for the company, it shall advertise about the notice in at least two newspapers circulating in the place, where the registered office of the company is situated. One of the newspapers should be published in English language and the other one in the regional language of that place.

Appointment as Additional Directors

Section 260 empowers the Directors to appoint Additional Directors if the power is given to them by the Articles of Association. Such additional directors shall hold office only up to the date of the next annual general meeting. If due to some reason, the annual general meeting is not held or cannot be held, the additional director shall vacate his office on the day on which the annual general meeting would have been held. The number of directors and additional directors together shall not exceed the maximum strength fixed for the Board by the articles.

Casual Vacancy

The Board of Directors have the power to fill up the casual vacancy caused in the Board. Section 262 provides that in the case of a public company or a private company, which is a subsidiary of a public company, if the office of any director appointed by the company in general meeting is vacated before his term of office will expire in normal course, the casual vacancy may be filled up by the Board of Directors in their meeting subject to the provisions of the articles of association. Any person so appointed shall hold office only up to the date up to which the director in whose place the casual appointment is made, would have held the office if it had not been vacated.

Alternate Director

Section 303 provides that an alternate director can be appointed by the Board of Directors if it is authorized by the articles of association or by a resolution passed in the annual general meeting. He shall act as alternate director in the place of the original director in his absence for a period of at least 3 months, from the State in which the meetings of the Board are normally held.

Appointment by Proportional Representation

Section 265 provides that the articles of association of a public company or a private company, which is a subsidiary of a public company may provide for appointment of directors by proportional representation. This provision is made basically for providing representation to all segments of the shareholders. The section further provides that the articles may provide for appointment of not less than 2/3rd of the total number of directors by proportional representation. The appointment can be made either by a single transferable vote or by a system of cumulative voting or other wise. The appointment is to be made once in every three years and interim casual vacancies being filled in according to the other relevant provisions.

Appointment by third parties

The articles of association of a company may, under certain circumstances, give power to the debenture holders or other creditors like banker to appoint their nominees on the Board of Directors. The number of directors so appointed shall not exceed 1/3rd of the total number of directors. They are not liable for retiring by rotation.

Appointment by Central Government

As per section 408, the Central Government can appoint such number of directors on the Board of the company as the Tribunal may order in writing, to safeguard the interests of the company or its shareholders. The appointment shall be for not more three years on any one occasion. The purpose of this appointment is to prevent the affairs of the company from being conducted either in the manner-

a) Which is oppressive to any members of the company, or

b) Which is prejudicial to the interests of the company or to public interest

The Tribunal may pass the above order on a reference made to it by the Central Government or on the application of,

a) Not less than 100 members of the company or

b) Members of the company holding not less than 1/10th of the total voting power therein.

Any director appointed by the Central Government shall not be required to hold any qualification shares nor shall his period of office be liable to termination by retirement of directors by rotation. Any such director may be removed by the Central Government from his office and another person may be appointed in his place.

Restrictions on The Appointment of Director: [Section 266]

We have discussed the legal provisions regarding the appointment of directors. The Company Law provides certain restrictions on the appointment of directors. Certain legal formalities are to be completed before a person can work as director. These restrictions are as follows.

A person shall not be capable of being appointed as director of a company and shall also not be named as a director or proposed director in the prospectus unless before the registration of the Articles or the publication of the prospectus or the filing of the statement in lieu of prospectus, as the case may be, he or his agent authorized in writing, has –

i. Signed and filed with the Registrar a consent in writing to Act as such director, and has,

ii. Signed the memorandum for his qualification shares if any or taken his qualification shares if any from the company and paid or agreed to pay for them or

iii. Signed and filed with the Registrar an undertaking in writing to take from the company his qualification shares, if any and pay for them or

iv. Made and filed with the Registrar an affidavit to the effect, that his qualification shares are registered in his name.

This section does not apply to a private limited company.

Number of Directorship

As per the section number 275, no person shall save otherwise provided in section 276, hold office at the same time as director in more than 15 [fifteen] companies. Thus the limit of holding directorship is 15 companies. Section 276 (1) provides that, any person holding office as director in more than 15 companies, immediately before the commencement of the Companies [Amendment] Act 2000 shall, within two months from such commencement,

a) Choose not more than fifteen of those companies as companies in which he wishes to continue to hold the office of director,

b) Resign his office as director in the other companies and

c) Intimate the choice made by him under clause (a) to each of the companies in which he was holding the office of director before such commencement, to the Registrar having jurisdiction in respect of each such company and also to the Central Government.

Section 276 (2) provides that any resignation made in pursuance of clause (b) of sub section (1) shall become effective immediately on the dispatch thereof to the company concerned. Sub section (3) of section 276 provides that no such person shall act as director in more than fifteen companies after the expiry of two months from the commencement of the Companies [Amendment] Act 2000.

Section 277 provides that where a person already holding the office of director in fifteen companies is appointed, after the commencement of the Companies Amendment Act 2000 as a director of any other company, the appointment –

a) Shall not take effect unless such person has within fifteen days thereof, effectively vacated his office as director in any of the companies in which he was already a director and

b) Shall become void immediately on the expiry of the fifteen days if he has not, before such expiry, effectively vacated his office as director in any of the companies aforesaid.

Section 277 (2) provides that where a person already holding the office of director in fourteen companies or less is appointed, after the commencement of the Companies [Amendment] Act 2000, as a director of other companies, making the total number of his directorship more than fifteen, he shall choose the directorships which he wishes to continue to hold or to accept, so however that the total number of directorships, old and new, held by him, shall not exceed fifteen. None of the new appointments of director shall take effect until such choice is made, and all the new appointments shall become void if the choice is not made within fifteen days of the day on which the last of them was made.

Section 278 (1) provides that for the calculation of number of directorships for the purpose of sections 275, 276 and 277, the following companies shall be excluded.

a) A private company, which is neither a subsidiary nor a holding company of a public company

b) An unlimited company

c) An association not carrying on business for profit or which prohibits the payment of a dividend

d) A company in which such person is only an alternate director, that is to say, a director who is only qualified to Act as such during the absence or incapacity of some other director.

It should be noted that in making the calculation aforesaid, any company referred to in clauses a, b, and c of sub section (1) shall be excluded for a period of three months from date on which the company ceases to fall within the purview of those clauses.

Any person who holds office, or acts as a director of more than fifteen companies in contravention of the above mentioned provisions, shall be punishable with a fine, which may extend to fifty thousand rupees in respect of each of those companies after the first fifteen. [Section 279]

Vacation of Office by Directors

According to section 283 of the Companies Act, the office of the director shall become vacant if,

a. If he fails to hold the qualification shares if any required by the articles of association of the company, within two months of his appointment

b. He is adjudicated to be of unsound mind.

c. He has applied to be adjudicated as an insolvent

d. He is convicted by a Court of any offence involving moral turpitude and sentenced in respect thereof to imprisonment for not less than six months

e. He fails to pay any call in respect of shares of the company held by him within six months from the last date fixed for the payment of the call.

f. He absents himself from 3 consecutive meetings of the Board of directors or from all meetings of the Board for a consecutive period of 3 months, whichever is longer, without obtaining leave of absence from the Board

g. He fails to make disclosures to the Board of directors with regard to any contracts with the company, in which he is directly or indirectly interested.

h. He becomes disqualified by an order of the Tribunal from being a director on the ground of having been convicted of an offence in connection with the promotion, formation or management of the company or found guilty of fraud or misfeasance in relation to its winding up proceedings

i. He is removed before the expiry of his period of office by an ordinary resolution

j. Having been appointed a director by virtue of his holding any office or employment in the company, he ceases to hold such office or other employment in the company.

Position Of Directors

Directors are the representative of shareholders and are expected to conduct the affairs of the company in an efficient manner. A question arises about their exact position. The question is whether they are officers of the company or trustees of the company or whether they are agents or whether they perform all these roles? It is very difficult to answer these questions in the context of the law. However, the position of directors can be examined from all these angles. This is discussed in the following paragraphs.

I] Directors are the elected representatives of the shareholders as mentioned above. They have to run the management of the company. They have to use the property of the company in a judicious way and in the best interests of the shareholders. Thus the role that they play is that of trustees. They are treated as trustees of the property of the company as well as that of the money of the company and also of the powers vested to them. In using the property and money of the company, they should not allow their personal interests to clash with that of the company's interests. They have to refund to the company any of its money or property, which they have improperly paid away or transferred. Similarly the powers given to them by the Law as well as by the articles of association of the company should not be used for their personal interests. It should be remembered that they are the trustees for the company and not the trustees for the third parties.

Actually, directors are not the real trustees but quasi-trustees mainly because,

- ❖ The ownership of the property and money of the company is not entrusted to them
- ❖ Their functions differ from the functions of the trustees
- ❖ Their duties of care are not as onerous as those of trustees.

II] Directors as Agents: Though a company is an artificial person created by law, it can Act only through the elected representatives of the shareholders, i.e. board of directors. Thus the directors are the agents of the company. The company acts through them and hence the relationship between the directors and the company is that of agent and principal. The acts of the agents are the acts of the principal and therefore the directors' actions are binding on the company. However as per the law of agency, if the directors exceed their powers and take some actions, these actions are not binding on the company. The company may ratify them if it feels it necessary. Thus in the eyes of law, directors are the agents of the company.

III] Directors as Officers: The Company Law, treats the directors as officers of the company. [Section 2(30)] Therefore, they are liable for penalties if there is any non- compliance or violation of the provisions of the Company Law.

IV] Directors as Employees: Directors are elected representatives of the shareholders and not entitled for any benefit, which are allowed to the employees of the company. However, they can be full time employees of the company by entering into a special contract with the company regarding the employment. For example, a managing director or a whole time director is an employee of the company and any director can occupy these positions and become the employee of the company.

Removal of Directors

Directors can be removed by the company, Central Government as well as by the Tribunal. The relevant provisions of the Company Law are as follows.

I] Removal by the Company/Shareholders: [Section 284] – A company may, by ordinary resolution, remove a director before the expiry of his period of office. However this section shall not apply to, a director appointed by the Central Government under section 408. This provision shall also be not in the case of a private company, authorize the removal of a director, holding the office for life on the 1st day of April 195, whether or not he is subject to retirement under an age limit by virtue of the articles or otherwise. This provision shall also be not applicable where the company has availed itself of the option given to it under section 265 to appoint not less than two thirds of the total number of directors according to the principle of proportional representation.

Procedure for Removal: A company has to follow a procedure for removal of director before the expiry of his term. According to section 284 (2), a special notice shall be required of any resolution to remove a director under this section, or to appoint somebody instead of the director so removed at the meeting in which he is removed. The concerned director shall be given an opportunity to be heard at the meeting. A vacancy created by the removal of the director under this section may, if he has been appointed by the company in general meeting or by the Board of Directors in pursuance to section 262, be filled by the appointment of another director in his place in the meeting at which he is removed provided a special notice has been given of the resolution. The person so appointed in the place of the removed director shall hold the office until the date up to which his predecessor would have held office if he had not been removed as aforesaid.

II] Removal by Central Government: According to section 388 [B to C], the Central Government, may in certain circumstances, remove managerial personnel from office on the recommendation of the Tribunal. The Central Government may use this power where in its opinion there are circumstances suggesting,

- ❖ That any person concerned in the conduct and management of the affairs of the company is or has been guilty of fraud, misfeasance, persistent negligence or default in carrying out his obligations and functions under the law or breach of trust or
- ❖ That the business of the company is not or has not been conducted and managed by such person in accordance with sound business principles or prudent commercial practices or

- That the company is or has been conducted and managed by the person concerned in a manner, which is likely to cause, or has caused serious injury or damage to the interest of the trade, industry or business to which such company pertains, or

- That the business of the company is or has been conducted and managed by the persons concerned with intent to defraud its creditors, members or any other person or otherwise for a fraudulent or unlawful purpose or in a manner prejudicial to public interest.

The person/s against whom a case is presented shall be given an opportunity of being heard and then suitable decision will be taken,

III] Removal by Tribunal: The Tribunal has the power to remove a director as per section 402. The law provides that where an application has been made to the Tribunal under section 397 or 398 for prevention of oppression or mismanagement respectively and if the Tribunal finds that relief should be granted, it may terminate, set aside or modify any agreement between the company and the managing director or any other director or the manager. The concerned person, who is so removed cannot claim damages against the company or compensation for the loss of office. He cannot be appointed in any managerial capacity in the company, without the permission of the Tribunal for a period of five years from the date of the order.

10.3 BOARD OF DIRECTORS

The Board of Directors has been given various powers by the Company Law. Some of these powers are to be exercised only at the general meeting while the rest can be exercised by passing a resolution in a board meeting. Therefore it becomes essential that the board meets regularly to transact the business, which is essential to run the administration of the company smoothly. The Company Law has provisions regarding the board meeting. These provisions are discussed here.

- Section 285, provides that in the case of every company, a meeting of its Board of Directors shall be held at least in every three months and at least four such meetings shall be held every year. According to the direction of the Central Government, the provisions of this section may not be applicable to any company or class of companies.

- Notice of the meeting shall be given to all the directors in writing who are in India and the notice shall be given at his usual address in India. Failure to give notice shall attract penalty of Rs.1000 for every officer whose duty is to give notice as mentioned above.

- The quorum for the board meeting shall be 1/3rd of its total strength [any fraction contained in that one third being rounded off as one] or two directors, whichever is higher. It should be noted that 'interested director' shall not be counted for deciding the quorum for the meeting]

- If a meeting of the board of directors could not be held for want of quorum, the unless the articles otherwise provide, the meeting shall automatically stand adjourned till the same day next week, at the same time and place or if that day is a public holiday, till the next succeeding day, which is not a public holiday, at the same time and day. [Section 288(1)]

- The provisions of section 285 shall not be deemed to have been contravened merely by reason of the fact that a meeting of the Board, which has been called in compliance with the terms of that section could not be held for want of a quorum. [Section 288(2)]

- A resolution to be passed by circulation shall be deemed to have been passed if it is circulated to all members not being less than the quorum along with necessary papers [members of the board or its committee and those in India] and has been approved by such of the directors as are then in India or by a majority of such of them as are entitled to vote on the resolution.

- Acts done by a person as a director shall be valid, not withstanding that it may afterwards be discovered that his appointment was invalid by reason of any defect or disqualification or had terminated by virtue of any provisions contained in this Act or in the article. However any act done by a director after his appointment was found invalid by reason of any defect or disqualification or had been terminated due to any reason mentioned in this Act shall be invalid. [Section 290]

Powers of The Board of Directors

The Board of Directors of a company is responsible for the management and administration of the company. It is but natural that they are given sufficient powers to run the company successfully. However it is also necessary to put some restrictions on their powers, otherwise there is a possibility of misuse of the same. The Company Law, therefore provides for general powers which can be exercised by the board in accordance with the provisions in the articles and memorandum and certain powers are to be exercised only by the sanction of the shareholders at the meeting. These powers are discussed in the following paragraphs.

I] General Powers: As per section 291(1), the Board of directors of a company shall be entitled to exercise all such powers and do all such acts and things as the company is authorized to exercise and do. It is further provided that these powers shall be subject to the provisions of memorandum and articles of association of a company. Section 291(2) provides that no regulation made by the company in general meeting shall invalidate any prior act of the Board, which would have been valid if that regulation had not been made.

II] POWERS TO BE EXERCISED BY BOARD ONLY AT MEETING: Section 292 (1) provides that the Board of directors of a company shall exercise the following powers on behalf of the company, and it shall do so only by means of resolutions passed at meeting of the Board.

a) The power to make calls on the shareholders in respect of money unpaid on their shares

b) The power to authorize the buy back of shares

c) The power to issue debentures

d) The power to borrow moneys otherwise than on debentures

e) The power to invest the funds of the company and

f) The power to make loans

The Board may, by a resolution passed at a meeting, delegate to any committee of directors, the managing director, the manager or any other principal officer of the company or in the case of a branch office of the company, a principal officer of the branch office, the powers specified in clauses [c], [d] and [e] of sub section (2) specified below.

Sub section (2) of section 292 provides that every resolution delegating the power referred to in clause [c] above, shall specify the total amount outstanding at any time up to which moneys may be borrowed by the delegate.

Similarly every resolution mentioned in [d], [e] and [f] shall specify the maximum amounts to be specified in respect of the loans and investments.

III] POWERS TO BE EXERCISED WITH THE APPROVAL OF THE COMPANY IN GENERAL MEETING: According to section 293 (1), the Board of directors of a public company or of a private company, which is a subsidiary of a public company, shall not except with the consent of such public company or subsidiary in the general meeting-

a) Sell, lease or otherwise dispose of the whole, or substantially the whole of the undertaking of the company, or where the company owns more than one undertaking, of the whole or substantially the whole of any such undertaking.

b) Remit or give time for the repayment of any debt due by a director [except in the case of renewal or continuance of an advance made by a banking company to its director in the ordinary course of business].

c) Invest, otherwise than in trust securities, the amount of compensation received by the company in respect of compulsory acquisition, after the commencement of this Act of any such undertaking as referred in clause (a) or of any premises or properties used for any such undertaking and without which it cannot be carried on or can be carried on only with difficulty or only after a considerable time.

d) Borrow moneys after the commencement of this Act, where the moneys borrowed, together with the moneys already borrowed by the company [apart from the temporary loans obtained from the company's bankers in the ordinary course of business] will exceed the aggregate of the paid up capital of the company and its free reserves, that is to say, reserves not set apart for any specific purpose.

e) Contribute, after the commencement of this Act, to charitable and other funds not directly relating to the business of the company or the welfare of its employees, any amount the aggregate of which will in any financial year, exceed fifty thousand rupees or five percent of its average net profits as determined in accordance of section 349 and 350 during the three financial years immediately preceding whichever is greater.

f) Every resolution passed by the company in general meeting to borrow moneys shall specify the total amount up to which moneys may be borrowed by the Board of directors. Likewise every resolution passed by the company in general meeting to contribute to charitable and other funds shall specify the total amount, which may be contributed to charitable and other funds in any financial year.

Political Contributions: [Section 293 A]

Companies can give political contributions to the political parties or for political purpose to any person directly or indirectly out of their profits. However there are some restrictions on these contributions, which are as follows.

a) Political contributions to any political parties or to persons for political purposes are prohibited for Government companies and other companies which are in existence for less than 3 years

b) Any amount or aggregate of the amounts so contributed by a company in any financial year shall not exceed 5% of its average net profits during the three immediately preceding financial years.

c) Before any such contribution is made by the company, a resolution authorizing the making of the contribution shall be passed at a meeting of the Board of directors. Such resolution shall be deemed to be justification in law for the making of the contributions authorized by it.

d) The company shall disclose in its profit and loss account the amount or amounts of such contributions during the financial year to which that account relates giving the particulars of the total amount contributed and the name of the party or persons to which or to whom such amount has been contributed.

10.4 DUTIES OF DIRECTORS

General duties of directors are discussed below.

a) Fiduciary Duties: There is a fiduciary relationship between the company and the directors. Hence the directors have to perform duties, which are of fiduciary nature. These duties include,

- ❖ Exercising their powers honestly and bona fide for the benefit of the company as a whole and
- ❖ Not to place themselves in a position in which, there is a conflict between their duties

to the company and their personal interests. They must not make any secret profits out of their position. If they indeed make any secret profits, they will have to account for it to the company.

- ❖ These duties are owed to the company and not to the individual shareholders.

b) Duties of care, skill and diligence: Directors should carry out their duties with reasonable care and exercise such degree of skill and diligence as is reasonable expected of persons of their knowledge. The standard of care, skill and diligence depends upon the nature of company's work, business and circumstances of the case.

c) Other duties of directors include attending Board meetings as well as to disclose his interest in a contract and not to delegate his functions except to the extent authorized by the Act or the constitution of the company.

10.5 CONTRACTS IN WHICH DIRECTORS ARE INTERESTED

According to section 297 (1), except with the consent of the Board of directors of a company, a director of the company or his relative, a firm in which such a director or relative is a partner, any other partner in such a firm, or a private company of which the director is a member or director shall not enter into any contract with the company,

a) For the sale, purchase or supply of any goods, materials or services or

b) After the commencement of this Act, for underwriting the subscription of any shares in, or debentures of the company.

c) In case of a company having a paid up share capital of not less than one crore rupees, no such contract shall be entered into except with the previous approval of the Central Government.

According to section 297 (2), the sub section (1), clause a shall not affect,

a) The purchase of goods and materials from the company, or the sale of goods and materials to the company, by any director, relative, firm, partner or private company as aforesaid for cash at prevailing market prices or

b) Any contract or contracts between the company on one side and any such director, relative, firm, partner or private company on the other for sale, purchase or supply of any goods, materials and services in with either the company or the director, relative, firm, partner or private company as the case may be, regularly trades or does business, provided the cost of goods or services do not exceed Rs. Five thousand rupees in aggregate.

c) In the case of a banking or insurance company any transaction in the ordinary course of business of such company with any director, relative, firm, partner or private company as aforesaid.

d) When the value of goods or services exceed Rs. Five thousand in the aggregate in any year comprised in the period of the contract, the consent of the Board shall be obtained at a meeting within three months of the date on which the contract was entered into.

- According to section 299, every director of a company, who is directly or indirectly concerned or interested in a contract or proposed contract entered into, or to be entered into, by or on behalf of the company, shall disclose the nature of his concern or interest at a meeting of the board of directors. In case of a proposed contract, such disclosure shall be made by a director at the meeting of the Board at which the question of entering into the contract or agreement is first taken into consideration. In the case of any other contract or arrangement, the required disclosure shall be made at the first meeting of the Board held after the director becomes interested in the contract. For this purpose, the director concerned shall give a notice to the Board to this effect. This is deemed to be sufficient disclosure of the interest.
- A director of a company must not place himself in a position in which his personal interest clashes with his duty. Therefore he should not take part in the discussion of or vote as a director on any contract or arrangement in which he is directly or indirectly interested unless authorized by the articles. In case he votes, his vote would not be counted. Even his presence shall not be taken into consideration while computing the quorum for the meeting. Every director who knowingly contravenes with these provisions, shall be punishable with fine which may extend to Rs.50000.
- Register of Contracts: As per section 301, every company shall keep one or more register in which shall be entered separately particulars of all contracts entered into by the company in which any of the directors is interested. The following particulars, to the extent they are applicable in each case, shall be given in the register.

  a) The date of the contract or arrangement

  b) The names of the parties thereto

  c) The principal terms and conditions thereof

  d) The date on which it was placed before the board of directors and

  e) The names of the directors voting for and against the contract and the names of those remaining neutral.

  f) The register aforesaid shall be placed before the next meeting of the Board of directors and shall then be signed by all the directors present at the meeting. The register shall be kept at the registered office of the company and shall also be open to the inspection of any member of the company and extracts may be taken there from and copies of the same may be required by any member of the company.

Director Identification Number (DIN)

According to section 266 A, every individual, intending to be appointed as director of a company or director of a company appointed before the commencement of the Companies [Amendment] Act, 2006, shall make an application for allotment of Director Identification

Number to the Central Government in such form and manner [including electronic form] along with such fees as may be prescribed. Such an application shall be made within 60 days of the commencement of this Act.

Section 266 B provides that the Central Government shall, within one month from the receipt of the application, allot a Director Identification Number to an applicant, in such manner as may be prescribed. The Identification Number shall be only one and no director shall apply, obtain or possess another identification number. The identification number shall be informed to the company or all companies wherein he is a director within one month of the receipt of the number. The number shall also be informed to the Registrar within one week of the receipt of the number. Every person or company, while furnishing any return, information or particulars as are required to be furnished under this Act, shall quote the Director Identification Number in such returns, information or particulars in case such return, information or particulars relate to the director or contain any reference to the director.

10.6 MANAGING DIRECTORS AND MANAGERS

A managing director is a director who is entrusted with substantial powers of management, which would not otherwise be exercisable by him. These powers may be conferred upon him by virtue of an agreement with the company or a resolution passed by the company in a general meeting or by its Board of directors or by virtue of its memorandum or articles of association.

The term 'Managing Director' includes a director occupying the position of a managing director, by whatever name called. But the power to do administrative acts of a routine nature when so authorized by the Board such as the power to affix the common seal of the company to any document or to draw and endorse any cheque on the account of the company or to draw and endorse any negotiable instrument or to sign any share certificate or to direct registration of transfer of any share, shall not be included within substantial powers of the management. The managing director shall exercise his power subject to superintendence, control and direction of its Board of directors. He is a whole time director and is the chief executive of the company.

Appointment: Every public company or a private company, which is a subsidiary of a public company, having a paid up share capital of Rs.5 crores or more shall have a managing or whole time director or a manager. [Section 269] Various other provisions are as follows.

a) Prior approval of the Central Government shall be required for the appointment of managing director if the appointment is not according to the conditions prescribed in schedule XIII. Schedule XIII also prescribes the remuneration payable to the managerial persons.

b) If prior approval of the Central Government is required, an application should be made within 90 days from the date of appointment to the Central Government.

c) The Central Government shall not accord its approval to the application unless it is satisfied that the managing or whole time director or the manager is a fit and proper person, and the terms and conditions of his appointment are fair and just.

d) If the appointment is not approved by the Central Government, the person so appointed shall have to vacate his office immediately on the receipt of the order from the Central Government. If he fails to do so, he shall be punishable with a fine which may extend to Rs.5000 for every day during which he omits or fails to vacate his office.

Disqualifications of Managing Director: According to section 267, no person, shall be appointed as a managing director or whole time director who,

a) Is an un-discharged insolvent, or has at any time been adjudged an insolvent

b) Suspends, or has at any time suspended payment to his creditors or makes or has at any time made, composition with them or

c) Is or has at any time been, convicted by a Tribunal of an offence involving moral turpitude.

d) Disqualifications of a director also apply to a managing or whole time director.

e) A person may be appointed as a managing director in a public company or in a private company which is a subsidiary of a public company, provided he is not holding the office of the managing director or the manager in any other company including a private company which is not a subsidiary of a public company. He can, however hold such office in any number of private companies which are not subsidiaries of public companies. A public company, or a private company, which is a subsidiary of a public company may appoint or employ a person as its managing director if he is the managing director or manager of one and not more than one company including a private company, which is a subsidiary of a public company. But any such appointment shall be approved by a resolution passed at a meeting of the Board of directors with the consent of all the directors present at the meeting. Specific notice of such a meeting and the resolution shall also be given to all the directors then in India.

f) The term of office of a managing director or whole time director shall not exceed 5 years at a time. There is nothing to prohibit re-appointment, re-employment or the extension of the term of office of the managing director. But any such new term shall not be sanctioned earlier than 2 years from the date on which it is to come into force. [Section 317] This section shall not be applicable to a private company.

Manager

According to section 2 [24], manager means 'An individual who has the management of the whole or substantially the whole of the affairs of a company'. A manager is subject to the superintendence, control and direction of the Board of directors. Manager includes a director or any other person occupying the position of a manager, by whatever name called and whether under a contract of service or not. The following are the provisions of the Company Law regarding the appointment of manager.

a) A firm or body corporate cannot be appointed as a manager

b) A person shall not be appointed as a manager if he is an un discharged insolvent or has at any time within the preceding five years been adjudged as insolvent or has suspended payment to his creditors within the preceding five years or is or has at any time within the preceding five years been convicted by a Court in India of an offence involving moral turpitude.

c) A company shall not appoint a person as a manager if he is already a manager or a managing director of another company. However a company may appoint a person as a manager if he is the manager or managing director of any other but only one company. This appointment shall have to be made by a resolution passed at a meeting of the Board of Directors with the consent of all the directors present at the meeting.

d) The manager of a company shall be subject to the overall limits of managerial remuneration. Such remuneration shall not exceed 5% of the net profits of the company without the approval of the Central Government. Any increase in the remuneration shall require the prior approval of the Central Government.

e) Office of manager cannot be assigned.

f) A manager shall not be appointed for a term exceeding five years at a time.

10.7 REMUNERATION OF DIRECTORS

There are elaborate provisions in the Company Law regarding the remuneration payable to the directors. These provisions are given below.

1) The remuneration payable to the directors of a company, including any managing or whole time director shall be determined in accordance with and subject to the provisions of section 198 and this section, either by the articles of the company or by a resolution or, if the articles so required, by a special resolution, passed by the company in general meeting and the remuneration payable to any such director determined as aforesaid shall be inclusive of the remuneration payable to such director for services rendered by him in any other capacity. Any remuneration for services rendered by any such director in any other capacity shall not be so included if the services rendered are of a professional nature and in the opinion of the Central Government, the director possesses the requisite qualifications for the practice of the profession. [Section 309(1)]

2) A director may receive remuneration by way of a fee for each meeting of the Board of a committee thereof, attended by him. [Sub section 2]

3) A director, who is either in the whole time employment of the company or a managing director may be paid remuneration either by way of a monthly payment or at a specified percentage of net profits of the company or partly by one way and partly by the other. Without the sanction of the Central Government, such remuneration shall not exceed five percent of the net profits of the company for one such director and if there is more than one director, ten percent for all of them. [Sub section 3]

4) A director who is neither in the whole time employment of the company nor a managing director may be paid remuneration either by way of monthly, quarterly or annual payment with the approval of the Central Government or by way of commission if the company authorizes such payment by a special resolution. Such remuneration shall not exceed one percent of the net profits of the company if the company has a managing or whole time director or a manager and three percent of the net profits of the company in other case. Any excess remuneration than the above mentioned percentages shall be allowed if the company in general meeting with the prior approval of the Central Government has authorize the payment. [Sub section 4]

5) The net profits referred to in 3 and 4 above, shall be computed in the manner referred to in section 198 sub section (1). [Sub section 5]

6) If any director draws or receives, directly or indirectly, by way of remuneration any such sums in excess of the limit prescribed by this section or without the prior approval of the Central Government, where it is required, he shall refund such sums to the company and until such sum is refunded, hold it in trust for the company. [Sub section 5A]

7) The company shall not waive the recovery of any sum refundable to it under sub section 5A unless permitted by the Central Government.

8) No director of a company who is in receipt of any commission from the company and who is either in the whole time employment of the company or a managing director shall be entitled to receive any commission or other remuneration from any subsidiary of such company. [Sub section 6]

9) The provisions of this section shall not apply to a private company unless it is a subsidiary company of a public company. [Sub section 9]

STUDY NOTE - 11

COMPANY MEETINGS

This Study Note includes:

- Introduction
- Types of Company Meetings
- Essentials of a Valid Meeting
- Types of Resolutions
- Other Aspects
  - Proxies
  - Voting at the Meeting
  - Resolutions

11.1 INTRODUCTION

The corporate system of business organization is essentially democratic in structure. Officials acting under the orders of the Board of Directors, which is the executive head of the company, carry on the business of the company. But the directors are elected to the Board by the shareholders of the company and must abide by the wishes of the shareholders as expressed in resolutions passed in meetings convened for the purpose. The shareholders are subject to the provisions of Memorandum of Association and Articles of Association, the final authority as regards the affairs of the company. The shareholders cannot interfere in the day-to-day administration of the company. But they can elect Directors who will carry on the administration in the manner desired by them. Also there are many matters, which are beyond the powers of the Board of Directors to decide and which must be placed before the shareholders for decision. Meetings of shareholders are held for this purpose and the decisions of shareholders are expressed in the form of resolution.

11.2 TYPES OF MEETINGS

The following are the types of company meetings.

A. Shareholders' Meetings

- ➢ Statutory Meeting
- ➢ Annual General Meeting
- ➢ Extra-ordinary General Meeting

B. Creditors' Meetings

C. Debenture holders' Meetings

D. Meetings of Directors

Provisions of Company Law regarding these meetings are discussed in the following paragraphs.

A. Shareholders' Meetings:

I] Statutory Meetings:

- Every public company limited by shares and every company limited by guarantee and having a share capital, must within a period of not less than one month and not more than six months from the date at which the company is entitled to commence business, hold a general meeting of members to discuss a report by directors, known as statutory report, which contains particulars relating to the formation of company.
- Statutory Report: This is a report drafted by director and certified as correct by at least two of them [including managing director where there is one] A copy of the report must be sent to every member at least 21 days before the date of the meeting. A copy is also to be sent to the Registrar for registration. Section 165 [3] provides that the statutory report must contain the following particulars.

  I. The total number of shares fully paid up and partly paid up allotted.

  II. The total amount of cash received by the company in respect of the shares

  III. An abstract of the receipts, classifying them according to source and mentioning the expenses incurred for commission, brokerage etc.

  IV. The names, address and occupations of directors, auditors, manager and secretary and changes of the names, addresses etc.

  V. Particulars of contracts, which are to be submitted to the meeting for approval with proposed modifications if any.

  VI. Details of underwriting contracts if any

  VII. Calls in arrears from directors and others

  VIII. Particulars of commission and brokerages paid to directors and managers.

Particulars as regards cash in the statutory report are to be certified as correct by the auditors of the company.

The members of the company who are present at the meeting are at liberty to discuss any matter relating to the formation irrespective of previous notice is given or not. But no resolution can be passed of which notice has not been given in accordance with the provisions of the Act.

If default is made in complying with the provisions of Section 165, every director or other officer of the company who is in default shall be punishable with fine, which may extend to Rs.500.

II] Annual General Meeting :

General meeting of a company means a meeting of its members for specified purposes. There are two kinds of general meetings. The first one is the Annual General Meeting and the second one is the other general meeting. The legal provisions about the Annual General Meeting are summarized below.

- The first annual general meeting of a company may be held within a period of not more than 18 months from the date of its incorporation. If such a meeting is held within this period, it shall not be necessary for the company to hold any annual general meeting in the year of its incorporation or in the following year. Subject to this provision, a company must hold an annual general meeting each year. Not more than 15 months shall elapse between the date of one annual general meeting and the next. The Registrar may for any special reason, extend the time of holding an annual general meeting [other than the first annual general meeting] by a period not exceeding 3 months. The notice, by which an annual general meeting is called, must specify it as such. Every annual general meeting shall be called during business hours, on a day, which is not a public holiday, at the registered office of the company or at some other place within the town or village where the registered office is situated. The Central Government may exempt any class of companies from the provisions mentioned in this paragraph. The time of holding of annual general meeting may be fixed by the articles of the company. A public company or a private company, which is a subsidiary of a public company, may be a resolution passed in one general meeting, fix the time for its subsequent general meetings. Other private companies may do so by a resolution agreed to by all the members thereof.
- A general meeting may be called by giving not less than 21 days notice in writing. The annual general meeting may be called with a shorter notice if it is agreed to by all the members entitled to vote in the meeting.

III] Extra-ordinary General Meetings :

Any meeting of shareholders other than statutory meeting and annual general meeting is an extra ordinary general meeting. As per Company Law, even though Board of Directors is the highest authority in case of a company administration, there are limitations on their powers.

There are several powers given to the Board of Directors, which are to be exercised only with the consent of the shareholders in a general meeting. If there is an urgent issue on which shareholders' sanction is to be obtained and if it is advisable to wait till the next annual general meeting, an extra ordinary general meeting is called. This meeting can be called by any one of the following parties.

- Board of Directors: The Board of Directors on their own or on the request of specified number of shareholders can call this meeting. For this meeting a notice of 21 days is to be given though a shorter notice than this may also be given under certain circumstances.

- The Board of Directors can be compelled to call extra ordinary general meeting upon a request or requisition made for it, under the following conditions. The requisition must be signed by members holding at least $1/10^{th}$ of the paid up capital of the company and in the case of companies not having share capital, by members holding at least $1/10^{th}$ of the total voting powers. The requisition must set out the matters, which will be considered at the meeting. The Board must, within 21 days of the receipt of a valid requisition, issue a notice for the holding of the meeting on a date fixed within 45 days of the receipt of the requisition. If the Board does not hold the meeting as aforesaid, the requisitionists can call a meeting to be held on a date fixed within 3 months of the date of the requisition. Resolutions, properly passed at this meeting called by requisionists are binding on the company.

11.3 ESSENTIALS OF A VALID MEETING

The following are the essentials of a valid meeting.

I] Proper Authority :

The meeting must be convened by a proper authority. The Board of Directors is the proper authority to convene a meeting by passing a resolution in their meeting, about convening a meeting.

II] Notice :

Notice of every meeting must be given to a) all members entitled to vote up on the matters which are proposed to be dealt with the meeting. b) The persons on whom the share of any deceased or insolvent members may have devolved and c) Auditor or auditors of the company. If notice of a meeting is not given to every person entitled to receive notice, any resolution passed in the meeting shall be invalid.

Length of the notice: As per the section 171 (1), notice of a general meeting should be given at least 21 days before the date of the meeting and in writing. However, a shorter notice may be given in the following cases.

- In the case of an annual general meeting, if all the members entitled to vote agree to that effect and

- In case of any other meeting, if members of the company who are holding 95% of the paid up share capital, where the company has share capital and where the company do not have share capital holders of 95% of the total voting power of the company agree to that effect.

Contents and Manner of service of notice: Every notice of a meeting of a company, shall specify the place and the day and hour of the meeting and shall contain a statement of the business to be transacted in the same. According to section 173 (1), in case of an annual general meeting, all business to be transacted at the meeting shall be deemed to be special, with the exception of business relating to a) Consideration of accounts, balance sheet and the reports of the board of directors and auditors. b) Declaration of dividends c) Appointment of directors in the place of those retiring and d) the appointment of, and the fixing of the remuneration of the auditors and in case of any other meeting, all business shall be deemed to be special.

For every special business, an explanatory statement setting out all the material facts concerning each such item of business should be included in the notice. [Section 173 (2)]

III] Quorum :

Quorum is the minimum number of members, which must be present in the meeting to make the meeting a valid one. Provisions regarding quorum are given in the section 174 and are given below.

- Unless the articles provide otherwise, in case of public limited company [Except the deemed public company under section 43 A] the quorum shall be five members personally present and in case of a private limited company, the quorum shall be two members present personally.
- If within half an hour from the time appointed for holding a meeting of the company, a quorum is not present, the meeting, if called upon the requisition of members, shall stand dissolved. [Section 174 (3)]
- In any other case, the meeting shall stand adjourned to the same day in the next week, at the same time and place or to such other day and at such other time and place as the board may decide. [Section 174 (4)]
- If at the adjourned meeting also, a quorum is not present, within half an hour from the time appointed for holding the meeting, the members present shall be a quorum. [Section 174 (5)]
- The above sub sections 3, 4, and 5 shall be subject to the provisions of the articles of the company.

IV] Chairman :

Unless the articles of association provide otherwise, the members personally present at the meeting shall elect one of themselves to be the chairman thereof by show of hands. If poll is demanded for election of a chairman, it shall be taken immediately as per the provisions of the Act, the chairman elected by show of hands, exercising all powers of the chairman under the said provisions. If some other person is elected chairman as a result of the poll, he shall be the chairman of the meeting. [Section 175 (1) to (3)]

V] Minutes :

Minutes are records of the business transacted at the meeting. Provisions of section 193 are summarized below.

i. Every company shall prepare minutes of all proceedings of every general meeting and of all proceedings of every board meeting as well as the meeting of committee of the board within 30 days of the date of such meeting.

ii. The book in which the record of the proceedings of a meeting is kept is known as the minute book. Separate minutes books are required to be kept for shareholders general meetings of the company and directors meetings and usually there are also separate minute books for committee meetings of the board of directors. The page of every minute book shall be consecutively numbered. There should not be any attaching or pasting of papers of proceedings of a meeting in the minute book in any case.

iii. Each page of the minute book, which records proceedings of a board meeting shall be initialed or signed by the chairman of the meeting of the same meeting or the next succeeding meeting. The last page of the record of proceedings of each meeting in the minutes book shall be dated and signed. This has to be done,

   - In the case of a board or a committee meeting, by the chairman of the same or the next succeeding meeting and
   - In case of a general meeting, by the chairman of the same meeting within 30 days of the meeting, or in the event of death or inability of that chairman within 30 days of the meeting, by the director duly authorized by the board for that purpose.

iv. The minutes of a meeting shall contain a fair and correct summary of the proceedings of the meeting, so that the absentee shareholders may be in a position to form some reliable idea of what transpired at these meetings. All appointments of officers made at any of the meetings aforesaid shall also be included in the minutes of the meeting.

v. Minutes of meetings kept in accordance with the provisions of section 193 shall be evidence of the proceedings recorded therein and shall be conclusive of the facts stated therein.

11.4 OTHER ASPECTS

The other aspects regarding the meeting are discussed below.

I] Proxies :

As per section 176 (1), any member of a company, who is entitled to attend and vote at a meeting of the company shall be entitled to appoint another person [whether a member or not] as his proxy to attend and vote instead of himself, but the proxy shall not have any right to speak at the meeting. A member of a private company shall not be entitled to appoint more than one proxy. A proxy shall not be entitled to vote except on a poll. Section 176 (2) provides that in every notice calling a meeting of a company, which has a share capital, or the articles of a company provide so, there shall be a statement given prominently stating that a member entitled to attend and vote is entitled to appoint a proxy or more than one proxies wherever allowed, to attend and vote instead of himself and that a proxy need not be a member. The duly filled in proxy forms should be deposited with the company at least 48 hours before the start of the meeting. Any provision in the articles of a public company or a private company, which is a subsidiary of a public company, making it compulsory to file the proxy forms before more than 48 hours shall be invalid. The instrument appointing a proxy, shall be in writing and be signed by the appointer or his attorney duly authorized in writing or if the appointer is a body corporate, be under its seal or be signed by an officer or an attorney duly authorized by it.

II] Voting at the meeting :

There are several occasions, when a voting is to be arranged at the meeting. The following methods of voting are used for this purpose.

i. Voting by show of hands: As per section 177, at any general meeting, a resolution put to vote at the meeting, shall unless a poll is demanded under section 179, be decided by show of hands. Declaration given by the chairman regarding the declaration of result of voting by show of hands shall be conclusive. [Section 178]

ii. Voting by Poll: Before or on declaration of the result of voting on any motion by show of hands, a poll may be taken by the chairman of the meeting either on his own accord or on the demand made to that effect by the persons specified below.

    - In case of a public company having a share capital, a poll shall be taken on a demand by any member or members present in person or by proxy and holding at least $1/10^{th}$ of the total voting power in respect of the resolution or on which an aggregate sum of Rs.50000 has been paid up.
    - In the case of a private company, having a share capital, by one member having the right to vote on the resolution and present in person or by proxy if not more than seven such members are personally present, and by two such members present in person or by proxy if more than seven members are present personally.
    - In the case of any other company, by any member or members present in person or by proxy and having not less than one tenth of the total voting power in respect of the resolution.
    - Demand for poll can be withdrawn at any time by the person or persons who made the demand.

- A poll demanded on a question or adjournment or the appointment of a chairman shall be taken forthwith. In any other case it shall be taken within 48 hours of the demand for poll. [Section 180]

- A poll is complete when its result is ascertained and not on an earlier day when the votes were cast. Where a poll is taken, the meeting is regarded as continuing until the ascertainment of the result of the poll. A meeting reconstituted after a poll is in continuance of the same meeting and a poll itself is part of the meeting.

- The chairman of the meeting has the power to regulate the manner in which a poll is to be taken. The most commonly followed method is 'ballot paper' on which the members record their decision, i.e. for or against the motion. The result of the poll shall be declared by the chairman. [Section 185]

III] Resolutions :

A] Ordinary Resolution: A resolution is an ordinary resolution when at a general meeting, the notice has been given, votes cast [whether by show of hands or on a poll as the case may be], in favor of the resolution [including the casting vote if any of the chairman] by members, who benign entitled so to do, vote in person, or where proxies are allowed by proxy, exceed the votes, if any, case against the resolution by members so entitled and voting. [Section 189 (1)] In other words, for passing a ordinary resolution a simple majority is required. Thus when in a general meeting, 100 members are present and entitled to vote and out of these 100 members, if 51 vote for the resolution and 49 vote against the same, the resolution is passed. Some of the occasions where ordinary resolution is required are as follows.

- Passing of annual accounts and balance sheet along with report of the Board of Directors.
- Appointments of first and subsequent directors
- Issue of shares at a discount
- Alteration of share capital
- Declaration of dividends
- Appointing auditors and fixing his remuneration

B] Special Resolution: A special resolution is the resolution, which has the following features.

- The intention to propose the resolution as a special resolution has been duly specified in the notice calling the general meeting.

- The votes cast in favor in the resolution are at least 75% of the total votes cast in connection with the resolution.

- The notice and agenda include an explanatory statement setting out all material facts concerning the subject matter of the special resolution including the nature of concern or interest of every director and the manager if any shall be annexed to the notice of the meeting.

- A copy of every special resolution together with the copy of the explanatory statement should be filed with the Registrar within 30 days of the passing of the resolution.

- Some of the occasions where special resolution is required are given below.

  - Alteration of memorandum for changing the place of registered office from one State to other with the permission of the Tribunal.

  - Change of name of the company

  - Alteration of the articles of association

  - Payment of interest out of capital

  - Applying to the Court to wind up of a company.

C] Resolution Requiring Special Notice : This is not a separate type of resolution as such. It is actually an ordinary resolution for which a special notice is required to be given. Section 190 (1) provides that where the Act or articles provides so, a special notice of not less than 14 days should be given for certain resolutions 14 days before the meeting in which a resolution is moved, exclusive of the day on which the notice is served or deemed to be served and the day of the meeting. Sub section (2) of section 190 provides that, on receipt of the notice, the company shall give its members notice of the resolution in the same manner as it gives notice of the meeting, or if that is not possible, shall give them notice thereof, either by advertisement in a newspaper having an appropriate circulation or any other mode allowed by the articles not less than seven days before the meeting. A special notice is required for a resolution in the following cases.

- Appointment of an auditor other than the retiring auditor
- Provision that a retiring auditor shall not be re-appointed
- Removal of a director before the expiry of his period
- Appointment of a director in place of one who is removed

Additional grounds in respect of which a special notice is required may be provided in the articles of association of the company.

D] Resolutions passed at adjourned meetings : [Section 191] – Where a resolution is passed at an adjourned meeting of,

a) A company,
b) The holders of any class of shares in a company or
c) The Board of Directors of a company,

The resolution shall, for all purposes, be treated as having been passed on the date on which it was in fact passed and shall not be deemed to have been passed on any earlier date.

E] Passing of resolution by Postal Ballot : [Section 192 A] – A listed public company may and in the case of resolutions relating to such business as the Central Government may, by notification, declare to be conducted only by postal ballot, shall, get any resolution passed by means of a postal ballot, instead of transacting the business in general meeting of the company. Where a company decides to pass any resolution by resorting to postal ballot, it shall send a notice to all the shareholders, along with a draft resolution explaining the reasons therefore and requesting them to send their assent or dissent in writing on a postal ballot within a period of 30 days from the date of posting of the ballot. The notice shall be sent by registered post or by any other method as may be prescribed by the Central Government on this behalf, and shall include with the notice, a postage prepaid envelop for facilitating the communication of the assent or dissent of the shareholders to the resolution within the said period. If a resolution as assented to by a majority of the shareholders by means of postal ballot, it shall be deemed to have been duly passed at a general meeting convened in that behalf.

STUDY NOTE - 12

BORROWING POWERS

This Study Note includes:

- Introduction
- Borrowing Capacity
- Legal Consequences of Ultra Vires Borrowings
- Charges - Fixed and Floating Charges and its legal Provision of the Same
- Debentures

12.1 INTRODUCTION

A company raises funds to run the business by issuing share capital. Funds are also raised through internal sources i.e. undistributed profits and reserves. In addition to these sources, a company can also raise funds through borrowings. Every company, unless prohibited by its memorandum or articles has implied power to borrow money for the purpose of its business. It also has the power to give security for the loan by creating a mortgage or charge on its property. A non- trading company, on the other hand has no implied power to borrow. It requires express power to do so and must be incorporated in the articles of association of that company. The relevant provisions regarding borrowing and creation of charge are discussed in this chapter.

12.2 HOW MUCH A COMPANY CAN BORROW?

Though a company has power to borrow, it does not mean that it can borrow without any limits as such. A company should consider its capacity to service the borrowings before an amount is borrowed. The Law also puts certain restrictions on the borrowings made by a company. When a company has express or implied power to borrow, it can borrow subject to the limits set by the memorandum or articles of association. A public company having a share capital cannot exercise borrowing power unless the certificate of commencement of business is obtained by it. [Section 149 (1)]

CONSEQUENCES OF EXCESS BORROWINGS :

As long as the borrowings are within the limits, there are no legal problems as such. However if the company borrows more amounts than permitted by its memorandum or articles, it is called as ultra vires borrowing. [Ultra means beyond and vires means powers, thus ultra vires means beyond the powers of the company] Sometimes the borrowings may be within the limits set by the memorandum or articles but it may be beyond the scope of authority of the directors. Thus in this case the borrowings are intra vires to the company but are ultra vires to the directors. There are legal implications of both these types of borrowings. These implications are discussed below.

12.3 LEGAL CONSEQUENCES OF ULTRA VIRES BORROWINGS

If the borrowings are ultra vires the company, it is totally void. Actually there is no debt at all for the company and if at all some securities are given, they also become void. Thus in other words, the lenders have no right to recover the debt against the company. Therefore it is always advisable for the lenders to make sure that the loans given by them are within the powers of the company, otherwise they will loose the amount of loan given to the company. However, even in the case of ultra vires borrowings, the lenders have some rights. These rights are as follows.

12.3.1 LENDERS' RIGHTS IN CASE OF ULTRA VIRES BORROWINGS :

The lenders have the following rights when it is ultra vires borrowings.

i. Injunction: This right is exercisable when the company has not spent the money borrowed as a result of ultra vires borrowings. A lender can go the Tribunal and claim injunction restraining the company from spending the money borrowed. However, once the company has spent the money, this remedy is lost.

ii. Subrogation: If the money borrowed as a result of the ultra vires borrowings has been used to pay some intra vires borrowings, the lender of the ultra vires borrowings takes the place of the intra vires lender to the extent of the loan repaid. This is known as principle of subrogation. In other words, the lender of the ultra vires borrowings enters into the shoes of the lender of the intra vires lender and to that extent the amount of loan becomes intra vires. Thus for example, if A has given some loan to a company of Rs.1000000, which is ultra vires and if out of the same, Rs.500000 are used to repay an intra vires loan, Rs.500000 of the ultra vires borrowings becomes intra vires borrowing and the A can claim the repayment of the same. Remaining amount, however remains as ultra vires borrowings.

iii. Identification and Tracing: If it is possible for the lender to identify the money lent by him, or any property purchased with it, he can trace the same and claim it. However, this is possible only when the company has not spent the money and it is still in the hands of the company.

iv. Claim for damages: The lender of the ultra vires borrowings, may claim compensation or damages for breach of authority against the directors of the company. However the doctrine of constructive notice applies here. If it was possible for the lender to find out from the memorandum or articles about the borrowing powers and the ultra vires borrowings, the lender cannot claim damages for the same.

12.3.2 BORROWING BEYOND AUTHORITY OF DIRECTORS BUT INTRA VIRES THE COMPANY:

Sometimes, the borrowings made by the company is ultra vires the directors but intra vires the company. In such cases, the directors of the company has exceeded their authority but the borrowing is not beyond the powers of the company as such. In these cases, the borrowing can be ratified and thus becomes valid. However if the company refuses to ratify the same, as per the law of agency, if the third party knows that the agent has exceeded the authority, there is no remedy available to the third party. Thus the lender cannot recover the amount. However, if the directors have not followed some of the internal procedures, the rule laid down in the doctrine of indoor management [Royal British Bank V/S Turquand] becomes applicable, and the lender can recover the amount.

12.4 CHARGES

As discussed in the earlier in this chapter, power to borrow money includes power to give security for the borrowings. A Charge is a kind of security given by the company to its creditors. A charge includes 'mortgage'. Charge can be created on the assets of the company or on the entire undertaking of the company. A charge can be 'Fixed' or 'Floating'. A fixed charge is on a particular asset of a company. For example, a company can create charge on asset like plant and machinery or land and building or any other fixed asset of the company. A company can use the asset as usual, but if it wants to dispose it off, the permission of the lender will have to take for the same. On the other hand, a floating charge is an equitable charge, which is created on some class of property, which is constantly changing. For example, a company can create a floating charge on inventory, debtors, receivables etc. A company can deal with these assets as usual during the course of business. A floating charge crystallizes into a fixed charge if the company goes into liquidation or ceases to carry on business or a receiver is appointed or a default is made in paying the principal as well as interest on the borrowings.

12.4.1 REGISTRATION OF CHARGES :

As mentioned earlier, a company can create fixed or floating charge on its assets. Certain charges created by the company must be registered with the Registrar, otherwise, they will be void against the liquidator or creditor. These charges are as follows. [Section 125]

(1)

a) A charge for the purpose of securing issue of debentures

b) A charge on the uncalled capital of the company

c) A charge on any immovable property, wherever situated or any interest thereon

d) A charge on the book debts of the company

e) A charge, not being a pledge, on any movable property of the company

f) A floating charge on the undertaking or any property of the company including stock in trade

g) A charge on calls made but not paid

h) A charge on ship or any share in a ship

i) A charge on the goodwill, on a patent or a license under a patent on a trade mark or on a copyright or a license under a copyright.

(2) A charge created out of India and comprising solely property situated outside India

(3) Charge created in India but comprising of property outside India.

A charge must be registered with the Registrar within a period of 30 days from the date of creation of the same. However an extension of 30 days may be given by the Registrar on payment of prescribed fees if he is satisfied that there is a genuine cause for the delay.

12.4.2 EFFECTS OF NON- REGISTRATION :

Certain charges created by the company must be registered with the Registrar as mentioned above. However if the company fails to register the charge the legal implications of the same are as follows.

I. The charge becomes void as against the liquidator and creditor.

II. The money becomes payable immediately.

III. When a charge becomes void for non-registration, no right of lien can be claimed on the documents of title as they are only ancillary to, and were delivered pursuant to, the charge

IV. There shall be penalties due to non registration of charges.

12.4.3 DATE OF NOTICE OF CHARGE :

As per section 126, where any charge on any property of a company required to be registered under section 125 has been so registered, any person acquiring such property or any part thereof, or any share or interest therein, shall be deemed to have notice of the charge as from the date of such registration.

12.4.4 REGISTER OF CHARGES :

The provisions of section 130 regarding the maintenance of register of charges are as follows.

1) The Registrar shall, in respect of each company, cause to be kept a register containing the particulars of all the charges requiring registration under this part. [Sub section (1)]

2) Every company shall forward to the Registrar for being entered in the register kept under sub section (1) the particulars of all the charges requiring registration under this Part in such form and manner and after payment of prescribed fees.

3) The particulars of the charges mentioned above shall be relate to, in the case of charge to the benefit of which, the holders of a series of debentures are entitled, such particular as are specified in the relevant sections and in the case of any other cases, the following particulars shall be given.

    a) If the charge is a charge created by the company, the date of its creation, and if the charge was a charge on the existing on property, acquired by the company, the date of acquisition of the property

    b) The amount secured by the charge

    c) Short particulars of the property charged

    d) The persons entitled to the charge.

4) The pages of the register shall be consecutively numbered and the Registrar shall cause to keep the register in a prescribed form and also prescribe the manner in which the documents are to be filed and sign or initial every page of such register.

5) After entering the particulars of all the charges required, the Registrar shall return the instrument if any or the verified copy thereof, as the case may be, filed in accordance with the provisions of this Part to the persons filing the same.

6) The register kept as per the provisions of this section shall be open to inspection by any person on payment of prescribed fees.

7) The Registrar shall keep a chronological index, in the prescribed form and with the prescribed particulars of the charges registered with him. [Section 130]

8) The Registrar shall give a certificate under his hand of the registration of any charge registered in pursuance of this Part, stating the amounts thereby secured, and the certificate shall be conclusive evidence that the requirement of this Part as to registration have been complied with. [Section 131]

12.4.5 MEMORANDUM OF SATISFACTION :

[Section 138 to 140] – After a charge has been created and registered, the debt has got to be paid or satisfied by the company. When the charge is paid off or satisfied in full, the company shall give a notice of this fact to the Registrar within 30 days from the date of such payment or satisfaction. On receipt of such an information, the Registrar shall inform the holder of the charge of the fact of the payment or satisfaction of the charge. The Registrar shall further call upon the holder of the charge to show cause within a period not exceeding 14 days, why payment or satisfaction should not be recorded as intimated to him. If no cause is shown or if the holder of the charge raises no objection, the Registrar shall enter in the register of charges a memorandum of satisfaction recording this fact. If cause is shown or any objection is raised by the holder of the charge, the Registrar shall record a note to that effect in the register and inform the company accordingly.

12.4.6 REGISTER OF CHARGES AT THE COMPANY:

According to Section 143 every company has to keep at its registered office, a register of charges and enter therein all charges specifically affecting the property of the company and all floating charges on the undertaking or on any property of the company, giving in each case,

a) Short particulars of the property charged

b) The amount of charge and

c) Except in the case of securities of bearer, the names of the persons entitled to the charge

If any officer of the company knowingly omits, or willfully authorizes or permits the omission of any entry, required to be made as per the above particulars, he shall be punishable with a fine which may extend to Rs. 5000.

12.4.7 RIGHT TO INSPECT COPIES OF INSTRUMENTS CREATING CHARGES AND COMPANY'S REGISTER OF CHARGES :

As per provisions of section 144 (sub sections 1 to 4), the copies of the instruments creating charges kept in pursuance of section 136, and the register of charges kept in pursuance of section 143, shall be done during the business hours [subject to reasonable restrictions as the company in general meeting may impose, so that not less than 2 hours in each day are allowed for inspection] to the inspection of any creditor or member of the company without fee at the registered office of the company. The company may charge fees for each inspection. If inspection is refused, the company and every officer of the company, who is in default, shall be punishable with a fine which may extend to Rs.500 and a further fine, which may extend to Rs.200 for every day during which the refusal continues. The Central Government may also by order compel an immediate inspection of the said copies or register. [Section 144 (4)]

12.5 DEBENTURES

The borrowing powers of the company have been discussed in the above paragraphs. Now, we will be discussing, one of the popular form of borrowing, i.e. the debentures. A company can borrow money through the sale of debentures. A 'Debenture' is actually an acknowledgement of a debt, which is taken by the company from the debenture holders. Section 2 [12] of the Companies Act defines debenture as 'debenture includes debenture stock, bonds and any other securities of a company, whether constituting a charge on the asset of the company or not.' A company can issue debentures of various types. These types are discussed below.

12.5.1 TYPES OF DEBENTURES :

The following are the types of debentures

a) Bearer Debentures: These debentures are also called as 'unregistered' and are payable to the bearer. These debentures are freely transferable from one person to another and the bearer is entitled to the interest as well as to the principal amount of the same.

b) Registered Debentures: The holders of these debentures are registered with the company and hence they are called as registered debentures. The registered holders of debentures can transfer these debentures to other persons in the similar fashion of transfer of shares. The transfer is to be registered with the company. Registered debentures are not negotiable instruments while the bearer debentures are negotiable instruments.

c) Secured Debentures: Debentures which create some charge on the property of the company are known as secured debentures. The charge may be a fixed charge or a floating charge.

d) Unsecured Debentures: These debentures have no charge, either fixed or floating on the assets of the company. In other words, no asset is offered as security to them and hence they are called as unsecured debentures.

e) Redeemable Debentures: These debentures are redeemable after the particular period for which they are issued is over. These debentures may be re-issued after their redemption.

f) Irredeemable Debentures: A debenture is irredeemable if either there is no fixed period for the redemption or the repayment of it is made conditional on the happening of an event which may not happen for an indefinite period or may happen only in certain specified and contingent events, for example the winding up of the company.

g) Convertible Debentures: These debentures give an option to the holders to convert them into preference or equity shares at stated rates of exchange after a certain period. If the holders, exercise this option, the debentures get converted, otherwise they can accept cash.

h) Non Convertible Debentures: These debentures do not give an option to the holders of conversion.

12.5.2 ISSUE OF DEBENTURES AT DISCOUNT :

Debentures can be issued at a discount, unless the articles provide otherwise. There are no formalities required to be completed like the ones prescribed in case shares are issued at discount. But the particulars of the debentures issued at discount or any allowance or commission in relation to the debentures issued at a discount are to be filed with the Registrar for registration. Interest payable on debentures may be paid out of capital. Convertible debentures cannot be issued at a discount because it will be an indirect way of issuing shares at discount. A company cannot issue debentures carrying voting rights at any meeting of the company.

12.5.3 DEBENTURE HOLDERS' ACTIONS :

A debenture holder is a creditor of a company. The company owes him the interest on the amount of the debenture as well as the principal amount, which is to be repaid after the expiry of the period for which they are issued. However sometimes, some companies may commit default in paying either the interest or the principal amount or both. In such cases, the debenture holders have some legal remedies against the company. However the positions of the secured and unsecured debentures are different. In case of unsecured debentures, their position is similar to that of the unsecured creditors. The unsecured debenture holders may sue for their principal and interest. They may also file a petition under section 439 for the winding up of the company by the Tribunal on the ground specified in section 433 (e) that is the company is unable to pay its debts.

As regards to the secured debentures, they have the following remedies in addition to both the remedies mentioned above.

a) A secured debenture holder may sue on behalf of himself and all other debenture holders of the same class to obtain payment and enforce his security by sale. This is known as 'debenture holders action' and if several debenture holders sue separately, the Tribunal can consolidate their suits into one.

b) Appointment of Receiver: A Receiver may be appointed if the conditions of issue of debentures give the secured debenture holders the powers to appoint the Receiver. On the appointment of the Receiver, the assets become specifically charged in favor of the debenture holders and the powers of the company to deal in them in the ordinary course of business cease although the company continues to exist until it is wound up.

c) Foreclosure: He may apply to the Tribunal for foreclosure of the company's rights to redeem the debentures. Foreclosure is a process by which the mortgagor, failing to repay the money lent on the security of a property, is compelled to forfeit his rights to redeem the property.

d) Sale: A secured debenture holder may sell the property charges as security if an express power to do so is contained in the terms of issue of the debentures. He may also have the property sold through trustees if such power is given by the debenture trust deed.

e) Proof for the balance: If the company is insolvent and his security is insufficient, he may value his security and prove for the balance. As an alternative, he may surrender his security and prove for the whole amount of his debt.

STUDY NOTE - 13

OPPRESSION AND MISMANAGEMENT

This Study Note includes:

- Introduction
- Meaning of Oppression
- Prevention of Oppression
- Meaning of Mismanagement
- Right to Apply U/S 399
- Powers of Tribunal
- Alteration of Memorandum and Articles of Association of the Company
- Powers of Central Government to Prevent Oppression or Mismanagement
- Principle of Majority Rule

13.1 INTRODUCTION

The affairs of a company are conducted in a democratic manner, which indicates that the majority rule shall prevail. Shareholders of a company are the real owners, however due to their large numbers and spread in a large geographical area, they are not able to take part in the day-to-day administration of the company. Therefore, they elect their representatives, who are known as 'Directors'. The board of directors have wide powers as per the Companies Act 1956. However, some of the powers given to the Board of Directors are to be exercised with the consent of the shareholders in a general meeting. In any general meeting, majority rule shall prevail as laid down in the landmark case of 'Foss V/s Harbottle', which has been explained in the previous chapter. However, it is possible that there might be injustice on the minority at the hands of majority. This may lead into 'oppression' on the minority. In such cases there must be some remedy available to the minority to challenge the majority. Similarly if there is mismanagement of a company, there must be protection given to the minority shareholders to prevent the mismanagement. Hence the Companies Act 1956 has made exhaustive provisions to prevent oppression and mismanagement. These provisions are discussed in detail in the following paragraphs.

13.2 WHAT IS 'OPPRESSION'?

In a landmark judgment, Justice Lord Cooper has observed that, ' The essence of the matter seems to be that the conduct complained of should be at the lowest and involve a visible departure from the standards of fair dealing, and a violation of the conditions of fair play on which every shareholder who entrusts his money to the company is entitled to rely.' Thus oppression should be such that it warrants winding up of the company, however, winding up may not protect the interests of the party affected by such oppression and hence some other type of relief becomes necessary.

13.3 PREVENTION OF OPPRESSION

Section 397 of the Companies Act provides that,

(1) Any members of a company, who complain that the affairs of the company are being conducted in a manner prejudicial to the public interest or in a manner oppressive to any member or members may apply to the National Company Law Tribunal for an order under this section, provided such members have a right so to apply in virtue of section 399.

(2) If, on any application under sub-section (1), the Tribunal is of the opinion,

(a) that the affairs of the company are being conducted in a manner prejudicial to the public interest or in a manner oppressive to any member or members and,

(b) that to wind up the company would unfairly prejudice such member or members, but otherwise the facts would justify the making up of a winding up order on the ground that it was just and equitable that the company would be wound up.

The Tribunal may, with a view to bringing to an end, the matters complained or, make such order as it thinks fit.

Thus, if we analyze the above provisions, the following points emerge.

I. There must be an act or acts done by the company, which are against the interest of the public or are oppressive to any member or members.

II. The act or acts are such that winding up of the company in the given circumstances will be perfectly justifiable. This indicates the seriousness of the act of oppression.

III. However, considering the interests of the member or members, the winding up order would affect the interest of such member or members in an adverse manner. This means that the remedy will be worst than the decease.

IV. Requisite number of members applies to the Tribunal, complaining about the oppression or any other act or acts, which are prejudicial to the public interest.

13.4 MISMANAGEMENT

Regarding mismanagement also, the Tribunal may provide relief as per the provisions of section 398. This section provides that,

(1) Any members of a company who complain -

- (a) that the affairs of the company are being conducted in a manner prejudicial to public interest or in a manner prejudicial to the interests of the company, or
- (b) that a material change (not being a change brought about by, or in the interests of, any creditors including debenture holders or any class of shareholders of the company) has taken place in the management or control of the company, whether by an alteration in its Board of Directors or managers or in the ownership of the company's shares, or if it has no share capital, in its membership, or in any other manner whatsoever, and that by reason of such change, it is likely that the affairs of the company will be conducted in a manner prejudicial to the public interest or in a manner prejudicial to the interests of the company, may apply to the Tribunal for an order under this section, provided that the members have a right to apply in virtue of section 399.

(2) If, on any application under sub-section (1), the Tribunal is of the opinion that the affairs of the company are being conducted as aforesaid or that by reason of any material change as aforesaid in the management or control of the company, it is likely that the affairs of the company will be conducted as aforesaid, the Tribunal, may, with a view to bringing to an end or preventing the matters complained of or apprehended, make such order as it thinks fit.

Thus it is clear from the above provisions that if there is any case of mismanagement of a company, the Tribunal can provide relief to rectify the same. However, the Tribunal will act on the request made by specific number of members and the relevant provisions given in section 399 are given below.

13.5 RIGHT TO APPLY UNDER SECTION 399

As mentioned in the above paragraph, the Tribunal will act on the request made by specified number of members. The provisions of section 399 are as follows.

(1) The following members of a company shall have the right to apply under section 397 or section 398

- (a) In the case of the company having a share capital, not less than one hundred members of the company or not less than $1/10^{th}$ of the total number of members, whichever is less, or any member or members holding not less than one tenth of the issued share capital of the company, provided that the applicant or applicants have paid all calls and other sums due on their shares.

(b) In the case of the company not having share capital, not less than one fifth of the total number of its members.

(2) For the purpose of sub-section (1), where any share or shares are held by two or more persons jointly, they shall be counted only as one member.

(3) Application can be made by any one of the members on behalf of others, after obtaining their consent in writing.

(4) The Central Government may, if in its opinion circumstances exist, which make it just and equitable so to do, authorize any member or members of the company to apply to the Tribunal under section 397 or 398, notwithstanding that the requirements of clause (a) or clause (b) as the case may be, of sub-section (1) are not fulfilled.

(5) The Central Government, may ask such member or members to pay security deposit towards the payment of any costs, if the Central Government feels it necessary to do so.

It should be remembered that the Central Government may itself apply to the Tribunal for an order under section 397 and 398 or authorize any person to apply on its behalf.

13.6 POWERS OF TRIBUNAL

- The Tribunal has powers under section 397 or 398, to pass any order, which may provide for,

(a) The regulation of the conduct of the company's affairs in future.

(b) The purchase of the shares or interests of any members of the company by other members thereof or by the company.

(c) In the case of a purchase of its shares by the company as aforesaid, the consequent reduction of its share capital

(d) The termination, setting aside or modification of any agreement, howsoever arrived at, between the company on the one hand and any of the following persons, on the other, namely,

i. The Managing Director

ii. Any other director

iii. The manager,

Upon such terms and conditions as may, in the opinion of the Tribunal, be just and equitable in all the circumstances of the case.

(e) The termination or setting aside of any agreement shall not be done unless due notice is given to the concerned party and as regards the modification, unless the consent of the concerned party is obtained. Whenever, there is a termination, setting aside or modifications in an agreement, the order directing so, shall not give rise to any claim whatever against the company by any person for damages or for compensation for loss of office or in any other respect, either in pursuance of the agreement or otherwise. [section 407 (1) (a)] The Managing Director or other directors or manager whose agreement is so terminated shall not eligible to be appointed as Managing Director or other director or manager for a period of 5 years from the date of passing of such an order without the approval of the Tribunal. Such approval shall not be granted unless notice of the intention to apply for leave has been served on the Central Government and that Government has been given an opportunity of being heard in this matter. [section 407 (3)]

(f) The setting aside of any fraudulent preference made within 3 months before the date of the application. The period of 3 months should be a clear period of 3 months between the date of transfer and that of application.

(g) Any other matter for which, in the opinion of the Tribunal, it is just and equitable that provision should be made.

- The Tribunal has the powers under section 409 for prevention of change in management, i.e. Board of Directors. If the managing director or any director or manager of a company complains to the Tribunal that as a result of a change in the ownership of shares, a change in the Board of Directors is likely to take place and such change would prejudicially affect the affairs of the company, the Tribunal may order that no such change in the Board of Directors or membership of the company can be made, without its prior approval. The Tribunal shall however satisfy itself by an inquiry as it thinks fit that such an order is necessary. It may also make an interim order to the effect before making or completing the inquiry. Section 409 does not apply to a private company unless it is a subsidiary of a public company.

INTERIM ORDER :

As per section 403, the Tribunal can pass an interim order before passing a final order for regulation of the conduct of the company's affairs as it may feel just and equitable.

13.7 ALTERATION OF MEMORANDUM AND ARTICLES OF ASSOCIATION OF THE COMPANY

The company can make suitable alterations in the Memorandum and Articles of Association, if the order given by the Tribunal under section 397 or 398 makes any alterations in these documents. However such alteration in these documents must be strictly in accordance with the order and for such alteration and should not be inconsistent with the order. Any such alteration, which is consistent with the order shall not require any prior approval of the Tribunal and shall be deemed to have done according to the provisions of the Act. [Section 404 (1) and (2)] The company should file a certified copy of the amended memorandum and articles of association with the Registrar within 30 days of this alteration for registration. [Section 404 (3)] If any default is made in the compliance of the provisions of sub-section 3, the company and every officer of the company, who is in default shall be punishable with fine, which may extend to fifty thousand rupees.[Section 404 (4)]

13.8 POWERS OF CENTRAL GOVERNMENT TO PREVENT OPPRESSION OR MISMANAGEMENT

Under the provisions of the section 408, the Central Government has the powers to take steps for prevention of oppression and mismanagement.

- Section 408, sub-section 1 provides that the Central Government can appoint such number of persons to hold office of directors of the company, as may be directed by the Tribunal by its order in writing. Such persons are appointed to safeguard the interests of the company, or its shareholders or the public interest and the period for which they shall hold the office shall not be more than three years. The Tribunal may pass such an order on a reference made by the Central Government or on an application of not less than one hundred members of the company or of the members of the company, holding not less than one-tenth of the total voting powers therein and is satisfied after an inquiry that such an appointment or appointments are necessary to prevent the oppression and mismanagement in the company. The directors so appointed shall not be required to hold qualification shares, nor shall they retire by rotation. However, they can be removed or replaced by the Central Government. Section 408 (5) provides that no change in the Board of Directors made after a person is appointed or directed to hold the office as a director or additional director shall have effect unless confirmed by the Tribunal. The Central Government may require the persons appointed as the directors or additional directors in pursuance of this section to report to the Central Government from time to time with regard to the affairs of the company.
- Section 388 –B to 388-E empower the Central Government to remove managerial persons from office on the recommendation of the Tribunal. [Please refer to the chapter of 'Directors' for details of the same]

13.9 PRINCIPLE OF MAJORITY RULE

The management of a company is run on democratic principle. This means that, shareholders elect their representative, i.e. directors by voting in the annual general meeting. The directors are thus elected representatives of the shareholder and are responsible for the management and administration of the company. They have been given powers to conduct the business of the company in an efficient manner. However there are limitations on the power of the director and there are several areas, where decision are to be taken only after the sanction of the general meeting. These decisions are taken on the basis of majority, whether simple or three forth. Thus democratic principles are followed in running the company. However, there is a possibility that this majority rule may be misused and may be used to oppress the minority. The principle that the will of the majority should prevail and bind the minority is known as the principle of majority. It was laid down in the landmark judgment in the case of Foss V/S Harbottle, which is given below.

In this case, two minority shareholders, in a company alleged that its directors were guilty of buying their own land for the use of the company and thus paid themselves a higher price than its value. This action of the directors resulted into a loss to the company and minority shareholders decided to take action for damages against the directors. However in a general meeting it was decided by the majority shareholders that no action should be taken against the directors. The minority shareholders filed a suit, which was dismissed by the Court on the ground that the acts of directors were capable of confirmation by the majority of members and held that if something wrong is done to the company, the company itself should take the action and not the minority shareholders.

Thus the above decision upholds the majority rule and the important benefit is that the principle of majority rule is upheld. It is but fair that the majority wish should prevail. Similarly unnecessary litigations at the will of minority have been averted. Thus this decision is a landmark in several respect.

However there are instances where the majority rule has oppressed the minority shareholders. If there is an oppression and mismanagement and if it is proved, the protection of majority rule shall not prevail. Thus in the following situations, the majority rule principle shall not be applicable and the minority rights shall be protected. These are known as exceptions to the rule laid down in the case of Foss V/S Harbottle. These exceptions are given below.

1) When the majority does any Act, which is ultra vires or illegal, the minority shareholders can take action against the majority wish and prevent them from doing so.

2) If the majority are perpetrating a fraud on minority, the minority can take against the majority.

3) Any Act, which is inconsistent with the articles of association can be challenged by the minority.

4) If any decision, which is to be taken by special resolution is in fact done by a simple majority, the minority can bring an action against the majority.

5) Minority shareholders can take action if any personal rights of an individual member have been infringed.

6) Minority shareholder may bring an action against the company, where there is a breach of duty be the directors and majority shareholders to the detriment of the company.

7) If there is mismanagement and oppression, the minority shareholders can bring legal action against the majority.

STUDY NOTE - 14

COMPROMISES, ARRANGEMENTS AND RECONSTRUCTION

This Study Note includes:

- Introduction
- Meaning of Compromises, Arrangements and Reconstruction
- Legal Provisions Concerning Compromises, Arrangement and Reconstruction and Amalgamation
- Inter Corporate Loans and Investments

14.1 INTRODUCTION

As a going concern, a company may have to make adjustments in the form of compromises, arrangements and also reconstruction of its business. Sometimes these adjustments are voluntary while sometimes there may be legal compulsion for the company to do so. Various legal provisions about these adjustments have been discussed in this topic in the following paragraphs.

14.2 MEANING OF COMPROMISES, ARRANGEMENTS AND RECONSTRUCTION

The various terms used in this topic have been defined as follows.

❖ Compromises: This term means settlement or adjustments of claims in dispute by mutual concessions. Thus in other words, compromise pre supposes the existence of a dispute and it means settlement of the same by give and take policy. Compromise does not mean one-sided settlement but involves mutual sacrifices and concessions.

❖ Arrangements: As per section 390 the expression 'arrangements' includes a reorganization of the share capital of the company by the consolidation of shares of different classes, or by the division of shares into shares or different classes or by both these methods. [Section 390 b]

❖ Reconstruction: Reconstruction occurs when a company transfers the whole of its undertaking and property to a new company under an arrangement by which the shareholders of the old company are entitled to receive some shares or other similar interests in the new company.

❖ Amalgamation: Amalgamation takes place when two or more companies combine into one company. The shareholders in the amalgamating company become substantially shareholders of the amalgamated company. Thus when A Ltd. and B Ltd. come together and a new company C Ltd. is formed, it is an amalgamation.

14.3 LEGAL PROVISIONS

14.3.1 COMPROMISES

When compromises are carried out by companies as going concern, the procedure is to be followed. [Section 391 to 393] According to the legal provisions, a compromise or arrangements may be proposed between a company and its creditors or any class of them or between a company and its members or any class of them. The following procedure is to be followed in case of such compromise or arrangements.

I] Once a proposal for compromise or arrangement is made, the company or any creditor or member may apply to the Tribunal for a compromise.

II] The Tribunal shall then direct the calling of a meeting of each class of creditors or each class of members. Before granting sanction to convene such a meeting, the Tribunal, shall satisfy itself that the scheme is reasonable and can be implemented by the company. The meeting shall be held and conducted in a manner as directed by the Tribunal.

III] At the meeting, a resolution approving the compromise or arrangement shall be passed by a majority representing $3/4^{th}$ in value of the creditors or members present at the meeting.

IV] The Tribunal shall sanction any scheme, which is fair and reasonable and made in good faith for the benefit of each class of the members or creditors concerned.

V] Once a compromise is sanctioned by the Tribunal, it becomes binding on all the creditors and members and in the case of a company, which is being wound up, on the liquidator and contributories of the company. However, the Tribunal, is not bound to sanction the compromise or arrangement unless it is satisfied that the company or any other person by whom application has been made has disclosed to the Tribunal all material facts relating to the company such as the latest financial position of the company, the latest auditor's report on the accounts of the company, the pending of any investigation proceedings in relation to the company under relevant sections.

VI] The order of the Tribunal sanctioning the compromise shall have effect only when a certified copy of the order has been delivered to the Registrar for registration. A copy shall also be annexed to every copy of the memorandum issued after the certified copy has been filed.

VII] The Tribunal has the authority to stay the commencement or continuation of any suit or proceedings against the company on such terms as it thinks fit, until the application is finally disposed off.

VIII] An appeal shall lie from any order made by the Tribunal exercising original jurisdiction under section 391 to the Tribunal empowered to hear appeals.

❖ When a company is being wound up subject to the supervision of the Tribunal, the liquidator has the powers under section 546 regarding the compromise or arrangements and he can exercise the same. The powers can be exercised with the sanction of a special resolution of the company. The liquidator may, with the necessary sanction take following actions.

  i. Pay any classes of creditors in full

  ii. Make any compromise or arrangement with creditors or persons claiming to be creditors

  iii. Make compromise with the debtors where such debts arise as a result of calls or otherwise

An arrangement or compromise may also be entered into between a company about to be, or in the course of being wound up and its creditors. Such arrangement is binding on the company and on the creditors, if it is sanctioned by a special resolution of the company. The arrangement is subject to the right of appeal and hence any creditor or contributory may within 3 weeks from the completion of the arrangement, appeal to the Tribunal against it. The Tribunal may, as it thinks just, amend, vary or set aside the arrangement.

14.3.2 RECONSTRUCTION AND AMALGAMATION :

We have defined these terms earlier in this chapter. The procedure to be followed in case of reconstruction and amalgamation is discussed below.

PROCEDURE TO BE FOLLOWED :

The following procedure is required to be followed in case of reconstruction and amalgamation.

i. Where a compromise or arrangement has been proposed for the purpose of reconstruction of a company, or its amalgamation with another company, the scheme shall be approved by the holders of $3/4^{th}$ in value of shares concerned.

ii. The scheme shall then be sanctioned by the Tribunal. The Tribunal may sanction the compromise or arrangement and pass orders for any of the following matters.

  a) The transfer of the undertaking, property, and liabilities of the transferor company to the transferee company.

  b) The allotment or appropriation by the transferee company of any shares, debentures, policies or other like interests in that company, which are to be allotted or appropriated under the contract

c) The continuation by or against any transferee of any legal proceedings by or against the transferor company.

d) The dissolution, without winding up of any transferor company

e) The provision to be made for any persons who dissent from the compromise or arrangement and

f) Such incidental, consequential and supplemental matters as are necessary to secure that the reconstruction or amalgamation shall be fully and effectively carried out.

iii. A compromise or arrangement proposed in connection with a scheme for the amalgamation of a company, which is being wound up, with any other company, shall be sanctioned by the Tribunal. However if the Tribunal has received a report from the Registrar that the affairs of the company have been conducted in a manner prejudicial to the interest of its members or to the public interest, it shall not sanction the compromise or arrangement. A similar report from the Official Liquidator is necessary before the Tribunal orders dissolution without winding up of any transferor company.

iv. A certified copy of the Tribunal order should be filed with the Registrar within 30 days after the making of the order by the Tribunal.

v. The Tribunal shall give the Central Government notice of every application made to it under section 391 or 394. It shall also take into consideration the representations made by the Central Government if any.

DISSENTING SHAREHOLDERS :

[Section 395] – About the rights of dissenting shareholders, provisions of section 395, provide the following.

i. A scheme of reconstruction and amalgamation may involve the transfer of shares by one company to another company.

ii. After the transferee company makes an offer to the shareholders of the transferor company to acquire their shares, the offer shall be approved within 4 months by holders of not less than $9/10^{th}$ in value of the shares of the transferor company. In the computation of the $9/10^{th}$ in the value of the shares, shares already held by the transferee company or its nominee or subsidiary shall not be counted.

iii. When the acceptance of $9/10^{th}$ in the value of the shareholders is duly received, the transferee company shall gent the right to acquire the shares of the dissenting shareholders if any.

iv. Within 2 months, after the expiry of the 4 months [period for approval], the transferee company shall give a notice to the dissenting shareholders that it desires to acquire their shares. The dissenting shareholders may apply to the Tribunal within 1 month of the notice. The Tribunal will interfere if the scheme appears to be oppressive, unjust, unfair or unconscionable or the consent of the majority has been obtained by fraud, deception or any other improper means. If no such application is made to the Tribunal, the transferee company shall be entitled to acquire the shares of all persons on whom the notice is served.

v. When the transferee company acquires the shares and pays their price, the transferor company shall register the transferee company as the holder of those shares. Within one month of the date of such registration, the transferor company shall inform the dissenting shareholders of the fact of such registration and of the receipt of the amount or other consideration representing the price payable to them by the transferee company.

vi. The transferor company shall pay into a bank account [separate] the money received from the transferor company and shall hold the money in trust for its shareholders.

14.3.3 AMALGAMATION OF COMPANIES IN NATIONAL INTEREST :

[Section 396] Where the Central Government is satisfied that it is essential in the public interest that two or more companies should amalgamate, it may be order notified in the Official Gazette, provide for the amalgamation of these companies into a single company. The amalgamated company shall lave such constitution, property, powers, rights, interests, authorities and privileges and shall be subject to such liabilities, duties and obligations as may be specified in the order. The order of the Central Government may provide for the continuation by or against the transferee company of any legal proceedings pending by or against any transferor company. It may also contain such consequential, incidental and supplemental provisions as may be necessary to give effect to the amalgamation. Every member of creditor including a debenture holder, of each of the companies before amalgamation shall have, as nearly as may be, the same interest in or right against the amalgamated company as he had in the company of which he was originally a member or creditor. If his rights in the new company are in any manner less, he shall be entitled to compensation, which shall be assessed by the prescribed authority. Every such assessment shall be published in the Official Gazette.

Any person aggrieved by the assessment of compensation may, within 30 days from the date of publication of the assessment in the Official Gazette, prefer an appeal to the Tribunal. Thereupon the assessment of the compensation shall be made by the Tribunal. Copies of every order made under section 396, shall at the earliest after it has been made, be laid before both Houses of Parliament.

14.4 INTER CORPORATE LOANS AND INVESTMENTS

According to section 372 A,(1) no company, shall directly or indirectly,

a) Make any loan to any other body corporate

b) Give any guarantee, or provide security in connection with a loan made by any other person to, or to any other person by, any body corporate and,

c) Acquire, by way of subscription, purchase or otherwise the securities of any other body corporate,

Exceeding sixty percent of its paid up share capital and free reserves, or one hundred per cent of its free reserves, whichever is less.

It is further provided that where the loans or guarantee or investments made exceed the above mentioned percentages, further loans or guarantee or investments should be given only after passing a special resolution in a general meeting, authorizing these further loans, guarantees or investments.

The Board of directors may give guarantee, without being previously authorized by a special resolution if,

a) A resolution is passed in the meeting of the Board authorizing to give guarantee in accordance with the provisions of this section

b) There exists exceptional circumstances which prevent the company from obtaining previous authorization by a special resolution passed in a general meeting for giving a guarantee and

c) The resolution of the Board under clause (a) is confirmed within twelve months, in a general meeting of the company or the annual general meeting held immediately after passing of the Board's resolution, whichever is earlier.

d) The notice of such resolution shall indicate clearly the specific limits, the particulars of the body corporate in which the investment is proposed to be made, or loan or security or guarantee to be given, the purpose of the investment, loan or security or guarantee, specific sources of funding and such other details.

e) No loan or investment shall be made or guarantee or security given by the company unless the resolution sanctioning it is passed at a meeting of the Board with the consent of all the directors present at the meeting and the prior approval of the public financial institution refereed to in section 4A, where any term loan is subsisting, is obtained.

f) No loan to any body corporate shall be made at a rate of interest lower than the prevailing bank rate, being the standard rate made public under section 49 of the Reserve Bank of India Act 1934.

g) No company, which has defaulted in complying with the provisions of section 58 A, shall directly or indirectly,

   i. Make any loan to any body corporate

   ii. Give any guarantee, or provide security, in connection with a loan made by any other person to, or to any other person by, any body corporate and

   iii. Acquire by way of subscription, purchase or otherwise the securities of any other body corporate, till such default is subsisting.

h) Every company shall keep a register showing the following particulars in respect of every investment or loan made, guarantee given or security provided by it in relation to any body corporate under sub section (1) mentioned above.

   i. The name of the body corporate

   ii. The amount, terms and purpose of the investment or loan or security or guarantee

   iii. The date on which the investment or loan has been made and

   iv. The date on which the guarantee has been given or security has been provided in connection with a loan.

i) The register referred above, shall be kept at the registered office of the company concerned and shall be open to inspection at such office and extracts may be taken there from and copies thereof may be required by any member of the company to the same extent, in the same manner and on payment of the same fees as in the case of the register of members of the company and the provisions of section 163 A shall apply accordingly.

Study Note - 15

WINDING UP

This Study Note includes

- Introduction
- Modes of winding up of a company
- Compulsory winding up
- Voluntary Winding up

15.1 INTRODUCTION

Winding up or liquidation means closure of the company or dissolution of the company. It represents the last stage in the life of a company. During winding up, the assets of the company are sold out, book debts realized and the liabilities are settled. If some amount still remains after the satisfaction of all the creditors, the preference shareholders paid and the equity shareholders are paid at the end depending on the amount available. For completing the entire process, an administrator called as liquidator is appointed and he is responsible for disposing of all the assets, and distributing the proceedings amongst various claimants including creditors and the shareholders. Various legal provisions regarding winding up are discussed below.

15.2 MODES OF WINDING UP

The following are the modes of winding up.

I] Winding up by the Tribunal [Section 433 to 483] Also called as Compulsory Winding Up

II] Voluntary Winding Up [Section 484 to 521] This winding up may be,

- Members' Voluntary Winding Up or
- Creditors' Voluntary Winding Up

We will take up each of the types of the winding up for a detailed discussion. We will start with the Winding Up by The Tribunal or Compulsory Winding Up.

15.2.1 Winding Up By The Tribunal or Compulsory Winding Up:

This winding up, as the name suggests is a compulsory winding up as ordered by the Tribunal. However even this winding up cannot be ordered unless there are compelling reasons for the same. It can be ordered in the following cases.

A] Special Resolution: If members of a company pass a special resolution in a general meeting, the Tribunal may order for winding up of a company. However, when members pass a resolution like this, they may prefer a voluntary winding up, which is less costly and less time consuming and hence winding up petition under this section are extremely rare.

B] Default in holding Statutory Meeting or filing of Statutory Report: Petition under this section should be made either by the Registrar or by a contributory. Petition can be made after the expiry of 14 days from the date on which the statutory meeting should have been held. Usually the Tribunal shall order to hold a statutory meeting and file the statutory report instead of taking extreme step of ordering winding up under this section.

C] Failure to commence, or suspension of business: [Section 433 (c)] The Tribunal exercises power in this case if the company do not show any intention of commencing the business. However, if the company fails to commence business within one year from the incorporation or suspends operation for a complete one year, the Tribunal may not order winding up if there are reasonable prospects of the company commencing the business within a reasonable time or there are good reasons for the delay.

D] Reduction in Membership: [Section 433 (d)]- There are statutory limitations on the number of members in case of a public company and a private company. Accordingly in case of a private company the minimum number is 2 and in the case of public company the minimum number is 7. If the number of members in case of these companies, fall below the statutory minimum, the company may be ordered to be wound up by the Tribunal. In case the number falls below the statutory minimum and the company continues the business for more than six months, and every member is aware of this fact, they are held as severally liable for the payment of the whole of the debts of the company contracted after those six months.

E] Inability to pay debts: [Section 433 (e)] – A company may be wound up by the Tribunal, if it is unable to pay its debts. However it should be established that the company really is unable to pay its debts. Temporary suspension of payment of debt cannot be a ground for ordering the winding up of a company. If the company neglects the demand for payment to a creditor or when a decreed bets is unsatisfied or when the company is facing commercial insolvency, it may be inferred that the company is unable to pay its debts and accordingly the Tribunal may order winding up of the company.

F] Just and Equitable: [Section 433 (f)] –If it is just and equitable in the opinion of the Tribunal, the company may be wound up as per order of the Tribunal. However the opinion of the Tribunal must be based on facts. The principle of just and equitable does not have a definition as such. It may rest with the judicial discretion of the Tribunal depending the facts and circumstances of each case.

Petition: [Section 439]

The winding up procedure commences after a petition is made to the Tribunal. The petition may be made by any of the following parties.

A] Company: A company may itself make a petition to the Tribunal for winding up. A special resolution to that effect must have been passed in a general meeting of a company. However as explained in one of the earlier points, a company may not make petition under this section, as it is more convenient to have a voluntary winding up rather than a compulsory winding up.

B] Creditor/s: [Section 439 (1) (b)] – Any creditor/s may file a petition for winding up of a company to the Tribunal. Creditor includes not only the persons to whom a debt is due at the time of the petition of winding up but also every other person, who is having a pecuniary claim against the company, whether actual or contingent and such persons are competent to file a petition for winding up of a company.

C] Contributory/Contributories: [Section 439 (1) (c)]- A contributory means a person who is liable to contribute to the assets of the company on the event of its being wound up and includes the holder of shares, which are fully paid up. He can present a petition for winding up of a company, even though he may be the holder of fully paid up shares or that the company may have no assets at all, or may have no surplus assets left for distribution among the shareholders after the satisfaction of its liabilities. A contributory can file a petition for winding up on the following grounds.

- If the number of membership is reduced below the statutory minimum or
- He is an original allottee of the shares or
- He has held his shares for any 6 out of the previous 18 months or
- The shares have devolved on him through the death of a former holder.

D] All Prior Parties: All prior parties described above, i.e. the company, creditors, contributories can file petition either together or individually.

E] Registrar: [Section 439 (1) (e)] – Petition by Registrar can be made on the following grounds.

- If default is made by the company in delivering the statutory report to the Registrar or in holding the statutory meeting.
- If the company does not commence its business within a year from its incorporation, or suspends it business for a whole year
- If the number of members is reduced in the case of a public company below 7 and in the case of a private company below 2.
- If the company is unable to pay its debts

F] Central Government: [Section 439 (1) (f)] – If the Central Government, on the report given by the inspectors appointed under section 235, is of the opinion that, the business of the company is being conducted with an intention to defraud its creditors, members or other persons or for a fraudulent purpose or there is an oppression to any of its members or the purpose behind the formation of the company itself was fraudulent or unlawful, or persons connected with the management of the company have been guilty of fraud, misfeasance or other misconduct towards the company or its members, it can apply to the Tribunal for winding up of the company.

Commencement of Winding Up: The important question that is to be answered is what is the effective date of commencement of winding up? Section 441 (1) provides that where, before the presentation of the petition for the winding up of a company by the Tribunal, a resolution has been passed by the company for voluntary winding up, the winding up of the company shall be deemed to have commenced at the time of the passing of the resolution and unless the Tribunal, on proof of fraud or mistake, thinks fit to direct otherwise, all proceedings taken in the voluntary winding up shall be deemed to have validly taken. According to section 441 (2), in any other case, the winding up of a company by the Tribunal, shall be deemed to commence at the time of the presentation of the petition for the winding up. Every petition for winding up a company shall be advertised 14 days before the hearing, stating the date on which the petition was presented and the names and addresses of petitioners.

Powers of the Tribunal: The Tribunal shall have the following powers under section 443 (1). The section provides that on hearing the petition, the Tribunal may,

- Dismiss it, with or without costs or
- Adjourn the proceedings conditionally or unconditionally or
- Make any interim order that it thinks fit or
- Make an order for winding up of the company with or without costs or any other order it may thinks fit.

The Tribunal shall not refuse to make a winding up order on the ground only that the assets of the company have been mortgaged to an amount equal to or in excess of those assets, or that the company has no assets.

Winding Up Order: Consequences: As a result of the winding up order by the Tribunal, the following legal provisions apply.

i. Intimation to Official Liquidator and Registrar: The Tribunal may pass an order of winding up of a company. After passing such an order, it shall immediately inform to the Official Liquidator and Registrar about the order of winding up

ii. Discharge Notice: The order of winding up shall be deemed to be notice of discharge to the officers and employees of the company, except when the business of the company is continued. Where a servant of the company is on a contract of service for a fixed term and that term has not expired on the date of the order of the winding up of the company, the order operates as a wrongful discharge and damages are allowed for breach of contract of service and the servant is free from his agreement not to compete with the company.

iii. Staying of suits: When the Tribunal makes an order for winding up, no suit or other legal proceedings shall be commenced against the company except by leave of the Tribunal. The pending suits shall also not be proceeded without the permission of the Tribunal.

STEPS IN WINDING UP BY THE ORDER OF TRIBUNAL:

- **Appointment of Official Liquidator**

1) According to section 448 (1), after the passing of an order of liquidation by the Tribunal, there shall be an Official Liquidator, who,

a) may be appointed from a panel of professional firms of chartered accountants, advocates, company secretaries, cost and works accountants or firm having a combination of these professions, which the Central Government shall constitute for the Tribunal, or

b) may be a body corporate consisting of such professionals as may be approved by the Central Government from time to time, or

c) may be a whole time or part time officer appointed by the Central Government.

d) Before appointing the Official Liquidator, the Tribunal may give due regard to the views or opinion of the secured creditors and workmen.

2) The terms and conditions for the appointment of the Official Liquidator, and the remuneration payable to him shall be –

a) Approved by the Tribunal for those appointed under clause a and b of sub section (1), subject to a maximum remuneration of five percent of the value of debt recovered and realization of sale of assets.

b) Approved by the Central Government for those appointed under clause c of sub section (1) in accordance with the rules made by it in this behalf.

3) Where the Official Liquidator, is an officer appointed by the Central Government under clause c, of sub section (1), the Central Government may also appoint, if considered necessary, one or more Deputy Official Liquidators or Assistant Official Liquidators to assist the Official Liquidator in the discharge of his functions, and the terms and conditions for the appointment of such Official Liquidators and the remuneration payable to them shall also be in accordance with the rules made by the Central Government.

4) All references to the Official Liquidator in the Act shall be construed as reference to the Official Liquidator specified in sub section (1) or to the Deputy Official Liquidator or Assistant Official Liquidator referred in the sub section (3) mentioned above.

5) The amount of the remuneration payable shall form part of the winding up order made by the Tribunal and be treated as first charge on the realization of the assets and be paid to the Official Liquidator or to the Central Government, as the case may be.

6) The Official Liquidator, shall conduct proceedings in the winding up of a company and perform such duties in reference thereto as the Tribunal may specify in this behalf.

7) On a winding up order being made by the Tribunal, the Official Liquidator shall by virtue of his office, become the liquidator of the company. [Section 449]

8) At any time after the presentation of a winding up petition and before the making of a winding up order, the Tribunal may appoint the Official Liquidator to be the liquidator provisionally. [Section 450] A provisional liquidator is as much a liquidator in winding up. The name 'provisional liquidator' is a only a label, he has the same powers and has the same duties as those of the liquidator. Before appointing a provisional liquidator, the

Tribunal shall give a notice to the company and give a reasonable opportunity to it to make its representations. If the Tribunal thinks fit, it may dispense with such notice, but in that case, it shall in writing record the special reasons for not giving the notice. On a winding up order being made by the Tribunal, the Official Liquidator shall cease to hold office as provisional liquidator and shall become the liquidator of the company.

Duties of Liquidator: In discharging the function of the liquidator, he has to perform the following duties.

1) The liquidator shall conduct the proceedings in winding up and perform the duties as directed by the Tribunal.

2) He will have to submit a preliminary report to the Tribunal immediately after the receipt of the statement of affairs and not later than six months from the date of the order of winding up by the Tribunal. The report shall contain details regarding the following. a) The amount of capital issued, subscribed, and paid up and the estimated amount of assets and liabilities. b) If the company has failed the cause of the failure and c) Whether in his opinion, further inquiry is desirable as to any matter relating to the promotion, formation or failure of the company or the conduct of the business thereof.

3) The Official Liquidator may, if he thinks fit, make further reports, stating the manner in which the company was promoted or formed. He may further state if any fraud has been committed by any person in company's promotion or formation, or since the formation thereof. He may also state any other matters which it is desirable to bring to the notice of the Tribunal.

4) It shall be the duty of the provisional liquidator/liquidator to take into his custody all the property, effects and actionable claims to which the company is entitled. As long as there is no liquidator, all the property and effects of the company shall be deemed to be in the custody of the Tribunal.

5) The liquidator shall, in the administration of the assets of the company and the distribution thereof among creditors, have regard to any directions which may be given by resolution of the creditors or contributories at any general meeting or by the committee of inspection. Any directions by the creditors or contributories at any general meeting shall override any directions given by the committee of inspection.

6) The liquidator may apply to the Tribunal for proper directions in relation to any matter arising in the winding up. He shall also use his discretion in the administration of the assets of the company and in the distribution thereof among the creditors.

7) If required, the liquidator may summon general meetings of the creditors or contributories whenever he thinks it fit for the purpose of ascertaining their wishes. He shall have to summon these meetings, if the creditors or contributories requested in writing to do so by not less than $1/10^{th}$ in value of the creditors or contributories as the case may be.

8) It shall be the duty of the liquidator, to keep proper books for making entries or recording minutes of the proceedings at meetings and such other matters as may be prescribed. Any

creditor or contributory, subject to the directions of the Tribunal, may inspect such books personally or by his agent.

9) Another important duty of the liquidator is prepare the accounts of the company. The Companies Act provides that the liquidator shall, at such times as may be prescribed but at least twice each year during his tenure of office, present to the Tribunal an account of receipts and payments as liquidator. The account shall be in the prescribed form, shall be made in duplicate and shall be duly verified. The Tribunal shall cause the accounts to be audited. One copy of the accounts duly audited, shall be filed and kept by the Tribunal. The other copy of the account shall be delivered to the Registrar for filing. Each copy shall be open to the inspection of any creditor, contributory or persons interested. A summary of the audited accounts shall be prepared by the liquidator and shall be sent to every creditor and contributory. The Tribunal may waive this provision.

10) The Tribunal, may at the time of making an order for the winding up of a company or at any time, direct that there shall be appointed a committee of inspection to act with the liquidator.

11) The liquidator, shall within two months of the expiry of each year from the commencement of winding up, file a statement duly audited by a qualified auditor of the company with respect to the proceedings in, and position of, the liquidation. The statement shall be filed, in the case of a winding up by the Tribunal, in Tribunal and in the case of voluntary winding up, with the Registrar.

Powers of Liquidator: The following are the powers of the Liquidator.

1) Section 457 (1), provides that the liquidator in a winding up by the Tribunal, shall have the following powers, with the sanction of the Tribunal.

   a) To constitute or defend any suit, prosecution, or other legal proceeding, civil or criminal, in the name and on behalf of the company.

   b) To carry on the business of the company so far as may be necessary for the beneficial winding up of the company.

   c) To sell the immovable and movable property and actionable claims of the company by public auction or private contract, with power to transfer the whole thereof to any person or body corporate, or to sell the same in parcels.

   d) To sell whole of the undertaking of the company as a going concern.

   e) To raise on the security of the assets of the company any money requisite.

   f) To do all such other things as may be necessary for winding up the affairs of the company and distributing of its assets.

2) Without the sanction of the Tribunal, the liquidator shall have the following powers.

   a) To do all acts and to execute documents and deeds on behalf of the company under its seal.

b) To inspect the records and returns of the company or the files of the Registrar without payment of any fees.

c) To prove, rank and claim in the insolvency of any contributory for any balance against his estate and to receive dividends.

d) To draw, accept, make and endorse any bill of exchange, hundi or promissory note, on behalf of the company in the course of its business.

e) To take out, in his official name, letters of administration to any deceased contributory, and to do any other act necessary for obtaining payment of any money due from a contributory or his estate.

f) To appoint an agent to do any business which he is unable to do himself.

3) The liquidator shall have powers, exercisable in case of onerous contracts. The term 'onerous' means a right to property. The liquidator may, with the leave of the Tribunal, disclaim onerous contracts, and properties. This shall be done within 12 months after the commencement of the winding up, unless the Tribunal extends time.

Powers of Tribunal: The Tribunal has the following powers under the Companies Act in order to discharge the duties effectively for ensuring a smooth winding up.

a) The Tribunal may at any time after making a winding up order on the application either of the Official Liquidator or of any creditor or contributory, stay the winding up proceedings.

b) The Tribunal may settle the list of contributories who are liable to contribute to the assets of the company, with the power to rectify the register of members.

c) The Tribunal may also order any contributory to pay money, due by him to the company apart from any call.

d) The Tribunal has the power to make calls on all or any of the contributores for payment of any money, which it considers necessary to satisfy the debts and liabilities of the company for the expenses of winding up and for adjustment of the rights of the contributories.

e) The Tribunal, may at any time after making, a winding up order, direct delivery to the liquidator of any money, property or books and papers in the custody or control of any contributory, trustee, receiver, banker, agent, officer or other employee of the company, to which the company is prima facie entitled.

f) The Tribunal may fix a time within which creditors shall prove their debts or claims. It may exclude creditors not proving within the time from the benefit of any distribution made before those debts and claims are proved.

g) The Tribunal has the power to summon any person in connection with the winding up of the company.

h) If in the opinion of the Official Liquidator a fraud has been committed by any person in the promotion or formation of the company, or by any officer of the company in relation to the company since its formation, he shall make a report to the Tribunal. The Tribunal, in such cases may direct the person to appear before the Tribunal and examine him publicly regarding his conduct and dealings as an officer.

i) The Tribunal has the powers to arrest a contributory if after the passing of the order of winding up, it believes that the contributory is in possession of property or books belonging to the company and there is a possibility that the contributory is likely to quit the country.

j) In all the matters regarding the winding up, the Tribunal may convene meetings of creditors or contributories for the purpose of ascertaining their wishes.

- **Liquidation – Other Aspects:** The following are the other aspects of liquidation.

A. Statement Of Affairs: [**Section 454**]: Within 21 days of the relevant date [date of the appointment of a provisional liquidator, or where no such appointment is made, the date of winding up order] the company shall submit a statement to the Official Liquidator as to the affairs of the company. The Tribunal, may in its discretion direct that the company need not submit this statement. This statement shall be in the prescribed form, verified by affidavit and contain the following particulars.

a) The assets of the company, stating separately the cash balance in hand and at the bank, if any and the negotiable securities, if any held by the company.

b) Its debts and liabilities.

c) The names, residences and occupations of its creditors, stating separately the amount of secured and unsecured debts, and in the case of secured debts, particulars of the securities given, whether by the company or an officer thereof, their values and the dates on which they were given.

d) The debts due to the company and the names, residences and occupations of the persons from whom they are due and the amount likely to be realized on account thereof.

e) Such further or other information as may be prescribed or as the Official Liquidator may require.

- The statement shall be submitted and verified by one or more of the persons who are at the relevant date the directors and by the person who is at that date the manager, secretary or other chief officer of the company or by such of the persons hereinafter in this sub section mentioned, as the Official Liquidator, subject to the direction of the Tribunal, may require to submit and verify the statement, that is to say, persons

a) Who are or have been officers of the company

b) Who have taken part in the formation of the company at any time within one year before the relevant date

c) Who are in the employment of the company, or have been in the employment of the company, within the said year and are in the opinion of the Official Liquidator, capable of giving the information required

d) Who are or have been within the said year officers of, or in the employment of a company, which is or within the said year was, an officer of the company to which the statement relates.

- The statement shall be submitted within twenty one days from the relevant date, or within such extended time not exceeding three months from that date as the Official Liquidator or the Tribunal, may for special reasons, appoint.
- Any person making, or concurring in making, the statement and affidavit required by this section, shall be allowed and shall be paid by the Official Liquidator or provisional liquidator, as the case may be, out of the assets of the company, such costs and expenses incurred in and about the preparation and making of the statement and affidavit as the Official Liquidator may consider reasonable, subject to an appeal to the Tribunal.

B. Committee And Inspection: The Tribunal may, at the time of making an order for the winding up of a company or at any time thereafter, direct that there shall be appointed a committee of inspection to Act with the liquidator. The liquidator shall then within two months from the date of such direction convene a meeting of the creditors of the company for the purpose of determining the membership of the committee. Within 14 days of the creditors' meeting, the liquidator shall call a meeting of the contributories to consider the decision of the creditors with respect to the membership of the committee. The contributories may accept the decision of the creditors with or without modification or reject it. If the contributories do not accept the decision of the creditors, the liquidator shall apply to the Tribunal for directions as to what shall be the composition of the committee and who shall be its members.

C. Contributory: The term 'contributory' means every person liable to contribute to the assets of the company in the event of its being wound up and includes the holder of any shares, which are fully paid up.

List of Contributories: The list of contributories shall be prepared in two parts, A and B

List A shall include the present members of the company, i.e. members whose names appear in the company's register of members at the time of the winding up of the company.

List B shall include the past members of the company, i.e. member who ceased to be members within one year preceding the commencement of the winding up of the company.

Liability of Contributories: The liability of the present members shall be limited to,

a) In the case of company limited by shares, to the amount remaining unpaid on the shares and

b) In the case of a company limited by guarantee, to the amount undertaken to be contributed by him to the assets of the company in the event of its being wound up.

A past member shall not be liable to contribute –

a) If he ceased to be a member for one year or more before the commencement of winding up

b) In respect of any debt or liability of the company contracted after he ceased to be a member

c) If it appears to the Tribunal that the present members will be able to satisfy the contributions required to be made by them.

Where there have been several transfers of the same shares within a year before the winding up, the primary liability is that of the latest transferor in case of default by the A list contributories.

15.2.2 Voluntary Winding Up: Voluntary winding up means winding up by the members of the company or creditors of the company without the interference by the Tribunal. The following are the methods of voluntary winding up.

i. By passing a ordinary resolution: If there is a fixed period for which a company has been established as per the articles of association, the company may by passing an ordinary resolution in a general meeting decide to wind up after the expiry of the specified period.

ii. By Special Resolution: A company may at any time pass a special resolution that it be wound up voluntarily. No reasons need by given where the members pass a special resolution for the voluntary winding up of the company. Even the articles cannot prevent the exercise of this statutory right.

iii. A voluntary winding up shall be deemed to commence at the time when the resolution, either special or ordinary is passed for its voluntary winding up.

iv. The company shall have to give a notice within 14 days of the passing of the resolution for voluntary winding up of the company by advertisement in the Official Gazette and also in some newspaper circulating in the district of the registered office of the company.

A] Types of Voluntary Winding Up: A voluntary winding up may be,

1) Members' voluntary winding up or

2) Creditors' voluntary winding up

Provisions regarding these winding up are discussed below.

1) Members' Voluntary Winding Up: The following provisions are applicable in this case.

a) Declaration of solvency: In a voluntary winding up of a company if a declaration of its solvency is made in accordance with the provisions of sections 488, it is a members' voluntary winding up. The declaration shall be made by a majority of the directors at a meeting of the Board that the company has no debts or that it will be able to pay its debts full within 3 years from the commencement of the winding up. The declaration shall be verified by an affidavit. The declaration shall have to be made when it is made within five weeks immediately before the date of the resolution and delivered to the Registrar for registration before that date and is accompanied by a copy of the report of the auditors of the company on profit and loss account of the company from the date of the last profit and loss account to the latest practicable date immediately before the declaration of solvency and the balance sheet of the company and a statement of the company's assets and liabilities as on the last mentioned date.

b) Appointment and remuneration of liquidators: The company in general meeting shall appoint one or more liquidators for the purpose of winding up its affairs and distributing its assets. It shall also fix the remuneration, if any to be paid to the liquidator or liquidators. Any remuneration so fixed shall not be increased in any circumstances. The liquidator shall not start his work before his remuneration is fixed as mentioned above.

c) On the appointment of the liquidator, all the powers of the Board of directors, the managing director, whole time director and the manager shall cease except when the company in general meeting or the liquidator may sanction them to continue.

d) If a vacancy occurs by death, resignation or otherwise in the office of any liquidator appointed by the company, the company in general meeting may fill the vacancy. For this purpose a general meeting may be convened by any contributory or by the continuing liquidator or liquidators if any.

e) The company shall give notice to the Registrar of the appointment of a liquidator or liquidators. It shall also give notice of every vacancy occurring in the office of liquidator and of the names of the liquidators appointed to fill every such vacancy. The notice shall be given by the company within 10 days of the event to which it relates.

f) If the liquidator is at any time of the opinion that the company will not be able to pay its debts in full within the period stated in the declaration, he shall forthwith summon a meeting of the creditors. He shall lay before the meeting a statement of the assets and liabilities of the company. Thereafter the winding up shall become creditors' voluntary winding up.

g) In the event of winding up continuing for more than one year, the liquidator shall call a general meeting of the company at the end of the first year from the commencement of the winding up. He shall also call a general meeting at the end of each succeeding year. He shall lay before the meeting an account of his actions and dealings and of the conduct of the winding up during the year.

h) As soon as the affairs of the company are fully wound up, the liquidator shall make up an account of the winding up, showing how the winding up has been conducted and how the property of the company has been disposed of. He shall then call a general meeting of the company and lay before it, the accounts showing how the winding up has been conducted. The meeting shall be called by advertisement, which shall specify the time, place and object of the meeting and published not less than one month before the meeting in the official gazette and also in some newspapers circulating in the district of the registered office of the company. Within one week, after the meeting, the liquidator shall send to the Registrar and the Official Liquidator a copy each of the account and shall make a return to each of them of the holding of the meeting and of the date thereof. If a quorum is not present at the final meeting, the liquidator shall make a return that the meeting was duly called but could not be held for want of quorum

The Registrar on receiving the account and return shall register them. The Official Liquidator, on receiving them, shall make a scrutiny of the books and papers of the company. The liquidator of the company and present officers shall give the Official Liquidator all reasonable facilities to make a scrutiny. On such scrutiny the Official Liquidator shall make a report to the Tribunal. If the report shows that the affairs of the company have been conducted in a manner not prejudicial to the interests of the members or to the public interest, then from the date of the submission of the report to the Tribunal, the company shall be deemed to be dissolved.

i) If in the case of the members' voluntary winding up, the liquidator finds that the company is insolvent, there will be a duty of the liquidator to call a meeting of the company and of the creditors at the end of each year.

B. **Creditors' Voluntary Winding Up:** A voluntary winding up of a company in which a declaration of its solvency is not made in referred to as 'Creditors' Voluntary Winding Up'. The following are the provisions applicable to the Creditors' Voluntary Winding Up.

i. The company shall call a meeting of the creditors of the company on the day on which the annual general meeting of the company is to be held and at which the resolution for voluntary winding up is to be proposed, or on the next day. It shall send notices of the meeting to the creditors by post simultaneously with the sending of the meeting of the company. It shall also cause notice of the meeting of the creditors to be advertised once at least in the Official Gazette and once at least in two newspapers circulating in the district of the registered office of the company. The Board of Directors of the company shall cause a full statement of the position of the company's affairs together with a list of the creditors and the estimated amount of their claims to be laid before the meeting. It shall also appoint one of their members to preside at this meeting. It shall be the duty of the director so appointed to attend the meeting and preside there at.

ii. Notice of any resolution passed at a creditors' meeting shall be given by the company to the Registrar within 10 days of the passing thereof.

iii. The creditors and the members at their respective meetings may nominate a liquidator. If they nominate different persons, the creditors nominee shall be the liquidator. But any director, member or creditor of the company may apply to the Tribunal for an order that the person nominated as liquidator by the company or any other person shall be the liquidator. The application shall be made to the Tribunal within 7 days after the date on which the nomination was made by the creditors. If no person is nominated by the creditors, the person nominated by the members shall be the liquidator. Likewise if no person is nominated by the company, the person nominated by the creditors shall be the liquidator.

iv. The creditors at their meeting may, if they think fit, appoint a committee of inspection consisting of not more than 5 persons. If such a committee is appointed, the company may also at a general meeting appoint not more than 5 members to the committee. However, the creditors may if they think fit, resolve that all or any of the persons appointed by the company ought not to be the members of the committee of inspection. If the creditors and members do not agree on a common list, the Tribunal may constitute a committee of inspection.

v. On the appointment of a liquidator, all the powers of the Board of directors shall cease. But the committee of inspection, or if there is no such committee, the creditors in general meeting may sanction the continuance of the Board.

vi. In case of any vacancy arising in the office of the liquidator due to death, resignation or otherwise, the creditors as per the directions of the Tribunal, may fill the vacancy in the general meeting.

vii. The liquidator shall call a general meeting of the company and a meeting of the creditors every year, within 3 months from the close of every year. This will be so if the winding up continues for more than 1 year. He shall lay before the meeting an account of his acts and dealings and of the conduct of the winding up during the preceding year and position of the winding up.

viii. As soon as the affairs of the company are fully wound up, the liquidator shall make up an account of the winding up showing how the winding up has been conducted and how the property of the company has been disposed of. He shall then call a general meeting of the company and a meeting of the creditors for the purpose of laying the account before the meeting and giving explanation thereof.

- **Consequences of Winding Up:** The following are the consequences of winding up.

1] Shareholders / Members: In the case of a company, a shareholder is liable to pay the full amount up to the face value of the shares held by him. His liability continues even after the company goes into liquidation, but then he is known as contributory. A contributory may be present or past. In case of a company limited by guarantee, the members are liable to contribute up to the amount guaranteed by them.

2] Creditors: When a company is solvent, all debts payable on a contingency and all claims against the company, present or future, certain or contingent, ascertained or sounding only in damages, shall be admissible to proof against the company. A just estimate of the value of such debts or claims shall be made. Where a solvent company is wound up, all claims of creditors, when proved are fully met.

Where a company is insolvent and it is being wound up, the same rule shall prevail as in the case of insolvency with regard to,

a. Debts provable

b. The valuation of annuities and future and contingent liabilities

c. The respective rights of secured and unsecured creditors

The security of every secured creditor shall however, be deemed to be subject to a pari passu charge in favor of the workmen to the extent of the workmen's portion thereto. Where a secured creditor instead of relinquishing his security and proving his debt, opts to realize his security,

a) The liquidator shall be entitled to represent the workmen and enforce the workmen's charge

b) Any amount realized by the liquidator by way of enforcement of the workmen's charge shall be applied proportionately for the discharge of workmen's dues.

c) The debt due to the secured creditor on the amount of the workmen's portion in his security shall rank parri passu with the workmen's dues.

d) All persons who in any such case would be entitled to prove for and receive dividends out of the assets of the company may come in under the winding up and make such claims against the company as they are entitled to make.

3) Preferential Payments: In a winding up, some unsecured debts are paid, subject to the provisions of the Act, in priority of others. These payments are knows as preferential payments and are as follows.

a) All revenues, taxes, cesses, and rates due to the Central Government or a State Government or to a local authority at the relevant date. The amount should have become due and payable within 12 months preceding the relevant date. Relevant date means in the case of a compulsory winding up of a company, the date on which a provisional liquidator is appointed or if he is not appointed, the date of the winding up order. In case the company had commenced to be wound up voluntarily before that date, relevant date means date of commencement of winding up voluntarily.

b) All wages or salary of any employee in respect of services rendered to the company and due for a period not exceeding four months within the 12 months before winding up. The amount shall not, in case of any one claimant, exceed such sum as may be notified by the Central Government in the Official Gazette.

c) All accrued holiday remuneration becoming payable to any employee on account of winding up.

d) All amounts due in respect of contributions payable during the 12 months, before the winding up order under the Employees State Insurance Act, 1948. This, however does not apply when the company is being wound up voluntarily for the purpose of reconstruction or amalgamation with another company.

e) All amounts due in respect of any compensation or liability under the Workmen's Compensation Act 1923, in respect of death or disablement of any employee of the company.

f) All sums due to any employee from a provident fund, a pension fund, a gratuity fund or any other fund for the welfare of the employees maintained by the company.

g) The expenses of any investigation held in so far as they are payable by the company.

h) Advances made by a third person to pay wages or salary to any employee, or in the case of his death to any other person in his right on account of holiday remuneration, shall in a winding up, have the same priority as the persons to whom these payments are made out of money advanced have priority.

4) Employees: A winding up order shall be deemed to be a notice of discharge to the officers and employees of the company, except when the business of the company is continued. Such a discharge shall relieve them of all the obligations under their contract of service. A voluntary winding up shall also operate as a notice of discharge to the company's servants.

Defunct Company: A company is said to be 'defunct' when it is not carrying on business or when it is not in operation. If the company has ceased to carry on business, the Registrar may strike off the Register as a defunct company in accordance with the provisions of the Company Law.

A company shall be declared to a 'defunct' company after following a proper procedure. If the Registrar has reasonable cause to believe that a company is not carrying on business or is not in operation, he shall send to the company by post a notice inquiring whether the company is carrying on the business or not. If the Registrar do not receive an answer within one month of the sending this letter, he shall within 14 days after the expiry of the month, send to the company by registered post, a letter referring to the first letter and stating that no answer has been received. He shall further mention in the letter that if no reply is received to the second letter within one month, a notice will be published in the Official Gazette with a view to striking the name of the company off the Register.

If the Registrar receives an answer that the company is not carrying on any business or if no answer is received within one month of the sending of the second letter, he may publish in the Official Gazette and send to the company by a registered post, a notice that at the expiration of 3 months from the date of the notice, the name of the company shall be struck off the Registrar and the company may be dissolved. The company may, however, within three months show cause why it should not be dissolved.

The same procedure is also followed when the company is being wound up and the Registrar has reasons to believe that either no liquidator is acting or the affairs of the company has been wound up completely and no return has been submitted by the liquidator for a period of 6 consecutive months.

At the expiry of 3 months, mentioned in the notice aforesaid, the Registrar may strike the name of the company of the Register, unless cause to the contrary is previously shown by the company.

He shall then publish notice of this fact in the Official Gazette. It is on the publication in the Official Gazette of this notice that the company shall stand dissolve.

Name of the defunct company can be restored by the Tribunal as per the procedure laid down in the Act and this power lasts for 20 years. Restoration can be made on the application of any member or creditor who feels aggrieved by the name of the company having been struck off the Register. He may apply to the Tribunal within a period of 20 years from the date of publication in the Official Gazette. The Tribunal may order restoring the name if it is satisfied that at the time of striking off the name, the company was in fact in operation and was carrying on the business and it is just that the name of the company be restored in the Register.

STUDY NOTE - 16

RIGHT TO INFORMATION ACT

This Study Note includes

- Various Provisions Relating to Right to Information Act

A Bill to operationalise the right to information by setting out the practical regime for people to secure access to information under the control of public authorities, consistent with public interest, in order to promote openness, transparency and accountability and in relation to matters connected therewith or incidental thereto.

16.1 INTRODUCTION

(1) This Act may be called the Right to Information Act 2004

(2) It extends to the whole of India except the State of Jammu and Kashmir.

(3) It shall come into force within 120 days of it being enacted.

(4) Where State legislation exists dealing with the right to access information; a person will have the right to seek information under the State law as well as under this Act, if the information pertains to a subject under the State List in Schedule 7 of the Constitution of India.

(5) Objectives of the Act:

The objectives of the Act are to -

(i) give effect to the Fundamental Right to Information, which will contribute to strengthening democracy, improving governance, increasing public participation, promoting transparency and accountability and reducing corruption

(ii) establish voluntary and mandatory mechanisms or procedures to give effect to right to information in a manner which enables persons to obtain access to records of public authorities in a swift, effective, inexpensive and reasonable manner.

(iii) promote transparency, accountability and effective governance of all public authorities by, including but not limited to, empowering and educating all persons to:

- understand their rights in terms of this Act in order to exercise their rights in relation to public authorities;

- understand the functions and operation of public authorities; and effectively participating in decision making by public authorities that affects their rights.

In This Act, unless the context otherwise requires:

(a) "appropriate Government" means in relation to a public authority established, constituted, owned, substantially financed by funds provided directly or indirectly or controlled-

(i) by the Union Government, The Union Government;

(ii) by the State Government, The State Government;

(iii) by the Union territory, The Union Government;

(b) "competent authority" means-

(i) The Speaker in the case of the House of the People or the Legislative Assembly and the Chairman in the case of the Council of States or the Legislative Council:

(ii) The Chief Justice of India in the case of the Supreme Court;

(iii) The Chief Justice of the High Court in the case of a High Court;

(iv) The President or the Governor, as the case may be, in case of other authorities created by or under the Constitution;

(v) The administrator appointed under article 239 of the Constitution;

(c) "Chief Information Commissioner" and "Information Commissioner" and "State Information Commissioner" means the authorities so appointed under this act

(d) "right to information" means the right to access information held by, legally accessible by or under the control of any public authority and includes:

(i) Inspection of works, documents, records;

(ii) Taking notes and extracts and obtaining certified copies of documents or records;

(iii) Taking certified samples of material;

(iv) Obtaining information in the form of diskettes, floppies, tapes, video cassettes or in any other electronic mode or through printouts where such information is stored in a computer or in any other device.

(e) "information" means any material in any form, including records, documents, file notings, memos, emails, opinions, advices, press releases, circulars, orders, logbooks, contracts, reports, papers, samples, models, data, material held in any electronic form and any information relating to a private body which can be accessed by a public authority under any law;

(f) "prescribed" means prescribed by rules made under this Act by the appropriate Government or the competent authority, as the case may be;

(g) "public authority" means any authority or body established or constituted,-

(i) by or under the Constitution;

(ii) by any law made by the appropriate Government, and includes any other body owned or controlled by the appropriate Government and includes panchayati raj institutions and other community bodies, like district councils, and village or locality durbars, performing public functions in areas notified under schedule 5 and 6 of the constitution.

(h) "Public Information Officer" means the Public Information Officer appointed under sub-section (I and/or 1a of section 5;

(i) "record" includes-

(i) any document, manuscript and file;

(ii) any microfilm, microfiche and facsimile copy of a document;

(iii) any reproduction of image or images embodied in such microfilm (whether enlarged or not): and

(iv) any other material produced by a computer or by any other device.

(j) "third party" means a person other than the person making a request for information and includes a public authority.

FREEDOM OF INFORMATION AND OBLIGATIONS OF PUBLIC AUTHORITIES

3. Subject to the provision of this Act, all persons shall have the right to information.

4. Every public authority shall-

(a) maintain all its records, duly catalogued and indexed, in a manner and form which facilitates the right to information as provided for in this Act, including ensuring that all records, covered by the Act that are appropriate to computerise, are within a reasonable time and subject to availability of resources, computerised and connected through a network all over the country on different system so that authorised access to such records is facilitated.

(b) publish within 6 months of this Act coming into force and thereafter update at least every 12 months-

(i) The particulars of its organisation, functions and duties.

(ii) The powers and duties of its officers and employees

(iii) Procedures followed during the decision making process, including chains of supervision and accountability.

(iv) The norms set by the public authority for the discharge of its functions.

(v) Rules, regulations, instructions, manual and records held by or under its control used by its employees for discharging its functions.

(vi) A statement of the categories of documents that are held by or under the control of the public authority.

(vii) Particulars of any arrangement that exists for consultation with, or representation by, members of the public in relation to the formulation of policy in, or in the administration of, the public authority.

(viii) A statement listing all boards, councils, committees and other bodies constituted by two or more persons, that are part of, or that have been established for the purpose of advising, the public authority, and whose meetings are open to the public, or the minutes of whose meetings are available for public inspection;

(ix) A directory of their public servants, from the level of the head of the department or his/her equivalent and below;

(x) The monthly remuneration received for each position, including the system of compensation as established in regulations;

(xi) Information concerning the budget assigned to each agency, including all plans, proposed expenditures and reports on disbursement;

(xii) The design and execution of subsidy programs, including the amounts allocated to them, criteria for access, implementation details and beneficiaries;

(xiii) All concessions, permits or authorisations granted, with their recipients specified.

(xiv) All information available to the public authority in electronic form or capable of being reduced to electronic form which is not exempt under this Act, subject to availability of resources.

(xv) The details of facilities available to citizens for obtaining information, including if the public authority maintains a library or reading room that is available for public use, a statement of that fact including details of the address and hours of opening of the library or reading room; and

(xvi) The name, designation and other particulars of the Public Information Officer;

(xvii) Such other information as prescribed by the appropriate government or Information Commissioner from time to time which would promote transparency across public authorities or in specific public authorities, as appropriate; on the basis that it shall be a constant endeavor of public authorities to take steps to provide as much information to the public suo moto at regular intervals through various means of communication so that the public have minimum resort to the use of this Act to obtain information.

(c) publish all relevant facts concerning important decisions and policies that affect the public while formulating and announcing such decisions and policies;

(d) give reasons for its decisions, whether administrative or quasi-judicial to those affected by such decisions;

(e) before initiating any project, or formulating any policy, scheme, programme or law, publish or communicate to the public generally or to the persons affected or likely to be affected by these in particular, the facts available to it or to which it has reasonable access which in its opinion should be known to them in the best interests of natural justice and promotion of democratic principles.

(f) For the purpose of this section, information should be disseminated widely and in a form and manner which is easily accessible and comprehensible to the public. "Disseminated" shall mean appropriately making known to the public the information to be communicated through notice boards, newspapers, public announcements, media broadcasts, the internet or other such means and shall include inspection at all of the bodies offices. All materials shall be disseminated keeping in mind cost effectiveness, the local language and the most effective method of communication in that local area. Such information should be in easily accessible, with the Public Information Officer, where possible in electronic format, which shall be available free or at the cost of the medium, or in print at cost price.

5.(1) Every public authority shall for the purposes of this Act, designate as many officers as Public Information Officers, in all administrative units and offices under such authority, as are necessary to render the public body as accessible as reasonably possible for requesters of information, within one month of this Act coming into force.

(a) An officer at each sub-divisional level or other appropriate sub-district level, shall be designated a Public Information Officer, within three months of this act coming into force, for the purposes of this Act. He/she shall receive all requests for information, and appeals, both under the state and the central acts, and pass them on to a designated authority for onward transmission to the relevant department/agency.

(b) Where applications/appeals are handed over at the sub divisional or sub-district level, an additional period of five days would be added to the time of response specified under this act, in order to enable the request/appeal to be communicated to the relevantauthority.

(2) Every Public Information Officer shall deal with requests for information and shall render reasonable assistance to any person seeking such information.

(3) The Public Information Officer may seek the assistance of any other officer as he considers necessary for the proper discharge of his duties.

(4) Any officer whose assistance has been sought under sub-section (3), shall render all assistance to the Public Information Officer seeking his/her assistance and be treated as a Public Information Officer for the purposes of the penalties provisions in this Act

6. (1) A person desirous of obtaining information shall make a request in writing or through electronic means in English or in the official language of the area in which the application is being submitted, to:

(a) the Public Information Officer of the relevant public authority;

(b) other designated Public Information Officers, as specified in 5 (1a) specifying the particulars of the information sought by him/her. Provided that where such request cannot be made in writing the Public Information Officer shall render all reasonable assistance to the person making the request orally to reduce it in writing.

6.(2) An applicant for access to information shall not be required to give any reason for requesting access to that information or any other personal details except those necessary for contacting the applicant.

6.(3)(1) Where an application is made to a Public Authority for information:

(a) which is held by another Public Authority; or

(b) the subject matter of which is more closely connected with the functions of another Public Authority, the first mentioned Public Authority shall transfer the application or such part of it as may be appropriate to that other Public Authority and shall inform the applicant immediately of the transfer.

(2) A transfer of an application pursuant to subsection (1) shall be made as soon as practicable but not later than 5 days after the date of receipt of the application

7.(1) Subject to section 5, sub section (1b) above and section 7, sub-section (3)(a) below, on receipt of a request under section 6, the Public Information Officer shall as expeditiously as possible and in any case within fifteen days of the receipt of the request, either provide the information requested on payment of such fee as may be prescribed or reject the request for any of the reasons specified in sections 8 and 9.

Provided that where the information sought for concerns the life and liberty of a person, the same should be provided within forty-eight hours of the receipt of the request:

7.(2) If a Public Information Officer fails to give the decision on a request for access to the requestor concerned within the period contemplated in s.7(1), the Public Information Officer would, for the purposes of this Act, be regarded as having refused the request.

7.(3) Where it is decided to provide the information on payment of any further fee representing the cost of providing the information, the Public Information Officer shall send an intimation to the person making the request, giving:

(a) the details of such fees as determined by him, showing the calculations as per the act, at prescribed rates, requesting him to deposit the fees, and the period intervening between the dispatch of the said intimation and payment of fees shall be excluded for the purpose of calculating the period of fifteen days referred to above;

(b) information concerning his/her rights with respect to review the decision as to the amount of fees charged and/or the form of access provided, including the contact details of the appellate body, time limits, process and any relevant forms.

7.(4) Where access to a record or a part thereof is to be given under this Act and the person to whom access is to be given has a sensory disability, the public authority will provide assistance to enable access to the information, including providing assistance with inspection as appropriate.

7.(5)(a) Subject to sub-sections (b) and (c) below, where access to information is to be given in the form of printed copies, or copies in some other form, such as on tape, disk, film or other material, the applicant shall pay the prescribed fee.

(b) Any fees payable by the applicant shall be reasonable, and shall in no case exceed the actual cost of copying the information or in the case of samples of materials the cost of obtaining the sample, and shall be set via regulations at a maximum limit taking account of the general principle that fees should not be set so high that they undermine the objectives of this Act in practice.

(c) Notwithstanding subsection (a), where a public authority fails to comply with the time limits specified in section 7, any access to information to which the applicant is entitled pursuant to his request shall be provided free of charge.

7.(6) Before taking any decision under sub-section (1), the Public Information Officer shall take into consideration the representation made by a third party under section 11.

7.(7) Where a request is rejected under sub-section (6), the Public Information Officer shall communicate to the person making request,

(i) the reasons for such rejection;

(ii) the period within which an appeal against such rejections may be preferred;

(iii) the particulars of the appellate authority.

7.(8) Information shall ordinarily be provided in the form in which it is sought unless it would disproportionately divert the resources of the public authority or would be detrimental to the safety or preservation of the record in question.

8.(1) Notwithstanding anything contained in this Act, there shall be no obligation to give any person:

(a) information, disclosure of which would prejudicially affect the sovereignty and integrity of India, the security, strategic, scientific or economic interests of the State, relation with foreign State or lead to incitement of an offence;

(b) information which has been expressly forbidden to be published by any court of law or tribunal or the disclosure of which may constitute contempt of court;

(c) information, 'the disclosure of which would cause a breach of privilege of Parliament or the State Legislature ;

(d) information including commercial confidence, trade secrets or intellectual property, the disclosure of which would harm the competitive position of a third party, unless the Competent Authority is satisfied that larger public interest warrants the disclosure of such information ;

(e) information available to a person in his fiduciary relationship, unless the Competent Authority is satisfied that the larger public interest warrants the disclosure of such information ;

(f) information received in confidence from foreign government;

(g) information, the disclosure of which would endanger the life or physical safety of any person or identify the source of information or assistance given in confidence for law enforcement or security purposes ;

(h) information which would impede the process of investigation or apprehension or prosecution of offenders ;

(i) cabinet papers including records of deliberations of the Council of Ministers, Secretaries and other officers, provided that the decisions of Council of Ministers, the reasons thereof, and the material on the basis of which the decisions were taken shall be made public after the decision has been taken, and the matter is complete, or over; provided further that those matters which come under the exemptions listed in Section 8 shall not be disclosed.

(j) information which relates to personal information the disclosure of which has no relationship to any public activity or interest, or which would cause unwarranted invasion of the privacy of the individual unless the Information Officer or the apellate authority, as the case might be, is satisfied that the larger public interest justifies the disclosure of such information.

Provided that the information, which cannot be denied to the Parliament or a State Legislature, shall not be denied to any person.

Notwithstanding anything in the Official Secrets Act 1923 nor any of the exemptions permissible in accordance with section 8 (1), a public authority may not refuse to allow access to information, unless the harm to the protected interest outweighs the public interest in disclosure.

(2) Subject to the provisions of clause (a) and (i) of sub section I of section 8, any information relating to any occurrence, event or matter which has taken place, occurred or happened ten years before the date on which any request is made under section 6 shall be provided to any person making a request under that section.

Provided that the matters covered by Sub-Section 8(a) and Sub-Section 8(i) may be disclosed after twenty-five years. Provided that where any question arises as to the date from which the said period of ten years or twenty-five has to be computed, the decision of the Union Government shall be final, subject to the usual appeals provided for in this act.

9. Without prejudice to the provisions of section 8, a Public Information Officer may reject a request for information where such a request for providing access would involve an infringement of copyright subsisting in a person other than the State.]

10.(1)If a request for access to information is rejected on the ground that it is in relation to information which is exempted from disclosure, then notwithstanding anything contained in this Act, access may be given to that part of the record which does not obtain any information that is exempted from disclosure under this Act and which can reasonably be severed from any part that contains exempted information.

10.(2) Where access is granted to a part of the record in accordance with sub-section (1), the Public Information Officer shall send a notice to the applicant, advising:

(a) that only part of the record requested, after severance of the record containing information which is exempted from disclosure, is being furnished; and

(b) The reasons for the decision; including any findings on any material questions of fact, referring to the material on which those findings were based;

(c) The name and designation of the person giving the decision; and

(d) Details of the fees determined by him/her and requesting the applicant to deposit the fees;

(e) Information concerning his/her rights with respect to review of the decision regarding non-disclosure of part of the information, the amount of fees charged and/or the form of access provided, including the contact details of the appellate body, time limits, process and any relevant forms;

11. (1) Where a public authority intends to disclose any information or record, or part thereof on a request made under this Act which relates to, or has been supplied by a third party and has been treated as confidential by that third party, the Public Information Officer shall, within five days from the receipt of a request, give written notice to such third party of the request and of the fact that the public authority intends to disclose the information or record, or part thereof and invite the third party to make a submission, in writing or orally, regarding whether the information should be disclosed, which submission shall be taken into account when determining whether to disclose the information.

Provided that except in the case of trade or commercial secrets protected by law, disclosure may be allowed if the public interest in disclosure outweights in importance any possible harm or injury to the interests of such party.

(2) where a notice is given by the public information officer under sub-section (1) to a third party in respect of any information or record or part thereof, the third party shall, within ten days from the date of issuance of notice, be given the opportunity to make representation against the proposed disclosure

(3) Notwithstanding anything contained in section 7, the public information officer shall, within twenty days after receipt of the request under section 6, if the third party has been given an opportunity to make representation under sub-section (2), make a decision as to whether or not to disclose the information or record or part thereof and give in writing the notice of his decision to the third party.

(4) A notice given under sub-section (3) shall include a statement that the third party to whom the notice is given is entitled to prefer an appeal against the decision under section 12(2).

12(1)(i)(a) The President shall appoint or designate a Chief Information Commissioner for all matters pertaining to the Union. Such appointment shall be made on the basis of a recommendation made by an Appointing Committee presided by the Prime Minister, with the Leader of Opposition in the Lok Sabha and the Chief Justice of India as members.

(i)(b) The Governor shall appoint or designate a State Information Commissioner for all matters pertaining to the State. Such appointment shall be made on the basis of recommendation made by an Appointing Committee presided by the Chief Minister, with the Leader of Opposition in the Legislative Assembly and the Chief Justice of the High Court as members.

(ii) Information Commissioners may be appointed by the President or the Governor, as the case may be, in consultation with the appropriate Appointing Committee and the Chief Information Commissioner or State Information Commissioners, as the case may be.

(iii) Every Chief Information Commissioner, State Information Commissioners and the commissioners shall be persons with wide knowledge and experience of administration and governance.

(iv) The Chief Information Commissioners and any Information Commissioners shall not be members of Parliament or members of the Legislative of any State or Union Territory and shall not hold any other office of profit and shall not be connected with any political party or be carrying on any business or practice any profession;

(v) The requisite budgetary allocations for the emoluments and expenses, including office expenses, of the Chief Information Commissioner and of other Information Commissioners will be provided by the Government of India through special budgetary provisions made available to the respective states out of the Union Government Budget.

(vi) The Chief Information Commissioner and of other Information Commissioners shall function autonomously without being subjected to directions by any other authority and would be under the administrative control of the Government of India, Ministry of Personnel, Administrative Reforms and Public Grievances.

(vii) Every person appointed as a Chief Information Commissioner or an Information Commissioner shall hold office for a term of five years from the date on which he enters upon his office. He/she will not be eligible for reappointment.

12. (2) (i) Any person who does not receive a decision or is aggrieved by a decision of the Public information officer may, within thirty days of receipt of such a decision, or of the expiry of the time allowed for responding, prefer an appeal to an appellate authority prescribed for the purpose in each department and senior in rank to the Public Information Officer.

Provided that such authority may entertain the appeal after the expiry of the said period of thirty days if it is satisfied that the appellant was prevented by sufficient cause from filing the appeal in time.

(ii) A second appeal against the decision under sub-section (1) shall lie within 90 days from the time by which the decision should have been made or receipt of a decision, prefer an appeal to the relevant Information Commissioner, Provided that the relevant Information Commissioner may entertain appeal after the expiry of the said period of ninety days if it is satisfied that the appellant was prevented by sufficient cause from filing the appeal in time.

(iii) Where an appeal is being preferred against an order made by the Public Information Officer under Section 11 to disclose "third party" information , the appeal by the concerned third party must be made within thirty days of the order.

(iv) If the decision of the Public Information Officer against which the appeal is preferred relates to information of a third party, the relevant Information Commissioner shall give a reasonable opportunity of being heard to that third party.

(v) In any appeal proceedings, the onus to prove that a denial of a request was justified will be on the public authority that denied the request.

(vi) Appeals to any Information Commissioner shall be disposed of within thirty days of the receipt of the appeals, or within such extended period, not exceeding a total of forty five days from the date of filing of appeal, for reasons to be recorded in writing.

(vii) The decision of the Information Commissioner shall be binding.

(viii) In his/her decision, the relevant Information Commissioner has the power to:

(a) require the public authority to take any such steps as may be necessary to bring it into compliance with the Act, including by;

(i) providing access to information, including in a particular form;

(ii) appointing an information officer;

(iii) publishing certain information and/or categories of information;

(iv) making certain changes to its practices in relation to the keeping, management and destruction of records;

(v) enhancing the provision of training on the right to information for its officials;

(vi) providing him or her with an annual report, in compliance with section 4(b);

(b) require the public body to compensate the complainant for any loss or other detriment suffered;

(c) impose any of the penalties available under this Act;

(d) reject the application.

(i) The Information Commissioner shall serve notice of his/her decision, including any rights of appeal, on both the complainant and the public authority.

(ii) A decision of the Information Commissioner may be appealed to the High Court or the Supreme Court, on any point of fact and law.

12.(3)Powers of the Chief Information Commissioner/State Information Commissioners/ Information Commissioners

(1) Subject to this Act, the Chief Information Commissioners /State Information Commissioners/Information Commissioners shall receive and investigate complaints from persons:

(a) who have been unable to submit a request to a Public Information Officer, either because none has been appointed as required under the Act or because the Public Information Officer has refused to accept their application;

(b) who have been refused access to information requested under this Act;

(c) who have not been given access to information within the time limits required under this Act;

(d) who have been required to pay an amount under the fees provisions that they consider unreasonable, including a person whose wishes to appeal a decision in relation to their application for a fee reduction or waiver;

(e) who believe that they have been given incomplete, misleading or false information under this act;

(f) in respect of any other matter relating to requesting or obtaining access to records under this Act.

(2) Where a Chief Information Commissioner/State Information Commissioners/Information Commissioners are satisfied that there are reasonable grounds to investigate a matter relating to requesting or obtaining access to records under this Act, the Chief Information Commissioner may initiate a complaint in respect thereof.

(3) The Chief Information Commissioners/State Information Commissioners/Information Commissioners have, in relation to the carrying out of the investigation of any complaint under this Act, power:

(a) to summon and enforce the appearance of persons and compel them to give oral or written evidence on oath and to produce such documents and things as the Commissioner deems requisite to the full investigation and consideration of the complaint, in the same manner and to the same extent as a superior court of record;

(b) to administer oaths;

(c) to receive and accept such evidence and other information, whether on oath or by affidavit or otherwise, as the relevant Information Commissioner sees fit, whether or not the evidence or information is or would be admissible in a court of law;

(d) to enter any premises occupied by any government institution on satisfying any security requirements of the institution relating to the premises;

(e) to converse in private with any person in any premises entered pursuant to paragraph (d) and otherwise carry out therein such inquiries within the authority of the Chief Information Commissioner under this Act as the Commissioner sees fit; and

(f) to examine or obtain copies of or extracts from books or other records found in any premises entered pursuant to paragraph (d) containing any matter relevant to the investigation.

(g) Shall impose the penalties prescribed under this act, after giving due opportunity to the concerned official of being heard.

(4) Notwithstanding any other Act of Parliament or any privilege under the law of evidence, an Chief Information Commissioner /State Information Commissioners/Information Commissioners may, during the investigation of any complaint under this Act, examine any record to which this Act applies that is under the control of a government institution, and no such record may be withheld from any Commissioner on any grounds.

(5) All the powers of the Chief Information Commissioner would also be enjoyed by the State Information Commissioners and other Information Commissioners.

12.(4) Penalties

(1) Subject to sub-section (3), where any Public Information Officer has, without any reasonable cause, failed to supply the information sought, within the period specified under section 7(1), the relevant Information Commissioner shall, on appeal, impose a penalty of rupees two hundred fifty, which amount must be increased by regulation at least once every five years, for each day's delay in furnishing the information, after giving such Public Information Officer a reasonable opportunity of being heard.

(2) Subject to sub-section (3), where it is found in appeal that any Public Information Officer has –

(i) Refused to receive an application for information;

(ii) Mala fide denied a request for information;

(iii) Knowingly given incorrect or misleading information,

(iv) Knowingly given wrong or incomplete information, or

(v) Destroyed information subject to a request;

(vi) Obstructed the activities of a Public Information Officer, any Information Commission or the courts; commits an offence and will be liable upon summary conviction to a fine of not less than rupees two thousand and imprisonment of up to five years, or both.

(3) An officer whose assistance has been sought by the Public Information Officer for the performance of his/her duties under this Act shall be liable for penalty as prescribed in sub-sections (1) and (2) jointly with the Public Information Officer or severally as may be decided by the relevant Information Commissioner.

(4) Any fines imposed under sub-sections (1), (2) and (3) shall be recoverable from the salary of the concerned officer, including the Public Information Officer, or if no salary is drawn, as an arrears of land revenue, recoverable within a maximum of six months of the order imposing the fine.

(5) The Public Information Officer or any other officer on whom the penalty under sub-sections (1), (2) and (3) is imposed shall also be liable to appropriate disciplinary action under the service rules applicable to him. Provided that in cases where the officer is proved guilty of deliberate denial of information or misinformation, the punishment imposed shall be a major penalty, i.e., dismissal or removal or reduction in rank.

MISCELLANEOUS

13. No suit, prosecution or other legal proceeding shall lie against any person for anything which is in good faith done or intended to be done under this Act or any rule made thereunder.

14. The provisions of this Act shall have effect not withstanding anything inconsistent therewith contained in the Official Secrets Act, 1923, and any other law for the time being in force or in any instrument having effect by virtue of any law other than this Act.

15. No court shall entertain any suit, application or other proceeding in respect of any order made under this Act and no such order shall be called in question otherwise than by way of an appeal under this Act.

16. (1) Nothing contained in this Act shall apply to the intelligence and security organisations, specified in the Schedule being organisations established by the Union Government or any information furnished by such organisations to that Government.

Provided that information pertaining to alleged violations of human rights, to the life and liberty of human beings and to the allegations od corruption will not be excluded under this clause.

(2) The Union Government may, by notification in the official Gazette, amend the Schedule by including therein any other intelligence or security organisation established by that government or omitting therefrom any organisation already specified therein and on the publication of such notification, such organisation shall be deemed to be included in or, as the case may be omitted from the Schedule.

(3) Every notification issued under sub-section (2) shall be laid before each house of parliament.

(4) Nothing contained in this Act shall apply to such intelligence and security organisations which may be specified, by a notification in the official gazette, by a state Government from time to time. Provided that information pertaining to alleged violations of human rights, to the life and liberty of human beings and to the allegations of corruption will not be excluded under this clause

(5) Every notification issued under sub section (4), shall be laid before the state legislature.

16A Monitoring and Reporting

(1) The Chief Information Commissioners/State Information Commissioners/Information Commissioners shall, as soon as practicable after the end of each year, prepare a report on the implementation of this Act during that year and cause a copy of the report to be laid before the legislatures of the concerned state and each House of the Parliament.

(2) Each responsible department/ministry shall, in relation to the public authorities within their jurisdiction, collect and provide such information to the Chief Information Commissioners as is required to prepare the report under this section, and shall comply with any prescribed requirements concerning the furnishing of that information and the keeping of records for the purposes of this section.

(3) Each report shall, at a minimum, state in respect of the year to which the report relates:

(a) the number of requests made to each public authority;

(b) the number of decisions that an applicant was not entitled to access to a document pursuant to a request, the provisions of this Act under which these decisions were made and the number of times each provision was invoked;

(c) the number of appeals sent to the Information Commissioners for review, the nature of the complaints and the outcome of the appeals;.

(d) particulars of any disciplinary action taken against any officer in respect of the administration of this Act;

(e) the amount of charges collected by each public authority under this Act;

(f) any facts which indicate an effort by public authorities to administer and implement the spirit and intention of this Act;

(g) recommendations for reform, including recommendations in respect of particular public authorities, for the development, improvement, modernisation, reform or amendment of this Act or other legislation or common law or any other matter relevant to operationalise the right to access information, as appropriate.

(4) The Union Government Ministry responsible for the administration of this Act, as soon as practicable after the end of each year, prepare a summary report on the implementation of this Act during that year and cause a copy of the report to be laid before the concerned state legislatures and each House of the Parliament, drawing on the information provided in the reports of the Chief Information Commissioners for each State.

(5) If it appears to any Chief Information Commissioner that the practice of a public authority in relation to the exercise of its functions under this Act does not conform with provisions or spirit of the Act , s/he may give to the authority a recommendation specifying the steps which ought in his/her opinion to be taken for promoting such conformity.

16B (1) The Government must, to the extent that financial and other resources are available:

(a) develop and conduct educational programmes to advance the understanding of the public, in particular of disadvantaged communities, of this Notification and of how to exercise the rights contemplated in this Act;

(b) encourage public authorities to participate in the development and conduct of programmes referred to in paragraph (a) and to undertake such programmes themselves; and

(c) promote timely and effective dissemination of accurate information by public authorities about their activities.

(d) train information officers of public authorities and/or produce relevant training materials for use by authorities themselves.

(2) The Government must, within 18 months, compile in each official language a guide containing such information, in an easily comprehensible form and manner, as may reasonably be required by a person who wishes to exercise any right contemplated in this Act.

(3) The Government must, if necessary, update and publish the guide at regular intervals The guide must, without limiting the generality of subsection (2), include a description of-

(a) the objects of this Act;

(b) the postal and street address, phone and fax number and, if available, electronic mail address of the Public Information Officer of every public authority as appointed under sub section (1) of section 5

(c) the manner and form of a request for access to a information of a public authority;

(d) the assistance available from and the duties of Public Information Officers of a public authority in terms of this Act;

(e) the assistance available from the Information Commissioners in terms of this Act;

(f) all remedies in law available regarding an act or failure to act in respect of a right or duty conferred or imposed by this Act, including the manner of lodging an appeal with the Chief Information Commissioner and a court against a decision by the Public Information Officer of a public authority;

(g) the provisions providing for the voluntary disclosure of categories of records in accordance with section 4;

(h) the notices regarding fees to be paid in relation to requests for access; and

(i) any additional regulations or circulars relevant to obtaining access to information in accordance with this Act.

(4) The Government must, if necessary, update and publish the guide at regular intervals.

17.(1) The Union Government may by notification in the Official Gazette, make rules to carry out the provisions of this Act.

(2) In particular, and without prejudice to the generality of the foregoing power, such rules may provide for all or any of the following matters, namely

(a) intervals at which matters referred to in sub-clauses (i) to (vi) of clause (b) of section 4 shall be published.

(b) The fee payable under sub-section (1) of section 7;

(c) The authority before whom an appeal may be preferred under sub-section (2) of section 12;

(d) any other matter which is required to be, or may be, prescribed.

18.(1) The State Government may, by notification in the Official Gazette, make rules to carry out the provisions of the Act.

(2) In particular, and without prejudice to the generality of the foregoing power, such rules may provide for all or any of the following matters, namely:-

(a) the fee payable under sub-section (1) of section 7:

(b) the authority before whom an appeal may be preferred under sub-section (2) of section 12:

(c) any other matter which is required to be, or may be prescribed:

Provided that initially the rules shall be made by the Union Government by notification in the official gazette.

19. (1) The competent authority may, by notification in the official gazette make rules to carry out the provisions of this Act.

(2) In particular, and without prejudice to the generality of the foregoing power such rules may provide for all or any of the following matters, namely:-

(a) the fee payable under sub-section (1) of section 7:

(b) the authority before whom an appeal may be preferred under sub-section (2) of section 12;

(c) any other matter which is required to be, or may be, prescribed.

20.(1) Every rule made by the Union Government under this Act shall be laid, as soon as may be after it is made, before each house of parliament, while it is in session, for a total period of thirty days which may be comprised in one session or in two or more successive sessions, and if, before the expiry of the session immediately following the session or the successive sessions aforesaid, both houses agree in making any modification in the rule or both houses agree that the rule should not be made, the rule shall thereafter have effect only in such modified from or be of no effect, as the case may be, so, however, that any such modification or annulment shall be without prejudice to the validity of anything previously done under that rule.

(2) Every rule made under this Act by a State Government shall be laid, as soon as may be after it is notified, before the State Legislature.

21.(1) If any difficulty arises in giving effect to the provisions of this Act, the Union Government may, by order published in the official gazette, make such provision not inconsistent with the provisions of this Act as appear to it to be necessary or expedient for removal of the difficulty:

Provided that no such order shall be made after the expiry of a period of two years from the date of commencement of this Act.

(2) Every order made under this section shall as soon as may be after it is made, be laid before the houses of parliament.

STUDY NOTE - 17

THE COMPETITION ACT, 2002

This Study Note includes:

- Introduction
- Definition and Basic Concepts
- Prohibition of certain agreements, abuse of dominant position and regulation of combinations
- Competition Commmission of India
- Finance, Accounts and Audit
- Miscellaneous

17.1 INTRODUCTION

The Competition Commission of India was established in October 2003 under the Competition Act, 2002. It was, however, mired in litigation as the provisions governing its functions were challenged in a writ petition before the Supreme Court.

The apex court in January 2005 addressed the writ petition with certain directions to the government. Consequent to this, the Competition (Amendment) Bill, 2006 was introduced in March 2006, and was referred for examination to the parliamentary standing committee. Following the recommendations of the committee, the Competition (Amendment) Bill, 2007 was introduced and passed in August 2007.

The backdrop

To achieve its objective of not permitting an 'appreciable adverse effect on competition in India', the Competition Act, 2002 deals with three situations—prohibition of anti-competitive agreements and abuse of dominant position, and regulation of combinations (covered acquisitions, mergers and amalgamations).

The focus of this article is the recent amendments dealing with two aspects of the third situation, which merit special attention—a change in threshold limits to meet the criteria for intimating the Competition Commission, and making such reporting mandatory.

Domestic nexus

An acquisition or merger or amalgamation would be governed under the third situation, if it constitutes a 'combination' by exceeding certain prescribed threshold limits. The limits determine the trigger for reporting the proposed combination to the commission.

The amendment focuses on the provision of a domestic nexus (a nexus with assets and operations in India) in connection with the limits applicable to acquisitions in which a foreign entity and an Indian entity are involved. This would narrow down the scope for an acquisition being covered under 'combinations' to be regulated by the commission. Thus, if the acquirer is a foreign company without any Indian presence, the Competition Act trigger will not apply due to the provision of the India nexus.

Incidentally, the original limits continue to apply under the Competition Act to acquisitions of enterprises dealing in similar goods, and to mergers and amalgamations.

A corresponding amendment in the limits has not been made for those cases. The rationale for this is not very clear because it would have been better to restrict the applicability to all cases of combinations.

Intimation Mandatory

A very crucial aspect of the original provisions was that it was voluntary for an enterprise proposing to enter into a combination to intimate the Competition Commission.

Now, once the new law comes into force, such intimation of the combination to the commission would be mandatory and, in fact, such a coupling shall not take effect until 210 days from the date of notification or approval from the commission, whichever is earlier. This is likely to result in a long gestation period of about seven to eight months from the date of approval of the proposal.

This has some critical dimensions to be considered. Any uncertainty in a merger/ acquisition could have a serious and destabilizing impact on the businesses of the parties involved. In most cases, unlike an acquisition, a merger is dependent on the high court's approval (or, in the case of certain specified industries, any other regulatory body, such as the Reserve Bank of India in the case of banks).

The introduction of this new dimension of keeping the merger/acquisition pending until the approval of the commission will also (albeit for a different purpose) add a significant element of uncertainty, and can be a serious drag on 'big-ticket' M&A activities in India.

The uncertainty has several implications, including the following:

- Perception among customers
- Uncertainty as regards the 'identity' of the enterprise could create reluctance among customers, who could choose to shift to a more 'stable' competitor.
- Inability to make strategic and operational decisions: Strategic and operational business issues could remain in 'limbo'.
- Human resources: In any acquisition or merger, the human resources element is crucial. This has dimensions relating to alignment of titles, roles and responsibilities. A long period of uncertainty could seriously dent morale and heighten attrition.

- Enterprise value(s): As a result of the uncertainty, including the above factors, the market value of both enterprises could be severely dented due to the long period of uncertainty.

Interestingly, while such reference to a regulatory body is mandatory in a number of countries, the time limit prescribed by most of them is much shorter, ranging from 25-35 days for an initial investigation.

When the initial investigation results in serious doubts regarding its effect on competition, the next level investigation triggers the time limit, which is generally 90-180 days. For example, in the US and the European Union, the time limit for initial investigation is 30 days and 25 days, and for detailed investigation, an additional 30 days and 90 days, respectively.

Summing up

While the objective of the Competition Act, 2002, as stated in its preamble, is undoubtedly laudable, the timing issue needs to be addressed. In addition, it is very important to have detailed guidelines and a framework within which the approval would be given by the Competition Commission. This could help mitigate the likely element of uncertainty by an upfront evaluation of the parameters contained in the guidelines in connection with the planned combination. One hopes the government will take such issues seriously and take steps to address them.

17.2 DEFINITION AND BASIC CONCEPTS

The following Act of Parliament received the assent of the President on the 13lh January, 2003

An Act to provide, keeping in view of the economic development of the country, for the establishment of a Commission to prevent practices having adverse effect on competition,

To promote and sustain competition in markets, to protect the interests of consumers and to ensure freedom of trade carried on by other participants in markets, in India, and for matters connected therewith or incidental thereto.

EXTENT

1.

(1) This Act may be called the Competition Act, 2002.

(2) It extends to the whole of India except the State of Jammu and Kashmir.

(3) It shall come into force on such date as the Central Government may, by notification in the Official Gazette, appoint.

Provided that different dates may be appointed for different provisions of this Act and any reference in any such provision to the commencement of this Act shall be construed as a reference to the coming into force of that provision.

BASIC CONCEPTS

2.
In this Act, unless the context otherwise requires,—

(a) "acquisition" means, directly or indirectly, acquiring or agreeing to acquire—

(i) shares, voting rights or assets of any enterprise; or

(ii) control over management or control over assets of any enterprise;

(b) "agreement" includes any arrangement or understanding or action in concert,—

(i) whether or not, such arrangement, understanding or action is formal or in writing; or

(ii) whether or not such arrangement, understanding or action is intended to be enforceable by legal proceedings;

(c) "cartel" includes an association of producers, sellers, distributors, traders or service providers who, by agreement amongst themselves, limit, control or attempt to control the production, distribution, sale or price of, or, trade in goods or provision of services;

(d) "Chairperson" means the Chairperson of the Commission appointed under sub-section (1) of section 8;

(e) "Commission" means the Competition Commission of India established under sub-section (1) of section 7;

(f) "consumer" means any person who—

(i) buys any goods for a consideration which has been paid or promised or partly paid and partly promised, or under any system of deferred payment and includes any user of such goods other than the person who buys such goods for consideration paid or promised or partly paid or partly promised, or under any system of deferred payment when such use is made with the approval of such person, whether such purchase of goods is for resale or for any commercial purpose or for personal use;

(ii) hires or avails of any services for a consideration which has been paid or promised or partly paid and partly promised, or under any system of deferred payment and includes any beneficiary of such services other than the person who hires or avails of the services for consideration paid or promised, or partly paid and partly promised, or under any system of deferred payment, when such services are availed of with the approval of the first-mentioned person whether such hiring or availing of services is for any commercial purpose or for personal use;

(g) "Director General" means the Director General appointed under sub-section (1) of section 16 and includes any Additional, Joint, Deputy or Assistant Directors General appointed under that section;

(h) "enterprise" means a person or a department of the Government, who or which is, or has been, engaged in any activity, relating to the production, storage, supply, distribution, acquisition or control of articles or goods, or the provision of services, of any kind, or in investment, or in the business of acquiring, holding, underwriting or dealing with shares, debentures or other securities of any other body corporate, either directly or through one or more of its units or divisions or subsidiaries, whether such unit or division or subsidiary is located at the same place where the enterprise is located or at a different place or at different places, but does not include any activity of the Government relatable to the sovereign functions of the Government including all activities carried on by the departments of the Central Government dealing with atomic energy, currency, defence and space.

Explanation—For the purposes of this clause,—

(a) "activity" includes profession or occupation;

(b) "article" includes a new article and "service" includes a new service;

(c) "unit" or "division", in relation to an enterprise, includes—

- (i) a plant or factory established for the production, storage, supply, distribution, acquisition or control of any article or goods;
- (ii) any branch or office established for the provision of any service;

(i) "goods" means goods as defined in the Sale of Goods Act, 1930 (8 of 1930) and includes—

- (A) products manufactured, processed or mined;
- (B) debentures, stocks and shares after allotment;
- (C) in relation to goods supplied, distributed or controlled in India, goods imported into India;

(j) "Member" means a Member of the Commission appointed under sub-section (/) of section8 and includes the Chairperson;

(k) "notification" means a notification published in the Official Gazette;

(l) "person" includes—

- (i) an individual;
- (ii) a Hindu undivided family;

(iii) a company;

(iv) a firm;

(v) an association of persons or a body of individuals, whether incorporated or not, in India or outside India;

(vi) any corporation established by or under any Central, State or Provincial Act or a Government company as defined in section 617 of the Companies Act, 1956 (1 of 1956);

(vii) any body corporate incorporated by or under the laws of a country outside India;

(viii) a co-operative society registered under any law relating to cooperative societies;

(ix) a local authority;

(x) every artificial juridical person, not falling within any of the preceding sub-clauses;

(m) "practice" includes any practice relating to the carrying on of any trade by a person or an enterprise;

(n) "prescribed" means prescribed by rules made under this Act;

(o) "price", in relation to the sale of any goods or to the performance of any services, includes every valuable consideration, whether direct or indirect, or deferred, and includes any consideration which in effect relates to the sale of any goods or to the performance of any services although ostensibly relating to any other matter or thing;

(p) "public financial institution" means a public financial institution specified under section 4A of the Companies Act, 1956 (1 of 1956) and includes a State Financial, Industrial or Investment Corporation;

(q) "regulations" means the regulations made by the Commission under section 64;

(r) "relevant market" means the market which may be determined by the Commission with reference to the relevant product market or the relevant geographic market or with reference to both the markets;

(s) "relevant geographic market" means a market comprising the area in which the conditions of competition for supply of goods or provision of services or demand of goods or services are distinctly homogenous and can be distinguished from the conditions prevailing in the neighbouring areas;

(t) "relevant product market" means a market comprising all those products or services which are regarded as interchangeable or substitutable by the consumer, by reason of characteristics of the products or services, their prices and intended use;

(u) "service" means service of any description which is made available to potential users and includes the provision of services in connection with business of any industrial or commercial matters such as banking, communication, education, financing, insurance, chit funds, real estate, transport, storage, material treatment, processing, supply of electrical or other energy, boarding, lodging, entertainment, amusement, construction, repair, conveying of news or information and advertising;

(v) "shares" means shares in the share capital of a company carrying voting rights and includes—

(i) any security which entitles the holder to receive shares with voting rights;

(ii) stock except where a distinction between stock and share is expressed or implied;

(w) "statutory authority" means any authority, board, corporation, council, institute, university or any other body corporate, established by or under any Central, State or Provincial Act for the purposes of regulating production or supply of goods or provision of any services or markets therefor or any matter connected therewith or incidental thereto;

(x) "trade" means any trade, business, industry, profession or occupation relating to the production, supply, distribution, storage or control of goods and includes the provision of any services;

(y) "turnover" includes value of sale of goods or services;

(z) words and expressions used but not defined in this Act and defined in the Companies Act, 1956 (1 of 1956) shall have the same meanings respectively assigned to them in that Act.

17.3 PROHIBITION OF CERTAIN AGREEMENTS, ABUSE OF DOMINANT POSITION AND REGULATION OF COMBINATIONS

Prohibition of agreements

Anti competitive agreements

(1) No enterprise or association of enterprises or person or association of persons shall enter into any agreement in respect of production, supply, distribution, storage, acquisition or control of goods or provision of services, which causes or is likely to cause an appreciable adverse effect on competition within India.

(2) Any agreement entered into in contravention of the provisions contained in subsection (1) shall be void.

(3) Any agreement entered into between enterprises or associations of enterprises or persons or associations of persons or between any person and enterprise or practice carried on, or decision taken by, any association of enterprises or association of persons, including cartels, engaged in identical or similar trade of goods or provision of services, which—

(a) directly or indirectly determines purchase or sale prices;

(b) limits or controls production, supply, markets, technical development, investment or provision of services;

(c) shares the market or source of production or provision of services by way of allocation of geographical area of market, or type of goods or services, or number of customers in the market or any other similar way;

(d) directly or indirectly results in bid rigging or collusive bidding, shall be presumed to have an appreciable adverse effect on competition:

Provided that nothing contained in this sub-section shall apply to any agreement entered into by way of joint ventures if such agreement increases efficiency in production, supply, distribution, storage, acquisition or control of goods or provision of services.

Explanation.—For the purposes of this sub-section, "bid rigging" means any agreement, between enterprises or persons referred to in sub-section (3) engaged in identical or similar production or trading of goods or provision of services, which has the effect of eliminating or reducing competition for bids or adversely affecting or manipulating the process for bidding

(4) Any agreement amongst enterprises or persons at different stages or levels of the production chain in different markets, in respect of production, supply, distribution, storage, sale or price of, or trade in goods or provision of services, including—

(a) tie-in arrangement;

(b) exclusive supply agreement;

(c) exclusive distribution agreement;

(d) refusal to deal;

(e) resale price maintenance,

shall be an agreement in contravention of sub-section (1) if such agreement causes or is likely to cause an appreciable adverse effect on competition in India.

Explanation.—For the purposes of this sub-section,—

(a) "tie-in arrangement" includes any agreement requiring a purchaser of goods, as a condition of such purchase, to purchase some other goods;

(b) "exclusive supply agreement" includes any agreement restricting in any manner the purchaser in the course of his trade from acquiring or otherwise dealing in any goods other than those of the seller or any other person;

(c) "exclusive distribution agreement" includes any agreement to limit, restrict or withhold the output or supply of any goods or allocate any area or market for the disposal or sale of the goods;

(d) "refusal to deal" includes any agreement which restricts, or is likely to restrict, by any method the persons or classes of persons to whom goods are sold or from whom goods are bought;

(e) "resale price maintenance" includes any agreement to sell goods on condition that the prices to be charged on the resale by the purchaser shall be the prices stipulated by the seller unless it is clearly stated that prices lower than those prices may be charged.

(5) Nothing contained in this section shall restrict—

(i) the right of any person to restrain any infringement of, or to impose reasonable conditions, as may be necessary for protecting any of his rights which have been or may be conferred upon him under—

(a) the Copyright Act, 1957 (14 of 1957);

(b) the Patents Act, 1970 (39 of 1970);

(c) the Trade and Merchandise Marks Act, 1958 (43 of 1958) or the Trade Marks

(d) the Geographical Indications of Goods (Registration and Protection) Act, 1999

(e) the Designs Act, 2000 (16 of 2000);

(f) the Semi-conductor Integrated Circuits Layout-Design Act, 2000 (37 of 2000);

(ii) the right of any person to export goods from India to the extent to which the agreement relates exclusively to the production, supply, distribution or control of goods or provision of services for such export.

Prohibition of abuse of dominant position

Abuse of dominant position

4(1) No enterprise shall abuse its dominant position.

(2) There shall be an abuse of dominant position under sub-section (1), if an enterprise.—

(a) directly or indirectly, imposes unfair or discriminatory—

(i) condition in purchase or sale of goods or service; or

(ii) price in purchase or sale (including predatory price) of goods or service, Explanation.— For the purposes of this clause, the unfair or discriminatory condition in purchase or sale of goods or service referred to in sub-clause (i) and unfair or discriminatory price in purchase or sale of goods (including predatory price) or service referred to in sub-clause (ii) shall not include such discriminatory condition or price which may be adopted to meet the competition;

Or (b) limits or restricts—

(i) production of goods or provision of services or market therefore; or

(ii) technical or scientific development relating to goods or services to the prejudice of consumers; or

(c) indulges in practice or practices resulting in denial of market access; or

(d) makes conclusion of contracts subject to acceptance by other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts; or

(e) uses its dominant position in one relevant market to enter into, or protect, other relevant market.

Explanation.—For the purposes of this section, the expression—

(a) "dominant position" means a position of strength, enjoyed by an enterprise, in the relevant market, in India, which enables it to—

(i) operate independently of competitive forces prevailing in the relevant market; or

(ii) affect its competitors or consumers or the relevant market in its favour;

(b) "predatory price" means the sale of goods or provision of services, at a. price which is below the cost, as may be determined by regulations, of production of the goods or provision of services, with a view to reduce competition or eliminate the competitors. Regulation of combinations

Combination

5. The acquisition of one or more enterprises by one or more persons or merger or amalgamation of enterprises shall be a combination of such enterprises and persons or enterprises, if—

(a) any acquisition where—

(i) the parties to the acquisition, being the acquirer and the enterprise, whose control, shares, voting rights or assets have been acquired or are being acquired jointly have,—

(A) either, in India, the assets of the value of more than rupees one thousand crores or turnover more than rupees three thousand crores; or

(B) in India or outside India, in aggregate, the assets of the value of more than five hundred million US dollars or turnover more than fifteen hundred million US dollars; or

(ii) the group, to which the enterprise whose control, shares, assets or voting rights have been acquired or are being acquired, would belong after the acquisition, jointly have or would jointly have,—

(A) either in India, the assets of the value of more than rupees four thousand crores or turnover more than rupees twelve thousand crores; or

(B) in India or outside India, in aggregate, the assets of the value of more than two billion US dollars or turnover more than six billion US dollars; or

(b) acquiring of control by a person over an enterprise when such person has already direct or indirect control over another enterprise engaged in production, distribution or trading of a similar

or identical or substitutable goods or provision of a similar or identical or substitutable service, if—

(i) the enterprise over which control has been acquired along with the enterprise over which the acquirer already has direct or indirect control jointly have,—

(A) either in India, the assets of the value of more than rupees one thousand crores or

turnover more than rupees three thousand crores; or

(B) in India or outside India, in aggregate, the assets of the value of more than five hundred million US dollars or turnover more than fifteen hundred million US dollars;

or

(ii) the group, to which enterprise whose control has been acquired, or is being acquired, would belong after the acquisition, jointly have or would jointly have,—

(A) either in India, the assets of the value of more than rupees four thousand crores or turnover more than rupees twelve thousand crores; or

(B) in India or outside India, in aggregate, the assets of the value of more than two billion US dollars or turnover more than six billion US dollars; or

(C) any merger or amalgamation in which—

(i) the enterprise remaining after merger or the enterprise created as a result of the amalgamation, as the case may be, have,—

(A) either in India, the assets of the value of more than rupees one thousand crores or turnover more than rupees, three thousand crores; or

(B) in India or outside India, in aggregate, the assets of the value of more than five hundred million US dollars or turnover more than fifteen hundred million US dollars;

or

(ii) the group, to which the enterprise remaining after the merger or the enterprise created as a result of the amalgamation, would belong after the merger or the amalgamation, as the case may be, have or would have,—

(A) either in India, the assets of the value of more than rupees four-thousand crores or turnover more than rupees twelve thousand crores; or

(B) in I ndia or outside India, the assets of the value of more than two billion US dollars or turnover more than six billion US dollars.

Explanation.— For the purposes of this section,—

(a) "control" includes controlling the affairs or management by—

(i) one or more enterprises, either jointly or singly, over another enterprise or group;

(ii) one or more groups, either jointly or singly, over another group or enterprise;

(b) "group" means two or more enterprises which, directly or indirectly, are in a position to-

(i) exercise twenty-six per cent. or more of the voting rights in the other enterprise; or

(ii) appoint more than fifty percent, of the members of the board of directors in the other enterprise; or

(iii) control the management or affairs of the other enterprise;

(c) the value of assets shall be determined by taking the book value of the assets as shown, in the audited books of account of the enterprise, in the financial year immediately preceding the financial year in which the date of proposed merger falls, as reduced by any depreciation, and the value of assets shall include the brand value, value of goodwill, or value of copyright, patent, permitted use, collective mark, registered proprietor, registered trade mark, registered user, homonymous geographical indication, geographical indications, design or layout-design or similar other commercial rights, if any, referred to in sub-section (5) of section 3.

Regulation of combinations

6. (1) No person or enterprise shall enter into a combination which causes or is likely to cause an appreciable adverse effect on competition within the relevant market in India and such a combination shall be void.

(2) Subject to the provisions contained in sub-section (1), any person or enterprise, who or which proposes to enter into a combination, may, at his or its option, give notice to the Com-

mission, in the form as may be specified, and the fee which may be determined, by regulations, disclosing the details of the proposed combination, within seven days of—

(a) approval of the proposal relating to merger or amalgamation, referred to in clause (c) of section 5, by the board of directors of the enterprises concerned with such merger or amalgamation, as the case may be;

(b) execution of any agreement or other document for acquisition referred to in clause (a) of section 5 or acquiring of control referred to in clause (h) of that section.

(3) The Commission shall, after receipt of notice under sub-section (2), deal with such notice in accordance with the provisions contained in sections 29, 30 and 31.

(4) The provisions of this section shall not apply to share subscription or financing facility or any acquisition, by a public financial institution, foreign institutional investor, bank or venture capital fund, pursuant to any covenant of a loan agreement or investment agreement.

(5) The public financial institution, foreign institutional investor, bank or venture capital fund, referred to in sub-section (4) shall, within seven days from the date of the acquisition, file, in the form as may be specified by regulations, with the Commission the details of the acquisition including the details of control, the circumstances for exercise of such control and the consequences of default arising out of such loan agreement or investment agreement, as the case may be.

Explanation.—For the purposes of this section, the expression—

(a) "foreign institutional investor" has the same meaning as assigned to it in clause (a) of the Explanation to section 115AD of the Income-tax Act, 1961(43 of 1961);

(b) "venture capital fund" has the same meaning as assigned to it in clause (b) of the

Explanation to clause (23 FB) of section 10 of the Income-tax Act, 1961(43 of 1961);.

17.4 COMPETITION COMMISSION OF INDIA (CCI)

Establishment of Commission

7. (1) With effect from such date as the Central Government may, by notification, appoint, there shall be established, for the purposes of this Act, a Commission to be called the "Competition Commission of India".

(2) The Commission shall be a body corporate by the name aforesaid having perpetual succession and a common seal with power, subject to the provisions of this Act, to acquire, hold and dispose of property, both movable and immovable, and to contract and shall, by the said name, sue or be sued,

(3) The head office of the Commission shall be at such place as the Central Government may decide from time to time.

(4) The Commission may establish offices at other places in India.

Composition of Commission

8. (1) The Commission shall consist of a Chairperson and not less than two and not more than ten other Members to be appointed by the Central Government:

Provided that the Central Government shall appoint the Chairperson and a Member during the first year of the establishment of the Commission.

(2) The Chairperson and every other Member shall be a person of ability, integrity and standing and who, has been, or is qualified to be, a judge of a High Court; or, has special knowledge of, and professional experience of not less than fifteen years in international trade, economics, business, commerce, law, finance, accountancy, management, industry, public affairs, administration or in any other matter which, in the opinion of the Central Government, may be useful to the Commission.

(3) The Chairperson and other Members shall be whole-time Members.

Selection of Chairperson and other Members

9. The Chairperson and other Members shall be selected in the manner as may be prescribed.

Term of office of Chairperson and other Members

10. (1) The Chairperson and every other Member shall hold office as such for a term of five years from the date on which he enters upon his office and shall be eligible for re-appointment:

Provided that no Chairperson or other Member shall hold office as such after he has attained,—

(a) in the case of the Chairperson, the age of sixty-seven years;

(b) in the case of any other Member, the age of sixty-five years.

(2) A vacancy caused by the resignation or removal of the Chairperson or any other Member under section 11 or by death or otherwise shall be filled by fresh appointment in accordance with the provisions of sections 8 and 9.

(3) The Chairperson and every other Member shall, before entering upon his office, make and subscribe to an oath of office and of secrecy in such form, manner and before such authority, as may be prescribed.

(4) In the event of the occurrence of a vacancy in the office of the Chairperson by reason of his death, resignation or otherwise, the senior-most Member shall act as the Chairperson,

until the date on which a new Chairperson, appointed in accordance with the provisions of this Act to fill such vacancy, enters upon his office.

(5) When the Chairperson is unable to discharge his functions owing to absence, illness or any other cause, the senior-most Member shall discharge the functions of the Chairperson until the date on which the Chairperson resumes the charge of his functions.

Resignation, removal and suspension of Chairperson and other members

11. (1) The Chairperson or any other Member may, by notice in writing under his hand addressed to the Central Government, resign his office:

Provided that the Chairperson or a Member shall, unless he is permitted by the Central Government to relinquish his office sooner, continue to hold office until the expiry of three months from the date of receipt of such notice or until a person duly appointed as his successor enters upon his office or until the expiryof his term of office, whichever is the earliest.

(2) Notwithstanding anything contained in sub-section (1), the Central Government may, by order, remove the Chairperson or any other Member from his office if such Chairperson or Member, as the case may be,—

(a) is, or at any time has been, adjudged as an insolvent; or

(b) has engaged at any time, during his term of office, in any paid employment, or

(c) has been convicted of an offence which, in the opinion of the Central Government, involves moral turpitude; or

(d) has acquired such financial or other interest as is likely to affect prejudicially his functions as a Member; or

(e) has so abused his position as to render his continuance in office prejudicial to the public interest; or

(f) has become physically or mentally incapable of acting as a Member.

(3) Notwithstanding anything contained in sub-section (2), no Member shall be removed from his office on the ground specified in clause (d) or clause (e) of that subsection unless the Supreme Court, on a reference being made to it in this behalf by the Central Government, has, on an inquiry, held by it in accordance with such procedure as may be prescribed in this behalf by the Supreme Court, reported that the Member, ought on such ground or grounds to be removed.

Restriction on employment of Chairperson and other Members in certain cases

12. The Chairperson and other Members shall not, for a period of one year from the ' date on which they cease to hold office, accept any employment in, or connected with the management or administration of, any enterprise which has been a party to a proceeding before the Commission under this Act:

Provided that nothing contained in this section shall apply to any employment under the Central Government or a State Government or local authority or in any statutory authority or any corporation established by or under any Central, State or Provincial Act or a Government company as defined in section 617 of the Companies Act, 1956 (1 of 1956).

Financial and administrative powers of Member Administration

13. The Central Government shall designate any Member as Member Administration who shall exercise such financial and administrative powers as may be vested in him under the rules made by the Central Government:

Provided that the Member Administration shall have authority to delegate such of his financial and administrative powers as he may think fit to any other officer of the Commission subject to the condition that such officer shall, while exercising such delegated powers continue to act under the direction, superintendence and control of the Member Administration.

Salary and allowances and other terms and conditions of service of Chairperson and other Members

14. (1) The salary, and the other terms and conditions of service, of the Chairperson and other Members, including travelling expenses, house rent allowance and conveyance facilities, sumptuary allowance and medical facilities shall be such as may be prescribed.

(2) The salary, allowances and other terms and conditions of service of the Chairperson or a Member shall not be varied to his disadvantage after appointment.

Vacancy, etc. not to invalidate proceedings of Commission

15. No act or proceeding of the Commission shall be invalid merely by reason of—

(a) any vacancy in, or any defect in the constitution of, the Commission; or

(b) any defect in the appointment of a person acting as a Chairperson or as a Member; or

(c) any irregularity in the procedure of the Commission not affecting the merits of the case.

Appointment of Director General, etc.

16. (1) The Central Government may, by notification, appoint a Director General and as many Additional, Joint, Deputy or Assistant Directors General or such other advisers, consultants or officers, as it may think fit, for the purposes of assisting the Commission in conducting inquiry into contravention of any of the provisions of this Act and for the conduct of cases before the Commission and for performing such other functions as are, or may be, provided by or under this Act

(2) Every Additional, Joint, Deputy and Assistant Directors General or such other advisers, consultants and officers, shall exercise his powers, and discharge his functions, subject to the general control, supervision and direction of the Director General.

(3) The salary, allowances and other terms and conditions of service of the Director General and Additional, Joint, Deputy and Assistant Directors General or such other advisers, consultants or officers, shall be such as may be prescribed.

(4) The Director General and Additional, Joint, Deputy and Assistant Directors General or such other advisers, consultants or officers shall be appointed from amongst persons of integrity and outstanding ability and who have experience in investigation, and knowledge of accountancy, management, business, public administration, international trade, law or economics and such other qualifications as may be prescribed.

Registrar and officers and other employees of Commission

17. (1) The Commission may appoint a Registrar and such officers and other employees as it considers necessary for the efficient performance of its functions under this Act.

(2) The salaries and allowances payable to and other terms and conditions of service of the Registrar and officers and other employees of the Commission and the number of such officers and other employees shall be such as may be prescribed.

DUTIES, POWERS AND FUNCTIONS OF COMMISSION

Duties of Commission

18. Subject to the provisions of this Act, it shall be the duty of the Commission to eliminate practices having adverse effect on competition, promote and sustain competition, protect the interests of consumers and ensure freedom of trade carried on by other participants, in markets in India: Provided that the Commission may, for the purpose of discharging its duties or performing its functions under this Act, enter into any memorandum or arrangement with the prior approval of the Central Government, with any agency of any foreign country.

Inquiry into certain agreements and dominant position of enterprise

19. (1) The Commission may inquire into any alleged contravention of the provisions contained in subsection (1) of section 3 or sub-section (1) of section 4 either on its own motion or on—

(a) receipt of a complaint, accompanied by such fee as may be determined by regula tions, from any person, consumer or their association or trade association; or

(b) a reference made to it by the Central Government or a State Government or a statu tory authority.

(2) Without prejudice to the provisions contained in sub-section (1), the powers and functions of the Commission shall include the powers and functions specified in sub-sections (3) to (7).

(3) The Commission shall, while determining whether an agreement has an appreciable adverse effect on competition under section 3, have due regard to all or any of the following factors, namely:—

(a) creation of barriers to new entrants in the market;

(b) driving existing competitors out of the market;

(c) foreclosure of competition by hindering entry into the market;

(d) accrual of benefits to consumers;

(e) improvements in production or distribution of goods or provision of services;

(f) promotion of technical, scientific and economic development by means of production or distribution of goods or provision of services.

(4) The Commission shall, while inquiring whether an enterprise enjoys a dominant position or not under section 4, have due regard to all or any of the following factors, namely:—

(a) market share of the enterprise;

(b) size and resources of the enterprise;

(c) size and importance of the competitors;

(d) economic power of the enterprise including commercial advantages over competi tors;

(e) vertical integration of the enterprises or sale or service network of such enterprises;

(f) dependence of consumers on the enterprise;

(g) monopoly or dominant position whether acquired as a result of any statute or by virtue of being a Government company or a public sector undertaking or otherwise;

(h) entry barriers including barriers such as regulatory barriers, financial risk, high capi tal cost of entry, marketing entry barriers, technical entry barriers, economies of scale, high cost of substitutable goods or service for consumers;

(i) countervailing buying power;

(j) market structure and size of market;

(k) social obligations and social costs;

(l) relative advantage, by way of the contribution to the economic development, by the enterprise enjoying a dominant position having or likely to have an appreciable ad verse effect on competition;

(m) any other factor which the Commission may consider relevant for the inquiry.

(5) For determining whether a market constitutes a "relevant market" for the purposes of this Act, the Commission shall have due regard to the "relevant geographic market'' and "relevant product market".

(6) The Commission shall, while determining the "relevant geographic market", have due regard to all or any of the following factors, namely:—

(a) regulatory trade barriers;

(b) local specification requirements;

(c) national procurement policies;

(d) adequate distribution facilities;

(e) transport costs;

(f) language;

(g) consumer preferences;

(h) need for secure or regular supplies or rapid after-sales services.

(7) The Commission shall, while determining the "relevant product market", have due regard to all or any of the following factors, namely:—

(a) physical characteristics or end-use of goods;

(b) price of goods or service;

(c) consumer preferences;

(d) exclusion of in-house production;

(e) existence of specialised producers;

(f) classification of industrial products.

Inquiry into combination by Commission

20. (1) The Commission may, upon its own knowledge or information relating to acquisition referred to in clause (a) of section 5 or acquiring of control referred to in clause (b) of section 5 or merger or amalgamation referred to in clause (c) of that section, inquire into whether such a combination has caused or is likely to cause an appreciable adverse effect on competition in India: Provided that the Commission shall not initiate any inquiry under this subsection after the expiry of one year from the date on which such combination has taken effect.

(2) The Commission shall, on receipt of a notice under sub-section (2) of section 6 or upon receipt of a reference under sub-section (1) of section 21, inquire whether a combination referred to in that notice or reference has caused or is likely to cause an appreciable adverse effect on competition in India.

(3) Notwithstanding anything contained in section 5, the Central Government shall, on the expiry of a period of two years from the date of commencement of this Act and thereafter every two years, in consultation with the Commission, by notification, enhance or reduce, on the basis of the wholesale price index or fluctuations in exchange rate of rupee or foreign currencies, the value of assets or the value of turnover, for the purposes of that section.

(4) For the purposes of determining whether a combination would have the effect of or is likely to have an appreciable adverse effect on competition in the relevant market, the Commission shall have due regard to all or any of the following factors, namely:—

(a) actual and potential level of competition through imports in the market;

(b) extent of barriers to entry into the market;

(c) level of combination in the market;

(d) degree of countervailing power in the market;

(e) likelihood that the combination would result in the parties to the combination being able to significantly and sustainably increase prices or profit margins;

(f) extent of effective competition likely to sustain in a market;

(g) extent to which substitutes are available or arc likely to be available in the market;

(h) market share, in the relevant market, of the persons or enterprise in a combination, individually and as a combination;

(i) likelihood that the combination would result in the removal of a vigorous and effective competitor or competitors in the market;

(j) nature and extent of vertical integration in the market;

(k) possibility of a failing business;

(l) nature and extent of innovation;

(m) relative advantage, by way of the contribution to the economic development, by any combination having or likely to have appreciable adverse effect on competition;

(n) whether the benefits of the combination outweigh the adverse impact of the combi nation, if any.

Reference by statutory authority

21. (1) Where in the course of a proceeding before any statutory authority an issue is raised by any party that any decision which such statutory authority has taken or proposes to take. is or would be, contrary to any of the provisions of this Act, then such statutory authority may make a reference in respect of such issue to the Commission.

(2) On receipt of a reference under sub-section (1), the Commission shall, after hearing the parties to the proceedings, give its opinion to such statutory authority which shall thereafter pass such order on the issues referred to in that sub-section as it deems fit: Provided that the Commission shall give its opinion under this section within sixty days of receipt of such reference.

Benches of Commission

22. (1) The jurisdiction, powers and authority of the Commission may be exercised by Benches thereof.

(2) The Benches shall be constituted by the Chairperson and each Bench shall consist of not less than two Members.

(3) Every Bench shall consist of at least one Judicial Member.

Explanation—For the purposes of this sub-section, "Judicial Member" means a Member who is, or has been, or is qualified to be, a Judge of a High Court.

(4) The Bench over which the Chairperson presides shall be the Principal Bench and the other Benches shall be known as the Additional Benches.

(5) There shall be constituted by the Chairperson one or more Benches to be called the Mergers Bench or Mergers Benches, as the case may be, exclusively to deal with matters referred to in sections 5 and 6.

(6) The places at which the Principal Bench, other Additional Bench or Mergers Bench shall ordinarily sit,shall be such as the Central Government may, by notification, specify.

Distribution of business of Commission amongst Benches

23. (1) Where any Benches are constituted, the Chairperson may, from time to time, by order, make provisions as to the distribution of the business of the Commission amongst the Benches and specify the matters, which may be dealt with by each Bench.

(2) If any question arises as to whether any matter falls within the purview of the business allocated to a Bench, the decision of the Chairperson thereon shall be final.

(3) The Chairperson may—

(i) transfer a Member from one Bench to another Bench; or

(ii) authorise the Members of one Bench to discharge also the functions of the Members of other Bench: Provided that the Chairperson shall transfer, with the prior approval of the Central Government, a Member from one Bench situated in one city to another Bench situated in another city.

(4) The Chairperson may, for the purpose of securing that any case or matter which, having regard to the nature of the questions involved, requires or is required in his opinion or under the rules made by the Central Government in this behalf, to be decided by a Bench composed of more than two Members, issue such general or special orders as he may deem fit.

Procedure for deciding a case where Members of a Bench differ in opinion

24. If the Members of a Bench differ in opinion on any point, they shall state the point or points on which they differ, and make a reference to the Chairperson who shall either hear the point or points himself or refer the case for hearing on such point or points by one or more of the other Members and such point or points shall be decided according to the opinion of the majority of the Members who have heard the case, including those who first heard it.

Jurisdiction of Bench

25. An inquiry shall be initiated or a complaint be instituted or a reference be made under this Act before a Bench within the local limits of whose jurisdiction—

(a) the respondent, or each of the respondents, where there are more than one, at the time of the initiation of inquiry or institution of the complaint or making of reference, as the case may be, actually and voluntarily resides, or carries on business, or personally works for gain; or

(b) any of the respondents, where there are more than one, at the time of the initiation of the inquiry or institution of complaint or making of reference, as the case may be, actually and voluntarily resides or carries on business or personally works for gain provided that in such case either the leave of the Bench is given, or the respondents who do not reside, or carry on business, or personally work for gain, as aforesaid, acquiesce in such institution; or

(c) the cause of action, wholly or in part, arises.

Explanation.—A respondent, being a person referred to in sub-clause (iii) or sub-clause (vi) or sub-clause (vii) or sub-clause (viii) of clause (l) of section 2, shall be deemed to carry on business at its sole or principal place of business in India or at its registered office in India or where it has also a subordinate office at such place.

Procedure for inquiry on complaints under Section 19

26. (1) On receipt of a complaint or a reference from the Central Government or a State Government or a statutory authority or on its own knowledge or information, under section 19, if the Commission is of the opinion that there exists a prima facie case, it shall direct the Director General to cause an investigation to be made into the matter.

(2) The Director General shall, on receipt of direction under sub-section (1), submit a report on his findings within such period as may be specified by the Commission.

(3) Where on receipt of a complaint under clause (a) of sub-section (1) of section 19, the Commission is of the opinion that there exists no prima facie case, it shall dismiss the complaint and may pass such orders as it deems fit, including imposition of costs, if necessary.

(4) The Commission shall forward a copy of the report referred to in sub-section (2) to the parties concerned or to the Central Government or the State Government or the statutory authority, as the case may be.

(5) If the report of the Director General relates on a complaint and such report recommends that there is no contravention of any of the provisions of this Act, the complainant shall be given an opportunity to rebut the findings of the Director General.

(6) If, after hearing the complainant, the Commission agrees with the recommendation of the Director General, it shall dismiss the complaint.

(7) If, after hearing the complainant, the Commission is of the opinion that further inquiry is called for, it shall direct the complainant to proceed with the complaint.

(8) If the report of the Director General relates on a reference made under sub-section (1) and such report recommends that there is no contravention of the pro visions of this Act, the Commission shall invite comments of the Central Government or the State Government or the statutory authority, as the case may be, on such report and on receipt of such comments, the Commission shall return the reference if there is no prima facie case or proceed with the reference as a complaint if there is a prima facie case.

(9) If the report of the Director General referred to in sub-section (2) recommends that there is contravention of any of the provisions of this Act, and the Commission is of

the opinion that further inquiry is called for, it shall inquire into such contravention in accordance with the provisions of this Act.

Orders by Commission after inquiry into agreements or abuse of dominant position

27. Where after inquiry the Commission finds that any agreement referred to in section 3 or action of an enterprise in a dominant position, is in contravention of section 3 or section 4, as the case may be, it may pass all or any of the following orders, namely:—

(a) direct any enterprise or'association of enterprises or person or association of persons, as the case may be, involved in such agreement, or abuse of dominant position, t'o discontinue and not to re-enter such agreement or discontinue such abuse of dominant position, as the case may be;

(b) impose such penalty, as it may deem fit which shall be not more than ten per cent. of the average of the turnover for the last three preceding financial years, upon each of such person or enterprises which are parties to such agreements or abuse:

Provided that in case any agreement referred to in section 3 has been entered into by any cartel, the Commission shall impose upon each producer, seller, distributor, trader or service provider included in that cartel, a penalty equivalent to three times of the amount of profits made out of such agreement by the cartel or ten per cent. of the average of the turnover of the cartel for the last preceding three financial years, whichever is higher;

(c) award compensation to parties in accordance with the provisions contained in section 34;

(d) direct that the agreements shall stand modified to the extent and in the manner as may be specified in the order by the Commission;

(e) direct the enterprises concerned to abide by such other orders as the Commission may pass and comply with the directions, including payment of costs, if any:

(f) recommend to the Central Government for the division of an enterprise enjoying dominant position;

(g) pass such oilier order as it may deem fit.

Division of enterprise enjoying dominant position

28 (1) The Central Government, on recommendation under clause (f) of section 27, may, notwithstanding anything contained in any other law for the time being in force, by order in writing, direct division of an enterprise enjoying dominant position to ensure that such enterprise does not abuse its dominant position.

(2) In particular, and without prejudice to the generality of the foregoing powers, the order referred to in sub-section (1) may provide for all or any of the following matters, namely:—

(a) the transfer or vesting of property, rights, liabilities or obligations;

(b) the adjustment of contracts either by discharge or reduction of any liability or obligation or otherwise;

(c) the creation, allotment, surrender or cancellation of any shares, stocks or securities;

(d) the payment of compensation to any person who suffered any loss due to dominant position of such enterprise;

(e) the formation or winding up of an enterprise or the amendment of the memorandum of association or articles of association or any other instruments regulating the business of any enterprise;

(f) the extent to which, and the circumstances in which, provisions of the order affecting an enterprise may be altered by the enterprise and the registration thereof;

(g) any other matter which may be necessary to give effect to the division of the enterprise.

(3) Notwithstanding anything contained in any other law for the time being in force or in any contract or in any memorandum or articles of association, an officer of a company who ceases to hold office as such in consequence of the division of an enterprise shall not be entitled to claim any compensation for such cesser.

Procedure for investigation of combination

29. (1) Where the Commission is of the opinion that a combination is likely to cause, or has caused an appreciable adverse effect on competition within the relevant market in India, it shall issue a notice to show cause to the parties to combination calling upon them to respond within thirty days of the receipt of the notice, as to why investigation in respect of such combination should not be conducted.

(2) The Commission, if it is prima facie of the opinion that the combination has, or is likely to have, an appreciable adverse effect on competition, it shall, within seven working days from the date of receipt of the response of the parties to the combination, direct the parties to the said combination to publish details of the combination within ten working days of such direction, in such manner, as it thinks appropriate, for bringing the combination to the knowledge or information of the public and persons affected or likely to be affected by such combination.

(3) The Commission may invite any person or member of the public, affected or likely to be affected by the said combination, to file his written objections, if any, before the Commission within fifteen working days from the date on which the details of the combination were published under sub-section (2).

(4) The Commission may, within fifteen working days from the expiry of the period specified in sub-section (3), call for such additional or other information as it may deem fit from the parties to the said combination.

(5) The additional or other information called for by the Commission shall be furnished by the parties referred to in sub-section (4) within fifteen days from the expiry of the period specified in sub-section (4).

(6) After receipt of all information and within a period of forty-five working days from the expiry of the period specified in sub-section (5), the Commission shall proceed to deal with the case in accordance with the provisions contained in section 31.

Inquiry into disclosures under sub-section (2) of section 6

30. Where any person or enterprise has given a notice under sub-section (2) of section 6. The Commission shall inquire—

(a) whether the disclosure made in the notice is correct;

(b) whether the combination has, or is likely to have, an appreciable adverse effect on competition.

Orders of Commission on certain combinations

31. (1) Where the Commission is of the opinion that any combination does not, or is not likely to, have an appreciable adverse effect on competition, it shall, by order, approve that combination including the combination in respect of which a notice has been given under sub-section (2) of section 6.

(2) Where the Commission is of the opinion that the combination has, or is likely to have, an appreciable adverse effect on competition, it shall direct that the combination shall not take effect.

(3) Where the Commission is of the opinion that the combination has, or is likely to have, an appreciable adverse effect on competition but such adverse effect can be eliminated by suitable modification to such combination, it may propose appropriate modification to the combination, to the parties to such combination.

(4) The parties, who accept the modification proposed by the Commission under sub-section (3), shall carry out such modification within the period specified by the Commission.

(5) If the parties to the combination, who have accepted the modification under subsection (4), fail to carry out the modification within the period specified by the Commission, such combination shall be deemed to have an appreciable adverse effect on competition and the Commission shall deal with such combination in accordance with the provisions of this Act.

(6) If the parties to the combination do not accept the modification proposed by the Commission under sub-section (3), such parties may, within thirty working days of the modification proposed by the Commission, submit amendment to the modification proposed by the Commission under that sub-section.

(7) If the Commission agrees with the amendment submitted by the parties under sub-section (6), it shall, by order, approve the combination.

(8) If the Commission does not accept the amendment submitted under sub-section (6), then, the parties shall be allowed a further period of thirty working days within which such parties shall accept the modification proposed by the Commission under sub-section (3).

(9) If the parties fail to accept the modification proposed by the Commission within thirty working days referred to in sub-section (6) or within a further period of thirty working days referred to in sub-section (8), the combination shall be deemed to have an appreciable adverse effect on competition and be dealt with in accordance with the provisions of this Act.

(10) Where the Commission has directed under sub-section (2) that the combination shall not take effect or the combination is deemed to have an appreciable adverse effect on competition under sub-section (9), then, without prejudice to any penalty which may be imposed or any prosecution which may be initiated under this Act, the Commission may order that—

(a) the acquisition referred to in clause (a) of section 5; or

(b) the acquiring of control referred to in clause (b) of section 5; or

(c) the merger or amalgamation referred to in clause (c) of section 5, shall not be given effect to: Provided that the Commission may, if it considers appropriate, frame a scheme to implement its order under this sub-section.

(11) If the Commission does not, on the expiry of a period of ninety working days from the date of publication referred to in sub-section (2) of section 29, pass an order or issue direction in accordance with the provisions of sub-section (1) or sub-section (2) or sub-section (7), the combination shall be deemed to have been approved by the Commission.

Explanation—For the purposes of determining the period of ninety working days specified in this subsection, the period of thirty working days specified in sub-section (6) and a further period of thirty working days specified in sub-section (8) shall be excluded.

(12) Where any extension of time is sought by the parties to the combination, the period of ninety working days shall be reckoned after deducting the extended time granted at the request of the parties.

(13) Where the Commission has ordered a combination to be void, the acquisition or acquiring of control or merger or amalgamation referred to in section 5, shall be dealt with by the authorities under any other law for the time being in force as if such acquisition or acquiring of control or merger or amalgamation had not taken place and the parties to the combination shall be dealt with accordingly.

(14) Nothing contained in this Chapter shall affect any proceeding initiated or which may be initiated under any other law for the time being in force.

Acts taking place outside India but having an effect on competition in India

32. The Commission shall, notwithstanding that,—

(a) an agreement referred to in section 3 has been entered into outside India; or

(b any party to such agreement is outside India; or

(c) any enterprise abusing the dominant position is outside India; or

(d) a combination has taken place outside India; or

(e) any party to combination is outside India; or

(f) any other matter or practice or action arising out of such agreement or dominant position or combination is outside India, have power to inquire into such agreement or abuse of dominant position or combination if such agreement or dominant position or combination has, or is likely to have, an appreciable adverse effect on competition in the relevant market in India.

Power to grant interim relief

33.(1) Where during an inquiry before the Commission, it is proved to the satisfaction of the Commission, by affidavit or otherwise, that an act in contravention of sub-section (1) of section 3 or sub-section (1) of section 4 or section 6 has been commit ted and continues to be committed or that such act is about to be committed, the Commission may, by order, grant a temporary injunction restraining any party from carrying on such act until the conclusion of such inquiry or until further orders, without giving notice to the opposite party, where it deems it necessary.

(2) Where during the inquiry before the Commission it is proved to the satisfaction of the Commission by affidavit or otherwise that import of any goods is likely to contravene sub-section (1) of section 3 or subsection (1) of section 4 or section 6, it may, by order, grant a temporary injunction restraining any party from importing such goods until the conclusion of such inquiry or until further orders, without giving notice to the opposite party, where it deems it necessary and a copy of such order granting temporary injunction shall be sent to the concerned authorities.

(3) The provisions of rules 2A to 5 (both inclusive) of Order XXXIX of the First Schedule to the Code of Civil Procedure, 1908 (5 of 1908) shall, as far as may be, apply to a temporary injunction issued by the Commission under this Act, as they apply to a temporary injunction issued by a civil court, and any reference in any such rule to a suit shall be construed as a reference to any inquiry before the Commission.

Power to award compensation

34.(1) Without prejudice to any other provisions contained in this Act, any person may make an application to the Commission for an order for the recovery of compensation from any enterprise for any loss or damage shown to have been suffered, by such person as a result of any contravention of the provisions of Chapter II, having been committed by such enterprise.

(2) The Commission may, after an inquiry made into the allegations mentioned in the application made under sub-section (1), pass an order directing the enterprise to make payment to the applicant, of the amount determined by it as realisable from the enterprise as compensation for the loss or damage caused to the applicant as a result of any contravention of the provisions of Chapter II having been committed by such enterprise.

(3) Where any loss or damage referred to in sub-section (1) is caused to numerous persons having the same interest, one or more of such persons may, with the permission of the Commission, make an application under that sub-section for and on behalf of, or for the benefit of, the persons so interested, and thereupon, the provisions of rule 8 of Order 1 of the First Schedule to the Code of Civil Procedure, 1908 (5 of 1908), shall apply subject to the modification that every reference therein to a suit or decree shall be construed as a reference to the application before the Commission and the order of the Commission thereon.

Appearance before Commission

35. A complainant or defendant or the Director General may either appear in person or authorise one or more chartered accountants or company secretaries or cost accountants or legal practitioners or any of his or its officers to present his or its case before the Commission.

Explanation—For the purposes of this section,—

(a) "chartered accountant" means a chartered accountant as defined in clause (b) of sub-section (1) of section 2 of the Chartered Accountants Act, 1949 (38 of 1949) and who has obtained a certificate of practice under sub-section (1) of section 6 of that Act;

(b) "company secretary" means a company secretary as defined in clause (c) of sub-section (1) of section 2 of the Company Secretaries Act, 1980 (56 of 1980) and who has obtained a certificate of practice under sub-section (1) of section 6 of that Act;

(c) "cost accountant" means a cost accountant as defined in clause (b) of sub-section (1) of section 2 of the Cost and Works Accountants Act, 1959 (23 of 1959) and who has obtained a certificate of practice under sub-section (1) of section 6 of that Act;

(d) "legal practitioner" means an advocate, vakil or an attorney of any High Court, and includes a pleader in practice.

Power of Commission to regulate its own procedure

36. (1) The Commission shall not be bound by the procedure laid down by the Code of Civil Procedure, 1908 (5 of 1908), but shall be guided by the principles of natural justice and, subject to the other provisions of this Act and of any rules made by the Central Government, the Commission shall have powers to regulate its own procedure in cluding the places at which they shall have their sittings, duration of oral hearings when granted, and times of its inquiry.

(2) The Commission shall have, for the purposes of discharging its functions umder this Act, the same powers as are vested in a civil court under the Code of Civil Procedure, 1908(5 of 1908), while trying a suit, in respect of the following matters, namely:—

(a) summoning and enforcing the attendance of any person and examining him on oath;

(b) requiring the discovery and production of documents;

(c) receiving evidence on affidavits;

(d) issuing commissions for the examination of witnesses or documents;

(e) subject to the provisions of sections 123 and 124 of the Indian Evidence Act, 1872 (1 of 1872), requisitioning any public record or document or copy of such record or document from any office;

(f) dismissing an application in default or deciding it ex-parte;

(g) any other matter which may be prescribed.

(3) Every proceeding before the Commission shall be deemed to be a judicial proceeding within the meaning of sections 193 and 228 and for the purposes of section 196 of the Indian Penal Code (45 of 1860) and the Commission shall be deemed to be a civil court for the purposes of section 195 (2 of 1974) and Chapter XXVI of the Code of Criminal Procedure, 1973.

(4) The Commission may call upon such experts, from the fields of economics, commerce, accountancy, international trade or from any other discipline as it deems necessary, to assist the Commission in the conduct of any inquiry or proceeding before it.

(5) The Commission may direct any person—

(a) to produce before the Director General or the Registrar or an officer authorised by it, such,books, accounts or other documents in the custody or under the control of such person so directed as may be specified or described in the direction, being documents relating to any trade, the examination of which may be required for the purposes of this Act;

(b) to furnish to the Director General or the Registrar or any officer authorised by it, as respects the trade or such other information as may be in his possession in relation to the trade carried on by such person, as may be required for the purposes of this Act.

(6) If the Commission is of the opinion that any agreement referred to in section 3 or "abuse of dominant position referred to in section 4 or the combination referred to in section 5 has caused or is likely to cause an appreciable adverse effect on competition in the relevant market in India and it is necessary to protect, without further delay, the interests of consumers and other market participants in India, it may conduct an inquiry or adjudicate upon any matter under this Act after giving a reasonable oral hearing to the parties concerned.

Review of orders of Commission

37. Any person aggrieved by an order of the Commission from which an appeal is allowed by this Act but no appeal has been preferred, may, within thirty days from the date of the order, apply to the Commission for review of its order and the Commission may make such order thereon as it thinks fit:

Provided that the Commission may entertain a review application after the expiry of the said period of thirty days, if it is satisfied that the applicant was prevented by sufficient cause from preferring the application in time: Provided further that no order shall be modified or set aside without giving an opportunity of being heard to the person in whose favour the order is given and the Director General where he was a party to the proceedings.

Rectification of orders

38. (1) With a view to rectifying any mistake apparent from the record, the Commission may amend any order passed by it under the provisions of this Act.

(2) Subject to the other provisions of this Act, the Commission may make—

(a) an amendment under sub-section (1) of its own motion;

(b) an amendment for rectifying any such mistake which has been brought to its notice by any party to the order.

Explanation— For the removal of doubts, it is hereby declared that the Commission shall not, while rectifying any mistake apparent from record, amend substantive part of its order passed under the provisions of this Act.

Execution of orders of Commission

39. Every order passed by the Commission under this Act shall be enforced by the Commission in the same manner as if it were a decree or order made by a High Court or the principal civil court in a suit pending therein and it shall be lawful for the Commission to send, in the event of its inability to execute it, such order to the High Court or the principal civil court, as the case may be, within the local limits of whose jurisdiction,—

(a) in the case of an order against a person referred to in sub-clause (iii) or sub-clause (vi) or subclause (vii) of clause (l) of section 2, the registered office or the sole or principal place of business of the person in India or where the person has also a subordinate office, that subordinate office, is situated;

(b) in the case of an order against any other person, the place, where the person concerned voluntarily resides or carries on business or personally works for gain, is situated, and thereupon the court to which the order is so sent shall execute the order as if it were a decree or order sent to it for execution.

Appeal

40. Any person aggrieved by any decision or order of the Commission may file an appeal to the Supreme Court within sixty days from the date of communication of the decision or order of the Commission to him on one or more of the grounds specified in section 100 of the Code of Civil Procedure, 1908 (5 of 1908):

Provided that the Supreme Court may, if it is satisfied that the appellant was prevented by sufficient cause from filing the appeal within the said period, allow it to be filed within a further period not exceeding sixty days:

Provided further that no appeal shall lie against any decision or order of the Commission made with the consent of the parties.

DUTIES OF DIRECTOR GENERAL

Director General to investigate contravention

41. (1) The Director General shall, when so directed by the Commission, assist the Commis sion in investigating into any contravention of the provisions of this Act or any rules or regulations made thereunder.

(2) The Director General shall have all the powers as are conferred upon the Commis sion under subsection (2) of section 36.

(3) Without prejudice to the provisions of sub-section (2), sections 240 and 240A of the Companies Act, 1956 (1 of 1956), so far as may be, shall apply to an investigation made by the Director General or any other person investigating under his authority, as they apply to an inspector appointed under that Act.

PENALTIES

Contravention of orders of Commission

42. (1) Without prejudice to the provisions of this Act, if any person contravenes, without any reasonable ground, any order of the Commission, or any condition or restriction subject to which any approval, sanction, direction or exemption in relation to any matter has been accorded, given, made or granted under this Act or fails to pay the penalty imposed under this Act, he shall be liable to be detained in civil prison for a term which may extend to one year, unless in the meantime the Commission directs his release and he shall also be liable to a penalty not exceeding rupees ten lakhs.

(2) The Commission may, while making an order under this Act, issue such directions to any person or authority, not inconsistent with this Act, as it thinks necessary or desir able, for the proper implementation or execution of the order, and any person who commits breach of. or fails to comply with, any obligation imposed on him under such direction, may be ordered by the Commission to be detained in civil prison for a term not exceeding one year unless in the meantime the Commission directs his re lease and he shall also be liable to a penalty not exceeding rupees ten lakhs.

Penalty for failure to comply with directions of Commission and Director General

43. If any person fails to comply with a direction given by—

(a) the Commission under sub-section (5) of section 36; or

(b) the Director General while exercising powers referred to in sub-section (2) of section 41, the Commission shall impose on such person a penalty of rupees one lakh for each day during which such failure continues.

Penalty for making false statement or omission to furnish material information

44. If any person, being a party to a combination,—

(a) makes a statement which is false in any material particular, or knowing it to be false; or

(b) omits to state any material particular knowing it to be material, such person shall be liable to a penalty which shall not be less than rupees fifty lakhs but which may extend to rupees one crore, as may be determined by the Commission.

Penalty for offences in relation to furnishing of information

45. (1) Without prejudice to the provisions of section 44, if any person, who furnishes or is required to furnish under this Act any particulars, documents or any information—

(a) makes any statement or furnishes any document which he knows or has reason to believe to be false in any material particular; or

(b) omits to state any material fact knowing it to be material; or 21

(c) wilfully alters, suppresses or destroys any document which is required to be furnished as aforesaid, the Commission shall impose on such person a penalty which may extend to rupees ten lakhs.

(2) Without prejudice to the provisions of sub-section (1), the Commission may also pass such other order as it deems fit.

Power to impose lesser penalty

46. The Commission may, if it is satisfied that any producer, seller, distributor, trader or service provider included in any cartel, which is alleged to have violated section 3, has made a full and true disclosure in respect of the alleged violations and such disclosure is vital, impose upon such producer, seller, distributor, trader or service provider a lesser penalty as it may deem fit, than leviable under this Act or the rules or the regulations: Provided that lesser penalty shall not be imposed by the Commission in cases where proceedings for the violation of any of the provisions of this Act or the rules or the regulations have been instituted or any investigation has been directed to be made under section 26 before making of such disclosure:

Provided further that lesser penalty shall be imposed by the Commission only in respect of a producer, seller, distributor, trader or service provider included in the cartel, who first made the full, true and vital disclosures under this section:

Provided also that the Commission may, if it is satisfied that such producer, seller, distributor, trader or service provider included in the cartel had in the course of proceedings,—

(a) not complied with the condition on which the lesser penalty was imposed by the Commission; or

(b) had given false evidence; or

(c) the disclosure made is not vital,

and thereupon such producer, seller, distributor, trader or service provider may be tried for the offence with respect to which the lesser penalty was imposed and shall also be liable to the imposition of penalty to which such person has been liable, had lesser penalty not been imposed.

Crediting sums realised by way of penalties to Consolidated Fund of India

47. All sums realised by way of penalties under this Act shall be credited to the Consolidated Fund of India.

Contravention by companies

48. (1) Where a person committing contravention of any of the provisions of this Act or of any rule, regulation, order made or direction issued thereunder is a company, every person who, at the time the contravention was committed, was in charge of, and was responsible to the company for the conduct of the business of the company, as well as the company, shall be deemed to be guilty of the contravention and shall be liable to be proceeded against and punished accordingly:

Provided that nothing contained in this sub-section shall render any such person liable to any punishment if he proves that the contravention was committed without his knowledge or that he had exercised all due diligence to prevent the commission of such contravention.

(2) Notwithstanding anything contained in sub-section (1), where a contravention of any of the provisions of this Act or of any rule, regulation, order made or direction issued thereunder has been committed by a company and it is proved that the contravention has taken place with the consent or connivance of, or is attributable to any neglect on the part of, any director, manager, secretary or other officer of the company, such director, manager, secretary or other officer shall also be deemed to be guilty of that contravention and shall be liable to be proceeded against and punished accordingly.

Explanation—For the purposes of this section,—

(a)”company” means a body corporate and includes a firm or other association of individuals: and

(b) “director”, in relation to a firm, means a partner in the firm.

COMPETITION ADVOCACY

Competition advocacy

49. (1) In formulating a policy on competition (including review of laws related to competition), the Central Government may make a reference to the Commission for its opinion on possible effect of such policy on competition and on receipt of such a reference, the Commission shall, within sixty days of making such reference, give its opinion to the Central Government, which may thereafter formulate the policy as it deems fit.

(2) The opinion given by the Commission under sub-section (1) shall not be binding upon the Central Government in formulating such policy.

(3) The Commission shall take suitable measures, as may be prescribed, for the promotion of competition advocacy, creating awareness and imparting training about competition issues.

17.5 FINANCE, ACCOUNTS AND AUDIT

Grants by Central Government

50. The Central Government may, after due appropriation made by Parliament by law in this behalf, make to the Commission grants of such sums of money as the Government may think fit for being utilised for the purposes of this Act.

Constitution of Fund

51. (1) There shall be constituted a fund to be called the "Competition Fund" and there shall be credited thereto—

(a) all Government grants received by the Commission;

(b) the monies received as costs from parties to proceedings before the Commission;

(c) the fees received under this Act;

(d) the interest accrued on the amounts referred to in clauses (a) to (c).

(2) The Fund shall be applied for meeting—

(a) the salaries and allowances payable to the Chairperson and other Members and the administrative expenses including the salaries, allowances and pension payable to the Director General, Additional, Joint, Deputy or Assistant Directors General, the Registrar and" officers and other employees of the Commission;

(b) the other expenses of the Commission in connection with the discharge of its functions and for the purposes of this Act.

(3) The Fund shall be administered by a committee of such Members of the Commission as may be determined by the Chairperson.

(4) The committee appointed under sub-section (3) shall spend monies out of the Fund for carrying out the objects for which the Fund has been constituted.

Accounts and Audit

52. (1) The Commission shall maintain proper accounts and other relevant records and prepare an annual statement of accounts in such form as may be prescribed by the Central Government in consultation with the Comptroller and Auditor-General of India.

(2) The accounts of the Commission shall be audited by the Comptroller and Auditor-General of India at such intervals as may be specified by him and any expenditure incurred in connection with such audit shall be payable by the Commission to the Comptroller and Auditor-General of India.

Explanation.—For the removal of doubts, it is hereby declared that the orders of the Commission, being matters appealable to the Supreme Court, shall not be subject to audit under this section.

(3) The Comptroller and Auditor-General of India and any other person appointed by him in connection with the audit of the accounts of the Commission shall have the same rights, privileges and authority in connection with such audit as the Comptroller and Auditor-General of India generally has, in connection with the audit of the Government accounts and, in particular, shall have the right to demand the production of books, accounts, connected vouchers and other documents and papers and to inspect any of the offices of the Commission.

(4) The accounts of the Commission as certified by the Comptroller and Auditor-General of India or any other person appointed by him in this behalf together with the audit report thereon shall be forwarded annually to the Central Government and that Government shall cause the same to be laid before each House of Parliament.

Furnishing of returns, etc., to Central Government

53. (1) The Commission shall furnish to the Central Government at such time and in such form and manner as may be prescribed or as the Central Government may direct, such returns and statements and such particulars in regard to any proposed or existing measures for the promotion of competition advocacy, creating awareness and imparting training about competition issues, as the Central Government may, from time to time, require.

(2) The Commission shall prepare once in every year, in such form and at such time as may be prescribed, an annual report giving a true and full account of its activities during the previous year and copies of the report shall be forwarded to the Central Government.

(3) A copy of the report received under sub-section (2) shall be laid, as soon as may be after it is received, before each House of Parliament.

17.6 MISCELLANEOUS

Power to exempt

54. The Central Government may, by notification, exempt from the application of this Act, or any provision thereof, and for such period as it may specify in such notification—

(a) any class of enterprises if such exemption is necessary in the interest of security of the State or public interest;

(b) any practice or agreement arising out of and in accordance with any obligation assumed by India under any treaty, agreement or convention with any other country or countries;

(c) any enterprise which performs a sovereign function on behalf of the Central Government or a State Government;

Provided that in case an enterprise is engaged in any activity including the activity relatable to the sovereign functions of the Government, the Central Government may grant exemption only in respect of activity relatable to the sovereign functions.

Power of Central Government to issue directions

55. (1) Without prejudice to the foregoing provisions of this Act, the Commission shall, in exercise of its powers or the performance of its functions under this Act, be bound by such directions on questions of policy, other than those relating to technical and administrative matters, as the Central Government may give in writing to it from time to time: Provided that the Commission shall, as far as practicable, be given an opportunity to express its views before any direction is given under this sub-section.

(2) The decision of the Central Government whether a question is one of policy or not shall be final.

Power of Central Government to supersede Commission

56. (1) If at any time the Central Government is of the opinion—

(a) that on account of circumstances beyond the control of the Commission, it is unable to discharge the functions or perform the duties imposed on it by or under the provisions of this Act; or

(b) that the Commission has persistently made default in complying with any direction given by the Central Government under this Act or in the discharge of the functions or performance of the duties imposed on it by or under the provisions of this Act and as a result of such default the financial position of the Commission or the administration of the Commission has suffered; or

(c) that circumstances exist which render it necessary in the public interest so to do, the Central Government may, by notification and for reasons to be specified therein, supersede the Commission for such period, not exceeding six months, as may be specified in the notification: Provided that before issuing any such notification, the Central Government shall give a reasonable opportunity to the Commission to make representations against the proposed supersession and shall consider epresentations, if any, of the Commission.

(2) Upon the publication of a notification under sub-section (1) superseding the Commission,—

(a) the Chairperson and other Members shall as from the date of supersession, vacate their offices as such;

(b) all the powers, functions and duties which may, by or under the provisions of this Act, be exercised or discharged by or on behalf of the Commission shall, until the Commission is reconstituted under sub-section (3), be exercised and discharged by the Central Government or such authority as the Central Government may specify in tins behalf;

(c) all properties owned or controlled by the Commission shall, until the Commission is reconstituted under sub-section (3), vest in the Central Government.

(3) On or before the expiration of the period of supersession specified in the notification issued under subsection

(1), the Central Government shall reconstitute the Commission by a fresh appointment of its Chairperson and other Members and in such case any person who had vacated his office under clause

(a) of sub-section (2) shall not be deemed to be disqualified for re-appointment.

(4) The Central Government shall cause a notification issued under sub-section (1) and a full report of any action taken under this section and the circumstances leading to such action to be laid before each House of Parliament at the earliest.

Restriction on disclosure of information

57. No information relating to any enterprise, being an information which has been obtained by or on behalf of the Commission for the purposes of this Act, shall, without the previous permission in writing of the enterprise, be disclosed otherwise than in compliance with or for the purposes of this Act or any other law for the time being in force.

Members, Director General, Registrar, officers and other employees, etc. of Commission to be public servants

58. The Chairperson and other Members and the Director General, Additional, Joint, Deputy or Assistant Directors General and Registrar and officers and other employees of the Commission shall be deemed, while acting or purporting to act in pursuance of any of the provisions of this Act, to be public servants within the meaning of section 21 of the Indian Penal Code (45 of 1860).

Protection of action taken in good faith

59. No suit, prosecution or other legal proceedings shall lie against the Central Government or Commission or any officer of the Central Government or the Chairperson or any Member or the Director- General, Additional, Joint, Deputy or Assistant Directors General or Rcgistrar or officers or other employees of the Commission for anything which is in good faith done or intended to be done under this Act or the rules or regulations made thereunder.

Act to have overriding effect

60. The provisions of this Act shall have effect notwithstanding anything inconsistent therewith contained in any other law for the time being in force.

Exclusion of jurisdiction of civil courts

61. No civil court shall have jurisdiction to entertain any suit or proceeding in respect of any matter which the Commission is empowered by or under this Act to determine and no injunction shall be granted by any court or other authority in respect of any action taken or to be taken in pursuance of any power conferred by or under this Act.

Application of other laws not barred

62. The provisions of this Act shall be in addition to, and not in derogation of, the provisions of any other law for the time being in force.

Power to make rules

63. (1) The Central Government may, by notification, make rules to carry out the provisions of this Act.

(2) In particular, and without prejudice to the generality of the foregoing power, such rules may provide for all or any of the following matters, namely:—

(a) the manner in which the Chairperson and other Members shall be selected under section 9;

(b) the form and manner in which and the authority before whom the oath of office and of secrecy shall be made and subscribed to under sub-section (3) of section 10;

(c) the financial and administrative powers which may be vested in the Member Administration under section 13;

(d) the salary and the other terms and conditions of service including travelling expenses, house rent allowance and conveyance facilities, sumptuary allowance and medical facilities to be provided to the Chairperson and other Members under sub-section (1) of section 14;

(e) the salary, allowances and other terms and conditions of service of the Director General, Additional, Joint, Deputy or Assistant Directors General or such other advisers, consultants or officers under sub-section (3) of section 16;

(f) the qualifications for appointment of the Director General, Additional, Joint, Deputy or Assistant Directors General or such other advisers, consultants or officers under sub-section (4) of section 16;

(g) the salaries and allowances and other terms and conditions of service of the Registrar and officers and other employees payable, and the number of such officers and employees under sub-section (2) of section 17;

(h) for securing any case or matter which requires to be decided by a Bench composed of more than two Members under sub-section (4) of section 23;

(i) any other matter in respect of which the Commission shall have power under clause (g) of subsection (2) of section 36;

(j) the promotion of competition advocacy, creating awareness and imparting training about competition issues under sub-section (3) of section 49;

(k) the form in which the annual statement of accounts shall be prepared under sub-section (1) of section 52;

(l) the time within which and the form and manner in which the Commission may furnish returns, statements and such particulars as the Central Government may require under sub-section (1) of section 53;

(m) the form in which and the time within which the annual report shall be prepared under sub-section (2) of section 53;

(n) the manner in which the monies transferred to the Central Government shall be dealt with by that Government under the fourth proviso to sub-section (2) of section 66;

(o) any other matter which is to be, or may be, prescribed, or in respect of which provision is to be, or may be, made by rules.

(3) Every notification issued under sub-section (3) of section 20 and section 54 and every rule made under this Act by the Central Government shall be laid, as soon as may be after it is made, before each House of Parliament, while it is in session, for a total period of thirty days which may be comprised in one session, or in two or more successive sessions, and if. before the expiry of the session immediately following the session or the successive sessions afore-

said, both Houses agree in making any modification in the notification or rule, or both Houses agree that the notification should not be issued or rule should not be made, the notification or rule shall thereafter have effect only in such modified form or be of no effect, as the case may be; so, however, that any such modification or annulment shall be without prejudice to the validity of anything previously done under that notification or rule, as the case may be.

Power to make regulations

64. (1) The Commission may, by notification, make regulations consistent with tills Act and the rules made thereunder to carry out the purposes of this Act.

(2) In particular, and without prejudice to the generality of the foregoing provisions, such regulations may provide for all or any of the following matters, namely:—

(a) the cost of production to be determined under clause (b) of the Explanation to section 4;

(b) the form of notice as may be specified and the fee which may be determined under sub-section (2) of section 6;

(c) the form in which details of the acquisition shall be filed under subsection (5) of Section 6;

(d) the fee which may be determined under clause (a) of sub-section (1) of section 19;

(e) any other matter in respect of which provision is to be, or may be, made by regulations.

(3) Every regulation made under this Act shall be laid, as soon as may be after it is made. before each House of Parliament, while it is in session, for a total period of thirty days which may be comprised in one session or in two or more successive sessions, and if, before the expiry of the session immediately following the session or the successive sessions aforesaid, both Houses agree in making any modification in the regulation, or both Houses agree that the regulation should not be made, the regulation shall thereafter have effect only in such modified form or be of no effect, as the case may be;

So, however, that any such modification or annulment shall be without prejudice to the validity of anything previously done under that regulation.

Power to remove difficulties

65. (1) If any difficulty arises in giving effect to the provisions of this Act, the Central Government may, by order published in the Official Gazette, make such provisions, not inconsistent with the provisions of this Act as may appear to it to be necessary for removing the difficulty:

Provided that no such order shall be made under this section after the expiry of a period of two years from the commencement of this Act.

(2) Every order made under this section shall be laid, as soon as may be after it is made, before each House of Parliament.

Study Note - 18

MERGER AND ACQUISITION

This Study Note includes

18.1 INTRODUCTION

In business or economics a merger is a Combination of two Companies into one large Company, i.e a merger is said to occur when two or more business Combine into one.

An acquisition is the buying of one company by another. Acquisition usually refers to a purchase of a Smaller firm by a large one. Sometimes, however, a smaller firm will acquire management control of a larger or longer established company and keep its name for the Combined entity. This is known as a reverse merger.

The United Kingdom Financial Reporting Standard 6 defines the term 'merger' as: "Merger is a business combination which results in the creation of a new reporting entity formed from the combining parties, in which the shareholders come together in a substantially equal partnership for the mutual sharing of risks and benefits of the combined entity; and in which no party to the combination, in substance, obtains control over any other."

A majority vote of shareholders is generally required to approve a merger. A merger is just one type of acquisition. One company can acquire another in several other ways, including purchasing some or all of the company's assets or buying up its outstanding shares of stock.

In general, mergers and other types of acquisitions are performed in the hopes of realizing an economic gain. For such a transaction to be justified, the two firms involved must be worth more together than they were apart. Some of the potential advantages of mergers and acquisitions include achieving economies of scale, combining complementary resources, garnering tax advantages, and eliminating inefficiencies. Other reasons for considering growth through acquisitions include obtaining proprietary rights to products or services, increasing market power by purchasing competitors, shoring up weaknesses in key business areas, penetrating new geographic regions, or providing managers with new opportunities for career growth and advancement. Since mergers and acquisitions are so complex, however, it can be very difficult to evaluate the transaction, define the associated costs and benefits, and handle the resulting tax and legal issues.

18.2 WHAT IS MERGER?

Merger or amalgamation contemplates joining two or more companies to form a new company, an altogether a new entity or absorbing of one or more companies by an existing company. The term "merger" and "amalgamation" are used synonymously.

Co. K + **Co. L** = **New Co. M**

Figure 1

Co. K and Co. L = Transferor/Amalgamating Company

Co. K + Co. L + Co. M = Existing Co. K

Figure 2

Co. L and Co. M = Transferor/Amalgamating Company

Co. K = Transferee/Amalgamated Company

In other words, merger involves consolidation of business of Company A and Company B into a new Company C on a going concern basis as shown in Figure 1 above or transfer of business of Company B and Company C to Company A on a going concern basis as shown in Figure 2 above. The transaction involves arrangement with the shareholders.

The consideration for transfer of business may be discharged either through issue of shares (equity or preference) or other instruments of the transferee company or by cash.

18.2.1 Varieties of Mergers

From the perspective of business structures, there are a whole host of different mergers. Here are a few types, distinguished by the relationship between the two companies that are merging:

- Horizontal merger take place where the two merging companies produce similar product in the same industry.
- Vertical merger occur when two firms each working at different stages in the production of the same good combine.
- Market-extension merger: Two companies that sell the same products in different markets.
- Product-extension merger: Two companies selling different but related products in the same market.
- Conglomeration: Two companies that have no common business areas.

  From the perspective of how the merge is financed, there are two types of mergers: purchase mergers and consolidation mergers. Each has certain implications for the companies involved and for investors:

  - Purchase Mergers - As the name suggests, this kind of merger occurs when one company purchases another one. The purchase is made by cash or through the issue of some kind of debt instrument, and the sale is taxable.

Acquiring companies often prefer this type of merger because it can provide them with a tax benefit. Acquired assets can be "written-up" to the actual purchase price, and the difference between book value and purchase price of the assets can depreciate annually, reducing taxes payable by the acquiring company (we discuss this further in part four of this tutorial).

- Consolidation Mergers - With this merger, a brand new company is formed and both companies are bought and combined under the new entity. The tax terms are the same as those of a purchase merger.

18.3 ACQUISITIONS

As you can see, an acquisition may be only slightly different from a merger. In fact, it may be different in name only. Like mergers, acquisitions are actions through which companies seek economies of scale, efficiencies, and enhanced market visibility. Unlike all mergers, all acquisitions involve one firm purchasing another—there is no exchanging of stock or consolidating as a new company. Acquisitions are often congenial, with all parties feeling satisfied with the deal. Other times, acquisitions are more hostile.

In an acquisition, as in some of the merger deals we discuss above, a company can buy another company with cash, with stock, or a combination of the two. Another possibility, which is common in smaller deals, is for one company to acquire all the assets of another company. Company X buys all of Company Y's assets for cash, which means that Company Y will have only cash (and debt, if they had debt before). Of course, Company Y becomes merely a shell and will eventually liquidate or enter another area of business.

Another type of acquisition is a reverse merger, a deal that enables a private company to get publicly-listed in a relatively short time period. A reverse merger occurs when a private company that has strong prospects and is eager to raise financing buys a publicly-listed shell company, usually one with no business and limited assets. The private company reverse merges into the public company, and together they become an entirely new public corporation with tradable shares.

Regardless of their category or structure, all mergers and acquisitions have one common goal: they are all meant to create synergy that makes the value of the combined companies greater than the sum of the two parts. The success of a merger or acquisition depends on how well this synergy is achieved.

18.3.1 Types of Acquisitions

In general, acquisitions can be horizontal, vertical, or conglomerate. A horizontal acquisition takes place between two firms in the same line of business. For example, one tool and die company might purchase another. In contrast, a vertical merger entails expanding forward or backward in the chain of distribution, toward the source of raw materials or toward the ultimate consumer. For example, an auto parts manufacturer might purchase a retail auto parts store. A conglomerate is formed through the combination of unrelated businesses.

Another type of combination of two companies is a consolidation. In a consolidation, an entirely new firm is created, and the two previous entities cease to exist. Consolidated financial statements are prepared under the assumption that two or more corporate entities are in actuality only one. The consolidated statements are prepared by combining the account balances of the individual firms after certain adjusting and eliminating entries are made.

Another way to acquire a firm is to buy the voting stock. This can be done by agreement of management or by tender offer. In a tender offer, the acquiring firm makes the offer to buy stock directly to the shareholders, thereby bypassing management. In contrast to a merger, a stock acquisition requires no stockholder voting. Shareholders wishing to keep their stock can simply do so. Also, a minority of shareholders may hold out in a tender offer.

A bidding firm can also buy another simply by purchasing all its assets. This involves a costly legal transfer of title and must be approved by the shareholders of the selling firm. A takeover is the transfer of control from one group to another. Normally, the acquiring firm (the bidder) makes an offer for the target firm. In a proxy contest, a group of dissident shareholders will seek to obtain enough votes to gain control of the board of directors.

18.4 DISTINCTION BETWEEN MERGERS AND ACQUISITIONS

Although they are often uttered in the same breath and used as though they were synonymous, the terms "merger" and "acquisition" mean slightly different things.

When a company takes over another one and clearly becomes the new owner, the purchase is called an acquisition. From a legal point of view, the target company ceases to exist and the buyer "swallows" the business, and stock of the buyer continues to be traded.

In the pure sense of the term, a merger happens when two firms, often about the same size, agree to go forward as a new single company rather than remain separately owned and operated. This kind of action is more precisely referred to as a "merger of equals." Both companies' stocks are surrendered, and new company stock is issued in its place. For example, both Daimler-Benz and Chrysler ceased to exist when the two firms merged, and a new company, DaimlerChrysler, was created.

In practice, however, actual mergers of equals don't happen very often. Often, one company will buy another and, as part of the deal's terms, simply allow the acquired firm to proclaim that the action is a merger of equals, even if it's technically an acquisition. Being bought out often carries negative connotations. By using the term "merger," dealmakers and top managers try to make the takeover more palatable.

A purchase deal will also be called a merger when both CEOs agree that joining together in business is in the best interests of both their companies. But when the deal is unfriendly—that is, when the target company does not want to be purchased—it is always regarded as an acquisition.

So, whether a purchase is considered a merger or an acquisition really depends on whether the purchase is friendly or hostile and how it is announced. In other words, the real difference lies in how the purchase is communicated to and received by the target company's board of directors, employees and shareholders.

Synergy is the magic force that allows for enhanced cost efficiencies of the new business. Synergy takes the form of revenue enhancement and cost savings. By merging, the companies hope to benefit from the following:

- Staff reductions - As every employee knows, mergers tend to mean job losses. Consider all the money saved from reducing the number of staff members from accounting, marketing and other departments. Job cuts will also include the former CEO, who typically leaves with a compensation package.
- Economies of scale - Yes, size matters. Whether it's purchasing stationery or a new corporate IT system, a bigger company placing the orders can save more on costs. Mergers also translate into improved purchasing power to buy equipment or office supplies—when placing larger orders, companies have a greater ability to negotiate price with their suppliers.
- Acquiring new technology - To stay competitive, companies need to stay on top of technological developments and their business applications. By buying a smaller company with unique technologies, a large company can keep or develop a competitive edge.
- Improved market reach and industry visibility - Companies buy companies to reach new markets and grow revenues and earnings. A merge may expand two companies' marketing and distribution, giving them new sales opportunities. A merger can also improve a company's standing in the investment community: bigger firms often have an easier time raising capital than smaller ones.

That said, achieving synergy is easier said than done—it is not automatically realized once two companies merge. Sure, there ought to be economies of scale when two businesses are combined, but sometimes it works in reverse. In many cases, one and one add up to less than two.

Sadly, synergy opportunities may exist only in the minds of the corporate leaders and the dealmakers. Where there is no value to be created, the CEO and investment bankers—who have much to gain from a successful M&A deal—will try to build up the image of enhanced value. The market, however, eventually sees through this and penalizes the company by assigning it a discounted share price. We talk more about why M&A may fail in a later section of this tutorial.

Conclusion & Resources

One size does not fit all. Many companies find that the best route forward is expanding ownership boundaries through mergers and acquisitions. For others, separating the public ownership of a subsidiary or business segment offers more advantages. At least in theory, mergers create synergies and economies of scale, expanding operations and cutting costs. Investors can take comfort in the idea that a merger will deliver enhanced market power.

By contrast, de-merged companies often enjoy improved operating performance thanks to redesigned management incentives. Additional capital can fund growth organically or through acquisition. Meanwhile, investors benefit from the improved information flow from de-merged companies.

M&A comes in all shapes and sizes, and investors need to consider the complex issues involved in M&A. The most beneficial form of equity structure involves a complete analysis of the costs and benefits associated with the deals.

18.5 ACCOUNTING FOR MERGERS AND ACQUISITIONS

The two principal accounting methods used in mergers and acquisitions are the pooling of interests method and the purchase method. The main difference between them is the value that the combined firm's balance sheet places on the assets of the acquired firm, as well as the depreciation allowances and charges against income following the merger.

The pooling of interests method assumes that the transaction is simply an exchange of equity securities. Therefore, the capital stock account of the target firm is eliminated, and the acquirer issues new stock to replace it. The two firms' assets and liabilities are combined at their historical book values as of the acquisition date. The end result of a pooling of interests transaction is that the total assets of the combined firm are equal to the sum of the assets of the individual firms. No goodwill is generated, and there are no charges against earnings. A tax-free acquisition would normally be reported as a pooling of interests.

Under the purchase method, assets and liabilities are shown on the merged firm's books at their market (not book) values as of the acquisition date. This method is based on the idea that the resulting values should reflect the market values established during the bargaining process. The total liabilities of the combined firm equal the sum of the two firms' individual liabilities. The equity of the acquiring firm is increased by the amount of the purchase price.

Accounting for the excess of cost over the aggregate of the fair market values of the identifiable net assets acquired applies only in purchase accounting. The excess is called goodwill, an asset which is charged against income and amortized over a period that cannot exceed 40 years. Although the amortization "expense" is deducted from reported income, it cannot be deducted for tax purposes.

Purchase accounting usually results in increased depreciation charges because the book value of most assets is usually less than fair value because of inflation. For tax purposes, however, depreciation does not increase because the tax basis of the assets remains the same. Since depreciation under pooling accounting is based on the old book values of the assets, accounting income is usually higher under the pooling method. The accounting treatment has no cash flow consequences. Thus, value should be unaffected by accounting procedure. However, some firms may dislike the purchase method because of the goodwill created. The reason for this is that goodwill is amortized over a period of years.

Accounting Standard (AS-14) as prescribed by the Institute of Chartered Accountants of India deals with accounting for amalgamation and treatment for resulting goodwill or reserves. AS-14 classifies amalgamation into two types, viz.:

Amalgamation in nature of merger; and

Amalgamation in nature of purchase.

Amalgamation in nature of merger is an amalgamation, which satisfies all the following conditions:

i. All the assets and liabilities of the transferor company become the assets and liabilities of the transferee company;

ii. Shareholders holding not less than 90% of the face value of the equity shares of the transferor company (other than transferee company and its nominees) become equity shareholders of the transferee company after amalgamation;

iii. The consideration is to be discharged by way of issue of equity shares in the transferee company to the shareholders of the transferor company on the amalgamation;

iv. The business of the transferor company is to be carried on by the transferee company;

v. No adjustments are intended to be made to the book values of the assets and liabilities of the transferor company.

If any one or more of the aforesaid conditions are not satisfied then the amalgamation is in nature of purchase.

Amalgamation in the nature of merger is to be accounted as per the Pooling of interest Method and in case of amalgamation in the nature of purchase accounting needs to be done as per the Purchase Method.

18.5.1 Under the Pooling of Interest Method:

i. The assets, liabilities and reserves of the transferor company are to be recorded at their existing carrying amounts and in the same form as it was appearing in the books of the transferor company.

ii. The identity of the reserves of the transferor company is to be kept intact in the balance sheet of the transferee company.

iii. Difference between the amounts of share capital issued plus any other additional consideration paid by the transferee company and the amount of the share capital of the transferor company should be adjusted in Reserves.

18.5.2 Under purchase method

i. The assets and the liabilities of the transferor company are to be recorded at their existing carrying amounts or, alternatively, the consideration should be allocated to individual assets and liabilities on the basis of fair values at the date of amalgamation while preparing the financial statements of the transferee company.

ii. The identity of the reserves of the transferor company other than the statutory reserves is not preserved. The identity of the statutory reserves is preserved in the same form and is recorded in the books of the transferee company by a corresponding debit to the amalgamation adjustment a/c.

iii. Excess or shortfall of consideration over the value of net assets acquired should be credited/ debited as capital reserve /goodwill, as the case may be.

iv. It is appropriate to amortize goodwill over a period of not exceeding 5 years unless a longer period is justified.

The accounting treatment as specified in AS-14 needs to be followed for accounting of reserves. In case the scheme of amalgamation sanctioned prescribes a separate treatment to be given to the reserves of the transferor company on amalgamation, it can be followed.

However the Institute of Chartered Accountants of India has issued a general clarification wherein the following disclosure is to be made in case the accounting treatment for reserves is different from that specified in AS-14:

i. Description of the accounting treatment given to reserves;

ii. Deviation in the Accounting Treatment and the reasons for following a treatment different from that prescribed in the AS-14;

iii. The financial effect, if any, arising due to such deviation is to be disclosed.

iv. Other Disclosure Requirements

a. General

- Names and general nature of business of the amalgamating companies
- Effective date of amalgamation for accounting purposes
- Method of accounting used to reflect the amalgamation & Exchange Ratio
- Particulars of the scheme sanctioned by the Court

b. If Pooling of Interest Method is used

- Description and number of shares issued, together with the percentage of each company's equity shares exchanged.
- The amount of any difference between the consideration and the value of net identifiable assets acquired and the treatment thereof

c. If Purchase Method is used

- Consideration for the amalgamation and description of consideration paid/payable
- The amount of difference between the consideration and the value of net identifiable assets acquired and the treatment thereof including the period of amortization of any goodwill arising on amalgamation

18.6 HOW TO VALUE AN ACQUISITION CANDIDATE

Valuing an acquisition candidate is similar to valuing any investment. The analyst estimates the incremental cash flows, determines an appropriate risk-adjusted discount rate, and then computes the net present value (NPV). If firm A is acquiring firm B, for example, then the acquisition makes economic sense if the value of the combined firm is greater than the value of firm A plus the value of firm B. Synergy is said to exist when the cash flow of the combined firm is greater than the sum of the cash flows for the two firms as separate companies. The gain from the merger is the present value of this difference in cash flows.

18.6.1 SOURCES OF GAINS FROM ACQUISITIONS

The gains from an acquisition may result from one or more of the following five categories:1) revenue enhancement, 2) cost reductions, 3) lower taxes, 4) changing capital requirements, or 5) a lower cost of capital. Increased revenues may come from marketing gains, strategic benefits, and market power. Marketing gains arise from more effective advertising, economies of distribution, and a better mix of products. Strategic benefits represent opportunities to enter new lines of business. Finally, a merger may reduce competition, thereby increasing market power. Such mergers, of course, may run afoul of antitrust legislation.

A larger firm may be able to operate more efficiently than two smaller firms, thereby reducing costs. Horizontal mergers may generate economies of scale. This means that the average production cost will fall as production volume increases. A vertical merger may allow a firm to decrease costs by more closely coordinating production and distribution. Finally, economies may be achieved when firms have complementary resources—for example, when one firm has excess production capacity and another has insufficient capacity.

Tax gains in mergers may arise because of unused tax losses, unused debt capacity, surplus funds, and the write-up of depreciable assets. The tax losses of target corporations can be used to offset the acquiring corporation's future income. These tax losses can be used to offset income for a maximum of 15 years or until the tax loss is exhausted. Only tax losses for the previous three years can be used to offset future income.

Tax loss carry-forwards can motivate mergers and acquisitions. A company that has earned profits may find value in the tax losses of a target corporation that can be used to offset the income it plans to earn. A merger may not, however, be structured solely for tax purposes. In addition, the acquirer must continue to operate the pre-acquisition business of the company in a net loss position. The tax benefits may be less than their "face value," not only because of the time value of money, but also because the tax loss carry-forwards might expire without being fully utilized.

Tax advantages can also arise in an acquisition when a target firm carries assets on its books with basis, for tax purposes, below their market value. These assets could be more valuable, for tax purposes, if they were owned by another corporation that could increase their tax basis following the acquisition. The acquirer would then depreciate the assets based on the higher market values, in turn, gaining additional depreciation benefits.

Interest payments on debt are a tax-deductible expense, whereas dividend payments from equity ownership are not. The existence of a tax advantage for debt is an incentive to have greater use of debt, as opposed to equity, as the means of financing merger and acquisition transactions. Also, a firm that borrows much less than it could may be an acquisition target because of its unused debt capacity. While the use of financial leverage produces tax benefits, debt also increases the likelihood of financial distress in the event that the acquiring firm cannot meet its interest payments on the acquisition debt.

Finally, a firm with surplus funds may wish to acquire another firm. The reason is that distributing the money as a dividend or using it to repurchase shares will increase income taxes for shareholders. With an acquisition, no income taxes are paid by shareholders.

Acquiring firms may be able to more efficiently utilize working capital and fixed assets in the target firm, thereby reducing capital requirements and enhancing profitability. This is particularly true if the target firm has redundant assets that may be divested.

The cost of debt can often be reduced when two firms merge. The combined firm will generally have reduced variability in its cash flows. Therefore, there may be circumstances under which one or the other of the firms would have defaulted on its debt, but the combined firm will not. This makes the debt safer, and the cost of borrowing may decline as a result. This is termed the coinsurance effect.

Diversification is often cited as a benefit in mergers. Diversification by itself, however, does not create any value because stockholders can accomplish the same thing as the merger by buying stock in both firms.

18.6.2 VALUATION PROCEDURES

The procedure for valuing an acquisition candidate depends on the source of the estimated gains. Different sources of synergy have different risks. Tax gains can be estimated fairly accurately and should be discounted at the cost of debt. Cost reductions through operating efficiencies can also be determined with some confidence. Such savings should be discounted at a normal weighted average cost of capital. Gains from strategic benefits are difficult to estimate and are often highly uncertain. A discount rate greater than the overall cost of capital would thus be appropriate.

The net present value (NPV) of the acquisition is equal to the gains less the cost of the acquisition. The cost depends on whether cash or stock is used as payment. The cost of an acquisition when cash is used is just the amount paid. The cost of the merger when common stock is used as the consideration (the payment) is equal to the percentage of the new firm that is owned by the previous shareholders in the acquired firm multiplied by the value of the new firm. In a cash merger the benefits go entirely to the acquiring firm, whereas in a stock-for-stock exchange the benefits are shared by the acquiring and acquired firms.

Whether to use cash or stock depends on three considerations. First, if the acquiring firm's management believes that its stock is overvalued, then a stock acquisition may be cheaper. Second, a cash acquisition is usually taxable, which may result in a higher price. Third, the use of stock means that the acquired firm will share in any gains from merger; if the merger has a negative NPV, however, then the acquired firm will share in the loss.

In valuing acquisitions, the following factors should be kept in mind. First, market values must not be ignored. Thus, there is no need to estimate the value of a publicly traded firm as a separate entity. Second, only those cash flows that are incremental are relevant to the analysis. Third, the discount rate used should reflect the risk associated with the incremental cash flows. Therefore, the acquiring firm should not use its own cost of capital to value the cash flows of another firm. Finally, acquisition may involve significant investment banking fees and costs.

Mergers and acquisitions and corporate restructuring—or M&A for short—are a big part of the corporate finance world. Every day, Wall Street investment bankers arrange M&A transactions that bring together separate companies to make larger ones. When they're not creating big companies from smaller ones, corporate finance deals do the reverse and break up companies through spinoffs, carve-outs, or tracking stocks.

Not surprisingly, these types of actions often make the news. Deals can be worth hundreds of millions or even billions of dollars, and they can dictate the fortunes of the companies involved for years to come. For CEOs, leading M&A can represent the pinnacle of their careers.

18.7 RECONSTRUCTION

Reconstruction means reorganization of a company's financial structure. In reconstruction of a company, usually the assets and liabilities of the company are revalued, the losses suffered by the company are written off by a deduction of the paid-up value of shares and/or varying of the rights attached to different classes of shares and compounding with the creditors. It may be done without liquidating the company and forming a new company in which case the process is called internal reconstruction. However, there may be external reconstruction in which case the undertaking being carried on by the company is transferred to a newly started company consisting substantially of the same shareholders with a view to the business of the transferee company being continued by the transferee company. An attempt is made that the newly started company has a sound financial structure and a good set of assets and liabilities recorded in the books of the transferee company at their fair values.

From the point of view of an accountant, external reconstruction is similar to amalgamation in the nature of purchase; the books of the transferee company are closed and in the books of the transferee company, the purchase of the business is recorded. But otherwise external reconstruction and amalgamation differs as follows:

(i) In external reconstruction, only one company is involved whereas in amalgamation, there are at least two existing companies which amalgamate.

(ii) In external reconstruction, a new company is certainly formed whereas in amalgamation a new company may be formed or in the alternative one of the existing companies may take over the other amalgamating company or companies and no new company may be formed.

(iii) The objective of the external reconstruction is to reorganize the financial structure of the company, on the other hand, the objective of the amalgamation is to cut competition and reap the economies of larger scale.

18.7.1 Scheme of Reconstruction

The need for reconstruction arises when a company has accumulated losses or when a company finds itself overcapitalized which means either that the value placed on assets is too much as compared to their earning capacity or that the profits as a whole are insufficient to pay a proper dividend. Apart from clarity, wide acceptance and justice, the reconstruction scheme must take into account the following:-

The fundamental basis of any proposals is the earning power of the company. Even the interest to debenture holders cannot be paid unless the company's activities are profitable. A very careful estimate should, therefore, be made of the profits expected by the company in the future. Unless the profits are sufficient to meet all the expenses including adequate depreciation, interest to debenture holders and other creditors, preference dividend, and a reasonable return to the equity shareholder, it would be useless to process with any reconstruction scheme because, otherwise, the need for reconstruction will soon arise again.

Assuming that adequate profits can be expected, the reconstruction scheme should not adversely affect the rights of preference shareholders (not to speak of creditors and debenture holders) unless it is absolutely necessary. Suppose, the profits are such that after paying dividends to preference shareholders little remains for equity shareholders: the preference shareholder may be persuaded to accept a sacrifice either by reduction of capital or by reduction in the rate of dividend or both because the alternative to such acceptance of sacrifice may be the liquidation of the company (in which case, due to forced sale, the asset may not realize much and the preference shareholder may not be able to get back what they have invested). If the company is in very bad position, even the debenture holders may be prevailed upon to accept a reduction of their claims. But, so far as is possible, contractual and legal rights and priorities should be maintained.

The equity shareholder will naturally have to bear the brunt of the losses and sacrifice. This is not as bad as it sounds because (a) the equity shareholders realize from the very beginning that if losses occur they have to bear them before anybody else can be called upon to do so, and (b) they must have already known that the value of their holding is small due to absence of dividend. The market price of share is related to dividend and not to the face or nominal value of the share. It really does not matter, therefore, whether the nominal value of an equity share is Rs.1 or Rs.100 or Rs.1,000 as long as it is not 0. (This does matter in case of preference shareholders and debenture holders whose earnings depend on the nominal value). In fact, a reconstruction scheme may be beneficial to the equity shareholders by enabling the payment of a dividend on such shares. On this ground, it would be unjust to ask the preference shareholders to accept a sacrifice when the equity shareholders improve their position.

There is, however, one important right which the equity shareholders enjoy. This is control over the affairs of the company. The equity shareholders will not easily give up this right, and hence the reconstruction scheme should keep this in mind. The equity shareholder may not agree to the conversion of preference share or debenture into equity share even if the holders of preference shares or debenture are willing to accept lower security for their holdings. The equity share holders may agree to this only if there is a threat of the company being wound up (in which case they will lose almost all). It should also be noted that without the consent of the parties their liability cannot be increased. For instances, fully paid shares cannot be converted into partly paid shares without the consent of the shareholders.

The requirements of the working capital must not be overlooked. Cash may require to pay certain dissenting creditor or even to pay arrears of preference dividend. Generally, therefore, a company under reconstruction will have to raise funds to enable it to pay off such dissenters and to carry on its work smoothly. Which of the various parties are willing to subscribe more shares will have to be seen. The equity share holders will like to consolidate their position by buying more shares. Sometimes, outsiders are willing to subscribe to the shares but they will generally prefer to do so if they are given a controlling share.

Steps

(1) First of all the total amounts to be written off should be ascertained. This would mean totaling up the debit balance of the profit and loss account, all fictitious assets like goodwill, preliminary expenses, discount on shares or debentures, any fall in value of assets, any increase in liabilities and arrears of dividends on cumulative preference shares. If the value of any share can be legitimately increased the amount of loss would then be reduced accordingly. The other way to get at the same figure would be to add up the present value as a going concern, of all the assets and deduct there from the amount of liabilities and also the arrears of dividend on cumulative preference shares. What is left is "net assets". The share capital compared with net assets will show how much amount is to e written off.

(2) The question now arises has to who is to bear the loss. IF the net assets are more than the preference share capital, it is obvious the whole of the loss will have to be borne by the equity share holders. The nominal value of the equity shares should be reduced by a sufficient margin to cover the loss. If the net assets are not sufficient to cover the preference share capital (or if the net assets are just sufficient), the preference share holder will have to accept a sacrifice, although their sacrifice will be smaller than that of the equity share holders. (Equity shareholders should not be completely wiped off). If the future earning power of the company permits, the dividend rate should be increased so that, in terms of rupees, the dividend remains unchanged. Thus if 10.5% preference share of Rs 100 are converted into preference share of Rs. 75 each, rate of dividend should be raised to 14%, if possible. In both cases, then the dividend will be Rs. 10.5 per share.

(3) Payment of arrears of dividend (question arises only in case of cumulative preference shares) in cash immediately may present difficulties. In such a case a good method is to issue deposit certificates. This is preferable to issuing shares because (a) it will not upset the voting power and (b) the certificate can be redeemed as soon as opportunity arises. The rate of interest need not be heavy, but of course, it will depend on the future earning capacity of the company.

(4) Debenture holders and other creditors are affected by the reconstruction scheme only if the total assets in the company are insufficient to cover even the liabilities (although they are concerned is necessary to any scheme that may be formulated). In such an eventuality, the creditors (including debenture holders) will have to accept sacrifice unless they think that by sending the company into liquidation we will be able to realize substantial portion of their claims. The share holders, both preference and equity will have to accept a heavy

reduction in the value of share but they cannot be expected to agree to complete wiping of the shares, in which case they will have no interest in keeping the company going. Generally, the sacrifice to be borne by the creditors will be as follows:

Preferential creditors	Nil
(According to law)	

In short, the whole scheme should broadly depend upon the expected earning power and upon the position as it likely to obtain if the company is sent to liquidation.

Internal vs. External Reconstruction: Having decided who is to bear how much sacrifice of loss and having settled the broad details of the scheme, and important question remains to be decided. Will the reconstruction be internal or external? Internal reconstruction means that the scheme will be carried out by liquidating the existing company and incorporating immediately another company (with the name only slightly changed such as A B Ltd, to take over the business of the outgoing company. There are advantages in both, but generally internal reconstruction is preferred. The advantages in its favour are:-

(a) Creditors, specially bank overdraft and debenture holders, may continue whereas they may not if the company is formally liquidated which will involve payment of claims to outsiders, If they do not continue, the company may suffer from want of financial assistance. This is, however, only academic since no reconstruction scheme, even internal, will be really formulated without the consent of the bank, debenture holders. Etc.

(b) The company will be able to set off its past losses against future profits for income-tax purposes. This will materially reduce the income-tax liability depending on the losses suffered during the preceding eight years. Losses can be carried forward for eight years provided the business is carried on. The business will technically end when the company is liquidated. Hence, in case of external reconstruction, losses cannot be carried forward for income tax purposes.

The arguments in favour of external reconstruction are as under:-

(a) External reconstruction may be the only way to bring about speedy reconstruction because sometimes a few people hold up the scheme by delaying tactics by means of legal objections.

(b) It may help in raising more finance by issuing to the existing shareholders partly paid shares in the new company. It should be remembered that in internal reconstruction fully paid up shares unless every shareholder gives his assent in writing. This may prove cumbersome. However, if shareholders are willing to accept partly paid shares in the new company, there is not much reason why they should refuse to buy new shares under a scheme of internal reconstruction.

Legal position as regards external reconstruction:

Sec 494 of the Companies Act permits the liquidator of a company to transfer the whole or any part of the company's business or property to another company and receive from the transferee company for distribution among the share holders of the company under liquidation. The liquidator must obtain the sanction of the company by a special resolution. Any sale of arrangement in pursuance of this section is binding on the members of the transferor company.

But a share holder who has not voted for the special resolution may, within seven days of the resolution, serve a notice on the liquidator expressing his dissent and requiring the liquidator either, (a) to abstain from carrying the resolution into effect, or (b) to purchase his interest at a price to be determined by agreement or by arbitration.

18.8 DEMERGER

Demerger is the converse of a merger or acquisition. It describes a form of restructure in which shareholders or unitholders in the parent company gain direct ownership in a subsidiary (the 'demerged entity'). Underlying ownership of the companies and/or trusts that formed part of the group does not change. The company or trust that ceases to own the entity is known as the 'demerging entity'. If the parent company holds a majority stake in the demerged entity , the resulting company is referred to as the subsidiary.

In a market of falling prices, mergers and IPOs are less popular, and the merchant banks who earn their fees from corporate activity will start to look at demerger possibilities for their clients.

Study Note - 19

CORPORATE GOVERNANCE

This Study Note includes

- Introduction
- History
- The Emergence of Corporate Governance Issues in India
- Recommendations of the Narasimham Committee, 1991
- Formation of Narasimham Committee on Banking Sector Reforms
- Report of Kumar Mangalam Birla Committee on Corporate Governance
- Summary of Naresh Chandra Committee on Corporate Audit and Governance
- Narayan Murthy Committee Report, 2003
- Dr. J. J. Irani Committee Report on Company Law, 2005

19.1 INTRODUCTION

Corporate governance is the set of processes, customs, policies, laws and institutions affecting the way a corporation is directed, administered or controlled. Corporate Governance also includes the relationships among the many stakeholders involved and the goals for which the corporation is governed. The principal stakeholders are the shareholders, management and the board of directors. Other stakeholders include employees, suppliers, customers, banks and other lenders, regulators, the environment and the community at large.

The stakeholders may be internal stakeholders(promoters,members,employees, management and the board of directors) and external stakeholders(suppliers,customers, lenders,abanks, the environment and the community at large, government and regulators.

Corporate governance is a voluntary ethical code of business of companies. According to Cadbury Committee on financial aspects of corporate governance:

" it is the system by which companies are directed and controlled. The board of directors are responsible for the governance of their companies .the shareholders role in the government is to appoint the directors and the auditors andto satisfy themselves that an appropriate governance structure is in place".

Elements of corporate Governance:

Long term relationship

Deals with checks and balances
Incentives of managers
Communications between management and investors

Transactional relationship

Matters relating to disclosure and authority

19.2 HISTORY

In the 19th century, state corporation laws enhanced the rights of corporate boards to govern without unanimous consent of shareholders in exchange for statutory benefits like appraisal rights, to make corporate governance more efficient. Since that time, and because most large publicly traded corporations in the US are incorporated under corporate administration friendly Delaware law, and because the US's wealth has been increasingly securitized into various corporate entities and institutions, the rights of individual owners and shareholders have become increasingly derivative and dissipated. The concerns of shareholders over administration pay and stock losses periodically has led to more frequent calls for corporate governance reforms.

In the 20th century in the immediate aftermath of the Wall Street crash of 1929 legal scholars pondered on the changing role of the modern corporation in society.

Since the late 1970's, corporate governance has been the subject of significant debate in the U.S. and around the globe. Bold, broad efforts to reform corporate governance have been driven, in part, by the needs and desires of shareowners to exercise their rights of corporate ownership and to increase the value of their shares and, therefore, wealth. Over the past three decades, corporate directors' duties have expanded greatly beyond their traditional legal responsibility of duty of loyalty to the corporation and its shareowners.

In the first half of the 1990s, the issue of corporate governance in the U.S. received considerable press attention due to the wave of CEO dismissals (e.g.:IBM, Kodak,Honeywell) by their boards.

19.3 THE EMERGENCE OF CORPORATE GOVERNANCE ISSUES IN INDIA

The Stock Exchange of London appointed the famous Cadbury Committee which submitted its report in 1992 that included the "Code of Best Practices "to be practiced by listed companies. Sir Cadbury report was implemented by the London Stock Exchange as part of its Listing Agreement with its member companies. The Cadbury Report is generally considered to be the foundation stone of Corporate Governance.

In India , the real history of corporate governance dates back to the year 1992,following efforts made in many countries of the world to put in place a system suggested by the Cadburry Committee. The Confedration of Indian Industry framed a voluntary code of corporate governance for listed companies in 1998.This was followed by the recommendations of the Kumar Mangalam Birla Committee set up in 1999 by SEBI culminating in the introduction of Clause 49 of the standard listing agreement to be complied with by all the listed companies in stipulated phases. The Kumar Mangalam Birla Committee divided its recommendations into mandatory and non mandatory efforts to initiate Corporate Governance in India

The Companies Amendment Act,2000 : Many provisions relating to corporate governance such as additional ground of disqualification of directors in certain cases,setting up of audit committee,directors responsibility statement in the directors report were introduced by the Companies (Amendment) Act ,2000.Corporate Governance was also introspected in 2001 by the advisory group constituted by the standing committee on International Finance Standards and codes of Reserve Bank of India under the chairmanship of Dr.Y.V.Reddy, the then Deputy Governor.

The Enron debacle of 2001 involving the hand-in-glove relationship between the auditor and the corporate client,the scam involving the fall of the corporate giants in the US like the Worldcom, Qwest, Global Crossing, Xerox and the consequent enactment of the stringent Sarbanes-Oxley Act were some important factors which prompted the Indian government to do something to put in place proper governance mechanism in the structure and system of administration of listed public limited companies.

Appointment of Naresh Chandra Committee, 2002

In the year 2002 a high level committee was appointed to examine and recommend drastic amendments to the law involving the auditor client relationship and role of independent directors by the department of company affairs under the chairmanship of Naresh Chandra.The various mandatory and non mandatory recommendations given by this committee are discussed in detail in the next chapter of this study material.

Appointment of Narayana Murthi Committee, 2003

The Commiittee summed up the utility of corporate governance saying that neither corporate governance be legislated by law nor it be static in dynamic environment but on the contrary it should be continuiously evolved. Further their recommendations raise the standard of corporate governance in Indian firms and make them attractive for domestic and global capital.

Legislative Changes

In order to achieve levels of management and governance that inspire the investor confidence, Department of Corporate Affairs (erstwhile Dpt. of Company Affairs) has taken several initiatives in the recent past. The Companies Act, 1956 has been amended thrice since 1999 and some further amendments are under consideration.

A bill was passed in both the Houses of Parliament in December 2002 enabling Primary Producer to produce and market products in a modern and professional manner at par with other companies.

A bill was passed in August 2001 which ushers in a new era of insolvency laws and provides for constitution of Company Law Tribunal.

Introduction of Regulations

SEBI was set up by the Government in 1992 to counter the shortcomings found in the functioning of stock exchanges such as long delays, lack of transparency in procedures and vulnerability to price rigging and insider trading and to regulate the capital market. On the insistence of SEBI stock exchanges have amended listing agreements to ensure that a listed company furnishes them annual statements showing the variations between financial projections and projected utilization of funds which would enable shareholders to make comparisons between promises and performance.

19.4 RECOMMENDATIONS OF THE NARASIMHAM COMMITTEE, 1991

India has witnessed a phenomenal expansion in the geographical coverage and functional spread of our banking and financial system since bank nationalization in 1969. Despite impressive quantitative achievements in resource mobilization and in extending the credit reach,several distortions had over the years crept into the banking and financial system. As a result productivity and efficiency of the system had suffered; its portfolio quality had badly deteriorated and profitability had been eroded.Several public sector banks and financial institutions had become weak financially and some public sector banks had been incurring losses year after year. Their customer service was poor, their work technology outmoded and they were unable to meet the challenges of a competitive environment.It was under these circumstances that the Government of India set up a High Level Committee with Mr. M. Narasimham, a former Governor of the Reserve Bank of India as Chairman to examine all aspects relating to structure,organization,functions and procedures of the financial system. This Committee on the financial systems submitted its report in November 1991.

The Narasimham Committee's recommendations were based on the fundamental assumption that the resources of the banks come from the general public and were held by the banks in trust and that they were to be deployed for maximum benefit of the depositors. This assumption automatically implied that even the Government had no business to endanger the solvency,health and efficiency of the nationalized banks under the pretext of using banks resources for economic planning, social banking, poverty eradication, etc. Besides the Government had no right to get hold of the funds of the banks at low rates of interest and use them for financing its consumption expenditure – paying the salary of the employees, for example and thus defraud the depositors.

The Narasimham Committee recommendations were aimed at

(i) ensuring a degree of operational flexibility;

(ii) internal autonomy for the public sector banks in their decision making process; and

(iii) a greater degree of professionalism in banking operations.

A. On Directed Investment

The Committee gave two important recommendations as regards SLR and CRR.

1] **Statutory Liquidity Ratio (SLR)** : In order to discourage Government using SLR for them as well as Financial Institutions, the Narasimham Committee recommended that Government should reduce SLR from 38.5% of the net demand and time liabilities of banks to 25% over next five years which will enable more funds with banks for allocation to agriculture, industry, trade, etc. The Government borrowing rates should be progressively market-related and that these higher rates would help banks to increase their income from their SLR investments.

2] **Cash Reserve Ratio (CRR)** : RBI should rely on open market operation increasingly and reduce its dependence on CRR.Further CRR should be progressively reduced from the present high level of 15% to 3% to 5% and RBI should pay interest on impounded deposits of banks above the basic minimum at a rate of interest equal to the level of banks one year deposits.

The above two recommendations would reduce the amount of idle cash balances kept by the banks with RBI under CRR and release the amount for more productive and remunerative purposes.Besides banks would also earn more income from the cash balance they kept with RBI.

B. On Directed Credit Programmes

1] Directed credit programmes to be gradually phased out as agriculture and small industry had already grown to a mature stage and they did not require any special support.

2] Directed credit programme should be a case of extraordinary support to certain weak sections of the economy. Besides it should be temporary and not a permanent one.

3] The concept of priority sector to be redefined to include only the weakest sections of rural community such as marginal farmers,rural artisans,village and cottage industries,tiny sector etc and directed credit programme should be fixed at 10 % of the aggregate bank credit.

4] The system should be reviewed after a period of three years so to assess the need to continue or terminate the programme.

5] The postulates of social banking need not clash with the sound banking.

C. On the Structure of Interest Rates

1] The level and structure of interest rates in the country should be broadly determined by market forces.

2] All controls and regulations on interest rates on lending and deposit rates of banks and financial institutions on debentures and company deposits, etc.should be removed.

3] Concessional rates of interest for priority sector loans of small sizes should be phased out and subsidies in IRDP loans should be withdrawn.

4] The RBI should be the sole authority to simplify the structure of interest rates. The bank rate should be the anchor rate and all other interest rates should be closely linked to it.

D. On Structural Reorganisation of the Banking Structure

To bring about greater efficiency in banking operations the Narasimham Committee proposed a substantial reduction in the number of public sector banks through mergers and acquisitions.According to the Committee the broad pattern should consist of

1] 3 or 4 large banks (including the State Bank of India) which could become international in character.

2] 8 to 10 national banks with a network of branches throughout the country engaged in general or universal banking.

3] Local banks whose operations would be generally confined to a specific region.

4] Rural banks including RRBs whose operations would be confined to the rural areas and whose business would be predominantly engaged in financing of agriculture and allied activities.

5] The present system of licensing of branches with the objective of spreading the banking habit should be discontinued and banks should have freedom to open new branches purely on profitability considerations.

6] Government to make a positive declaration that there would be no more nationalization of banks.

7] RBI should permit the setting up of new banks in private sector provided they confirm to the minimum start up capital and other requirements.There should be no difference in the treatment between public sector banks and private sector banks.

8] Government should allow foreign banks to open offices in India either as branches or as subsidiaries provided they confirm same social obligation as Indian Banks. Foreign banks and Indian banks to be permitted to set up joint ventures in regard to merchant and investment banking, leasing and other newer forms of financial services.

E. Other Recommendations relating to Banking system

1] The setting of Assets Restructuring Fund

The main idea of forming this fund was to take over at a discount & in a phased manner Non Performing Assets of nationalized banks and financial institutions to ensure smooth and effective functioning of ARF.This will help banks and financial institutions to take off bad and doubtful debts from their balance sheets and recycle the funds realized through this process into more productive uses.

2] Remove Duality of Control:

The present system of dual control over the banking system between RBI and Banking divisions of the Ministry of Finance should end immediately and only RBI should be the primary agency for the regulation of the banking system.

3] Free and autonomous banks:

Public sector banks should be free and autonomous.Every bank should go for radical change in work technology and work culture so as to become competitive internally and to be in step with wide ranging innovations taking place abroad.The appointment of Chief Executive of a Bank should not be based on political considerations but on professionalism and integrity and should be made by an independent expert panel and not by the Government as at present.

19.5 FORMATION OF NARASIMHAM COMMITTEE ON BANKING SECTOR REFORMS :

In April 1998 The Ministry of Finance, Government of India appointed one more committee to review the progress of banking sector reforms to date and chart a programme on financial sector reforms necessary to strengthen India's Financial system and make it internationally competitive.Important recommendation of this committee are as follows:

1] Need for a stronger banking system: The committee recommended the merger of strong banks with weak banks to have multiplier effect on industry but they also cautioned that this merger should take place properly otherwise this might have negative effect on the assets of the stronger banks.

2] Experiment with the concept of Narrow Banking: Narrow banking implies that the weak banks place their funds only in the short term in risk free assets – these banks attempt to match their demand deposits by safe liquid assets and in case the concept of narrow banking is found to be non-applicable to rehabilitate the weak bank then the possibility of closure of the banks to be examined.

3] Small local banks: The committee suggested the setting up of small,local banks which would be confined to States or cluster of districts in order to serve local trade, small industry and agriculture.At the same time these banks should have strong corresponding relationship with the larger national and international banks.

4] Capital Adequacy Ratio: Government should consider raising the prescribed Capital Adequacy ratio to improve the inherent strength of banks and to improve their risk absorption capacity.

5] Public ownership and real autonomy: The Committee has recommended review of the functions of Board so that the Board remain responsible for enhancing shareholder value through formulation of corporate strategy. Also Committee expressed need to segregate the regulatory and supervisory functions of RBI and RBI should maintain an arms length from those being regulated and hints at need for withdrawing the nominee director of RBI from bank boards.Regulation should not get involved into day to day management of banks but only in procedural and disclosure norms and sound procedures.

6] Review and update Banking Laws: Committee suggested urgent need to review and amend the provisions of RBI Act, Banking Regulation Act, State Bank of India Act, Bank Nationalization Act, etc so as to bring them in line with the current needs of the banking industry.Also need was expressed for computerization process in Public Sector Banks, professionalizing and depoliticizing bank boards, review of recruitment procedures, training and remuneration policies, etc.

19.6 REPORT OF KUMAR MANGALAM BIRLA COMMITTEE ON CORPORATE GOVERNANCE,

Suggested List of Items to be included in the Report on Corporate Governance in the Annual Report of Companies.

19.6.1 Board of Directors:

Composition and category of directors for example promoter, executive, non-executive, independent non-executive, nominee director, which institution represented as Lender or as equity investor. Attendance of each director at the BoD meetings and the last AGM. Number of BoD meeting held, dates on which held.

19.6.2 Audit Committee

Brief description of terms of reference

Composition, name of members and Chairperson

Meetings and attendance during the year

19.6.3 Remuneration Committee

Brief description of terms of reference

Composition, name of members and Chairperson

Attendance during the year

Remuneration policy

Details of remuneration to all the directors, as per format in main report

19.6.4 Shareholders Committee

Name of Non-executive director heading the committee

Name and designation of compliance officer

Number of shareholders complaints received so far

Number not solved to the satisfaction of shareholders

Number of pending share transfers

19.6.5 General Body meetings

Location and time, where last three AGMs held

Whether special resolutions were put through postal ballot last year, details of voting pattern

Person who conducted the postal ballot exercise

Are proposed to be conducted through postal ballot

Procedure for postal ballot

19.6.6 Disclosures

Disclosures on materially significant related party transactions i.e. transactions of the company of material nature, with its promoters, the directors or the management, their subsidiaries or relatives etc. that may have potential conflict with the interests of company at large.

Details of Non compliance by the company, penalties, and strictures imposed on the company by Stock Exchange or SEBI or any statutory authority, on any matter related to capital markets, during the last three years.

19.6.7 Means of Communication

Half yearly report sent to each shareholders

Quarterly results:

Which newspapers normally published in

Any web-site, where displayed

Whether it also displays official news releases; and

The presentations made to institutional investors or the analysts

Whether MD &A (Management Discussion & Analysis) is a part of annual report or not

19.6.8 General Shareholder information

A.G.M. : Date, time and venue
Financial Calendar
Date of Book closure
Dividend Payment Date
Listing on Stock Exchanges
Stock Code
Market Price Data : High, Low during each month in last financial year
Performance in comparison to broad-based indices such as BSE Sensex, CRISIL index etc.
Registrar and Transfer Agents
Share Transfer System
Distribution of shareholding
Dematerialization of shares and liquidity
Outstanding GDRs/ADRs/ Warrants or any Convertible instruments, conversion date and likely impact on equity
Plant locations
Address for correspondence

19.7 SUMMARY OF NARESH CHANDRA COMMITTEE REPORT ON CORPORATE AUDIT AND GOVERNANCE

19.7.1 Recommendations : The Auditor Company Relationship

Disqualification for Audit Assignments

Prohibition of any direct financial interest in the audit client by the audit firm, its partners or members of the engagement team as well as their 'direct relatives'. This prohibition would also apply if any 'relative' of the partners of the audit firm or member of the engagement team has an interest of more than 2 per cent of the share of profit or equity capital of the audit client.

Prohibition of any business relationship, which the audit client by the auditing firm, its partners or any member of the engagement team and their 'direct relatives'.

Prohibition of personal relationship, which would exclude any partner of the audit firm or member of the engagement team being a 'relative' of any of key officers of the client company, i.e. any whole time director, CEO, CFO, Company Secretary, senior manager belonging to the top two managerial levels of the company, and the officer who is in default (as defined in section 5 of the Companies Act). In case of any doubt, it would be the task of the Audit Committee of the concerned company to determine whether the individual concerned is the key officer.

Prohibition of service or cooling off period, under which any partner or member of the engagement team of an audit firm who wants to join an audit client, or any key officer of the client company wanting to join the audit firm, would only be allowed to do so after two years from the time they were involved in the preparation of accounts and audit of that client.

Prohibition of undue dependence on an audit client, so that no audit firm is unduly dependent on an audit client, the fees received from any one client and its subsidiaries and affiliates, all together, should exceed 25 percent of the total revenues of the audit firm. However, to help newer and smaller audit firms, this requirement will not be applicable to audit firms for the first five years from the date of commencement of their activities, and for those whose total revenues are less than Rs 15 lakhs per year.

Note: A 'direct relative' is defined as the individual concerned, his or her spouse, dependent parents, children or dependent siblings. For the present, the term 'relative' is as defined under Schedule IA of the Companies Act. However, the Committee believes that the Schedule IA definition is too wide, and needs to be rationalized for effective compliance.

Recommendation: List of prohibited non-audit services.

The committee recommends that the following services should not be provided by an audit firm to any audit client:

Accounting and book keeping services, related to the accounting records or financial statements of the audit client.

Internal audit services.

Financial information systems design and implementation, including services related to IT systems for preparing financial or management accounts and information flows of a company.

Actuarial services.

Broker, dealer, investment adviser or investment banking services.

Outsourced financial services.

Management functions, including the provision of temporary staff to audit clients.

Any form of staff recruitment, and particularly hiring of senior management staff for the audit client.

Valuation services and fairness opinion.

Further in case the firm undertakes any service other than audit, or the prohibited services listed above, it should be done only with the approval of the audit committee.

19.7.2 Recommendation : Independence Standards for Consulting and Other Entities that are Affiliated to Audit Firms

Prohibition of undue dependence. Where an audit firm has subsidiary associate or affiliated entities, yardstick of no more than 25 per cent of revenues coming from a single audit client stated in earlier Recommendation should be widened to accommodate the consolidated entity, Thus no more than 25 percent of the revenues of the consolidated entity should come from a single corporate client with whom there is also an audit engagement.

The other prohibitions listed in earlier Recommendation should also apply in full to all affiliated consulting and specialized service entities of any audit firm that are either subsidiaries of the audit firm, or have common ownership of over 50 per cent with the audit firm. And all the tests of independence outlined in earlier Recommendation should be carried over to the consolidated entity.

Consolidation tests should test fully, line-by-line for all subsidiaries, whether the audit firm, or its partners, own over 50 percent of equity, or share of profit.

Recommendation: Compulsory Audit Partner Rotation

There is no need to legislate in favour of compulsory rotation of audit firms.

However, the partners and at least 50 per cent of the engagement team (excluding article clerks and trainees) responsible for the audit of either a listed company, or companies whose paid up capital and free reserves exceeds Rs.10 crore, or companies whose turnover exceeds Rs.50 crore, should be rotated every five years.

Also, in line with the provisions of the European Union and the IFAC, persons who are compulsorily rotated could, if need be, allowed to return after a break of three years.

19.7.3 Recommendation : Auditor's disclosure of contingent liabilities

It is important for investors and shareholders to get a clear idea of company's contingent liabilities because these may be significant risk factors that could adversely affect the corporation's future health. The Committee recommends that management should be followed by the auditor's clearly worded comments on the management's view. This section should be highlighted in the significant accounting policies and notes on accounts, as well as, in the auditor's report, where necessary.

19.7.4 Recommendation: Auditor's disclosure of qualifications and consequent action.

- Qualifications to accounts, if any must form a distinct, and adequately highlighted, section of the auditor's report to the shareholders.
- These must be listed in full in plain English- what they are (including quantification thereof), why these were arrived at, including qualification thereof).
- In case of a qualified auditor's report, the audit firm may read out the qualifications, with explanations, to shareholders in the company's annual general meetings.
- It should also be mandatory for the audit firm to separately send a copy of the qualified report to the ROC, the SEBI and the principal stock exchange (for listed companies), about the qualifications, with a copy of this letter being sent to the management of the company. This may require suitable amendments to the Companies Act, and corresponding changes in the Chartered Accountant Act.

19.7.5 Recommendation: Management's certification in the event of auditor's replacement.

- Section 225 of the Company's Act needs to be amended to require a special resolution of shareholders, in case an auditor, while being eligible to reappointment, is sought to be replaced.
- The explanatory statement accompanying such a special resolution must disclose the management's reasons for such a replacement, on which the outgoing auditor shall have the right to comment. The Audit Committee will have to verify that this explanatory statement is 'true and fair'.

19.7.6 Recommendation : Auditors annual certification of independence.

- Before agreeing to be appointed as per Section 224(1)(b), the audit firm must submit a certificate of independence to the Audit Committee or to the board of directors of the client company certifying that the firm, together with its consulting and specialized services affiliates, subsidiaries and associated companies:Are independent and have arm's length relationship with the client company;Have not engaged in any non-audit services listed and prohibited in earlier recommendations.

  And are not disqualified from audit assignments by virtue of breaching any of the limits, restriction and prohibitions listed in earlier recommendations.

19.7.7 Recommendation : Appointment of Auditors.

The audit committee of the board of directors shall be the first point of reference regarding the appointment of auditors. To discharge this fiduciary responsibility the Audit Committee shall:

- Discuss the annual work programme with the auditor;
- Review the independence of the audit firm in line with above mentioned recommendations.
- Recommend to the board, with reasons, either the appointment/re appointment or removal of the external auditor, along with the annual audit remuneration.

Exception to this rule may cover government companies (which follow section 619 of the Companies Act) and scheduled 'commercial banks (where the RBI has a role to play.)

19.7.8 Recommendation : CEO and CFO certification of annual audited accounts

For all listed companies as well as public limited companies whose paid-up capital and free reserves exceeds Rs.10 crore, or turnover exceeds Rs.50 crore, there should be a certification by the CEO (either the Executive Chairman or the Managing Director) and CFO (whole time Finance Director or otherwise) which should state that, to the best of their knowledge and belief:

- They, the signing officers, have reviewed the balance sheet and profit and loss account and all its schedules and notes on accounts, as well as the cash flow statements and the Directors Report.
- These statements do not contain any material untrue statement or omit any material fact nor do they contain statements that might be misleading.
- These statements together represent a true and fair picture of the financial and operational state of the company, and are in compliance with the existing accounting standards and/ or applicable laws/regulations.
- They, the signing officers, are responsible for establishing and maintaining internal controls which have been designed to ensure that all material information is periodically made known to them; and have evaluated the effectiveness of internal control systems of the company.
- They, the signing officers, have disclosed to the auditors as well as the Audit Committee instances of significant fraud, if any, that involves management or employees having a significant role in the company's internal control systems.
- They, the signing officers, have indicated to the auditors, the Audit Committee and in the notes on accounts, whether or not there were significant changes in internal control and/ or of accounting policies during the year under review.
- In the event of any materially significant misstatements or omissions, the signing officers will return to the company that part of any bonus or incentive or equity based compensation which has inflated on account of such errors, as decided by the Audit Committee.

19.7.9 Recommendation: Setting up of Independent Quality Review Board

- There should be established, with appropriate legislative support, three independent Quality Review Boards (QRB), one each for the ICAI, the ICSI and ICWAI, to periodically examine and review the quality of audit, secretarial and cost accounting firms, and pass judgment and comments on the quality and sufficiency of systems, infrastructure and practices.
- In the interest of realism, the QRBs should, for the initial five years, focus their audit quality reviews to the audit firms, which have conducted the audit for the top 150 listed

companies, ranked according to market capitalization as on 31st March. Depending upon the record of success of such reviews, the DCA may subsequently consider altering the sample size or criterion.

- **Composition of ICAI 's QRB:** The board shall consist of 11 members, including the chairman. The chairman shall be nominated by the DCA, in consultation with, but not necessarily from, the ICAI. Five members of the board, excluding the chairman shall be nominated by the DCA who will be people of eminence, professional reputation and integrity including, but not limited to, nominees of the Comptroller and Auditor-General of India, RBI, SEBI, members or office bearers of the Bombay Stock Exchange or the National Stock Exchange, the three apex trade and industry associations (CII,FICCI, and ASSOCHAM), reputed educational and research institutions, bankers, economists, former public officials and business executives. The remaining five members of the Board will be nominated by the Council of the ICAI.

- **Composition of ICSI's QRB:** A five member board, including the chairman. The chairman shall be nominated by the DCA, in consultation with, but not necessarily from, the ICSI. Two members, excluding the chairman, shall be nominated by the DCA, who will have the same attributes suggested for ICAI's QRB above. The remaining two members will be nominated by the Council of the ICSI.

- **Composition of ICWAI's QRB:** A five member board, including the chairman. The chairman shall be nominated by the DCA, in consultation with, but not necessarily from, the ICWAI, Two members, excluding chairman, shall be nominated by the DCA, who will have the same attributes suggested for ICAI's QRB above. The remaining two members will be nominated by the Council of the ICWAI.

- **Funding:** Each of these QRBs will be funded by their respective institutes in a manner that will enable it to discharge its functions adequately.

- **Appellate forum:** In the instance of a dispute between the findings of the QRBs and reviewees, the matter should be referred to an appropriate appellate forum. This appellate forum should be the same as that suggested for disciplinary matters, which is discussed in blow recommendation.

19.7.10 Recommendation: Proposed disciplinary mechanism for auditors

- **Classification of offences and merging of schedules:** At present there are two schedules of offences and misconduct with the second schedules requiring action by High courts. These two schedules need to be merged, so that the Council is empowered to award all types of punishments for all types of offences. Further offences need to be categorized according to the severity of misconduct, so that processes can be designed, and punishments awarded according to the severity of the offence.

- **Prosecution Directorate:** An independent permanent directorate within the structure of ICAI shall be created, which shall act as the Prosecution Directorate. This office will exclusively deal with all disciplinary cases and hence, expedite the process of enquiry and decision making by fully devoting its time and energy towards processing these cases. The office should be headed by a person of the level of Director, and should be one with a legal background and conversant with the provisions of The Chartered Accountants Act and its regulations. He and his office shall be independent of the electoral process of ICAI. Suitable regulations need to be framed to uphold the independence of this office. The Prosecution Directorate shall have the same powers as are vested in a Civil Court under the Code of Civil Procedure ,1908 regarding (i) the discovery and production any document; and (ii) receiving evidence on affidavit.

Procedure for dealing with complaint cases

1. The complaints received in the appropriate form, manner, and complete in all respects, shall be registered by the Prosecution Directorate, and sent to the member or firm within 15 days of registration of such a compliant.

2. Depending on the category of the complaint, the Prosecution Directorate shall ask for and obtain necessary document such as written statements, rejoinders, comments and other evidence from the complainant as well as the respondent. The time frame for this should be, under normal circumstances, no more than 60 days. Not submitting such documents within the prescribed time shall be treated as an offence, risking the initiation of additional obstruction of justice proceedings.

3. On receipt of the relevant documents, the complaint along with the views, if any, of the Prosecution Directorate, will be placed before that Disciplinary Committee. This has to be done within 20 days of receiving all relevant accompanying documents.

Procedure for dealing with information cases

1. Information received shall be examined by the Prosecution Directorate. After firming his views, the Director of the Prosecution Directorate will place the matter before the Secretary of ICAI.

2. If the Secretary agrees with the view expressed by the Director, then the information case will be placed before the President of ICAI and thereafter, it would be discussed at a meeting between the President, Secretary and the Director. If in this meeting, it is decided to refer the matter to the Disciplinary Committee, then reference be made accordingly. Upon such referral, the Prosecution Directorate shall argue the case before the Disciplinary Committee. If, however, the Secretary and President of ICAI decide that the information should be filed and closed, then the Director of the Prosecution Directorate will have the choice to either follow the majority opinion, or dissent and refer such a case to the Disciplinary Committee, with his as well as the Secretary's and President's opinion. In such instances, however the President shall not function as the Presiding Officer of the Disciplinary Committee . Further, if the Director Prosecution does not feel that a reference to the Disciplinary Committee is warranted, the Institute would still be free to take such cases to the Committee if it feels there is a need to do so.

3. After registering the 'information' case, the procedure outlined for the complaint case may be followed mutatis mutandis.

Disciplinary committee:

- Enquiries in relation to misconduct of members shall be held by the Disciplinary Committee. To expedite decision making the Council of ICAI shall be empowered to constitute one or more bench of the Disciplinary Committees in cities where there are regional headquarters of ICAI.

- Composition: Each bench should consist of five members. The President or the Vice-president of ICAI will be Presiding Officer. However, in 'information' cases put before the Committee by the Prosecution Director after disagreeing with the views of the President and the Secretary, the President shall not act as the Presiding Officer. In such cases, the Vice-President will perform this role. Two of other four members will be nominees of ICAI's Council, while the remaining two will be nominees of the DCA viz people of eminence, professional reputation and integrity such as retired judges, bankers, professionals, economist, business executives, former members of regulatory authorities and former public officials. As far as practicable, members of the disciplinary committee should be from the regions other than the one in which it is being constituted.

  It needs to be stated that in terms of the existing requirement, a nominee of the central government is required to be nominated to the disciplinary committee. Until very recently, such a nominee was an official of the DCA. However, DCA officials have rarely had the time to attend the meetings of the disciplinary committee.

  Hence the committee recommends that, given their preoccupation in the department, a sitting government official should not be nominated to the disciplinary committee.

  It is pointed out that for each stage in the process, strict time lines should be prescribed. This is especially important in respect of scrutiny of information cases.

- Quorum: Three of the five members.

- Tenure: Co-terminus with the duration of the ICAI council.

- Functions: The disciplinary committees shall hear the compliant and information cases referred by the prosecution directorate and record their decision and conclusions in a report. This report shall also record the punishment awarded, if any, to the member which can constitute (i) reprimand (ii) removing the name of the member either permanently or for such period as thought fit. (iii) monetary penalty and /or (iv) a combination of any two.

Council

- Any report submitted by the disciplinary committee should normally be considered by the council within 45 days from the date of report. It shall be the duty of the council of ICAI to act upon the decisions of the disciplinary committee. While performing such duty, the council can;

1. Endorse the decisions by the disciplinary committee and implement them.

2. Refer any case back to the disciplinary committee for further enquiry ,when it finds that certain issues need further enquiry. However, in doing so, the council will have to frame the specific issues.

3. Direct the Prosecution Directorate to place the case before the Appellate body, In the event of the council deciding to appeal against the decisions of the disciplinary committee.

Appellate Body

- Headquartered in New Delhi, the appellate body shall consist of a Presiding Officer and four others members. The Presiding Officer shall be retired judge of the Supreme Court or a retired Chief Justice of a High Court. Two members should be past Presidents of the ICAI, nominated by the council. The remaining two shall be persons of eminence nominated by the DCA(but excluding any officer of the department or member of the council). The quorum shall be three.

Publication of decisions of the Disciplinary committee

Due publicity shall be given by the Prosecution Directorate about the punishment ultimately awarded, through periodicals, newsletters, website and any other means considered appropriate. However, no decision taken by the Disciplinary Committee be published unless and until the punishment is endorsed and implemented by the Council.

Funding

1. Appellate Body: Required funding arrangements should be made by the Central Government. This is essential for ensuring independence, and on the ground that the High Court stage can be said to have been always funded by the Government.

2. Disciplinary Committee: The expenses shall be borne by ICAI's Council, which shall also fix the emoluments, sitting fees, allowances, and other expenses of the members.

3. Prosecution Directorate: All expenses will be borne by the Council of ICAI.

4. Every complaint, other than a complaint made by or on behalf of the Central or any State Government shall be accompanied by a fee Rs.5,000 which will be returned as soon as the Disciplinary Committee recommends that case is not frivolous. Fees not refunded for frivolous cases will be used to partly defray the cost of investigation.

RECOMMENDATION: DEFINING AN INDEPENDENT DIRECTOR

- An independent director of a company is a non-executive director who :

1. Apart from receiving director's remuneration, does not have any material pecuniary relationships or transactions with the company, its promoters, its senior management or its holding company, its subsidiaries and associated companies.

2. Is not related to promoters or management at the board level, or one level below the board (spouse and dependent, parents, children or siblings).

3. Has not been an executive of the company in the last three years.
4. Is not a partner or an executive of the statutory auditing firm, the internal audit firms that are associated with the company, and has not been a partner or an executive of any such firm for the last three years. This will also apply to legal firm and consulting firm that have a material association with the entity.
5. Is not a significant supplier, vendor or customer of the company.
6. Is not a substantial shareholder of the company, i.e. owning 2 percent or more of the block of voting shares.
7. Has not been a director, independent or otherwise of the company for more than three terms of the three years each (not exceeding nine years in any case);
   - An employee, executive director or nominee of any bank, financial institution, corporations or trustees of debenture and bond holders, who is normally called a 'nominee director' will be excluded from the pool of directors in the determination of the number of independent directors. In other words, such a director will not feature either in the numerator or the denominator.
   - Moreover, if an executive in, say, Company X becomes an non-executive director in another Company Y, while another executive of Company Y becomes a non-executive director in Company X, then neither will be treated as an independent director.
   - The committee recommends that the above criteria be made applicable for all listed companies, as well as unlisted public limited companies with a paid up share capital and free reserves of Rs.10 crore and above or turnover of Rs.50 crore and above with effect from the financial year beginning 2003.

RECOMMENDATION: PERCENTAGE OF INDEPENDENT DIRECTORS

No less than 50 percent of the board of directors of any listed company, as well as unlisted public limited companies with a paid up share capital and free reserves of Rs.10 crore and above, or turnover of 50 crore and above, should consist of independent directors – independence being defined in earlier recommendation.

However this will not apply to: (1) unlisted public companies, which have no more than 50 shareholders and which are without debt of any kind from the public, banks, or financial institutions, as long as they do not change their character (2) unlisted subsidiaries of listed companies.

Nominee directors will be excluded both from the numerator and the denominator.

RECOMMENDATION: MINIMUM BOARD SIZE OF LISTED COMPANIES

The minimum board size of all listed companies, as well as unlisted public limited companies with a paid up share capital and free reserves of Rs.10 crore and above, or turnover of Rs.50 crore and above should be seven of which at least four should be independent directors.

However, this will not apply to: (1) unlisted public companies, which have no more than 50 shareholders and which are without debt of any kind from the public and banks, or financial institutions, as long as they do not change their character, (2) unlisted subsidiaries of listed companies.

RECOMMENDATION: DISCLOSURE ON DURATION OF BOARD MEETINGS/ COMMITTEE MEETINGS

The minutes of Board meetings and Audit Committee meetings of all listed companies, as well as unlisted public limited companies with a paid up share capital and free reserves of Rs.10 crore and above or turnover of Rs.50 crore must disclose the timing and duration of each such meeting, in addition to the date and members in attendance.

RECOMMENDATION: TELE-CONFERENCING AND VIDEO CONFERENCING

If a director cannot be physically present but wants to participate in the proceedings of the board and its committees, then a minuted and signed proceedings of a tele conference or video conference should constitute proof of his or her participation. Accordingly this should be treated as presence in the meetings. However, minutes of all such meetings should signed and confirmed by the director/s who has/have attended the meeting through video conferencing.

RECOMMENDATION: ADDITIONAL DISCLOSURE TO DIRECTORS

In addition to the disclosures specified in clause 49 under 'information to be placed before the board of directors', all listed companies, as well as unlisted public limited companies with a paid up share capital and free reserves of Rs10 crore and above or turnover of Rs.50 crore and above, should transmit all press releases and presentation to analysts to all board members. This will further help in keeping independent directors informed of how the company is projecting itself to the general public as well as a body of informed investors.

RECOMMENDATION: INDEPENDENT DIRECTORS ON AUDIT COMMITTEES OF LISTED COMPANIES:

Audit committees of all listed companies, as well as unlisted public limited companies with a paid up share capital and free reserves of Rs.10 crore and above, or turnover of Rs.50 crore and above, should consist exclusively, of independent directors, as defined in earlier recommendation.

However, this will not apply to : (1) unlisted public companies, which have no more than 50 shareholders and which are without debt of any kind from the public, banks, or financial institutions, as long as they do not change their character, (2) unlisted subsidiaries of listed companies.

RECOMMENDATION: AUDIT COMMITTEE CHARTER

- In addition to disclosing the names of members of the Audit Committee and the dates and frequency of meetings, the Chairman of the Audit Committee must annually certify whether and to what extent each of the functions listed in the Audit Committee Charter were discharged in the course of the year. This will serve as the Committee's action taken report' to the shareholders.

- This disclosure shall also give a succinct but accurate report of the tasks performed by the Audit Committee, which would include, among others, the Audit Committee's view on the adequacy of internal control systems, perceptions of risks and in the event of any qualifications, why Audit Committee accepted and recommended the financial statements with qualifications. The statements should also certify whether the Audit Committee met with the statutory and internal auditors of the company without the presence of management, and whether such meetings revealed materially significant issues or risks.

RECOMMENDATION: REMUNERATION OF NON-EXECUTIVE DIRECTORS

- The statutory limit on sitting fees should be reviewed, although ideally it should be a matter to be resolved between the management and the shareholders.
- In addition, loss making companies should be permitted by the DCA to pay special fees to any independent director, subject to reasonable caps, in order to attract the best restructuring and strategic talents to the boards of such companies.
- The present provisions relating to stock options, and to the 1 per cent commission on net profits, is adequate and does not, at present, need any revision. However, the vesting schedule of stock options should be staggered over at least three years, so as to align the independent and executive directors, as well as managers two levels below the Board, with the long term profitability and value of the company.

RECOMMENDATION: EXEMPTING NON-EXECUTIVE DIRECTORS FROM CERTAIN LIABILITIES

Time has come to insert provisions in the definitions chapter of certain Acts to specifically exempt non-executive and independent directors from such criminal and civil liabilities. An illustrative list of these Acts are the Companies Act, Negotiable Instruments Acts, Provident Fund Act, ESI Act, Factories Act, Industrial Disputes Act and the Electricity Supply Act.

Independent directors should also be indemnified.

RECOMMENDATION: TRAINING OF INDEPENDENT DIRECTORS

- DCA should encourage institutions of prominence including their proposed Centre for Corporate Excellence to have regular training programmes for independent directors. In framing the programmes, and for other preparatory work, funding could possibly come from the IEPF.
- All independent directors should be required to attend at least one such training course before assuming responsibilities as an independent director, or considering that enough programmes might not be available in the initial years, within one year of becoming an independent director. An untrained independent director should be disqualified under section 274 (1)(g) of the Companies Act, 1956 after being given reasonable notice.

- Considering that enough training institutions and programmes might not be available in the initial years, this requirement may be introduced in a phased manner, so that the larger listed companies are covered first.

- The executing bodies must clearly state their plan for the year and their funding should be directly proportionate to the extent to which they execute such plans.

- There should be a 'trainee appraisal' system to judge the quality of the programme and so help decide, in the second round, which agencies should be given a greater role and which should be dropped.

RECOMMENDATION: SEBI AND SUBORDINATE LEGISLATION

- SEBI may refrain from exercising powers of subordinate legislation in areas where specific legislation exists as in the Companies Act, 1956.

- If any additional requirements are sought to be prescribed for listed companies, then, in areas where specific provision exists in the Companies Act, it would be appropriate for SEBI to have the requirement prescribed in the Companies Act itself through a suitable amendment.

- In recognition of the fact that SEBI regulates activities in dynamic market conditions, the DCA should respond to SEBI's requirements quickly. In case the changes proposed by SEBI necessitate a change in the Companies Act, the DCA should agree to the requirement being mandated in clause 49 of SEBI regulation until the Act is amended.

- It would be appropriated for SEBI to use its powers of subordinate legislation, in consultation with the DCA, and vice versa. All committees set up either by SEBI or DCA to consider changes in law, rules or regulations should have representatives of both SEBI and DCA.

- A formal structure needs to be set up to ensure that the DCA, which regulated all companies, and SEBI, which regulates only listed companies, act in coordination and harmony.

RECOMMENDATION: IMPROVING FACILITIES IN THE DCA OFFICES

- The Government should increase the strength of the DCA's office,and substantially increase the quality and quantity of it's physical infrastructure, including computerisation.

- This should be accompanied by increased outsourcing of work, contractual appointments of specialist and computerization all of which will reduce, though not eliminate, the need to increase the officer-level strength of the department.

- The inspection-capacity of the department needs to be increased sharply; inspections should be regular administrative function, carried out largely on random basis.

- Officers of the DCA need to go through refresher and training courses regularly. In view of the very dynamic world in which they function, continuous upgrading of their skills is essential.

RECOMMENDATION: CORPORATE SERIOUS FRAUD OFFICE

- A Corporate Serious Fraud Office (CSFO) should be set up in the Department of Company Affairs with specialists inducted on the basis of transfer/ deputation and on special term contracts.
- This should be in the form of a multi-disciplinary team that not only uncovers the fraud, but is able to direct and supervise prosecutions under various economic legislations through appropriate agencies.
- There should be a Task Force constituted for each case under a designated team leader.
- In the interest of adequate control and efficiency, a Committee each, headed by the Cabinet Secretary should directly oversee the appointments to, and functioning of this office, and coordinate the work of concerned departments and agencies as described in earlier paragraph.
- Later, a legislative framework, along the lines of the SFO in the U.K. should be set up to enable the CSFO to investigate all aspects of the fraud and direct the prosecution in appropriate courts.

RECOMMENDATION PERTAINING TO ENSURING INVESTOR CONFIDENCE:

- Penalties ought to be rationalized and related to the sums involved in the offence. Fees, especially late fees, can be related to the size of the company in terms of its paid up capital and free reserves, or turnover, or both.
- Disqualification under section 274 (1)(g) of the Companies Act, 1956 should be triggered for certain other serious offences than just non-payment of debt. However, independent directors need to be treated on a different footing and excepted as in the case of nominee directors representing financial institutions.
- A stricter regime should be prescribed for companies registered as brokers with SEBI. Greater accountability should be provided for companies registered as brokers with SEBI. Greater accountability should be provided for with respect to transfer of money by way of Inter Corporate Deposits, or advances of any kind from listed companies to any other company as a necessary concomitant of the liberalization the section 372A of the Companies Act, 1956 provides.
- DCA's prosecution wing needs to be 'considerably strengthened. Streamlined procedures be prescribed in the Companies Act, on the lines of the recent amendments to the Code of Civil Procedure.
- To ensure that proceeds from illegal acts and frauds do not escape recovery, Companies Act needs to be amended to give DCA the powers of attachment of bank accounts etc., on the lines of the powers recently given to SEBI.

- Managers/promoters should be held personally liable when found guilty of offences. In such cases, the legal fees and other charges should be recovered from the officers in default, especially if the offences pertain to betrayal of shareholder's trust, or oppression of minority shareholders. It is patently unfair that the shareholder is penalized twice, once when mulcted and again to have to incur the legal expenses to defend the fraudster.

- Consolidated Financial statements should be made mandatory for companies having subsidiaries.

- DCA should consider reducing workload at offices of ROCs by providing for a system of 'pre-certification' by company secretaries; the system should provide for monetary and other penalties on company secretaries who certify incorrectly, even through error or oversight.

- The Companies Act, be amended to enable the DCA to order a 'compliance audit' much in the same manner as it can order special audits under section 233A of the Companies Act.

- MAOCARO should be amended to provide that auditors report contain violations such as those listed earlier paragraph.

- Section 293(1)(a) should be strengthened to prevent any unnatural strapping of assets, or sale of shares by management/promoters.

- To reduce its workload in ROC offices, as well as to improve auditing standards, the Government should consider introducing a system of 'random scrutiny' of audited accounts, in the same way as is done by the Accountancy Foundation in the U.K. or is proposed to be done by the Public Oversight Board in the USA, however this recommendation should be implemented only if, and after, DCA can take care of concerns such as the genuineness of randomness, client confidentiality, etc. and is confident of its own manpower strengths and skills.

- ICAI should reconsider the limits it has set on the number of articles that a partner can train something that has unintended consequence of denying young prospective accountants the chance to train with the best in the profession.

- Companies should be required to establish and publish an "Internal Code of Ethics".

- DCA should sponsor and financially support from the IEPF research on corporate governance and allied subjects that have a bearing on investor/shareholder well-being.

- ICAI should propose to the government a regime and a regulatory framework that encourages the consolidation and growth of Indian firms in view of the international competition they face, especially with regard to non-audit services.

- The government should consider amending the Partnership Act to provide for partnerships with limited liability, especially for professions that do not allow their members to provide services as a corporate body.

19.8 NARAYAN MURTHY COMMITTEE REPORT, 2003

A committee on corporate governance set up by SEBI under the chairmanship of N.R. Narayana Murthy which submitted its report in February 2003 was yet another committee on the subject signifying the regulator's anxiety to expeditiously promote corporate governance practices in Indian Companies.

The committee's terms of reference were the following:

- To review the performance of corporate governance.
- To determine the role of companies in responding to rumour and other price sensitive information circulating in the market in order to enhance the transparency and integrity of the market.

The Committee's reports express its total concurrence with the recommendations contained in the Naresh Chandra Committee's report on the following counts:

(i) Disclosure of contingent liabilities.

(ii) Certification by CEO's and CFO's.

(iii) Definition of Independent Directors.

(iv) Independence of Audit Committees.

The committee came out with two sets of recommendations namely, mandatory recommendations and non-mandatory recommendations. The mandatory recommendations focus on strengthening the responsibilities of audit committees, improving the quality of financial disclosures including those pertaining to related party transactions and proceeds from initial public offerings, requiring corporate executive boards to assess and disclose business risks in the annual reports of companies, calling upon the boards to adopt formal codes of conduct; the position of nominee directors and improved disclosures relating to compensation to non executive directors and shareholders.

MANDATORY RECOMMENDATIONS:

Audit Committee: An audit committee is the bedrock of quality governance. An effective audit committee is a pre-requisite for achieving high standard of governance. The committee recommended a bigger role for the audit committee. The committee suggested that the audit committee of publicly listed companies should be required to review the following information mandatorily.

(i) Financial statements and draft audit reports including quarterly and half yearly information.

(ii) Management discussion and analysis of financial condition and the results of operations.

(iii) Report relating to compliance with laws and risk management.

(iv) Management letters of internal control weaknesses issued by statutory internal auditors.

(v) Records of related party transactions.

In the present dispensations, audit committee, set up as per Clause 49 of the Listing Agreement, is empowered to recommend the appointment and removal of statutory auditors, fixation of audit fee and also approval for payment for any other services in addition to the powers of review etc. If the above powers are added as per committee's recommendations, the audit committee of the listed companies in India will become one of the most empowered committees in a corporate setup.

Narayan Murthy Committee has not taken a view on rotation of auditors.

Related party transactions: A statement of all transactions with related parties including their bases should be placed before the audit committee for formal approval/ratification and that if any transaction is not on an arm's length basis, management should provide explanation to the audit committee justifying the same.

The existing requirement as per Clause 49 of the listing agreement has been reiterated.

PROCEEDS FROM INITIAL PUBLIC OFFERINGS:

Companies raising money through initial public offerings should disclose to the audit committee the Source and Application of Funds under major heads on a quarterly basis.

Each year, the company shall prepare a statement of funds utilised for purposes other than those stated in offer document/ prospectus. This statement shall be certified by the independent auditors of the company. The audit committee should make appropriate recommendations to the board to take steps in the matter.

This suggestion was welcomed by many as it enlarges the existing requirement in this regard and is a response to manipulations perpetrated by some corporates in this area.

RISK MANAGEMENT:

The committee has deemed it necessary for the boards of companies to be fully aware of the risks involved in the business and that it is also important for shareholders to know about the process by which companies manage their business risks. The mandatory recommendations in this regard are the following:

Procedures should be in place to inform board members about the risk assessment and minimization procedures. These procedures should be periodically reviewed to ensure that executive management controls risks through means of a properly defined framework.

Management should place a report before the entire board of directors every quarter documenting the business risks faced by the company, measures to address and minimize such risks and any limitation to the risk taking capacity of the corporations. The board should formally approve this document.

At present, in Clause 49 of the Listing Agreement, there is a stipulation that the management discussion and analysis report forming part of the board's annual report should include discussion on "risk and concerns". The suggestion contained in the report is more elaborate and this would encourage a meaningful discussion at the board level periodically and the company will have the benefit of advice from board members who are in day to day management.

Code of Conduct:

The committee has recommended that it should be obligatory for the board of a company to lay down a code of conduct for all board members and senior management of the company. This code should be posted on the company's website and all board members and senior management personnel shall affirm compliance with the code on an annual basis. The annual report of the company shall contain a declaration to this effect signed off by the CEO and COO.

This suggestion which is long overdue in the Indian context is in line with the best practices adopted by corporates in developed economies. In fact, such matters are included in the charters of companies, sending a clear message to the company's personnel, how serious the company is about ensuring that the coded is followed both in the letter and spirit. It is found that in most of the cases the misdemeanours reported were caused by breach of the code of conduct.

Nominee directors : The committee recommended doing away with nominee directors. If a corporation wishes to appoint a director on the board, such appointment should be made by the shareholders. The committee insisted that an institutional director, if appointed, shall have the same responsibilities and shall be subject to the same liabilities as any other director. Nominees of the government on public sector companies shall be similarly elected and shall be subject to the same responsibilities and liabilities as other directors.

This suggestion has become an issue of hot debate in corporate circles and outside. However, in the present context where one finds a nominee director in the board of a company very often working or voting against matters perceived to be in interest to the company, and hence there is ample justification for this suggestion to be implemented. The board of a company is a cohesive team, characterized by mutual consultations and collective wisdom. There is no place for a person who does not fall in line. The inherent conflict would seriously harm the interests of the company.

Other mandatory recommendations of the committee are the following:

- Compensation to non-executive directors (to be approved by the shareholders in general meting, restrictions placed on grant of stock option, requirement of proper disclosures of details of compensation).

- Whistle blower policy to be in place in a company.

  All these suggestions are well merited and deserve implementation. Some objections raised in certain quarters about the recommendation of the committee with regard to whistle blowing can be met by suitable provisions to avoid frivolous and vexatious complaints.

  The non-mandatory recommendations pertain to moving to a regime providing for unqualified corporate financial statements, training of board members and evaluation of non-executive director's performance by a peer group comprising the entire board of directors, excluding the director being evaluated.

19.9 DR. J.J. IRANI COMMITTEE REPORT ON COMPANY LAW, 2005

The government of India constituted an expert committee on Company Law on 2 December 2004, under the chairmanship of Dr.J.J.Irani to make recommendations on (i) responses received from various stakeholders on the concept paper; (ii) issues arising from the revision of the Companies Act, 1956; (iii) bringing about compactness by reducing the size of the Act and removing redundant provisions; (iv) enabling essay and unambiguous interpretation by recasting the provisions of the law; (v) providing greater flexibility in rule making to enable timely response to ever evolving business models; (vi) protecting the interest of the stakeholders and investors, including small investors, and (vii) any other related, or incidental, to the above.

Set up to structurally evaluate the views of several stakeholders in the development of company law in India in respect of the concept paper promulgated by the Union Ministry of Company Affairs, the J.J. Irani Committee has come out with suggestions that will go far in laying sound base for corporate growth in the coming years. There has been a movement for some years now in many countries to create better frameworks of corporate governance. This has happened along with a trend towards global alignment of laws governing companies. Drawing from developments in countries such as the U.K., Australia, New Zealand and Canada, the Irani Committee report has made suggestions to reform and update the basic corporate legal framework essential for sustainable economic reform.

The expert committee comprised experts drawn from trade and industry associations,Professional bodies and institutes, chamber of commerce, leading senior advocates and auditors. Representatives of government departments, regulatory bodies and other organizations were included as special invitees. The committee deliberated on various issues on company law requiring a review on the basis of comments and suggestions received in response to the concept paper, opinion expressed by experts, professional bodies etc. The committee submitted its report to the Government of India on 31st May 2004.

The committee's report is balanced and well rounded document and attempts to equate the pulls and pressure or modern business and those of shareholder democracy. It is a step towards providing a growth oriented modern company law, with the thrust on stakeholder democracy and self-regulation. The report sought to address the concerns of all the stakeholders to enable the adoption of internationally accepted best practices.

INDEPENDENT DIRECTORS IN LISTED COMPANIES

SEBI had in the revised clause 49 of the listing agreement mandated that at least 50 per cent of the board of a listed company comprise independent directors. The capital market regulator has made it clear that the corporate India should comply with revised Clause 49 by 31st December 2005.

Taking a position that is at variance with that of the Securities and Exchange Board of India, the J.J. Irani committee has recommended that one third of the board of a listed company should comprise independent directors.

PYRAMIDAL STRUCTURE

The committee has also suggested that corporate should be allowed to maintain pyramidal corporate structures that are a company which is subsidiary of holding company could itself be a holding company. ”We suggest that pyramidal structures should be allowed because it is in the interest of corporate sector, especially when many companies are making acquisitions abroad .Although the committee started it’s deliberations under the presumptions that only 1 layer should be allowed, we later decided against it”, Dr Irani commented.

POWER TO SHAREHOLDER

The main thrust of the committee’s recommendations was to give liberty to shareholders and owners of the company to operate in a transparent manner. The committee calls for a significant shift from a government approval regime to a “shareholder approval and disclosures” regime. The report thus gives more power to shareholders, allowing them rather than the company law administration to decide on certain crucial matters. Mergers between willing companies will be quicker. They will not be subject to the vagaries of the legal system any more. Ratification by shareholders will be enough. To protect the rights of minority shareholders and also to ensure investor protection, the committee has aptly suggested that the new company law should recognize principles such as ‘class actions’ and ‘derivative action’.

The capital market got plenty of attention from the committee. There are proposals to devise an exit option for shareholders who have stayed with a company and not participated in a buy back scheme implemented earlier.

SINGLE PERSON COMPANY

The Committee has also mooted the the concept of single person company. Introducing the concept of One Person Company (OPC) as against the current stipulation of at least two persons to form a company, the committee has pitched for entrepreneurship in individuals. “The whole idea is that if there is an entrepreneur who wants to form his own company, he should not be bound down by company law to find other partners,” according to Dr.Irani.

SELF REGULATION

One distinctive approach of the committee in allowing corporate to self regulate their affairs. This is a much needed orientation of corporate growth in an overall policy regime being provided by the government.

STRINGENT PENALTIES

In order to strengthen the deterrent provisions in the present framework, the report has mandated publication of information relating to conviction for criminal breaches of the Companies Act on the part of the company or its officers in the annual report. The suggestions to provide stringent penalties will certainly help the regulator to curb fraudulent behaviour of companies.

ACCOUNTS AND AUDIT

According to the committee, "proper and accurate compilation of financial information of a corporate and its disclosure in a manner that is standardized and understood by stakeholders is central to the credibility of the corporates and soundness of investment decisions by the investors. The preparation of financial information and its audit therefore needs to be regulated through law with stringent penalties for non-observance". The committee took note of the contributions made by the Institute of Chartered Accountants of India and the National Advisory Committee on Accounting Standards and favoured the continuance of the existing institutional mechanism for formulating and notifying Accounting Standards.

GOVERNANCE STANDARDS

Those who believe that the Irani Committee will make corporate law and governance standards less strong point to its advocacy of a smaller number of independent directors (just one-third of company's board) compared to the much higher proportion (one half specified by the Securities and Exchange Board of India) under Clause 49 of the listing agreement.

There are other points of difference too between the committee and SEBI. But it is not correct to look at an expert committee's report purely from the points of its departure from current developments in those areas.

STUDY NOTES - 20

BOARD OF DIRECTORS & DIFFERENT COMMITTEES

This Study Note includes

- Effectiveness of the Board of Directors:
- Role of The Board in Ensuring Corporate Governance
- Role of Directors
- Independent Directors
- Desirability of Having Independent Directors
- Audit Committee - Section 292A of the Companies Act, 1956
- Remuneration Committee
- Nomination Committee
- Internal Control
- Directors' Responsibility Statement
- Going Concern status
- Related party transaction
- Project Management Audit and Corporate Governance
- Risk Evaluation and Management

The Board of Directors of a company which includes all directors elected by shareholders to represent their interests is vested with the powers of the management .The board has extensive powers to manage a company, delegate its power and authority to executives and carry on all activities to promote the interests of the company and its shareholders, subject to certain restrictions imposed by public authorities. The board of directors of a company is authorized to exercise such powers and to perform all such acts and things as the company is entitled to.

20.1 EFFECTIVENESS OF THE BOARD OF DIRECTORS

Though the board is recognized legally as the top layer of management with the responsibility of governing the enterprise, in actual practice, board of directors delegates most of its managerial power to chief executives say managing director or manager. In some case Board also appoints various committees like executive committee but these committees cannot make radical changes in the policy of the company. Board of Directors rely more on Chief Executives who being whole time officers of the company naturally devote greater time and attention to the matters connected with the management of the company. They are placed at far more advantageous position than board which meets only occasionally. The realistic functions of the board be enumerated as follows:

1] Confirming management decisions on major changes in objectives, policies, and those transactions which will have a substantial effect on the success of the company.

2] Providing constructive advice to the executives through discussion on important matters such as business outlook, new government legislation, wage policy, etc with a view to guiding executives when the policies are still in the process of formation.

3] Selecting Chief Executives and confirming the selection of other executives in the company made by chief executives.

4] Reviewing the results of the company's current operations.

Thus as per the current practice the initiative in the management of the companies has passed into the hands of chief executives. Peter Drucker remarks " In reality, the board as conceived by the lawmakers is at best a tired fiction. But this does not mean that board has no important function to perform. As ultimate responsibility of the management of the company rests with the board of directors. It is an organ of review, of appraisal, of appeal. Only in crisis it becomes an organ of action.

Problems can arise if the board were to become a mere rubber stamp. Particularly, when the company management is dominated by bureaucrats who cannot take a detached and objective view of company operation because they are too much involved with them.

For too long in India managing agents controlled the board of directors of companies and used them as mere tools. It is only through democratically elected boards consisting of professional men of deep insight into business affairs that the state of company management can be improved.

20.2 ROLE OF THE BOARD IN ENSURING CORPORATE GOVERNANCE

The clear message from the series of corporate debacles that occurred in America and several parts of the world, was simple that the board of directors is increasingly being recognized as a critical success factor for corporations, be they large or small, private or public. This understanding and appreciation of the role of the boards as being valuable has resulted in several recommendations to boost their contributions to success of companies by innumerable committees that have been appointed by governments and public spirited organizations all over the world.

Company laws enacted by various countries make it a point to stress that the duty of a statutory board is to protect and represent the interests of shareholders. The board cannot and does not run the company. There are executives who run the day to day affairs of the company as dictated by the board. The role of the board is to work out business strategy and address big issues. A board's role is evolved from law, customs, tradition and current practice, while it gets its authority from the shareholders as their representatives to run the company's mission. It is the broader responsibility of the board to ensure that the management works in the best interests of the corporation and the shareholders to enhance corporate economic value.

It is now clearly understood that no set of systems with a checklist and the laws of state governing them can ever ensure good governance. The quality of directors, their competence, commitment, willingness and ability to assume a high degree of obligation to the company and its shareholders as a member of the board alone drives the value of any board. A strategic board with broad governing responsibilities rather than one that acts in response to the demands of the CEO has become the need of an intensely competitive world. To strengthen their position and capacity to guide the company and protect the long term shareholder's value, many big corporates are turning to advisory boards to draw on the collective wisdom of several professionals. All of these decisions will, of course depend on the policy, its critical needs and long time goal of the company.

Susan F. Shultz, founder of SSA Executive Search International, author of several best sellers on the subject and member of several boards of directors condenses her experiences and research in the following summation.

How a Strategic Board can ensure good governance?

1. If the board is smaller, the director's involvement will be greater.
2. Independence is the essence of strategic boards.
3. Diversity means that a company has access to the best. It also means that the company is not arbitrarily limited to a single subset of its global constituency.
4. If the board is not informed appropriately, intelligently and comprehensively, it cannot function. In simple words, the output is only as good as the input.
5. The board has a broader responsibility to long term shareholder value than the CEO who is necessarily focused on day to day operations.

Board of Directors and Corporate Governance

There is an increasing awareness that corporates owe their existence to shareholders and the long-term sustainability of companies depends on winning their confidence through disclosures and transparency in operations and accountability for their actions to them. This is achieves through voluntary actions on the part of board of directors and through regulatory framework such as stock exchanges, securities and exchange board and other regulatory bodies. These principles are codified as principles of corporate governance.

20.3 ROLE OF DIRECTORS

The board has to shoulder a larger responsibility than the CEO, whose role is limited to being actively engaged with routine management functions. However, "There are many boards that overlook more than they oversee". This is more so in family-owned enterprises, which are common in Asia and Latin America. In India for instance, it is common to find family-owned concerns being run by promoter as their personal fiefdoms. Though their investments may be meager, they manage the firms, holding positions of CEOs, managing directors, chairman and members of the board of directors. In such a set-up the board acts more like a rubber stamp, rather than shouldering large responsibilities. For better governance the board should function as follows:

1. Directors should exhibit total commitment to the company: An efficient and independent board should be conscious of protecting the interests of all stakeholders and not concerned too much with the current price of the stock. According to Roz Ridgway, the hallmark of a good director is that he or she attends and actively participates in the meetings. This requires a cent percent commitment.

2. Directors should steer discussions properly: Another important function of the director is to set priorities and to ensure that these are acted upon. The directors should see that all important issues concerning the company's business are discussed and decision taken, and nothing trivial dominates and bogs them down. A good director rarely dominates or hijacks the discussion to his line of thinking but steps in when the discussion needs to be directed or adds newer thoughts after letting others have their say.

3. Directors should make clear their stand on issues: A director is also expected to have the courage of conviction to disagree. A good, responsible and duty-bound director should be willing to register dissent when and where needed. The management led by the CEO should know that they are being challenged, should be kept on alert and should not take things for granted. Directors should also be alert to any deteriorating situations in functional areas of finance, stock market, sales, personnel and especially those relating to moral issues.

4. Directors' responsibility to ensure efficient CEOs: Directors have great responsibility in the matter of employment and dismissal of the CEO. The board as a whole, should recruit the best CEO they can probably hire based on antecedents and market reports, evaluate objectively on a continuing basis his or her implementing effectively or otherwise the strategic planning devised by the board. Great boards are those which proactively govern, help avoid the big mistakes, strategies and most importantly the best leadership is in place with the resources to lead.

5. Challenges posed by decisions on acquisitions: One of the toughest challenges confronted by boards arises while approving acquisitions. It so happens in most cases that the board takes up the issue of acquisition only when the process has been set in motion and substantially gone through by the management. It will lead to a terrible embarrassment both the CEO and the board, if the half-way-gone-through proposal has to be shelved. More of these none-too-worthy proposed acquisitions have to be accepted because of these predicaments.

6. A Board should anticipate business events: An efficient board should be able to anticipate business events that would spell success or lead to disaster if proper measures are not adopted in time. The directors should be alert to such ensuing situations and be ready with the strategy to meet them so that either way the company stands to gain.

7. Directors should have long-term focus and stakeholder interests: Directors have a duty to act bona fide for the benefit of the company as a whole. This duty is owed to the company, that is, the separate legal person that incorporation would imply as per the current laws, that directors are required to act in the long time focus. They ought to help build producing relationships between the company and its employees, customers and suppliers or any other kind of investment that would serve the long term interests of its shareholders.

8. Promoting overall interests of the company and its stakeholders are of paramount importance: In recent times those who advocate reform of laws governing corporate practices stress the importance of reformulation of the concepts behind these laws. For instance, John Parkinson in his article "Reforming Directors' Duties" opines that while accepting that directors should not be required to do anything that would be contrary to the interst of shareholders, stresses that these interests should be understood as long term ones. This reformulation of the concept should encourage managers to pay great attention to the relationships that are the source of long term value. Once this becomes accepted, it will be logically consistent for the directors to exercise their powers in order to promote the success of the company as business enterprise. By doing so they will have regard to the interest of shareholders, employees, creditors, customers and suppliers. Stretched further it would become imperative that directors guide the company to a socially-responsible company. Social responsibility in this context should be seen as a means of compensating the society for anti-social corporate behavior such as causing ecological damages, making money at the cost of patients by launching fully untested medicines, etc. These are some of the duties and responsibilities expected of a proactive, sincere and committed board of directors who by their actions and decisions will be able to promote the interest of not only shareholders but all stakeholders of the company.

20.4 INDEPENDENT DIRECTORS

There have been a lot of discussions and debates going on in corporate circles and among academicians in recent times on the need for role of and importance of independent directors. An independent director is defined as a non-executive director who is free from business or other relationship which could materially interfere with the exercise of his "independent judgment."

The Companies Act provides a negative definition of an independent director, inasmuch as it renders ineligible eleven categories of persons to be appointed as independent directors in a company, for instance, if a person has held any post in a company at any point of time is disqualified to be independent director of the company. Likewise, any vendor, supplier or customer of goods and services of the company would stand disqualified, notwithstanding the fact that the amounts of transaction are insignificant.

20.5 DESIRABILITY OF HAVING INDEPENDENT DIRECTORS

Recent literature on corporate governance is replete with recommendations of various committees on the desirability of having non-executive, independent directors on the boards of companies to promote better corporate governance practices. The Cadbury Report identifies two areas where non-executive directors can make an important contribution to the governance process as consequence of their independence from executive responsibility.

1. Reviewing the performance of executive management.

2. Taking the lead where potential conflicts of interest arise, as for instance, fixing the salary of the CEO and perquisites or dealing with boardroom succession. Apart from these, independent directors, being non-executives with no vested interests, can bring in objectivity to the boards decision making process. Opinions vary on how many independent non-executive directors are required to achieve good corporate practice. The UK Combined Code recommended that non-executive directors should make up at least one-third of the board and that a majority of them should be independent. The IFSA guidelines and the Toronto Report recommend a higher standard that the majority of directors should be independent, non-executive. IFSA argues that majority of directors should be genuinely independent in order to ensure that board has the power to implement decision, if and when the need arises contrary to the wishes of management or major share-holder. IFSA contends that this creates "a more desirable board culture" and imposes a responsibility on the independent majority to be "especially competent and diligent" in carrying out their role.

3. The Indian Capital Market Regulator, the Securities Exchange Board of India (SEBI) has recently amended clause 49 of the listing agreement to ensure that independent directors account for at least 50% of board of directors of listed companies, where an executive chairman heads the board. However, if the chairman is a non-executive director, at least one third of board should consist of independent directors.

20.6 AUDIT COMMITTEE - SECTION 292A OF THE COMPANIES ACT, 1956

- Every public company having paid-up capital of not less than five crores of rupees shall constitute a committee of the Board known as "Audit Committee" which shall consist of less than three directors and such number of other directors other than managing or wholetime directors.
- Every Audit Committee constituted under sub-section(1) shall act in accordance with times of reference to be specified in writing by the Board.
- The members of the Audit Committee shall elect a chairman from amongst themselves.
- The annual report of the company shall disclose the composition of the Audit Committee.
- The auditors, the internal auditor, if any, and the director-in-charge of finance shall attend and participate at meetings of the Audit Committee but shall not have the right to vote.
- The Audit Committee should have discussions with the auditors periodically about internal control systems, the scope of audit including the observations of the auditors and review the half-yearly and annual financial statements before submission to the Board and also ensure compliance of internal control systems.

- The Audit Committee shall have authority to investigate into any matter in relation to the items specified in this section or referred to it by the Board and for this purpose, shall have full access to information contained in the records of the company and external professional advice, if necessary.
- The recommendation of the Audit Committee on matter relating to Financial management including the audit report shall be binding on the Board.
- If the Board does not accept the recommendations of the Audit Committee, it shall record the reasons therefor and communicate such reasons to the shareholders.
- The Chairman of the Audit Committee shall attend the annual general meetings of the company to provide any clarification on matters relating to audit.
- If a default is made in complying with the provisions of this section, the company and every officer who is in default, shall be punishable with imprisonment for a term which may extend to one year, or with fine which may extend to fifty thousand rupees or with both.

20.7 REMUNERATION COMMITTEE

It is now a universally accepted proposition of corporate governance practice that boards appoint appropriately composed remuneration committees to work out executive remuneration on their behalf. The combined code of the UK says that the remuneration committee will be responsible for working out remuneration packages "to attract, retain and motivate executives of the quality required". The committee should decide where to position their company relative to other companies and take account of comparable remuneration and relative performance. With regard to the composition of the committee, an overwhelming majority of guidelines suggest that it be composed exclusively of independent non-executive directors. The committee would make its well considered recommendations to the board for final decision. The following responsibilities are normally assigned to a remuneration committee, which should have a written terms of reference:

a) Remuneration packages and service contracts of the CEO and other senior executives.

b) Remuneration packages for non-executive directors.

c) Remuneration policies and practices of the company.

d) Any company share and other incentive schemes

e) Company superannuation and pension arrangements.

20.8 NOMINATION COMMITTEE

Role

The Governance and Nominating Committee's role is to determine the slate of director nominees for election to the Company's Board of Directors, to identify and recommend candidates to fill vacancies occurring between annual shareholder meetings, to review, evaluate and recommend changes to the Company's Corporate Governance Guidelines, and to review the Company's policies and programs that relate to matters of corporate responsibility, including public issues of significance to the Company and its stakeholders.

Membership

The membership of the Committee consists of at least two directors, each of whom shall meet the independence requirements established by the Board and applicable laws, regulations and listing requirements. The Board appoints the members of the Committee and the chairperson. The Board may remove any member from the Committee at any time with or without cause.

Operations

The Committee meets at least twice a year. The Committee shall meet periodically in executive session without Company management present. Additional meetings may occur as the Committee or its chair deems advisable. The Committee will cause to be kept adequate minutes of its proceedings, and will report on its actions and activities at the next quarterly meeting of the Board. Committee members will be furnished with copies of the minutes of each meeting and any action taken by unanimous consent. The Committee is governed by the same rules regarding meetings (including meetings by conference telephone or similar communications equipment), action without meetings, notice, waiver of notice, and quorum and voting requirements as are applicable to the Board. The Committee is authorized and empowered to adopt its own rules of procedure not inconsistent with (a) any provision of this Charter, (b) any provision of the Bylaws of the Company, or (c) the laws of the state.

Authority

The Committee will have the resources and authority necessary to discharge its duties and responsibilities. The Committee has sole authority to retain and terminate outside counsel, any search firm used to identify director candidates, or other experts or consultants, as it deems appropriate, including sole authority to approve the firms' fees and other retention terms. Any communications between the Committee and legal counsel in the course of obtaining legal advice will be considered privileged communications of the Company and the Committee will take all necessary steps to preserve the privileged nature of those communications.

The Committee may form and delegate authority to subcommittees and may delegate authority to one or more designated members of the Committee.

Responsibilities

Subject to the provisions of the Corporate Governance Guidelines, the principal responsibilities and functions of the Governance and Nominating Committee are as follows:

1.	Annually evaluate and report to the Board on the performance and effectiveness of the Board to facilitate the directors fulfilling their responsibilities in a manner that serves the interests of Corporation shareholders.
2.	Annually present to the Board a list of individuals recommended for nomination for election to the Board at the annual meeting of shareholders, and for appointment to the committees of the Board (including this Committee). Review and consider shareholder recommended candidates for nomination to the Board.
3.	Before recommending an incumbent, replacement or additional director, review his or her qualifications, including capability, availability to serve, conflicts of interest, and other relevant factors.
4.	Assist in identifying, interviewing and recruiting candidates for the Board.
5.	Annually review the composition of each committee and present recommendations for committee memberships to the Board as needed.
6.	Develop and periodically review and recommend to the Board appropriate revisions to the Company's Corporate Governance Guidelines.
7.	Monitor compliance with the Corporate Governance Guidelines.
8.	Regularly review and make recommendations about changes to the charter of the Governance and Nominating Committee.
9.	Regularly review and make recommendations about changes to the charters of other Board committees after consultation with the respective committee chairs.
10.	Obtain or perform an annual evaluation of the Committee's performance and make applicable recommendations.
11.	Assist the Chairman of the Board, if the Chairman is a non-management director, or otherwise the Chairman of the Committee acting as Lead Independent Director, in leading the Board's annual review of the Chief Executive Officer's performance.
12.	Annually review the Company's policies and programs that relate to corporate responsibility.

20.9 INTERNAL CONTROL

Under section 210 of the Companies Act, directors are required to maintain adequate accounting records to enable them to disclose with reasonable accuracy at any time the financial position of the company and in order to meet this responsibility they must in practice maintain some form of control system over the company's process of financial management. However there is no explicit requirement in company law for them to maintain an effective system of internal control.

Auditors in turn as part of their usual audit procedures will consider how far they can rely on the company's internal control systems in carrying out their audit of the financial statements.As a normal part of their audit procedures the auditors thus evaluate the internal control systems and if they plan to rely on them in reaching their audit opinion they will test the operation of those systems. As a by-product of this auditors will usually comment to management on their findings in what is commonly known as the management letter.However there is at present no Companies Act requirement for auditors to report on the adequacy of internal control systems.

Management Accounting measures and reports financial and nonfinancial information that helps managers make decisions to fulfill the goals of an organization. Management Accounting focuses on internal reporting.Basically application of management accounting facilitates maintenance of effective internal control system.

Internal Control is a process – effected by an entity's board of directors,management and other personnel designed to provide reasonable assurance regarding the achievement of objectives in the following categories :

(a) reliability of financial reporting;

(b) effectiveness and efficiency of operations ; and

(c) compliance with applicable laws and regulations.

Internal control consists of the following five interrelated components.

1. **Control Environment:** It sets the tone of an organization, influencing the control consciousness of its people. It is the foundation for all other components of internal control, providing discipline and structure.
2. **Risk Assessment:** It is the entity's identification and analysis of relevant risks to achievement of its objectives,forming a basis for determining how the risks should be managed.
3. **Control activities:** These are the policies and procedures that help ensure that management directives are carried out.
4. **Information and Communication:** It helps in are the identification, capture and exchange of information in a form and time frame that enable people to carry out their responsibilities.
5. **Monitoring:** It is a process that assesses the quality of internal control performance over time.

Consideration of Internal Control in planning an Audit – Auditor's Responsibility

In all audits the auditor should obtain an understanding of each of the five components of internal control sufficient to plan the audit by performing procedures to understand the design of controls relevant to an audit of financial statements, and whether they have been placed in operation.

In planning the audit, knowledge obtained above would be used to :

1. Identify the types of potential misstatements that occur (errors, frauds, illegal acts)

2. Consider factors that affect the risk of material misstatements.

3. Make a preliminary evaluation of control risk and decide upon an initial audit approach.

The nature, timing and extent of procedures the auditor chooses to obtain an understanding will vary depending on the size and complexity of the entity, previous experience with the entity , the nature of controls, and the extent of client documentation.

Documentation of Understanding of controls

An independent auditor must document his/her understanding of the internal control components mainly to show compliance with GAAS in work papers and serve as point of reference for current and future audits and engagements.

Methods of Documentation: Form and extent is a matter of professional judgment based upon size and complexity of the client .But common forms of documentation used are as follows:

1. Internal Control Questionnaire – a series of questions designed to elicit a "yes" or "no" answer. A "yes" answer is considered a positive attribute of the system. Conversely a no answer is a weakness or deficiency in the system.

2. Narrative memoranda describing system.

3. Flow chart

4. Checklist

Assesssing Control Risk: Application of Management Accounting applications

Control Risk – the risk that the client's internal control policy and procedures are not effective in preventing or detecting material misstatements in the financial statements.

1. Control risk at the maximum

- Conclusion based upon the auditor's judgment that the client's internal control policies and procedures do not reduce to a low level the potential that the financial statements are free of material errors and or irregularities.
- After reaching this assessment the auditor would only be required to document in his/her work papers the fact that control risk is at the maximum and not the basis for reaching this conclusion.

- The auditor may decide control risk is at the maximum based upon management accounting technique called cost benefit decisions

2. Control risk at less than the maximum

- Based upon his/her initial understanding of the internal control components, the auditor may conclude that control risk may be less than the maximum.
- The auditor in this situation must evaluate the cost/benefit of extending his/her understanding of internal controls to make a final decision concerning control risk.
- The cost/benefit decision is based upon the audit time involved in extending the auditor's understanding of internal controls,including tests of control,versus the time that may be saved with the possible reduction of substantive audit tests.

Tests of controls – audit tests designed to determine whether specific control procedures that the auditor plans to rely on are actually in place and operating effectively in the entity under audit.

Substantive Tests – audit tests designed to substantive one or more financial statement assertions

Should the auditor decide not to extend his/her understanding of internal controls because of cost/benefit considerations, control risk would then be assessed at the maximum for all financial statement assertions.

Communication of Internal Control Related Matters Noted in an Audit

During the course of an audit of an entity's financial statement, the auditor may become aware of matters related to internal control that may be of interest to the audit committee of the Board of Directors or others of equivalent authority. These items are referred to as "reportable conditions ". Some examples of reportable conditions are as follows:

Deficiencies in internal control design.

Inadequate overall internal control design.

Absence of appropriate segregation of duties consistent with appropriate control objectives.

Absence of appropriate reviews and approvals of transactions,accounting entries or systems output.

Inadequate procedures for appropriately assessing and applying accounting principles.

Inadequate provisions for safeguarding of assets.

Absence of other control techniques considered appropriate for the type and level of transaction activity.

Evidence that a system fails to provide complete and accurate output that is consistent with objectives and current needs because of design flaws.

Evaluating the work of Internal Auditors

In evaluating the work of internal auditors the Independent auditor should examine on a test basis documentary evidence of the work performed by internal auditors and should consider such factors as whether the scope of the work is appropriate, audit progammes are adequate, working papers adequately document work performed, conclusions reached are appropriate in the circumstances and any reports prepared are consistent with the results of the work performed. The independent auditor should also perform tests of some of the work of internal auditors. The extent of these tests will vary depending on the circumstances, including the type of transactions and their materiality. These tests may be accomplished by either (a) examining some of the transactions or balances that internal auditors examined or (b) examining similar transactions or balances but not those actually examined by internal auditors. The independent auditor should compare the results of his tests with the results of the internal auditors work in reaching conclusions on that work.

20.10 DIRECTORS' RESPONSIBILITY STATEMENT

Corporate Management is responsible for the preparation of financial statements. Section 210 of the Companies Act, 1956 requires the board of directors to lay before the annual general meeting the balance sheet and the profit and loss account. The International Standards on Auditing (ISA) Objective and Basic Principles Governing Audit issued by the International Auditing Practices Committee categorically states that :

" While the auditor is responsible for forming his opinion on the financial statements,the responsibilities for the preparation of financial statements are that of management of the entity. Management's responsibilities include the maintenance of accounting records,and internal controls the selection and application of accounting policies and safeguarding the assets of entity.The audit of financial statements does not relieve management of its responsibilities "

Para 6 of IAS-1 "Presentation of Financial Statements" requires that the board of directors and/or other governing body of an enterprise is responsible for the preparation and presentation of its financial statements.

Section 217(2AA) of the Company's Act, 1956 requires that the report of the board of directors should include Directors' Responsibility Statement. This statement should specify -

i) That accounting standards had been followed in the preparation of annual accounts and/or explanation for material departures from accounting standards;

ii) Accounting policies are selected and applied consistently and judgments and estimates are made that are reasonable and prudent so as to give true and fair view of the state affairs at the end of the financial year and profit or loss of the company during the year;

iii) Directors have taken proper and sufficient care for (i) maintenance of accounting records as per law (ii) safeguarding assets of the company and (iii) preventing and detecting fraud and other irregularities;

iv) Directors have prepared the accounts on a going concern basis.

Focus of the newly inserted sub-section 2AA of section 217 is to impose responsibility of

- Maintenance of adequate internal control and protective measures to safeguard assets of the company;
- Pursuance of going concern assumptions in the preparation of financial statements;
- Selection of accounting policies with prudence and its consistent application with an objective of reflecting true and fair view of the financial statements; and
- Pursuance of accounting standards with an explanation if there is a departure.

20.11 GOING CONCERN STATUS

Management may not prepare financial statements applying going concern basis in case there exists significant doubt about the going concern status of the enterprise.This point has not been taken care of in section 217(2AA).

In India preparation and presentation of corporate financial statements are governed by accounting policies stated in the Companies Act and any other statutes that govern the reporting entity, accounting standards and other documents stating accounting policies, measurement and disclosure issued by the Institute of Chartered Accountants of India or any other regulatory authority like SEBI, RBI, IRDA etc. They together form Indian GAAP. In fact while preparing financial statements it is necessary to follow Indian GAAP.

Corporate financial statements are prepared following "going concern" assumption which implies that the reporting entity is expected to continue operations in the foreseeable future and it has neither the intention nor necessity of liquidation or of curtailing the scale of operations. In India the Corporate management is not required to make explicit disclosure as regards the validity of going concern assumption. The term foreseeable future is also not defined in the accounting standard. Considering the uncertainties involved in the prediction of business continuity, foreseeable future should not be taken as distant future.

Parameters of identifying going concern uncertainty:

Forecasts and budgets

Borrowing requirements

Liability management

Contingent liabilities

Products and markets

Financial risk management

Other factors including consistency of earnings, stability of cost base, recurring operating losses, arrears of dividends, work stoppage, etc.

The Institute of Chartered Accountants of India has issued SAP-16 Going Concern. This audit standard attempt to capture going uncertainty in the line of ISA-23.Generally, financial statements are prepared on the basis of fundamental assumption of going concern. It is necessary for the auditors to consider the appropriateness of the going concern assumptions. The auditors should consider the existence of the following indications which risks the going concern assumption.

Financial Indications

1) Negative net worth or negative working capital
2) Fixed term borrowing approaching maturity without realistic prospects of renewal or repayment or excessive reliance on short term borrowings to finance long term assets.
3) Adverse key financial ratios
4) Substantial operating losses
5) Substantial negative cash flows from operations
6) Arrears or discontinuance of dividends
7) Inability to pay creditors on due dates
8) Difficulty in complying with the terms of loan agreements
9) Change from credit to cash on delivery transactions with suppliers
10) Inability to obtain financing for essential new product development or other essential investments
11) Entering into a scheme of arrangement with creditors for reduction of liability

Operating Indications

1) Loss of key management without replacement
2) Loss of a major market, franchise, license, or principal supplier
3) Labour difficulties or shortages of important supplies

Other Indications

1) Non – Compliance with capital or other statutory requirements
2) Pending legal proceedings against the entity that may if successful result in judgments that could not be met
3) Changes in legislation or government policy

4) Sickness of the entity under any statutory definition

5) The significance of such indications can often be mitigated by other factors

To resolve the doubt about the appropriateness of the going concern assumption the auditor should gather sufficient audit evidence.

EVALUATION OF GOING CONCERN UNCERTAINTIES

In order to evaluate various going concern uncertainties an Auditor needs to follow certain procedures which may include -

1) Analyse and discuss cash flow, profit and other relevant forecasts with management.

2) Review events occuring after the balance sheet date for items affecting the entity's ability to continue as a going concern.

3) Analyse and discuss the entity's latest available interim financial statements.

4) Review the terms of debentures and loan agreements and determine whether any have been breached.

5) Read minutes of the meetings of shareholders, the board of directors and important committees for reference to financing difficulties.

6) Review the status of matters under litigation and claims.

7) Confirm the existence legality and enforceability of arrangements to provide or maintain financial support with related and third parties and assess the financial ability of such parties to provide additional funds.

8) Consider the entity's position concerning unfilled customer orders.

20.12 RELATED PARTY TRANSACTIONS

Related party relationship may cause influence over the other such that one party is favoured.By this process transaction between the related parties lost the arm's length relationship.

Sometimes two or more enterprises operate under the common ownership or management without entering into transactions among themselves. But by virtue of related party relationship it is possible to control the volume of business of one enterprise for the benefit of other. Also the nature of market competition and pricing policies could have been different in absence of such related party relationship.

Accordingly disclosures of related party transactions are necessary for proper understanding of the financial performance and financial position. Related party disclosures seem more relevant when any such relationship is expected to discontinue with substantial effect on future performance of the reported entity.

Related Party as per the Companies Act , 1956 : Following parties are considered as related parties

Managers

Directors

Companies under the same management and

Subsidiaries

Under section 370 (1B) of the Companies Act two bodies corporate deemed to be under the same management

i] if the managing director or manager of one body is the managing director or manager of the other body corporate

ii] if majority of directors of one body corporate constituted majority of the directors of the other at any time within six months preceding

iii] if not less than one-third of the voting power of the bodies corporate is controlled by common individuals or body corporate

iv] if holding company of one body corporate is under common management with other body corporate in terms of i or ii or iii above

v] if one or more of the directors together with their relatives hold majority of the shares of both the bodies corporate

Related party:

A Related party is essentially any party that controls or can significantly influence the management or operating policies of the company during the reporting period. AS-18 deals only with the following related party relationship.

Enterprises that directly or indirectly through one or more intermediaries control or are controlled by or are under common control with the reporting enterprise (this includes holding companies, subsidiaries and fellow subsidiaries).

Associates and joint ventures of the reporting enterprise and the investing party or venture in respect of which the reporting enterprise is an associate or a joint venture.

Individuals owing directly or indirectly an interest in the voting power of the reporting enterprise that gives them control or significant influence over the enterprise and relatives of any such individual. Relative means the spouse, son, daughter, brother, sister, father and mother who may be expected to influence or be influenced by that individual in his/her dealings with the reporting enterprise.

Key management personnel and relatives of such personnel are those persons who have authority and responsibility for planning, directing and controlling the activities of the reporting enterprise and Enterprise over which individual or key management personnel described as above is able to exercise significant influence. This includes enterprises owned by directors or major shareholders of the reporting enterprise.

The concept and definition of related parties is based on the following basis :

Control Concept: One party has the ability to control the other party in followings ways

Control by ownership (directly or indirectly) more than 50% of voting power of an enterprise.

Control over composition of board of directors or other governing body.

Control of substantial interest in the voting power and power to direct the financial or operating policies of the enterprise for example associate and joint venture companies.

SIGNIFICANT INFLUENCE:

Significant influence can be exercised in many ways. For example

By representation of the board of directors

Participation in policy making process

Material inter-company transactions

Inter-change of managerial personnel

Dependence on technical information

Exceptions of Related Party

Following relationship will not be deemed as related party:

Two companies have a director in common but director is not able to influence the mutual dealing between the companies.

A single customer or supplier or franchiser or distributor or general agent with whom enterprise's transactions are in significant volume

Providers of finance

Trade union

Government department and agencies.

State controlled enterprises as regards related party relationship with other State controlled enterprise.

RELATED PARTY TRANSACTIONS

It means a transfer of resource or obligations between related parties regardless of whether or not a price is charged.

Para 19 of IAS 24 and AS-18 gives illustrative list of related party transactions

Purchase or sales of goods (finished or unfinished)

Purchase or sale of fixed assets

Rendering or receiving services

Leasing or hire purchase arrangements

Transfer of Research and development

License agreements

Finance (including loan and equity contributions)

Guarantees and collaterals

DISCLOSURE REQUIREMENTS:

	IAS-24	AS-18
1.	Related party relationships where control exists should be disclosed irrespective of whether there have been transactions between the related parties or not [Para 20]	Same as IAS-24 [Para 21]
2.	Elements of transactions necessary to be disclosed :	In case transaction between related parties exist, the reporting enterprise should
(a)	Volume of transactions by amount or proportion.	(a) Name of transacting related party
(b)	Amount or appropriate proportion of outstanding items.	(b) Description of the relationship
(c)	Pricing policies [Para 23]	(c) Description of the nature of transaction
(d)	Any other element of the transaction which is necessary for understanding the financial statements. Example includes pricing policy.	(d) Volume of transaction by amount or proportion
(e)	Amount or appropriate proportion of outstanding items and provision for doubtful debts.	
(f)	Amount written off or written back in the period in respect of debt due from or to related party [Para 23] Note : AS-18 does not specifically requires to disclose pricing policy. However any other elements mentioned in Para 23(v) read with Para 25 of AS 18 may demand disclosure of pricing policy.	

20.13 PROJECT MANAGEMENT AUDIT AND CORPORATE GOVERNANCE

Project Management is the discipline of planning, organizing, and managing resources to bring about the successful completion of specific project goals and objectives. A project is a finite endeavor—having specific start and completion dates—undertaken to create a unique product or service which brings about beneficial change or added value. This finite characteristic of projects stands in sharp contrast to processes, or operations, which are permanent or semi-permanent functional work to repetitively produce the same product or service. In practice, the management of these two systems is often found to be quite different, and as such requires the development of distinct technical skills and the adoption of separate management philosophy, which is the subject of this article.

The primary challenge of project management is to achieve all of the project goals and objectives while adhering to classic project constraints—usually scope, quality, time and budget. The secondary—and more ambitious—challenge is to optimize the allocation and integration of inputs necessary to meet pre-defined objectives. A project is a carefully defined set of activities that use resources (money, people, materials, energy, space, provisions, communication, motivation, etc.) to achieve the project goals and objectives.

Project management is quite often the province and responsibility of an individual project manager. This individual seldom participates directly in the activities that produce the end result, but rather strives to maintain the progress and productive mutual interaction of various parties in such a way that overall risk of failure is reduced.

A project manager is often a client representative and has to determine and implement the exact needs of the client, based on knowledge of the firm they are representing. The ability to adapt to the various internal procedures of the contracting party, and to form close links with the nominated representatives, is essential in ensuring that the key issues of cost, time, quality, and above all, client satisfaction, can be realized.

In whatever field, a successful project manager must be able to envision the entire project from start to finish and to have the ability to ensure that this vision is realized.

Any type of product or service — Pharmaceuticals, buildings, vehicles, electronics, computer software, financial services, etc. — may have its implementation overseen by a project manager and its operations by a product manager.

Project management activities

Project management is composed of several different types of activities such as:

Analysis and design of objectives and events

Planning the work according to the objectives

Assessing and controlling risk (or Risk Management)

Estimating resources

Allocation of resources

Organizing the work

Acquiring human and material resources

Assigning tasks

Directing activities

Controlling project execution

Tracking and reporting progress (MIS)

Analyzing the results based on the facts achieved

Defining the products of the project

Forecasting future trends in the project

Quality Management

Issues management

Issue solving

Defect prevention

Identifying, managing & controlling changes

Project closure (and project debrief)

Communicating to stakeholders

Increasing / decreasing a company's workers

Project control systems

Project control is that element of a project that keeps it on-track, on-time, and within budget. Project control begins early in the project with planning and ends late in the project with post-implementation review, having a thorough involvement of each step in the process. Each project should be assessed for the appropriate level of control needed: too much control is too time consuming, too little control is very risky. If project control is not implemented correctly, the cost to the business should be clarified in terms of errors, fixes, and additional audit fees.

Control systems are needed for cost, risk, quality, communication, time, change, procurement, and human resources. In addition, auditors should consider how important the projects are to the financial statements, how reliant the stakeholders are on controls, and how many controls exist. Auditors should review the development process and procedures for how they are implemented. The process of development and the quality of the final product may also be assessed if needed or requested. A business may want the auditing firm to be involved throughout the process to catch problems earlier on so that they can be fixed more easily. An auditor can serve as a controls consultant as part of the development team or as an independant auditor as part of an audit.

Businesses sometimes use formal systems development processes. These help assure that systems are developed successfully. A formal process is more effective in creating strong controls, and auditors should review this process to confirm that it is well designed and is followed in practice. A good formal systems development plan outlines:

- A strategy to align development with the organization's broader objectives
- Standards for new systems
- Project management policies for timing and budgeting
- Procedures describing the process

PROJECT GOVERNANCE - Key Roles

1) **Establish** the bases for project governance, approval and measurement — including defining roles and accountabilities, policies and standards and associated processes .

2) **Evaluate** project proposals to select those that are the best investment of funds and scarce resources and are within the firm's capability and capacity to deliver.

3) **Enable** through resourcing of projects with staff and consultants, harnessing and managing of business support and the provision of the governance resources.

4) **Define** the 'desired business outcomes' (end states), benefits and value — the business measures of success and overall value proposition.

5) **Control** the scope, contingency funds, overall project value and so on.

6) **Monitor** the project's progress, stakeholder's commitment, results achieved and the leading indicators of failure.

7) **Measure** of the outputs, outcomes, benefits and value — against both the plan and measurable expectations.

8) **Act** to 'steer' the project into the organization, remove obstacles, manage the critical success factors and remediate project or benefit-realization shortfalls.

9) **Develop** the organization's project delivery capability — continually building and enhancing its ability to deliver more complex and challenging projects in less time and for less cost while generating the maximum value.

Benefits of Project governance

Project governance will:

1) Outline the relationships between all internal and external groups involved in the project
2) Describe the proper flow of information regarding the project to all stakeholders
3) Ensure the appropriate review of issues encountered within each project
4) Ensure that required approvals and direction for the project is obtained at each appropriate stage of the project.

Elements of Project governance

Important specific elements of good project governance include:

1) A compelling business case, stating the objects of the project and specifying the in-scope and out-of-scope aspects
2) A mechanism to assess the compliance of the completed project to its original objectives
3) Identifying all stakeholders with an interest in the project
4) A defined method of communication to each stakeholder
5) A set of business-level requirements as agreed by all stakeholders
6) An agreed specification for the project deliverables
7) The appointment of a project manager
8) Clear assignment of project roles and responsibilities.
9) A current, published project plan that spans all project stages from project initiation through development to the transition to operations.
10) A system of accurate upward status- and progress-reporting including time records.
11) A central document repository for the project
12) A centrally-held glossary of project terms
13) A process for the management and resolution of issues that arise during the project
14) A process for the recording and communication of risks identified during the project
15) A standard for quality review of the key governance documents and of the project deliverables.

20.14 RISK EVALUATION AND MANAGEMENT

Introduction

The rapidly changing global economy has created an expanding array of risks to be managed if the viability and success of an enterprise are to be ensured. Corporations face the task of managing their risk exposures while remaining profitable and competitive at the same time. The challenges and demands of contemporary markets, customer expectations, regulatory authorities, employees and shareholders present organizations with an interesting paradox. Today a risk manager must generate a comprehensive matrix of risks being faced by the organization and act as a catalyst in successfully dealing with those risks. It is impossible for an organization to avoid risk.

Business risk is the possibility that an event, action or inaction will not positively affect the organisation's ability to increase shareholder value. After studying the definition of the business risk let us try to find out the risk sources and exploration of the forms of risk. Historically risk management has been confined to the traditionally insurable risks such as loss from fire, earthquakes, wind, flood etc. Solutions involving purchase of insurance were emphasized with focus on type of coverage, adequacy of limits.

Classification of Risks

Risks may be classified broadly under the following heads:

(a) Industry and Services Risks: These risks can be broadly categorised as follows namely

- Economic risks such as dependence on one product, one process, one client, one industry, etc in the short and long term.
- Service risks
- Market structure
- Business Dynamics
- Competition risks affecting tariff prices, costs, revenues and customer preferences
- Customer relation risks

(b) Management and Operation Risks: These risks relate broadly to the company's organization and management such as planning, monitoring and reporting system in the day to day management process namely:

- Risks to property
- Clear and well defined work processes
- Changes in Technology/upgradation
- R & D risks
- Agency network risks

- Personnel risks such as labour turnover risks involving replacement risks, training risks, cost risks, skill risks etc There are also unrest risks due to strikes and lockouts.
- Environmental and Pollution Control regulations
- Locational benefits near metros, railway stations, ports, cities, etc

(c) Market Risks: These risks relate to market conditions namely

- raw material rates
- quantities, quality, suppliers, lead time, interest rate risks and forex risk namely fluctuation risk and interest rate risk in respect of foreign exchange transaction

(d) Political Risks: These risks relate to political uncertainties namely

- Elections
- War risks
- Country / area risks
- Insurance risks like fire, strikes, riots and civil commotion, marine risks, cargo risks, etc
- Fiscal/monetary policy risks including taxation risks

(e) Credit Risks: These risks relate to commercial operations namely:

- creditworthiness risks
- risks in settlement of dues by clients
- provisions for doubtful and bad debts

(f) Liquidity Risk: These are financial risk factors namely:

- Financial solvency and liquidity risks
- Borrowing limits, delays
- Cash/reserve management risks
- Tax risks

(g) Disaster Risks: These risks relate to disasters from following factors:

- Natural risks like fires, floods, earthquakes, etc
- Man-made risks factors arising under the Factories act, mines act, etc
- Risk of failure of effective disaster management plans formulated by the company

(h) Systems Risks: These risks relate to the company's system namely:

- systems capacities
- system reliability

- obsolescence risks
- Data integrity risks
- Coordinating and interface risks

(i) Legal Risks : These risks relate to the following:

- Contract risks
- Contractual liability
- Frauds
- Judicial risks
- Insurance risks

Risk Evaluation

Risk evaluation is concerned with assessing probability and impact of individual risks, taking into account any interdependencies or other factors outside the immediate scope under investigation:

- Probability is the evaluated likelihood of a particular outcome actually happening (including a consideration of the frequency with which the outcome may arise). For example, major damage to a building is relatively unlikely to happen, but would have enormous impact on business continuity. Conversely, occasional personal computer system failure is fairly likely to happen, but would not usually have a major impact on the business
- Impact is the evaluated effect or result of a particular outcome actually happening
- Impact should ideally be considered under the elements of:
  - time
  - quality
  - benefit
  - people/resource

Some risks, such as financial risk, can be evaluated in numerical terms. Others, such as adverse publicity, can only be evaluated in subjective ways. There is a need for some framework for categorising risks, for example, high, medium and low.

When considering a risk's probability, another aspect is when the risk might occur. Some risks will be predicted to be further away in time than others and so attention can be focused on the more immediate ones. This prediction is called the risk's proximity. The proximity of each risk should be included in the Risk Log.

Management of Risk

Risk management covers all the processes involved in identifying, assessing and judging risks, assigning ownership, taking actions to mitigate or anticipate them, and monitoring and reviewing progress. Risk is a major factor to be considered during the management of a project. Project management must control and contain risks if a project is to stand a chance of being successful.

Risk can be defined as uncertainty of outcome (whether positive opportunity or negative threat). Some amount of risk taking is inevitable if the project is to achieve its objectives. The task of risk management is to manage a project's exposure to risk (that is, the probability of specific risks occurring and the potential impact if they did occur).

The management of risk is not a linear process; rather it is the balancing of a number of interwoven elements which interact with each other and which have to be in balance with each Risk management at the project level focuses on keeping unwanted outcomes to an acceptable minimum. Decisions about risk management at this level form an important part of the Business Case.

Where suppliers and/or partners are involved, it is important to gain a shared view of the risks and how they will be managed.

The aim is to manage that exposure by taking action to keep exposure to an acceptable level in a cost-effective way. Risk management involves having:

1) Access to reliable, up-to-date information about risks
2) Decision-making processes supported by a framework of risk analysis and evaluation
3) Processes in place to monitor risks
4) The right balance of control in place to deal with those risks.

Risk Principles

Risk is the chance, great or small, that damage or an adverse outcome will occur from a particular hazard. There are some essential elements that need to be in place in a project if risk management is to be effective and innovation encouraged, i.e. that:

- The Project Board supports and promotes risk management, understands and accepts the time and resource implications of any countermeasures
- Risk management policies and the benefits of effective risk management are clearly communicated to all staff
- A consistent approach to risk management is fully embedded in the project management processes
- Management of risks is an essential contribution to the achievement of business objectives

- Risks through working with programmes and other projects are assessed and managed
- There is a clear structure to the risk process so that each element or level of risk identification fits into an overall structure
- Where the project is part of a programme, changes in the state of any project risks that are also identified as programme risks must be flagged to programme Projects bring about change and change incurs risk. Change is usually about moving forward and this often means the use of new methods or new technology. These aspects can increase the risks. It is the combination of likelihood and impact, including perceived importance. management or the designated risk management function in the programme.

Projects bring about change and change incurs risk. Change is usually about moving forward and this often means the use of new methods or new technology. These aspects can increase the risks. It is the combination of likelihood and impact, including perceived importance.

Risk tolerance looks at acceptable/unacceptable deviations from what is expected. Risk appetite looks at how much risk a company is willing to accept. There can still be deviations that are within a risk appetite.

Before determining what to do about risks, the Project Board and Project Manager must consider the amount of risk they are prepared to tolerate. This will vary according to the perceived importance of particular risks.

For example, the view of financial risks and how much the project team is prepared to put at risk will depend on a number of variables, such as budgets, the effect on other parts of the programme or organisation or additional risks such as political embarrassment. A project team maybe prepared to take comparatively large risks in some areas and none at all in others, such as risks to health and safety.

Risk tolerance can be related to other tolerance parameters; risk to completion within time scale and/or cost and to achieving product quality and project scope within the boundaries of the Business Case. Perceptions of risk tolerance have to be considered in detail to establish the optimum balance of a risk occurring against the costs and value for money of limiting that risk.

The organisation's overall tolerance of exposure to risk must also be considered as well as a view of individual risks.

Risk Responsibilities

The management of risk is one of the most important parts of the job done by the Project Board and the Project Manager. The Project Manager is responsible for ensuring that risks are identified, recorded and regularly reviewed. The Project Board has four responsibilities:

Notifying the Project Manager of any external risk exposure to the project.

Making decisions on the Project Manager's recommended reactions to risk.

Striking a balance between the level of risk and the potential benefits that the project may achieve.

Notifying corporate or programme management of any risks that affect the project's ability to meet corporate or programme objectives.

The Project Manager modifies plans to include agreed actions to avoid or reduce the impact of risks.

Risk analysis requires input from the management of the organisation. The organisation's management, in turn, is kept informed by the Project Board of the risk analysis results. Communication is particularly important between the project and programme levels within the organisation.

Where the project is part of a programme, the management of risk procedures used by the project must be consistent and compatible with those of the programme unless there are valid reasons not to do so. Where a risk is uncovered in the programme, any affected projects should be involved in the analysis of that risk. Similarly, project risk evaluation should include staff from the programme. Project risks that threaten programme milestones or objectives must be escalated to programme management.

Risk Ownership

An 'owner' should be identified for each risk, who should be the person best situated to keep an eye on it. The Project Manager will normally suggest the 'owner' and the Project Board should make the decision. Project Board members may be appointed 'owners' of risks, particularly risks from sources external to the project. Allocating ownership of the risk process as a whole and the various components is fundamental from the outset. When describing who owns the various elements of risk, it is important to identify who owns the following:

- The risk framework in totality
- Setting risk policy and the project team's willingness to take risk
- Different elements of the risk process, such as identifying threats, through to producing risk response and reporting
- Implementation of the actual measures taken in response to the risks
- Interdependent risks that cross organisational boundaries, whether they be related to business processes, IT systems or other projects.

Overall ownership of the Risk Log is likely to lie with the Executive. However, the Executive will need to ensure that the people who own the various parts of the risk process are clearly defined, documented and agreed, so that they understand their various roles, responsibilities and ultimate accountability with regard to the management of risk. Normally the risk 'owner' will have the responsibility of monitoring each risk. If the owner is a Project Board member, the actual task of monitoring maybe delegated, but the responsibility stays with the owner. The Executive, for example, has ultimate responsibility for monitoring any risks or opportunities facing the Business Case, particularly any external ones, such as changes in company policy.

The Project Manager has the job of keeping a watching brief over all risks and checking that the defined actions, including monitoring, are taking place and are having the desired effect. Risks owned at team level should be reported on in the Checkpoint Reports. The Project Manager includes some form of report on any significant risks in the Highlight Report. The End Stage Report also summarises the risk status. Where a risk or opportunity actually occurs, the Project Manager will either instigate contingency action, or deal with the issue under Change Control.

The risk management cycle

Every project is subject to constant change in its business and wider environment. The risk environment is constantly changing too. The project's priorities and relative importance of risks will shift and change. Assumptions about risk have to be regularly revisited and reconsidered, for example at each end stage assessment.

The figure on the right shows the main steps through the risk management cycle.

- Identify the risks
- Evaluate the risks
- Identify suitable responses to risk
- Select
- Plan and resource
- Monitor and report

Risk Identification

This step identifies the potential risks (or opportunities) facing the project. It is important not to judge the likelihood of a risk at this early time. This is done in a controlled manner in a later step. Attempting to form judgments while 'brainstorming' a list of potential risks may lead to hurried and incorrect decisions to exclude some risks.

Once identified, risks are all entered in the Risk Log. This contains details of all risks, their assessment, owners and status. A suggested list of contents is given in Appendix A, Product Description outlines. The Risk Log is a control tool for the Project Manager, providing a quick reference to the key risks facing the project, what monitoring activities should be taking place and by whom. Reference to it can lead to entries.

Identify suitable responses to risk

The actions break into broadly five types, as shown below.

1. **Prevention:** Terminate the risk - by doing things differently and thus removing the risk, where it is feasible to do so. Countermeasures are put in place that either stop the threat or problem from occurring or prevent it having any impact on the project or business.

2. **Reduction:** Treat the risk - take action to control it in some way where the actions either reduce the likelihood of the risk developing or limit the impact on the project to acceptable levels.

3. **Transference:** This is a specialist form of risk reduction where the management of the risk is passed to a third party via, for instance, an insurance policy or penalty clause, such that the impact of the risk is no longer an issue for the health of the project. Not all risks can be transferred in this way.

4. **Acceptance:** Tolerate the risk - perhaps because nothing can be done at a reasonable cost to mitigate it or the likelihood and impact of the risk occurring are at an acceptable level.

5. **Contingency:** These are actions planned and organised to come into force as and when the risk occurs.

Any given risk could have appropriate actions in any or all these categories. There may be no cost-effective actions available to deal with a risk, in which case the risk must be accepted or the justification for the project revisited (to review whether the project is too risky), possibly resulting in the termination of the project.

The results of the risk evaluation activities are documented in the Risk Log. If the project is part of a programme, project risks should be examined for any impact on the programme (and vice versa). Where any cross-impact is found, the risk should be added to the other Risk Log.

Control Action - Balancing the risk

The risk response process should involve identifying and evaluating a range of options for treating risks and preparing and implementing risk management plans. It is important that the control action put in place is proportional to the risk. Every control has an associated cost. The control action must offer value for money in relation to the risk that it is controlling.

Selection of the risk actions to take is a balance between a number of things. For each possible action it is, first, a question of balancing the cost of taking that action against the likelihood and impact of allowing the risk to occur. For example, if a charity carnival is arranged, is it worth taking out insurance for Rs.3,000 guaranteeing Rs.6,000 if the carnival is rained off? Or, since the carnival date is in summer, do we take the risk and not spend the insurance money? But the selection is usually more complex than that. There are many elements to be taken into consideration.

Risk Action Selection

There may be several possible risk actions, each with different effects. The choice may be one of these options or a combination of two or more. We then have to consider the impact of (a) the risk occurring and (b) the risk action on:

- The team, Stage and/or Project Plans
- The business or programme
- The Business Case
- Other parts of the project.

The consideration has to be done in the light of the risk tolerances.

Planning and resourcing

Having made the selection, the implementation of the selected actions will need planning and resourcing and is likely to include plan changes, new or modified Work Packages:

- Planning, which, for the countermeasure actions itemised during the risk evaluation activities, consists of:
  - identifying the quantity and type of resources required to carry out the actions
  - developing a detailed plan of action; this will be included in Project and Stage Plans either as additional activities or as a contingency plan
  - confirming the desirability of carrying out the actions identified during risk evaluation in light of any additional information gained
  - obtaining management approval along with all the other aspects of the plans being produced
- Resourcing, which will identify and assign the actual resources to be used to conduct the work involved in carrying through the actions; these assignments will be shown in Project and Stage Plans; note that the resources required for the prevention, reduction and transference actions will have to be funded from the project budget since they are actions that we are committed to carry out; contingent actions will normally be funded from a contingency budget.

Monitoring and reporting

There must be mechanisms in place for monitoring and reporting on the actions selected to address risks. Some of the actions may have only been to monitor the identified risk for signs of a change in its status. Monitoring, however, may consist of:

- Checking that execution of the planned actions is having the desired effect
- Watching for the early warning signs that a risk is developing
- Modelling trends, predicting potential risks or opportunities
- Checking that the overall management of risk is being applied effectively.

Budgeting for risk management

A project needs to allocate the appropriate budget, time and resources to risk management. The risk process must be embedded in the project environment, rather than being tacked on as an afterthought.

The cost of carrying out risk management and the level of commitment and time, such as contingency plans, risk avoidance or reduction, needs to be recognised and agreed.

While the budget may be allocated to actions relating to risk treatment, there is often a failure to provide sufficient budget to the earlier parts of the process, such as risk assessment that can require a diverse range of skills, tools and techniques.

Experience has shown that allocating the correct budget to the risk management process early on will pay dividends later.

Risks may have additional factors relating to them that increase the complexity of assessing your overall exposure to risk. These include interdependencies. It is essential to understand the interdependencies of risks and how they can compound each other. For example, a skills shortage combined with serious technical problems and a requirement to bring the delivery date forward are common examples of risk compounding. Interdependencies can occur at all levels and across different levels.

A project may have interdependencies with other projects. A project maybe dependent upon a supplier delivering products or services that have a further interdependency upon another internal project delivering its objectives and so on in the supply chain. These need to be explicitly identified and assessed as part of the process of risk management.

Interdependencies often cross different boundaries, such as ownership, funding, decision making, organisational or geographical boundaries. You must be able to assess risk and communicate across these boundaries.

Risk management considerations

The relationship between benefit and delivery risks

Often the risk management process is focused primarily on delivery rather than benefit. Changes to delivery dates, costs, quality, etc. are not related back to the benefits.

The drive to deliver may continue long after the potential benefits have been significantly reduced or lost. A common cause of this is that the owners of benefit objectives are not the same as the owners of delivery. Decisions taken with regard to delivery must be related back to benefit and vice versa.

Internal versus external risks

Much is made of the difference between internal and external risks. The major differences, however, relate to the ability to apply the risk process to them. Internal risks can be just as difficult to identify, assess and evaluate as external risks and thus just as the cost of setting up a management of risk process for a project depends on the technical, political and organisational complexity involved. There are some general guidelines that can be applied, however. Planners for projects should expect to spend 1-3 per cent of their budget on an initial risk management effort and an additional 2 per cent on monitoring and updating this throughout the development life cycle.

Checklist on assignment of risk ownership:

- Have owners been allocated to all the various parts of the complete risk process and the full scope of the risks being catered for? For example, suppliers may be tasked with ownership of assessing and evaluating risk as part of their contracts.
- Are the various roles and responsibilities associated with ownership well defined?
- Do the individuals who have been allocated ownership actually have the authority in practice to fulfill their responsibilities?
- Have the various roles and responsibilities been communicated and understood?
- Are the nominated owners appropriate?
- In the event of a change, can ownership be quickly and effectively reallocated?
- Are the differences between benefit and delivery risks clearly understood and, if required, do they have different owners?

The Project Manager's Daily Log can be very useful in monitoring risks. Entries can be made in it for the Project Manager to check on the status of any risks where he/she is the owner. Other entries can be made to remind the Project Manager to check that other owners are monitoring and controlling their risks and feeding the information back.

Where the project is part of a programme:

- Programme management is responsible for ensuring the management of those risks with interdependencies between projects and programme.
- Where appropriate, the programme should take part in the risk management activities at the project level. This can normally be done by attendance at end stage assessments by either a member of programme management or a designated risk management function.
- Risks are frequently common across projects and would benefit from being centralised at programme level. The cost of corrective action can be reduced if it is planned, agreed and actioned only once. Also, problems can result from an inconsistent approach being taken by projects.

Study Note - 21

EVALUATION OF KEY FINANCIAL DECISIONS AND DISCLOSURES

This Study Note includes

- Key financial decisions and disclosures
- Management Audit for investor's protection in the context of corporate governance
- Corporate Governance norms as prescribed by SEBI

21.1 KEY FINANCIAL DECISIONS AND DISCLOSURES

Corporate governance is the system by which companies are directed and controlled. Board of directors is responsible for the governance of their companies. The shareholders role in governance is to appoint the directors and the auditors and to satisfy themselves that an appropriate governance structure is in place.

Within that overall framework the specifically financial aspects of corporate governance are the way in which boards set financial policy and oversee its implementation including the use of financial controls and the process whereby they report on the activities and progress of the company to the shareholders.

The role of auditors is to provide the shareholders with an external and objective check on the director's financial statements which form basis of that reporting system.

The Committee's objective is to help to raise the standards of corporate governance and the level of confidence in financial reporting and auditing by setting out clearly what it sees as the respective responsibilities of those involved and what it believes is expected of them.

While evaluating key financial decisions like Capital Investment as well as borrowings required for the Capital expenditure. The first important point in the evaluation is to take into account time value of money to be invested/borrowed which takes into account that a rupee received today is worth more than rupee received at any future time. The time value of money is the opportunity cost from not having the money today. For this purpose there are following techniques

Discounted Cash Flow: Under this there are two methods viz Net Present Value method and Internal Rate of Return method. DCF focuses on cash inflow and cash outflow rather than on operating income as determined in conventional accrual accounting.

NPV is calculated using the required rate of return which is the minimum acceptable rate of return on an investment. The required rate of interest is the return that an organization could expect to receive elsewhere for an investment of comparable risk. This rate is also called Discount rate, hurdle rate, or opportunity cost of capital

The NPV method calculates the expected monetary gain or loss from a project by discounting all expected future cash inflows and outflows to the present point in time using the required rate of return. Only projects with a zero or positive net present value are acceptable because the return from these projects equals or exceeds the cost of capital.

The Internal Rate of Return method calculates the discount rate at which the present value of expected cash inflows from a project equals the present value of expected cash outflows. That is the IRR is the discount rate that makes NPV equal to zero. While determining the discount rate the experts always have a calculator or computer programme and in the absence of both the trial and error method.

Sensitivity Analysis: To examine how a result will change if the predicted financial outcomes are not achieved or if an underlying assumption changes, managers can use sensitivity analysis a what-if technique.

Payback Method: Payback measures the time it will take to recoup in the form of expected future cash flows, the net initial investment in a project.

Cost Benefit Analysis: It is also necessary in some cases to do cost benefit analysis of the capital expenditure just to ensure that the benefits exceed the cost. Of course this is not possible in each case as sometimes it is difficult to quantify the benefits in monetary terms but at the same time incurring the expenditure is necessary.

All the abovementioned techniques would enable to find out the justification as well as evaluation of various financial decisions taken in business.

Disclosure

There are different accounting standards which specify the disclosure requirements for various financial decisions like borrowing, investments in fixed assets as well as securities. So let us discuss one by one.

Accounting for Fixed Assets (AS-10)

Gross and net book values of fixed assets at the beginning and at the end of accounting period showing additions, disposal, acquisition and other movements.

Expenditure incurred on account of Fixed Assets in the course of construction or acquisition.

Revalued amount substituted for historical cost of fixed assets, the method adopted to compute the revalued amount and whether an external valuer has valued the fixed assets in case where fixed assets are stated at revalued amount.

Further only non-refundable taxes and duties in respect of fixed asset should be included in the cost of that fixed asset. Cenvatable excise duty can be considered as a refundable tax. Therefore CENVAT credit of such duty should be reduced from the purchase cost of capital goods concerned and recognized as a separate asset provided

(a) The enterprise is entitled to the cenvat credit as per the rules

(b) There is a reasonable certainty that the cenvat credit would be utilized

(c) Enterprise intends to avail cenvat credit.

In case Enterprise does not intend to avail or recognition criteria is not satisfied then excise duty even though cenvatable should be included in the cost of fixed asset.

Accounting for Investments (AS – 13)

The standard deals with the following aspects

Classification of investment

Cost of investment

Carrying amount/valuation of investment

Disposal of investment

Reclassification of investment

Disclosure of investment in the financial statements

Disclosures:

Accounting policies followed for valuation of investment.

Classification of investment into current and long term in addition to classification as per Schedule VI of the Companies Act in case of company.

Aggregate amount of quoted & unquoted securities separately.

Any significant restriction on investment like minimum holding period for sale/disposal, utilization of sale proceeds, or non remittance of sale proceeds of investment held outside India.

Borrowing Costs: AS – 16

Enterprises are borrowing the funds to acquire, build and install the fixed assets and other assets, these assets take time to make them useable or saleable therefore the enterprises incur the interest to acquire and build these assets. The objective of the Accounting Standard is to prescribe the treatment of borrowing cost in accounting i.e. whether the cost of borrowing should be included in the cost of assets or not.

As per this accounting standard borrowing cost which is directly related to the acquisition, construction or production of qualifying asset should be capitalized. Qualifying asset is asset which takes substantial period of time to get ready for its intended use or sale, is called qualifying asset.

The financial statement should disclose -

The accounting policy adopted for borrowing cost.

The amount of borrowing cost capitalized during the period.

Significant difference among AS-16,IFRS/IAS and US GAAP

There is no significant difference among Indian GAAP (AS-16),IFRS/IAS-23 and USGAAP except the slight difference as regards to the disclosure requirements.

US GAAP (FAS -34) requires disclosure for an accounting period in which no interest cost is capitalized the amount of interest cost incurred and charged to expense during the period further for an accounting period in which some interest cost is capitalized the total amount of interest cost incurred during the period and the amount thereof that has been capitalized.

IFRS/IAS-23 requires the disclosures of the capitalization rate used to determine the amount of borrowing costs eligible for capitalization.

21.2 MANAGEMENT AUDIT FOR INVESTOR'S PROTECTION IN THE CONTEXT OF CORPORATE GOVERNANCE

Report of SEBI committee (India) on Corporate Governance defines corporate governance as the acceptance by management of the inalienable rights of shareholders as the true owners of the corporation and of their own role as trustees on behalf of the shareholders. It is about commitment to values, about ethical business conduct and about making a distinction between personal & corporate funds in the management of a company." The definition is drawn from the Gandhian principle of trusteeship and the Directive Principles of the Indian Constitution. Corporate Governance is viewed as ethics and a moral duty.

In any industrial enterprise big or small resources are pooled for the purpose of generating further wealth. All these resources in the form of assets are quantifiable in terms of money. These are placed in the hands of the management of the enterprise who are expected to put the resources to the best use in the interest of the industry and the economy as a whole. It is true irrespective of whether an organization is in the public or private sector, it is therefore essential to ascertain by an independent appraisal as to how far the management has performed in fulfilling the tasks entrusted to them. This exercise needs to be carried out at all the levels of the management.

Management Audit begins where a statutory financial audit ends. The statutory financial audit has lot of limitations and therefore there is need for an independent appraisal of managerial performance at various levels including the top most level. The thought of management audit had arisen some decades back. These management audits are substantially different from those performed by public accountants and are not concerned with the verification of financial data. They are performed either for the top management, for the stockholders or the for the owners. Management audits provide a device for surveying the management of the enterprise critically and objectively from the broadest point of view.

Of late in attesting the financial statements to be presented to the shareholders, the accountants are more preoccupied with disclosure of more information like capacity utilization, raw material consumption, etc which in a way leans towards management audit. The figures reported in the financial statements exhibit the results of the company but they do not show why the management acted in the way they did. Moreover, the financial statements also do not reveal the constraints within which the management acted. It is therefore expected that the new concept of management audit is to be developed to report the results more qualitatively than quantitatively.

The following definitions of management audit are useful in assessing its scope and areas of activities.

I] Management Audit is an examination of the conditions and a diagnosis of deficiencies with recommendations for correcting them. It is basically constructive in its conception and objective in its approach. It has but one purpose that of helping the management to better the position of the company. The net result is diagnosis of the present state of health of the business with attention focused on what needs improvement and with clear cut recommendations.

II] Management Audit is a systematic fact finding approach that examines appraises and reports on the understanding and effectiveness of an organisation's objectives, policies, standards, structure, procedures and controls to spotlight friction, waste, red tape etc. and to identify areas for improvement.

From the above definitions considered above we may summarise the activities of the management audit to consist broadly of

A] Analytical and objective examination of the organization of the company, the plan and policies, control, etc in the different functional areas of the business to ensure optimum utilization of resources and facilities available.

B] An objective evaluation of the performance of the business.

C] Identification of weak links in the organization and the internal controls with a view to giving signals on the potential dangers arising out of such weaknesses.

D] Identification of waste, inefficiency, delay and other areas, which require improvement.

E] Reporting on the effectiveness of the organization, objectives, policies, standards, procedures and control with a view to helping the management to better the company's performance.

F] Make recommendations for the improvement.

G] The entire approach is constructive in conception and objective in analysis.

Management Audit incorporates in itself an efficiency audit. Efficiency audit ensures "application of the basic economic principles so that resources flow into the most remunerative channels." The main object of efficiency audit is to ensure that

1. Every rupee invested in capital or in other fields give the optimum returns and

2. The planning of investment between the different functions and aspects is designed to give optimum results.

The parameters for measuring efficiency with its concomitant details are

1. Overall rate of return on capital employed
2. Better capacity utilization
3. Better utilization of raw material, power, labour, equipments and finance
4. Effective incentive system
5. Better export performance and import substitution'
6. Cost Control

It is necessary to make study activity wise so as to identify areas of deficiency in particular activity.

To conclude we can infer saying that Investor in order to protect his investment in any company expects proper exhibition of corporate governance which is taken care by Management Audit as Management audit would encompass compliance audit, efficiency audit, propriety audit and systems audit as well as management audit is concerned with the overall objectives of an organization.

21.3 CORPORATE GOVERNANCE NORMS AS PRESCRIBED BY SEBI

21.3.1 The Securities and Exchange Board of India

The Securities and Exchange Board of India Act,1992 was enacted by the Indian Parliament " to provide for the establishment of a Board to protect the interests of investors in securities and to promote the development of, and to regulate the securities market and for matters connected therewith or incidental thereto"

Objectives of the Board

Section 11(1) of the Securities and Exchange Board of India Act, 1992 explains the powers and functions of SEBI . As per the Act, it shall be the duty of the board to protect interests of the investors in securities and to promote the development of , and to regulate the securities market by such measures as it thinks fit.

The statutory objectives of the SEBI as per the Act are given below:

1. Protection of investor's interest in securities.
2. Promotion of the development of the securities market.
3. Regulation of the securities market and
4. Matters connected therewith and incidental thereto.

21.3.2 SEBI's Role in Promoting Corporate Governance

With the objective of improving market efficiency, enhancing transparency, preventing unfair trade practices and bringing the Indian market up to international standards, a package of reforms consisting of measures to liberalise, regulate, and develop the securities market was introduced in 1990s. The practice of allocation of resources among different competing entities as well as its terms by a central authority was discontinued. The issuers complying with the eligibility criteria now have freedom to issue the securities at market determined rates. The secondary market overcame the geographical barriers by moving to screen based trading, which made trading system accessible to everybody anywhere in the Indian sub-continent. Trades enjoy counterparty guarantee. The trading cycle shortened to a day and trades are settled within two working days while all deferral products are banned. Physical security certificates have almost disappeared. A variety of derivatives are available. In fact, some reforms such as straight through processing in securities, T+2 rolling settlement, clearing corporation being the central counter party to all the trades on the exchanges, real time monitoring of brokers positions and margins, and automatic disabling of brokers' terminals are singular to the Indian securities market. Indian disclosure and accounting standards are as modern, updated, potent and versatile as those of any other market. Today, the Indian securities market stands shoulder to shoulder with most developed markets in North America, Western Europe and Far East.

According to SEBI's former chairman, The Securities and Exchange Board of India have been focusing on the following areas to improve corporate governance.

1. Ensuring timely disclosure of relevant information.

2. Providing a n efficient and effective market system.

3. Demonstrating reliable and effective enforcement.

4. Enabling the highest standards of governance.

21.3.3 Disclosure standards

The erstwhile SEBI Chairman, G.N.Bajpai claims quoting academicians and researchers that disclosure standard in the Indian regulatory jurisdiction are at par with the best in the world. According to him this is a feedback from several global organizations, both regulatory and market participants.

SEBI has ensured that a company is required to make specified disclosures at the time of issue and make continuous disclosures as long as its securities are listed on exchanges. The standards for these disclosures including the content , medium and time of disclosures have been specified in the companies Act, Disclosure and Investor Protection Guidelines, Listing Agreement Regulations relating to insider trading and takeover etc. These disclosures are made through various documents such as prospectus, quarterly statements, annual reports etc. and are disseminated through media, websites of the company and the exchanges, and through EDIFAR (Electronic Data Information Filing and retrieval) system maintained by the regulator. These disclosures relate to financial performance, shareholding pattern, trading by insiders, substantial acquisitions, related party disclosures, audit qualifications, buyback details, corporate governance, actions taken against company, risk management, utilization of issue proceeds, remuneration of directors etc. All listed companies and organizations associated with securities markets including the intermediaries, asset management companies, Trustees of mutual funds, SROs, stock exchanges, clearing houses/corporations, public financial institutions, professional firms such as auditors, accountancy firms, law firms, consultants, etc. assisting or advising listed companies are required to abide by the Code of Corporate Disclosure Practices specified in SEBI (Insider Trading) regulations.

21.3.4 Efficient and effective market system

In the opinion of the Chairman of SEBI, the Indian securities market has a large infrastructure to meet the demands of a sub-continental market. Presently there are 25 stock exchanges and about 10,000 brokers, 15000 sub-brokers, more than 10000 listed companies, 500 foreign institutional investors, 400 depository participants, 150 merchant bankers, 40 mutual funds offering over 450 schemes, and 20 million investors. Yet, there is only one regulator. Not only the numbers are gigantic but also the systems and infrastructure are equally Atlantean and sophisticated. All stock exchanges in India offer on line, fully automated, nationwide anonymous, order driven screen based trading system. It has a comprehensive risk management system. The depositor's legislation ensures free transferability of securities with speed, accuracy and security. The securities are transferred electronically in demat form. Further, Indian accounting standards follow international accounting standards (principle based) and are by and large aligned. In addition to creating an efficient trading platform and settlement mechanism, SEBI's focus is substantially directed towards the following:

(a) Provisions of timely availability of high quality sensitive information to the market participants to enable them to take informed decision and ensure efficient price discovery

(b) Maintenance of high quality of services and fair conduct for market participants. The regulations specify high standards to become market intermediaries and require them to abide by a code of conduct.

(c) Ensuring that the market is fair, transparent and safe so that issuers and investors are at ease to carry out transactions.

21.3.5 Reliable and Effective Enforcement

SEBI aims at ensuring that no misconduct goes unnoticed or unpunished. It keeps an eye on the happenings in the market and identifies anything unusual or undesirable which may adversely affect the efficacy of the market. Every market participants, irrespective of his size and influence in the market or in the policy is held accountable for his misdeeds. The proactive approach of the regulator in enforcement can be gauged from the fact that during the financial year 2002-2003, SEBI passed 561 orders, out of which over 350 were punitive.

21.3.6 Highest Standards of Governance

SEBI has avowed that its regulation and guidance of the country's securities market would spell success in the area of corporate governance. The Kumar Mangalam Birla committee of the Indian jurisdiction outlined a code of good corporate governance, which compared very well with the recommendations of the Cadbury Committee and the OECD codes. The code was operationalised by inserting a new clause to the listing agreement (LA) and have been made applicable to all the listed companies in India in a phased manner. Following the implementation of the Birla Committee recommendations, substantial developments took place in the corporate world and securities market, which required revisit of the issue. The Narayana Murthy Committee has refined the corporate governance norms, which are proposed to be implemented through modification in the listing agreement. Government also appointed few committees. Based on their recommendations, government is trying to provide statutory back up to corporate governance standards.

The initiatives for improvement in corporate governance, according to G.N.Bajpai, come mainly from three sources, namely, the market, regulator and the legislature. While the legislative initiative is directed towards bringing about amendments to the basic law India’s Companies Act to include certain fundamental provisions related to corporate governance, dynamic aspects of corporate governance such as disclosures, accounting standards etc. are being pursued through the regulatory initiatives by bringing about amendments to the Listing Agreements. Such an approach is aimed at because a comparatively more complicated and protracted process is involved in the amendments to legislation in a truly democratic society like India’s. The most important initiative comes from market forces and mechanisms, which encourage and insist on the management’s improving the quality of corporate governance.

Indian market has formalized such forces in the form of a rating called “Corporate governance and Value Creation Rating”, which according to SEBI chairman is quite unique in the world and is sought after voluntarily by companies.

21.3.7 SEBI’s Record of Performance

R.Rajagopalan in his book Directors and Corporate Governance makes the following observations on the role of SEBI: “The Securities and Exchanges Board of India and its various committees should be complimented for many things happening in the capital market in India .Be it in the area of protection of small investors’ interests, or technology upgradation or development of securities market, SEBI has indeed been working with commensurate speed and efficiency in the last couple of years. There has, however been a common perception that SEBI has not developed a cadre of regulatory personnel to effectively track violations: After the Harshad Mehta’s securities scam in 90’s which was blamed on a systemic failure, the system needed a through overhauling. However, nothing really happened. Later another scamster, Ketan Parikh made use of the loopholes in the system to his advantage. He was instrumental in rigging the prices of shares resulting in heavy losses to the investing public, which led to erosion of faith in the capital market. Over the years, quite a few companies raised money through IPO’s and disappeared without a trace. It is not seen that the perpetrators of these frauds are promptly brought to book.

21.3.8 SEBI’S Role in the New Era

In the changed environment of the Indian economy, when after more than four decades of heavy regulation and anemic growth, with the government slowly opening the economy to market forces, and promoting modification of financial institutions, SEBI has to play a proactive role as a capital market regulator. SEBI's performance has to be judged in the context of its efficiency in this dynamic environment.

The SEBI has made progress in a number of areas:

1. Abolition of capital issues control and retaining the sole authority for new capital issues.
2. Regulation and reform of the capital market by arming itself with necessary authority and powers.
3. Regulating stock exchanges under Securities Contracts Regulation Act.
4. Bringing all primary and secondary market intermediaries under the regulatory framework.
5. Enforcing the companies to disclose all material facts and specific risk factors associated with projects while going in for public issues.

The record of the SEBI, over the period, has indeed been encouraging. SEBI has sought to check and control unfair practices on the stock exchanges, acted against transgressing companies, brokers accused of rigging prices, and scrips showing large price movements. At the same time, SEBI has sought to reduce regulation, and instead to leave it largely to the players in the market.

The capital market is composed of two constituents : the primary market and secondary market. While the primary market deals with the issue of new stocks and shares, the secondary market deals with the buying and selling of existing stocks and shares. SEBI, as a regulator of capital market has to play a regulatory role in both these markets. With a view to improving practices and market development and promote corporate governance among companies, SEBI has taken several steps as given below:

21.3.9 Primary Market Reforms

The primary capital market plays an important role in the overall functioning of securities market. Vibrancy of primary market, among other things, is a function of macro economic factors, industrial output and demand. Over the years, Securities and Exchange Board of India, the market regulator, has taken several initiatives to improve the operational efficiency and transparency of the primary market which provides investors with issues of high quality and for firms a market where they can raise resources in a cost effective manner. However, despite these measures the primary market remained lackluster in recent years.

Bonds have been the primary instruments for the resource mobilization in the primary market followed by equity. Equity with premium compared to the previous year, more than doubled in 2003-04, while issues in the public sector were dominant during the year, compared to the isues in the private sector, which raised about 87 percent in the previous year.

With regard to the primary market, the part of the capital market that concerns with the issues of new stocks and shares, the following major changes have been effected by SEBI:

1. Relating to new issues: In case of new issues, SEBI has introduced various guidelines and regulatory measures for capital issues with the objective of strengthening standards of disclosure, and certain procedural norms for the issuers and intermediaries with a view to removing the inadequacies and systemic deficiencies in the issue procedures. Companies issuing capital in the primary market are now required to disclose all material facts and specific risk factors regarding the projects, they should also give information regarding the basis of calculation of premium. SEBI has also introduced a code of advertisement for public issues with a view to ensuring fair and truthful disclosures. The prospectus should not contain statements that would mislead the investors. SEBI has also put in place a system of appointing its representatives to supervise the allotment process and to minimize malpractices in the allotment of oversubscribed issues. Prudential norms have been laid down for right issues.

2. Freedom to fix par value of shares: SEBI has dispensed with the requirement to issue shares with a fixed par value of Rs. 10 and Rs. 100 and has given the freedom to companies to determine the par value of shares issued by them. Companies with dematerialized shares have been allowed to alter the par value of a share indicated in the Memorandum and Articles of Association. The existing companies, which have issued shares at Rs. 10 and Rs. 100, can avail of this facility by consolidating, splitting their existing shares.

3. Guidelines for tightening the entry norms: Guidelines for tightening the entry norms for companies accessing capital market were issued by SEBI on 16th April 1996. Accordingly, a company should have a track record of dividend for a minimum 3 years out of the immediate preceding 5 years. If a manufacturing company does not have such a track record, it can access the public issue market subject to the condition that projects have been appraised by a public financial institution or a scheduled commercial bank and such appraising agency is also participating in the project fund.

4. Relating to IPOs: To encourage Initial Public Offers, (IPO), SEBI has let companies determine the par value of shares issued by them. SEBI has permitted issues of IPOs to go for "book building", i.e. reserve and allot shares to individual investors. However, the issuer will have to disclose the price, the issue size and the number of securities to be offered to the public.

5. Investor protection measures: On 15th June 1998, SEBI advised investors to exercise a greater deal of caution while investing in plantation companies. At the same time, plantation companies and other collective investment schemes were directed to obtain credit rating from accredited agencies prior to the issue of advertisement.

6. Cost reduction measures: To reduce the cost of issue, SEBI has made underwriting of issue optional, subject to the condition that if an issue was not underwritten and was not able to collect 90% of the amount offered to the public, the entire amount collected should be refunded to the investors. The lead managers have to issue due diligence certificate, which has now been made part of the offer document.

7. Relating to private placement market: Private placement market has become popular with issuers because of stringent entry and disclosure norms for public issues. Low

cost of issuance, ease of structuring investments and saving of time lag in issuance has led to the popularity and rapid growth of private placement. Total resource mobilization through private placement market had risen by more than three times between 1995-96 and 1998-99.

8. Banker to the issue under SEBI's purview: The "Banker to the Issue" is now brought under the purview of SEBI for investor protection. The Unit Trust of India (UTI) has been brought under the regulatory jurisdiction of SEBI.

9. Regulations on acquisitions and takeovers: SEBI has raised the minimum application size and also the proportion of each issue allowed for firm allotment to institutions such as mutual funds. SEBI has also introduced regulations governing substantial acquisition of shares and take-overs and lays down the conditions under which disclosures and mandatory public offers have to be made to shareholders.

10. Merchant banking under SEBI's jurisdiction: Merchant banking has been statutorily brought under the regulatory framework of SEBI. Merchant bankers are now to be authorized by SEBI and have to adopt the stipulated capital adequacy norms, abide by a code of conduct which stipulates a high degree of responsibility towards inspectors in respect of the pricing and premium fixation of issues. Merchant bankers will also have adhered to provisions relation to disclosures or offer letters for issues.

11. Permission to set up private mutual funds: The government has now permitted the setting up of private mutual funds. A few have already been set up. All mutual funds are allowed to apply for firm allotments in public issues. To improve the scope of investments by mutual funds, the latter are permitted to underwrite public issues. SEBI has relaxed the guidelines for investment in money market instruments. The market regulator has issued fresh guidelines for investment in money market instruments. The market regulator has issued fresh guidelines for advertising by mutual funds.

12. Making companies provide authentic information: SEBI has advised stock exchanges to amend the listing agreements to ensure that a listed company furnishes annual statement to the stock exchange showing the variations between financial projections and the projected utilization of funds in the offer documents and the actual utilization. This would enable shareholders to make comparisons between promises and performance of companies they invested in.

13. Making companies comply with issue norms: In order to make companies exercise greater care and diligence for timely action in matters relating to the public issues of capital. SEBI has advised stock exchanges to collect from companies making public issues, a deposit of 1% of the issue amount which could be forfeited in case of non-compliance of the provisions of the listing agreement and non-dispatch of refund orders and share certificates by registered post within the prescribed time.

14. Scrutiny of offer documents: SEBI scrutinizes offer documents to ensure that the company in the offer document has made all disclosures. All the guidelines and regulatory measures of capital issues are meant to promote healthy and efficient functioning of the issue market.

15. Access to international capital market: Since 1992, the Government of India has permitted Indian companies to access international capital markets through Euro equity shares. Initially, the Euro issue proceeds were to be utilized for approved end uses within a period of 1 year from the date of issue. Since there was continued accumulation of foreign exchange reserves with the Reserve Bank and there were long gestation periods of new investments, the government allowed the issuing companies to retain the Euro-issue proceeds abroad and repatriate them to the country only as and when expenditure for the approved end uses were incurred.

The Government of India has also liberalised investment norms for Non Resident Indians (NRIs) so that they and overseas corporate bodies can buy shares and debentures without prior permission of the Reserve Bank of India which has been the practice followed hitherto.

21.3.10 Secondary Market Reforms

In the matter of reform of the secondary market, a market that is engaged in the buying and selling of old stocks and shares, SEBI has initiated the following measures:

1. Registration of Intermediaries: SEBI has started the process of registration of intermediaries, such as the stockbrokers and sub-brokers under the provisions of the Securities and Exchange Board of India Act,1992. The registration is made on the basis of certain eligibility norms such as capital adequacy, infrastructure etc., There has been much opposition and resistance to this step of SEBI. The capital market regulator has also made rules for making client broker relationships more transparent, particularly with reference to the segregating client and broker accounts.

2. Reconstitution of stock exchange governing bodies : To make the governing body (GB) of a stock exchange more broad based, SEBI has issued guidelines for its composition. According to these guidelines, the governing body of a stock exchange should have five elected members, of which not more than four nominated by the government or SEBI, and three of fewer persons nominated as public representatives. During 1994-95, SEBI has reconstituted the governing bodies of stock exchanges.

3. Measures to speed up settlements : SEBI has prohibited “renewal ” of transactions in ‘B’ group securities, so that transaction could be settled within 7 days.

4. Simplification of procedures : Since 1992, SEBI has constantly reviewed the traditional trading system in Indian stock exchanges. SEBI is simplifying procedures and achieving transparency in costs and prices at which customer orders are executed, speeding up clearing and settlement and finally transfer of shares in the names of buyers. SEBI is setting up depositories, which would immobilize securities and help eliminate paper work this would give impetus to the growth of stock markets.

5. Regulations on insider trading: SEBI has notified regulations on insider trading under the provisions of SEBI Act, Such regulations are meant to protect and preserve the integrity of stock markets and, in the long run, to help inspire investor confidence in them. Despite these regulations, insider trading rampant in our stock exchanges,

and rigging the market and manipulating stock market price quotations are quite common. M.S. Shoes East Ltd., fiasco was an example of market rigging in March 2001. SEBI could do nothing about it though it was known that coteries of stockbrokers connived to hammer the Bombay Stock Exchange with rigging.

6. Regulation of collective investment schemes : SEBI's regulations for collective investment schemes (CIS) were notified on 15th October 1999. CIS includes any scheme, or arrangement with respect to property of any of subscription and to receive profits or income or produce arising from the management of such property. Under the SEBI Act and Regulations framed thereunder, no person can carry on any CIS unless he obtains a certificate of registration from SEBI. All existing CISs were required to apply for registration by 14 December 1999.

7. Regulation of foreign investments: The government has allowed foreign institutional investors (FIIs) such as pension funds, mutual funds, investment trusts, asset or portfolio management companies etc. to invest in the Indian capital market provided they are registered with SEBI. Till January 1995, as many as 286 FIIs have been registered with SEBI. There were only ten in January 1993. The cumulative net investment of FIIs on Indian equities has increased from $200 million in January 1993 to $3 billion in January 1995, and to $60 billion as on as on May 2005, according to report in Economic Times (11 May 2005) reflecting the healthy impact of economic liberalization policy of the country and to some extent, the prevalence of low rates of interest of the country and to some extent, the prevalence of low rates of interest abroad. The Government of India has now permitted joint venture stock broking companies to have non Indian citizens on their boards of directors.

8. Introduction of compulsory rolling settlement : In keeping with international best practice, SEBI has introduced compulsory rolling settlement of select scrips on 10th January 2000. In June 2000, SEBI introduced derivatives trading. As far as internet trading is concerned, SEBI has prescribed minimum technical standards to be enforced by stock exchanges for ensuring safety and security of transactions via the internet. Rolling Settlement has been extended to all scrips on all the stock exchanges with effect from 31 December 2001. SEBI has further decided to shorten the rolling settlement cycle from present T+5 to T+3 for all listed securities from 1 April 2002. The markets have now moved to T+2 settlement from 1 April 2003.

9. One point access to investors : In July 2002, SEBI launched a centralized internet based filing system for listed companies called EDIFAR (Electronic Data Information Filing and Retrieval System), which requires companies to post disclosures as per the listing agreement with the stock exchange on the EDIFAR website at the same time as they submit them to the exchange. The objective of EDIFAR is to provide investors simultaneous, one point access to key information on all listed companies.

   Beginning July 2002, SEBI has been posting all orders passed by its chairman against errant companies and market intermediaries on its website. This provides useful information to investors.

10. Introduction of takeover codes : With regard to mergers and acquisition, SEBI has made several investor friendly amendments to the takeover code in September 2002. This would stop the practice of promoters making preferential allotments to avoid making an open offer to other shareholders. Acquirers also have to disclose their holding more frequently, which increases transparency.

11. Trading of government securities through order driven screen based system:

    With a view to encouraging wider participation of all classes of investors, trading in government securities through a nationwide, anonymous, order driven, screen based trading system of the stock exchanges, in the same manner in which trading takes place in equities, was launched on 16 January 2003, initially on Bombay Stock Exchange (BSE), National Stock Exchange (NSE) and Over the Counter Exchange of India (OTCEI).

12. Delisting guidelines: The market regulator has issued the (SEBI) (Delisting of Securities) Guidelines,2003 on 17 February 2003. The guidelines provide that companies can delist from stock exchanges only by offering an exit route to remaining shareholders through a "reverse book building" process. This mechanism would leave the option of pricing to the investors and would be totally transparent to the market. Further, promoter shall offer a floor price on the basis of average of previous 26 weeks high and low prices to investors.

13. Central listing authority. To bring about the uniformity in scrutinizing listing applications across the stock exchanges and to strengthen the listing agreements, SEBI has, in April 2003, established the Central Listing Authority in Mumbai.

    Former Chief Justice of India, Justice M.N.Venkatachelliah, has been appointed as the president of the Authority. There shall be eight other members pf the Authority, all of whom shall hold office for a period of 3 years. They shall discharge the following functions :(1) processing the application made by corporates, mutual funds, or collective investment schemes and (2) making recommendations as to listing conditions.

14. Derivative trading : The Central Government lifted the prohibition on forward trading in securities by a notification issued on 1 March 2000 rescinding the 1969 notification. With the enactment of the Securities Laws (Amendment) Act,1999 in December 1999, trading in stock index futures started in June and July 2001 respectively. Single stock futures have also been introduced since 9 November 2001.

    Interest Rate Derivatives trading was formalized on the stock exchanges with the launch of futures on 10 years zero yield coupon bond and zero coupon notional T-Bill in June 2003.

15. Demutualisation and corporatisation of regional stock exchanges : Recently (2004), the Securities Contract (Regulations) Act (SCRA) was amended through the promulgation of an ordinance to make corportisation and demutualization of stock exchanges mandatory. The ordinance has been issued on the basis of the recommendation of a group under the chairmanship of Justice M.H.Kania, former Chief Justice of India, to advise the government on the issue of corporatisation of stock

exchanges. The amendment not only requires separation of ownership and trading rights, it also requires that the majority ownership rests with the public and those without any trading rights. Also through these conditions, the government has signaled a major shift in its earlier stand that stock exchanges should be self regulating agencies of their members. It now desires that they should be externally regulated.

Traditonally, the Regional Stock Exchanges (RSEs) functioned as mutual societies owned and operated by member brokers. A few of them have already switched to the corporate form. The new action plan now requires them to segregate ownership rights from trading rights. Professionals rather than broker representatives will conduct the affairs of the exchanges. Can the RSEs come together as has been proposed many times and transform themselves into the country's third exchange along with the National Stock Exchange (NSE) and Bombay Stock Exchange (BSE) ? That is a moot question, though few will question the need for increased competition that will have greater choice to investors.

However, in practice, it has always been difficult to form a third all India exchange. Despite the current moves to restructure the RSEs there is no guarantee that a demutualised and corporate exchange by itself will be the recipe for survival and eventual success. On the contrary, in the opinion of experts, there are valid reasons to be skeptical. The RSEs, in their new form will require a large number of stock market professionals who are a scarce commodity. Besides, an exchange operating for profit may sacrifice regulatory concerns for commercial gains.

At present stock exchanges in India are "mutual" and non-profit organizations enjoying tax exemption. The trading members are stockbrokers who also own, control and manage such exchanges for their mutual benefit. The ownership rights and trading rights are combined together in a membership card, which is not freely transferable.

On the other hand, a "demutual" exchange is one in which three distinct sets of people own the exchange, manage it and use its services. The three stakeholders are shareholders, brokers and investing public. The management is vested in a board of directors, assisted by a professional team. A demutualised exchange is generally a profit organization and a tax paying entity. The ownership rights are freely transferable and there is no membership card.

A typical mutual exchange managed by broker's representatives is not an ideal model for an enlightened self regulatory organization. In this regard, a demutualised framework is expected to have a balanced approach without the inherent conflict of interest. It can generate a greater management accountability. In a competitive environment stock exchanges require funds to raise funds, mutualised organizations sufer from their own limitations, where as a demutualised set up can tap capital markets. A publicly held organization is in a position to ensure greater transparency in dealings, accountability and market discipline and is amenable to changes. However, a demutualised and corporate form of stock exchange is not an unmixed blessing either. According to C.R.L.Narsimhan, an authority on the subject, they have the following disadvantages:

1. It is not as though the new governance structure will automatically be free from pitfalls. There may arise a different conflict of interest. The new look demutualised exchange operating on profit considerations may opt for a course that may conflict with the regulatory role expected of it.

2. Although it is unlikely to happen immediately in India, a corporate stock exchange may be listing its shares on an exchange possibly with its own self.

3. While a demutualised structure segregates the different roles of owner's controllers and traders, it is still necessary to invite eminent people on its Board. That is to ensure that the exchanges take care of public interest too and not merely ensure their commercial character.

4. In the demutualised exchanges, share capital will be subscribed to by different investors including the trading members. It may become necessary to prescribe a ceiling on voting powers somewhat akin to what obtains today in banking regulation and laws. This, of course, is a handicap that has to be overcome by anybody concerned with capital market.

5. An amendment to the Securities Contracts Regulation Act is on the cards: other legal changes/concessions are also necessary before demutualization takes place.

6. As in many other areas of the capital market it has been easy to identify what is wrong with existing system of stock exchange governance. It has been only slightly more difficult to suggest an alternative system, in this case the demutualised exchange.

   It is also likely that the government will push for a speedy transition to the new mode of governance. However, even if the board objectives are achieved, it is likely that the perception of the exchange may not improve dramatically over the short term.

21.3.11 Clause 49 in Listing Agreement on Corporate Governance

SEBI had constituted a committee on Corporate Governance under the Chairmanship of Sri Kumar Mangalam Birla to promote and raise the standard of corporate governance in the corporate sector. The committee submitted its report to SEBI. Accepting the recommendations of the committee SEBI advised all stock exchanges to amend their listing agreements by inserting new clause 49 which deals with good Corporate Governance practices to be adopted by all listed private and private sector companies. however, for listed entities, which are not companies , but body corporate(e.g. private and public sector banks, financial institutions, insurance companies etc.) incorporated under other statutes , this clause will apply to the extent that it does not violate their respective statutes ,and guidelines or directives issued by the relevant regulatory authorities. Clause 49 is inserted vide SEBI F.No.SMDRP/Policy Cir.10/2000 dated 21.2.2000.

As per Clause 49 of the Listing Agreement, the entity is required to obtain a certificate from the auditors of the entity as regards compliance of conditions of corporate governance as stipulated in that clause.

The certificate is required to be annexed with the Directors' Report, which is sent annually to all the shareholders of the entity. This certificate is required to be sent to the Stock Exchange(s) alongwith the Annual Return filed by the entity. The expression " auditors of the company" would mean the auditors appointed to audit the financial statements of the entity under the relevant statutes.

Features of Clause 49 of the Listing Agreement:

1.(a) All entities seeking listing for the first time are required to set up an audit committee at the time of listing.

(b) All existing listed entities with a paid – up capital of Rs. 3 crores and above are required to setup an audit committee in a phased manner as per schedule of implementation specified in Clause 49.

2. The audit committee shall have minimum three members, all being non-executive directors, with the majority of them being independent, and with at least one director having financial and accounting knowledge.

3. The chairman of the audit committee shall be an "independent" director.

4. A representative of the external auditor, when required shall be present as an invitee for the meetings of the audit committee.

The following additional requirements are stipulated as per Clause 49 of the Listing Agreement which are silent in Section 292A of the Companies Act,1956:

(i) The audit committee should invite such of the executives, as it considers appropriate (and particularly head of the finance function) to be present at the meeting of the committee, but on occasions it may Also meet without the presence of any executives of the company.

(ii) The company secretary shall act as secretary to the committee.

(iii) The audit committee shall meet at least thrice a year. One meeting shall be held before finalization of annual; accounts and once in every six months./

(iv) The quorum of the audit committee shall be two members or one-third of the members of the audit committee whichever is higher and minimum of two independent directors.

(v) The powers and role of the audit committee are elaborately contained in sub-paragraphs C & D of paragraph II.

The following additional requirements are stipulated as per Section 292A of the Companies Act, 1956 which are silent in Clause 49 of the Listing Agreement:

(i) The audit committee constituted shall act in accordance with terms of reference to be specified in writing by the board.

(ii) The recommendations of the audit committee on any matter relating to financial management, including the audit report, shall be binding on the board.

(iii) If the board does not accept the recommendations of the audit committee, it shall record the reasons therefore and communicate such reasons to the shareholders.

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