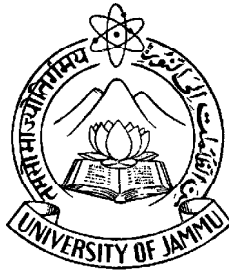


Directorate of Distance Education

UNIVERSITY OF JAMMU

JAMMU



SELF LEARNING MATERIAL

FOR

M.COM. THIRD SEMESTER

INVESTMENT MANAGEMENT

For the examination to be held in 2020

COURSE NO: M.COM-FC311

**FINANCE &
ACCOUNTING GROUP**

UNIT : I-IV

Course Coordinator :

PROF. SANDEEP KOUR TANDON

Room No. 11, First Floor

Directorate of Distance Education

University of Jammu

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COURSE NO. M.COM-FC 311

Written

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Reviewed :-

Unit I : Lesson No. 1-5

Unit II : Lesson No. 6-10

Unit III : Lesson No. 11-12

Unit III : Lesson No. 13-15

Unit IV : Lesson No. 17

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**DIRECTORATE OF DISTANCE EDUCATION
UNIVERSITY OF JAMMU
M.COM THIRD SEMESTER (NCBCS)
INVESTMENT MANAGEMENT**

Course: M.COM-FC311

Max. Marks: 100 Marks

Credit: 4

External: 80 Marks

Time: 3.00 Hrs

Internal: 20 Marks

(Syllabus for the examinations to be held in Dec 2020, 2021, 2022)

OBJECTIVES: To make students familiar with the conceptual framework of securities markets and the instruments traded therein.

UNIT- I: INTRODUCTION

Page No. 5-96

Meaning and definitions of investment; Objectives of investments; Classifications of investments; Modes of investment; Scope of investment management; Factors affecting investment decisions; Process of investment decisions; Difference between investment & speculation and investment & gambling; Real and financial assets- meaning, types and features of an ideal investment programme.

UNIT- II: VALUATION OF SECURITIES

Page No. 97-231

Meaning and types of securities-equity based and debt based; Valuation of securities-bond and equity valuation; Legal framework of security markets in India; Organized stock exchanges; Trading and operational mechanism of stock exchanges in India; Listing of Securities; Online trading; Dematerialization, Depositories and depository participants; WAP enabled trading.

UNIT- III: MUTUAL FUNDS AND SECURITY MARKET ANALYSIS

Page No. 232-328

Mutual funds-concept and origin of the mutual funds; Types of mutual funds; Importance of mutual funds; Estimation of net asset value of mutual funds; Mutual funds in India; Security market analysis - fundamental analysis; Economic, industry and company analyses; Technical analysis - methods of technical analysis; Dow theory and Random Walk Hypothesis.

UNIT- IV: INVESTMENT AND TAXATION

Page No. 329-398

Investment management -Portfolio management - meaning of portfolio management; Principles of portfolio management; Ingredients of portfolio management; Selection of portfolio - Markowitz Diversification; Investment and taxation; Long-term and short-term capital gains; Taxation of capital gains; Dividend taxation; Interest taxation; Tax saving ideas; Tax free bonds.

BOOKS RECOMMENDED

1. Donald E. Fisher and Ronald J. Jordan, Securities Analysis and Portfolio Management, Prentice Hall, New Delhi.
2. Sourain, Harry, Investment Management, Prentice Hall of India.
3. Francis and Archer, Portfolio Management, Prentice Hall of India.
4. Gupta L.C., Stock Exchange Trading in India: Prentice Hall of India

NOTE FOR PAPER SETTING

The paper consists of two sections. Each section will cover the whole of the syllabus without repeating the question in the entire paper.

Section A: It will consist of eight short answer questions, selecting two from each unit. A candidate has to attempt any six and answer to each question shall be within 200 words. Each question carries four marks and total weightage to this section shall be 24 marks.

Section B: It will consist of six essay type questions with answer to each question within 800 words. One question will be set at least from each unit and the candidate has to attempt four . Each question will carry 14 marks and total weightage shall be 56 marks.

MODEL QUESTION PAPER

INVESTMENT MANAGMENT

Time : 3 Hours

M. Marks : 80

SECTION - A

Attempt any six questions. Each question carries four marks. Answer to each question should be within 200 words.

1. Give the conceptual framework of security markets.
2. What do you mean by organized stock exchanges?
3. What do you mean by derivatives?
4. What do you mean by mutual funds?
5. What do you mean by fundamental analysis?
6. What do you mean by economic industry?
7. What do you mean by portfolio management?
8. How the selection of portfolio is made?

SECTION B

Attempt any four questions. Each question carries 14 marks. Answer to each question should be within 800 words.

1. What do you mean by securities. Also discuss the trading and operational mechanism of stock exchanges?
2. Write detailed note on the trading practices of NSE and BSE.
3. How the valuation of securities is done. Also explain different approaches to valuation?

4. What is meant by technical analysis. Discuss various methods of technical analysis?
5. Write detailed note on Markowitz Diversification Model of portfolio management?
6. Write detailed note on portfolio theory and risk management. Explain the procedure for the calculation of risk and return of portfolios.

INTRODUCTION

STRUCTURE

- 1.1 Introduction
- 1.2 Objectives
- 1.3 Meaning of Investment
- 1.4 Definition of Investment
- 1.5 Saving and Investment
- 1.6 Objectives of Investments
- 1.7 Importance of Investments
- 1.8 Summary
- 1.9 Glossary
- 1.10 Self Assessment Questions
- 1.11 Lesson End Exercises
- 1.12 Suggested Readings
- 1.13 References

1.1 INTRODUCTION

Most of the investors spend and earn money throughout their life by

investing in securities. Rarely, investor's current money income exactly balances with their consumption desires. Sometimes, investors may have more money than they want to spend and at other times, they may want to purchase more than they can afford. These imbalances will lead investors either to borrow or to save to maximize the long-run benefits from their income.

When current income exceeds current consumption desires, people tend to save the excess. They can do anything with these savings. One possibility is to put the money under a mattress or bury it in the backyard until some future time when consumption desires exceed current income. When they retrieve their savings from the mattress or backyard, they have the same amount they saved.

Another possibility is that they can give up the immediate possession of these savings for a future larger amount of money that will be available for future consumption. This tradeoff of present consumption for a higher level of future consumption is the reason for saving. What investor does with the savings to make them increase over time is investment. In contrast, when current income is less than current consumption desires, people borrow to make up the difference.

Those who give up immediate possession of savings (that is, defer consumption) expect to receive in the future a greater amount than they gave up. Conversely, those who consume more than their current income (that is, borrowed) must be willing to pay back in the future more than they borrowed. The rate of exchange between future consumption (future rupee) and current consumption (current rupee) is the pure rate of interest. Both people's willingness to pay this difference for borrowed funds and their desire to receive a surplus on their savings give rise to an interest rate referred to as the pure time value of money. This interest rate is established in the capital market by a comparison of the supply of excess income available (savings) to be invested and the demand for excess consumption (borrowing) at a given time.

An investment is the current commitment of rupee for a period of time in order to derive future payments that will compensate the investor for;

- (1) The time the funds are committed,
- (2) The expected rate of inflation, and
- (3) The uncertainty of the future payments.

The "Investor" can be an individual, a government, a pension fund, or a corporation. Similarly, this definition includes all types of investments, including investments by corporations in plant and equipment and investments by individuals in stocks, bonds, commodities, or real estate. In all cases, the investor is trading a known rupee amount today for some expected future stream of payments that will be greater than the current outlay.

Definition of Individual investor: "An individual who purchases small amounts of securities for themselves, as opposed to an institutional investor, also called as Retail Investor or Small Investor."

At this point, researcher has answered the questions about why people invest and what they want from their investments. They invest to earn a return from savings due to their deferred consumption. They want a rate of return that compensates them for the time, the expected rate of inflation, and the uncertainty of the return. In today's world everybody is running for money and it is considered as a root of happiness. For secure life and for bright future people start investing. Every time investors are confused with investment avenues and their risk return profile.

In fact, investing in various assets is an interesting activity that attracts people from all walks of life, irrespective of their occupation, economic status, education and family background.

1.2 OBJECTIVES

After reading this lesson, you will be able to:

- Understand the meaning of investment
- Know the definitions of investment
- Comprehend the objectives of investments

1.3 MEANING OF INVESTMENT

Investment is the employment of funds with the aim of getting return on it. In general terms, investment means the use of money in the hope of making more money. In finance, investment means the purchase of a financial product or other item of value with an expectation of favorable future returns.

Investment of hard earned money is a crucial activity of every human being. Investment is the commitment of funds which have been saved from current consumption with the hope that some benefits will be received in future. Thus, it is a reward for waiting for money. Savings of the people are invested in assets depending on their risk and return demands.

Investment refers to the concept of deferred consumption, which involves purchasing an asset, giving a loan or keeping funds in a bank account with the aim of generating future returns. Various investment options are available, offering differing risk-reward tradeoffs. An understanding of the core concepts and a thorough analysis of the options can help an investor to create a portfolio that maximizes returns while minimizing risk exposure.

1.4 DEFINITION OF INVESTMENT

Different thinkers interpret the word 'Investment' in their own ways in different periods. However, the ideology or concept of investment is same in between them.

Some important definitions of Investment are;

"Sacrifice of certain present value for some uncertain future value"

-WILLIAM F. SHARPE

"Purchase of a financial asset that produces a yield that is proportional to the risk assumed over some future investment period".

F. AMLING

There are three concepts of Investment:

- Business Investment
- Economic Investment
- Financial Investment

1. Business Investment: Business investment refers to the money put in a private business. It is the amount with which a person starts his business or the additional amount which he puts in later on. If a business unit is set up and an amount of ₹10 lakhs is spent on it, this will be a business investment.

2. Economic Investment: The concept of economic investment means addition to the capital stock of the society. The capital stock of the society is the goods which are used in the production of other goods. The term investment implies the formation of new and productive capital in the form of new construction and producers durable instrument such as plant and machinery. Inventories and human capital are also included in this concept. Thus, an investment, in economic terms, means an increase in building, equipment, and inventory.

3. Financial Investment: This is an allocation of monetary resources to assets that are expected to yield some gain or return over a given period of time. It means an exchange of financial claims such as shares and bonds, real estate, etc. People invest their funds in shares, debentures, fixed deposits, national saving certificates, life insurance policies, provident fund etc. In their view, investment is a commitment of funds to derive future income in the form of interest, dividends, rent, premiums, pension benefits and the appreciation of the value of their principal capital. In primitive

economies most investments are of the real variety whereas in a modern economy much investment is of the financial variety.

The economic and financial concepts of investment are related to each other because investment is a part of the savings of individuals which flow into the capital market either directly or through institutions. Thus, investment decisions and financial decisions interact with each other. Financial decisions are primarily concerned with the sources of money where as investment decisions are traditionally concerned with uses or budgeting of money.

1.5 SAVING AND INVESTMENT

Investors are savers but all savers cannot be good investors, as investment is a science and an art. Savings are sometimes autonomous and sometimes induced by the incentives like fiscal concessions or income or capital appreciation.

Investment may be regarded as utilization of the savings of a country for further creation of wealth. Investment plays a central role in the process of economic development. The level of savings largely effects investment. All the people in an economy do not save for production. Their savings have to be mobilized for productive purposes. Then only it will lead to capital formation, which is very core of economic growth. Saving is the excess of income over-consumption. Thus, something out of current consumption is kept aside for the creation of capital or wealth. Investment is the process of applying such savings to the creation of specific forms of capital.



For example, if a person having a deposit of ₹ 1 crore in his bank account, devotes himself to the construction of a power house, and thereafter sells the power so generated. He has used his money in the creation of capital, and that capital yields services in the form of "power", which can be sold and reconverted into "money". This process is described as "investment".

It is quite important to understand the different motives of savings and investments. The difference lies in the key element that synchronized both savings and investments. According to classical theory approach, the key element is the interest rates. In other words, interest rates shall synchronize motivation to save with motivation to invest by assuming that both savings and investments are functions of interest rate. On the contrary, according to Keynesian theory, motivation to savings is mostly independent of interest rates and depends heavily on the level on income and behavioural and institutional factors.

With respect to investment, classical economists emphasize interest rate as the main determinant of investment. They argue that investment is highly interest rate elastic as investors are mainly concerned with the cost of borrowing. On the other hand, the Keynesian view accepts that investment may respond to movements in the interest rates, but emphasize that such a responsiveness of investments to interest rate is very low as compared to the role of economic conditions or state of confidence.

Savings and investment decisions are generally made by different groups and for different reasons and the markets do not quickly coordinate savings and investments.

1.6 OBJECTIVES OF INVESTMENTS

Investing is a wide spread practice and many have made their fortunes in the process. The starting point in this process is to determine the characteristics of the various investments and then matching them with the individuals need and preferences. All personal investing is designed in order to achieve certain objectives. These objectives may be tangible such as buying a car, house etc. and intangible objectives such as social status, security etc. Similarly, these objectives may be classified as financial or personal objectives. Financial objectives are safety, profitability, and liquidity. Personal or individual objectives may be related to personal characteristics of individuals such as family commitments, status,

dependents, educational requirements, income, consumption and provision for retirement etc.

The objectives can be broadly classified as under:

1) Main objectives

- a) Maximizing the return
- b) Minimizing the risk

2) Subsidiary objectives

- a) Maintaining liquidity
- b) Hedging against inflation
- c) Increasing safety
- d) Saving tax

1) Main objectives

a) Maximizing the return

Investors always expect a good rate of return from their investments. The rate of return could be defined as the total income the investor receives during the holding period, stated as a percentage of the purchasing price at the beginning of the holding period.

$$\text{Return} = \frac{\text{End period value} - \text{Beginning period value} + \text{Dividend}}{\text{Beginning period value}} \times 100$$

The rate of return is stated semi-annually or annually to help compare among the different investment alternatives. If it is a stock, the investor gets the dividend as well as the capital appreciation as returns. Market return of the stock indicates the price appreciation for the particular stock. If a particular share is bought in 2017 at ₹50 and sold in 2018 at ₹60,

and the dividend yield is ₹5, then the return would be calculated as shown below:

$$\text{Return} = \frac{\text{Capital appreciation and dividend}}{\text{Purchase price}} \times 100$$

$$\text{Return} = \frac{10 + 5}{50} \times 100 = 30\%$$

b) **Minimizing the risk**

The risk of holding securities is related to the probability of the actual return becoming less than the expected return. The word 'risk' is synonymous with the phrase 'variability of return'. Investment risk is just as important as measuring its expected rate of return because minimizing risk and maximizing the rate of return are interrelated objectives in investment management. An investment whose rate of return varies widely from one period to another is considered riskier than one whose return does not change much. Every investor likes to reduce the risk of his investment by proper combination of different securities. Investors, however, differ in their attitude towards risk. Basically, there are two types of risk. These are:

- **Systematic risk:** Variability in a securities total return that is directly associated with overall movement in the general market or economy is called as systematic risk. This risk cannot be avoided or eliminated by diversifying the investment. Normally diversification eliminates a part of the total risk and the left over after diversification is the non-diversifiable portion of the total risk or market risk. Virtually all securities have some systematic risk because systematic risk directly encompasses the interest rate, market and inflation risk. 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 stock will be

adversely affected and if it rises strongly, most stocks will appreciate in value. Clearly market risk is critical to all investors.

- ***Non-systematic risk:*** Variability in a security total return not related to overall market variability is called unsystematic (non market) 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.

2) Subsidiary objectives

a) Maintaining liquidity

Liquidity is an important aspect of any investment option as it determines the ease, time and cost involved in converting the investment into cash. While certain expenses like purchasing a house, children's education, etc., can be reasonably planned, emergencies such as medical expenses necessitate redemption of an investment prematurely. The marketability of investment provides it liquidity.

Liquidity depends upon marketing and trading facilities. If a portion of the investment could be converted into cash without much loss of time, it helps the investor to meet emergencies. Stocks are liquid only if they command a good market by providing adequate returns through dividends and capital appreciation. Stocks in the Sensex, Nifty and Nifty Junior are more liquid, whereas stocks in the 'Z' group are illiquid.

b) Hedging against inflation

The rate of return should ensure a cover against inflation to protect against a risk in prices and fall in the purchasing value of money. The rate of return should be higher than the rate of inflation, otherwise, the investor will experience loss in real terms. Growth stocks would appreciate in their values overtime and provide protection against inflation. The return thus earned should assure the safety of the principal amount, regular flow of

income and be a hedge against inflation.

c) Increasing safety

Each investment option is differently affected by different types of risk. Risk affects not only the return on investment but also return of the investment itself. The selected investment avenue should be under the legal and regulatory framework. If it is not under the legal framework, it will be difficult to represent grievances, if any. Approval of the law itself adds a flavor of safety. Though approved by law, the safety of the principal differs from one mode of investment to another. Investments made with the government, assure more safety than with a private party. From the safety point of view, investments can be ranked as follows: bank deposits followed by government bonds, UTI units, non-convertible debentures, convertible debentures, equity shares and lastly deposits with non-banking financial companies.

d) Saving tax

Tax is unavoidable. Different income levels and investment options attract different tax rates. The tax rate may vary with the period of investment for a specific option. Certain investments offer tax incentives. The investor tries to minimize the tax outflow and maximize tax returns.

1.7 IMPORTANCE OF INVESTMENTS

Investments are important due to increase in life expectancy of a person, planning for retirement income, high planning for additional income due to high rates of taxation and inflationary pressure in an economy, the expectation of continuous stable income in the form of regular dividends, interests and other receipts. The following discussion provides an explanation of these issues.

1. Longer Life Expectancy

Investment decisions have become significant because statistics show that life expectancy has increased with good medical care. People usually retire

between the ages of 60 and 65. The income shrinks at the time of retirement because the annual inflow of earnings from employment stops. If savings are invested at the right age and time, wealth increases if the principal sum is invested adequately in different saving schemes. The importance of investment decisions is enhanced by the fact that there is an increasing number of women working in the organizations. Men and women are responsible for planning their own investments during their working life so that after retirement they are able to have a stable income through balanced investments.

2. Taxation

Taxation introduces an element of compulsion in a person's savings. Every country has different tax saving schemes for bringing down taxation levels of a person. Since investments provide regular and stable income and also give relief in taxation, they are considered to be very important and useful if investments are made by proper planning.

3. Interest Rates

Interest rates vary according to the choice of investment outlet. Investors prefer safe investments with a good return. A risk-less security will bring low rates of return. Government securities are risk-free. However, market risk is high with high rates of return. Before allocations of any amount, the different types of securities must be analyzed to calculate their benefits and their disadvantages. The investor should make his portfolio with several kinds of investments. Stability of interest is as important as receiving a high rate of interest.

4. Income

Investment decisions are important due the general increase in employment opportunities and an understanding of investment channels for saving in India. New and well paying job opportunities are in sectors like software technology; business processing offices, call centres, exports, media, tourism, hospitality, manufacturing sector, banks, insurance and financial

services. The employment opportunities gave rise to increasing incomes. Higher income has increased a demand for investments and earnings above the regular income of people. Investment outlets can be selected to make investments for supporting the regular income. Awareness of financial assets and real assets has led to increase the ability and willingness of working people to save and invest their funds for return in their lean period hence, leading to the importance of investments.

5. Investment Outlets

The availability of a large number of investment outlets has made investments useful and important. Apart from putting aside savings in savings banks where interest is low, investors have the choice of a variety of instruments. The question to reason out is which is the most suitable channel? Which investment will give a balanced growth and stability of return? The investor in his choice of investment has the objective of a proper mix between high rate of return and stability of return to get the benefits of both types of investments.

1.8 SUMMARY

The "Investor" can be an individual, a government, a pension fund, or a corporation. This definition includes all types of investments, including investments by corporations in plant and equipment and investments by individuals in stocks, bonds, commodities, or real estate. In all cases, the investor is trading a known rupee amount today for some expected future stream of payments that will be greater than the current outlay.

An investment is the current commitment of rupee for a period of time in order to derive future payments that will compensate the investor for -the time the funds are committed, the expected rate of inflation, and the uncertainty of the future payments. Investment is the employment of funds with the aim of getting return on it. In general terms, investment means the use of money in the hope of making more money. In finance, investment

means the purchase of a financial product or other item of value with an expectation of favorable future returns.

The investment objectives may be classified as financial or personal objectives. Financial objectives are safety, profitability, and liquidity. Personal or individual objectives may be related to personal characteristics of individuals such as family commitments, status, dependents, educational requirements, income, consumption and provision for retirement etc.

1.9 GLOSSARY

- **Investment:** Investment means the purchase of a financial product or other item of value with an expectation of favorable future returns.
- **Business Investment:** Business investment refers to the money put in a private business. It is the amount with which a person starts his business or the additional amount which he puts in later on.
- **Economic Investment:** The concept of economic investment means addition to the capital stock of the society.
- **Financial Investment:** This is an allocation of monetary resources to assets that are expected to yield some gain or return over a given period of time. It means an exchange of financial claims such as shares and bonds, real estate, etc.
- **Systematic Risk:** Variability in a securities total return that is directly associated with overall movement in the general market or economy is known as systematic risk.
- **Non-systematic Risk:** Variability in a security total return not related to overall market variability is called unsystematic risk.

1.10 SELF ASSESSMENT QUESTIONS

1. Explain the term investment.

2. What do you mean by financial investment?

3. Define economic investment.

1.11 LESSON END EXERCISES

1. Define investment. Explain the objectives of investment.

1.12 SUGGESTED READINGS

1. Sourain Harry, Investment Management, Prentice Hall of India.
2. Maheshwari Yogesh, Investment Management, Prentice Hall of India.
3. Chandra Prasanna, Investment Analysis and Portfolio Management, McGraw Hill.

1.13 REFERENCES

1. Donald E. Fisher and Ronald J. Jordan, Securities Analysis and Portfolio Management, Prentice Hall, New Delhi.
2. V K Bhalla, Fundamentals of Investment Management, S. Chand
3. Punithavathy Pandian, Securities Analysis and Portfolio Management, Vikas Publishing House Pvt Ltd.
4. Shashi K. Gupta and Rosy Joshi, Securities Analysis and Portfolio Management (Investment Management), Kalyani Publishers.
5. <https://shodhganga.inflibnet.ac.in>, accessed on 5th April, 2019.
6. V. A. Avadhani, Investment Management, Himalaya Publishing House.

INVESTMENT AVENUES

STRUCTURE

- 2.1 Introduction
- 2.2 Objectives
- 2.3 Classifications of Investments
- 2.4 Modes of Investment/Investment Avenues
- 2.5 Features of Investment Avenues
- 2.6 Summary
- 2.7 Glossary
- 2.8 Self Assessment Questions
- 2.9 Lesson End Exercises
- 2.10 Suggested Readings
- 2.11 References

2.1 INTRODUCTION

Many types of investment avenues or channels for making investments are available. A sound investment programme can be constructed if the investor familiarizes himself with the various alternative investments available. Investment media are of several kinds - some are simple and

direct, others present complex problems of analysis and investigations. Some investments are appropriate for one type of investor and another may be suitable to another person. The ultimate objective of the investor is to derive a variety of investments that meet this preference for risk and expected return. The investor will select the portfolio, which will maximize his utility. Securities present a wide range of risk-free instruments to highly speculative shares and debentures. From this broad spectrum, the investor will have to select those securities that maximize his utility. The investor, in other words, has an optimization problem. He has to choose the security, which will maximize his expected returns subject to certain considerations. Every investor wants to maximise returns but risk taking capacity varies from investor to investor. It is not only about the construction of a portfolio that will promise the highest expected return but is also about the satisfaction of the need of the investor. For instance, one investor may face a situation when he requires extreme liquidity. He may also want safety of securities. Therefore, he will have to choose a security with low returns. Another investor would not mind high risk because he does not have financial problems but he would like a high return. Such an investor can put his savings in growth shares, as he is willing to accept the risk. Another important consideration is the temperament and psychology of the investor. Some investors are temperamentally suited to take risks; there are others who are not willing to invest in risky securities even if the return is high. One investor may prefer safe government bonds whereas another may be willing to invest in blue chip equity shares of the company.

2.2 OBJECTIVES

After going through this lesson, you will be able to understand:

- Types of investment avenues,
- Modes of investment.

2.3 CLASSIFICATIONS OF INVESTMENTS

There are different methods of the classification of the investment avenues. These are explained below:

1. Physical investments: Physical investments are tangible assets like motorcars, aeroplanes, ships, buildings, plant and machinery, etc. Some of the physical assets like machinery, equipment, etc. are useful for further production whereas some like gold and silver ornaments, motor cars, etc. are not useful for further production.

2. Financial investments: Financial assets are those which are used for consumption or for production of goods and services or for further creation of assets. Examples are shares, NSS certificates, bonds, etc.

3. Marketable and Non-marketable investments: Some investments which are listed on the stock exchanges are easily marketable and can be converted into cash in a short time e.g shares, bonds and other instruments issued by government or companies. Non- marketable investments like bank deposits, provident funds, insurance schemes etc. cannot be bought or sold in the open market in the stock exchanges and thus are difficult to be converted into cash immediately.

4. Transferable and Non-Transferable: Instruments like shares, bond can be transferred in the name of others or can be sold or exchanged for cash or kind, whereas some instruments like insurance certificates, NSCs, cannot be transferred.

5. Short term and Long term investments: Short term investments are capital investments for a period of not more than one year. For example, short term deposits, purchase of short-term savings certificates, etc. Long term investments can be understood as capital investments for a period of more than one year. In the practice of large investment companies, long- term investments are detailed as follows:

- a) up to 2 years,

- b) from 2 to 3 years,
- c) from 3 to 5 years,
- d) over 5 years.

6. Regional nature of investments: On the basis of regional classification, investment can be categorized as:

- **investment abroad:** investing in investment objects located outside the state borders of a given country.
- **domestic investments:** investments of funds in the objects located in the territory of a given country.
- **regional investments:** investment of funds within a specific region of the country.

The securities can be classified on the basis of the following factors also:

- Issuing authority
- Denomination
- Ownership and participation rights
- Term to maturity
- Income payments
- Degree of liquidity
- Tax treatment
- Individual or Composite Security
- Derivative of another security, etc.

2.4 MODES OF INVESTMENT/ INVESTMENT AVENUES

Investment avenues are the outlets of funds. A bewildering range of

investment alternatives are available, they fall into two broad categories, viz, financial assets and real assets. Financial assets are paper (or electronic) claim on some issuer such as the government or a corporate body. The important financial assets are equity shares, corporate debentures, government securities, deposit with banks, post office schemes, mutual fund shares, insurance policies, and derivative instruments. Real assets are represented by tangible assets like residential house, commercial property, agricultural farm, gold, precious stones, and art object. As the economy advances, the relative importance of financial assets tends to increase. Of course, by and large the two forms of investments are complementary and not competitive.

Many alternative investments exist. These can be categorized in many ways. The investment alternatives/avenues are given below in Figure 2.1

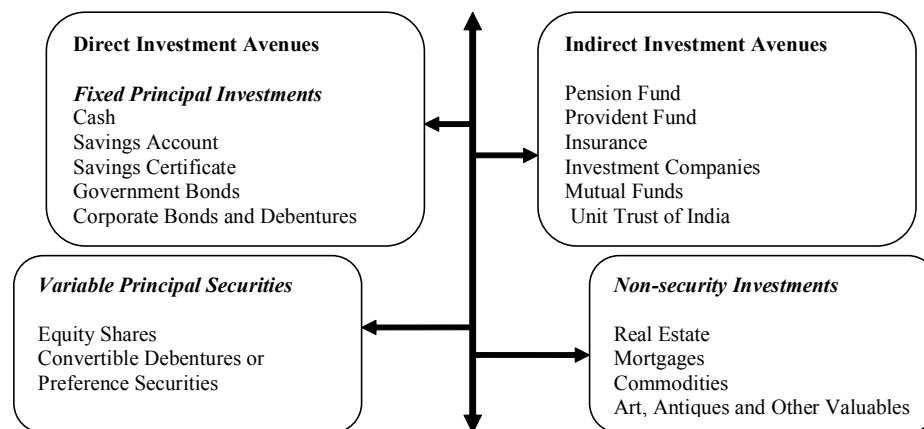


Figure 2.1: Investment Avenues

Investors are free to select any one or more alternative avenues depending upon their needs. All categories of investors are equally interested in safety, liquidity and reasonable return on the funds invested by them. In India, investment alternatives are continuously increasing along with new developments in the financial market. Investment is now possible in

corporate securities, public provident fund, mutual fund etc. Thus, wide varieties of investment avenues are now available to the investors. However, the investors should be very careful about their hard earned money. An investor can select the best avenue after studying the merits and demerits of the following investment alternatives:

- 1) Shares
- 2) Debentures and Bonds
- 3) Public Deposits
- 4) Bank Deposits
- 5) Post Office Savings
- 6) Public Provident Fund (PPF)
- 7) Money Market Instruments
- 8) Mutual Fund Schemes
- 9) Life Insurance Schemes
- 10) Real Estates
- 11) Gold-Silver
- 12) Derivative Instruments

For sensible investing, investors should be familiar with the characteristics and features of various investment alternatives. These are the various investment avenues; where individual investors can invest their hard earned money.

1) Shares

Share means a share in the share capital of a company. A company is a business organization. The shares which are issued by companies are of two types i.e. Equity shares and Preference shares. It is registered as

per Companies Act, 1956. Every company has share capital. The share capital of a company is divided into number of equal parts and each of such part is known as a 'share'. A public limited company has to complete three stages. The first is registration. The second is raising capital and the third is commencement of business. A public limited company issues shares to the public for raising capital. The first public issue is known as Initial Public Offerings (IPO). The shares can be issued at par, premium or discount. In order to issue shares a prospectus is prepared and has to be approved from Securities and Exchange Board of India (SEBI). These shares are listed with the stock exchange so that the shareholders can sale these shares in the market. The company has to make an application to the stock exchange for listing of shares.

The shares are also called as "stock". Nowadays, shares are issued in DEMAT form. It means shares are credited to a separate account of the applicant opened with depository participant. This is also called paperless security because shares are not issued in physical form. Demat account is compulsory when the shares are issued through Book Building Process. Book Building is a method of public issue of shares by a company in which the price is determined by the investors subject to a price band or range of prices given by the company.

Investment in shares is more risky because the share prices go on changing day by day. Today, the market is more 'volatile' means more fluctuating. The share prices may go up or go down. If the stock market falls the share prices will go down and the investor will lose money in the investment However, the return on investment in shares is higher. The return on investment in shares is in the form of regular dividend, capital appreciation, bonus and rights. There is also liquidity in this kind of investment. The shares can be sold in stock market and money can be collected within 3 to 4 days. Investment in shares is not a tax saving investment.

Companies (Private and Public) need capital either to increase their

productivity or to increase their market reach or to diversify or to purchase latest modern equipments. Companies go in for IPO and if they have already gone for IPO then they go for FPO. The only thing they do in either IPO or FPO is to sell the shares or debentures to investors (the term investor here represents retail investors, financial institutions, government, high net worth individuals, banks etc).

There are two ways in which investment in equities can be made:

- i. Through the primary market (by applying for shares that are offered to the public)
- ii. Through the secondary market (by buying shares that are listed on the stock exchanges)

2) Debentures and Bonds

A debenture is a document issued by a company as an evidence of a debt. It is a certificate issued by a company under its seal, acknowledging a debt due by it to its holders. The term debenture includes debenture stock, bonds and any other securities issued by a company. The Companies Act provides that a company can raise loans from the public by issue of debentures. The debenture holder becomes the creditor of the company. The debenture holder gets interest on the debenture which is fixed at the time of issue. The debentures are also issued to the public just like issue of shares. However, there is a need for credit rating before issue of debentures or Bonds. Bonds are issued by government companies and the debentures are issued by the Private sector companies. Therefore, bonds may be tax saving but debentures are not tax saving investment.

The companies use owned capital as well as borrowed capital in their capital structure as compared to equity shares because debenture holders have no say in the management of the company and interest on debentures is allowed as a business expense for tax purposes. The debentures are considered as secured loan. There is no much risk in the investment in

debentures as compared to shares. The return on debentures is also reasonable and stable. The debentures are also listed with the stock exchanges and can be traded in the stock market. However, the prices of debentures are not much volatile.

The debenture, being a loan, is redeemable at a certain period or maturity, otherwise it can be irredeemable. The debentures can be convertible or non-convertible. If a debenture is convertible into shares at maturity, it is called convertible. The convertible debentures may be partly convertible or fully convertible. Convertible debentures became popular in the last decade. The method of raising long term funds through debentures is not much popular in India. A very few companies have issued debentures and very few companies debentures or bonds are traded in the stock market.

Bonds refer to debt instruments bearing interest on maturity. In simple terms, organizations may borrow funds by issuing debt securities named bonds, having a fixed maturity period (more than one year) and pay a specified rate of interest (coupon rate) on the principal amount to the holders. Bonds have a maturity period of more than one year which differentiates it from other debt securities like commercial papers, treasury bills and other money market instruments.

Debt instrument represents a contract whereby one party lends money to another on pre-determined terms with regards to rate and periodicity of interest, repayment of principal amount by the borrower to the lender. In Indian securities markets, the term 'bond' is used for debt instruments issued by the Central and State governments and Public sector organizations and the term 'debenture' is used for instruments issued by Private corporate sector.

3) Public Deposits

The Companies Act provides that companies can accept deposits directly from the public. This mode of raising funds has become popular in the

1990s, because the bank credit had become costlier. As per provisions of the Companies Act, a company cannot accept deposits for a period of less than 6 months and more than 36 months. However, deposits up to 10% of the paid up capital and free reserves can be accepted for a minimum period of three months for meeting short-term requirements. Again, a company cannot accept or renew deposits in excess of 35% of its paid up capital and free reserves.

In order to meet, temporary financial needs, companies accept deposits from the investors. Such deposits are called public deposits or company fixed deposits and are popular particularly among the middle class investors. Almost all companies collect crores of rupees through such deposits.

On maturity, the depositor has to return the deposit receipt (duly discharged) to the company and the company pays back the deposit amount. The depositor can renew his deposit for further period of one to three years at his option. Many companies are now supplementing their fixed deposit scheme by cumulative time deposit scheme under which the deposited amount along with interest is paid back in lump sum on maturity. Companies, now, appoint managers (collecting agents) to their fixed deposit schemes. The managers are usually reputed share brokers. They help companies in collecting the deposits and also look after the administrative work in connection with such deposits.

At present, along with private sector companies, even public sector companies and public utilities also accept such deposits in order to meet their working capital needs. This source is popular and used extensively by the companies.

The popularity of public deposits is due to the following advantages:

- a) Public deposits are available easily and quickly, provided the company enjoys public confidence.

- b) This method of financing is simple and cheaper than obtaining loans from commercial banks. This makes public deposits attractive and agreeable to companies and also to depositors.
- c) Public deposits enable the companies to trade on equity and pay higher dividends on equity shares.
- d) The depositors receive interest on their deposits. This rate is higher than the interest rate offered by banks. The interest is also paid regularly by reputed companies.
- e) The formalities to be completed for depositing money are easy and simple. There is no deduction of tax at source where interest does not exceed a particular limit.
- f) The risk involved is also limited particularly when money is deposited with a reputed company.

4) Bank Deposits

Investment of surplus money in bank deposits is quite popular among the investors (Particularly among salaried people). Banks (Co-operative and Commercial) collect working capital for their business through deposits called bank deposits. The deposits are given by the customers for specific period and the bank pays interest on them. In India, all types of banks accept deposits by offering interest. The deposits can be accepted from individuals, institutions and even business enterprises, the business and profitability of banks depend on deposit collection. For depositing money in the bank, an investor/depositor has to open an account in a bank.

Different types of deposit accounts are:

- i. Current Account
- ii. Savings Bank Account
- iii. Fixed Deposit Account, and

iv. Recurring Deposit Account

The rate of interest for Fixed Deposits (FD) differs from bank to bank unlike previously when the same were regulated by RBI and all banks used to have the same interest rate structure. The present trends indicate that private sector and foreign banks offer higher rate of interest. Usually a bank FD is paid in lump sum on the date of maturity. However, some banks have facility to pay interest at the end of every quarter. If one desires to get interest paid every month, then the interest paid will be at a discounted rate. The Interest payable on Fixed Deposit can also be transferred to Savings Bank or Current Account of the customer.

NRIs and NREs can keep money in nationalised and other banks as savings or fixed deposits. In the case of NRI and NRE Account, the bank interest is not taxable. Some banks offer one percent higher interest rate on NRI/NRE accounts. Important features of bank deposit account are as follows:

- a) Any individual (of major age) can open a bank account by following simple procedure. An account holder is treated as bank customer and all normal banking facilities and services are offered to him. A bank account may be single or Joint Nomination facility is also given to account holders.
- b) Deposits in the banks are safe and secured. They can be withdrawn as per the terms and conditions of the bank account. The benefit of deposit insurance scheme is also available to bank depositors.
- c) Money can be deposited at any time in the case of current and savings bank accounts. In the case of fixed deposit account, it is deposited only once and money is deposited every month in the case of recurring deposit account.
- d) Interest is paid on bank deposits (except current deposits). The interest rate is decided by the RBI from time to time as per the

money market situation. The cooperative banks offer nearly one per cent higher interest rate as compared to commercial banks. Even senior citizens are offered a little higher interest rate (normally one per cent).

- e) Interest is paid on quarterly or six monthly basis. However, if the deposit period is less than 90 days, the interest is paid on maturity,
- f) Bank deposits have high liquidity. Banks even give loan on the security of fixed deposit receipts.

A. Advantages of Bank Deposits:

- a). Investment is reasonably safe and secured with adequate liquidity.
- b). Banks offer reasonable return on the investment made and that too in a regular manner.
- c). Banks offer loan facility against the investments made.
- d). Procedures and formalities involved in bank investment are limited, simple and quick.
- e). Banks offer various services and facilities to their customers.

B. Limitations of Bank Deposits:

- a). The rate of return in the case of bank investment is low as compared to other avenues of investment.
- b). The return on investment is not adequate even to give protection against the present inflation rate in the country.
- c). Capital appreciation is not possible in bank investment.

5) Post Office Savings

Post office operates as a financial institution. It collects small savings of the people through savings bank accounts facility. In addition, time

deposits and government loans are also collected through post offices. Certain government securities such as Kisan Vikas Patras, National Saving Certificates, etc. are sold through post offices. New schemes are regularly introduced by the Postal Department in order to collect savings of the people. This includes recurring deposits, monthly income scheme, PPF and so on. Postal savings bank schemes were popular in India for a long period as banking facilities were limited and were available mainly in the urban areas upto 1950s. The popularity of postal savings schemes is now reducing due to the growth of banking and other investment facilities throughout the country. However, even at present, small investors use postal savings facilities for investing their savings/ surplus money for short term/long term due to certain benefits like stable return, security and safety of investment and loan facility against postal deposits. Even tax benefit is one attraction for investment in post office. Investment in postal schemes is as good as giving money to the government for economic development along with reasonable return and tax benefits.

Postal savings schemes include the following:

- (i) Savings Bank Account,
- (ii) Monthly Income Scheme,
- (iii) Recurring Deposits,
- (iv) Time Deposits.

Thus, post office provides various schemes for safe investment of surplus funds. However, the return on investment is rather low. The interest rates are reduced considerably in recent years. Such trend of lowering of interest rate is applicable to all types of savings schemes in India. The postal rules and procedures are lengthy. Moreover, quick service and personal attention are not given due to inadequate staff, use of old methods and procedures, etc.

6) Public Provident Fund (PPF)

PPF is one attractive tax sheltered investment scheme for middle class

and salaried persons. It is even useful to businessmen and higher income earning people. The PPF scheme is very popular among the marginal income tax payers. The scheme was introduced in 1969. The features of PPF scheme are as given below:

- a. PPF account may be opened at any branch of the SBI or its subsidiaries or at Specified branches of nationalised banks. PPF account can be opened even in a post office on the same terms and conditions. Such account can be opened by any individual.
- b. Only one account can be opened in the name of a person.
- c. The PPF account is for a period of 15 years but can be extended for more years (five years at a time) at the desire of the depositor.
- d. The depositor is expected to make a minimum deposit of Rs.500 every year. In addition, money can be deposited once in every month. (A minimum deposit in a year is Rs. 500 and maximum is Rs. 70,000)
- e. The PPF account is not transferable, but nomination facility is available.
- f. Loan is admissible from the third year. Loan amount is limited to 25% of at the end of two years preceding.
- g. Fresh loan is not allowed when previous loan or interest thereof is outstanding.
- h. Interest is charged at the rate of 1% if prepaid within 36 months and at 6% on the outstanding loan after 36 months.
- i. Withdrawal is permissible from seventh financial year from the year of opening, limited to one in a financial year.
- j. Amount of withdrawal is limited to 50 % of balance at the end of the fourth preceding year less amount of outstanding loan or 50%

of balance at the end of immediate preceding year of withdrawal less amount of outstanding loan, if any whichever is less.

- k. The deposits in a PPF account are qualified for tax exemption under the Income-tax Act (Section 80C). The balance amount in a PPF account is fully exempted from the Wealth Tax.
- l. A compound interest at 8% per annum is paid in the case of PPF account with effect from 1-3-2003. The interest accumulated in the PPF account is also tax free.
- m. On maturity, the credit balance in the PPF account can be withdrawn. However, at the option of the subscriber, the account can be continued for three successive block periods of five years each, with or without deposits. During the extensions the account holder can make one withdrawals per year, subject to the condition that the total amount withdrawn during a 5- year block does not exceed 60 percent of the balance to the credit of the account at the beginning.

A. Advantages of PPF Account:

- a) Reasonably attractive interest rate even when it is reduced by one per cent with effect from 1-3-2003.
- b) Income from PPF A/c (interest payment) is exempted from income tax and wealth tax.
- c) Tax exemption on investment made in PPF.
- d) Withdrawal facility at certain intervals which also avoids frequent withdrawals.
- e) It is useful as a provision for old age, or as provision for certain expenses such as marriage of a son/daughter, purchase of flat, etc.
- f) PPF account is exempted from attachment from the court. This gives

security to family members/dependents.

B. Limitations of PPF Account:

- a) Low liquidity as one withdrawal is allowed in a year.
- b) The PPF account is for a period of 15 years which is a very long period.

In spite of limitations, PPF is an attractive avenue for investment in the case of Tax payers/Salaried class/Businessmen/Professionals.

7) Money Market Instruments

Money market is a centre in which financial institutions join together for the purpose of dealing in financial or monetary assets, which may be of short term maturity. The short term generally means a period up to one year and the term near substitutes to money denotes any financial asset which may be quickly converted into money with minimum transaction cost.

Thus, money market is a market for short term financial instruments, maturity period of which is less than a year. The deals are over the counter. The numbers of players in the market are limited. It is regulated by Reserve Bank of India. Money Market Instruments where Investors can invest are Treasury bills, Certificate of Deposit, Commercial Paper, Repurchase Options (Repo), Money Market Mutual Funds (MMMFs).

8) Mutual Funds Schemes

Mutual fund is a financial intermediary which collects savings of the people for secured and profitable investment. The main function of mutual fund is to mobilize the savings of the general public and invest them in stock market securities. The entire income of mutual fund is distributed among the investors in proportion to their investments- Expenses for managing the fund are charged to the fund, like mutual funds in India are registered as trusts under the Indian Trust Act. The trustees are appointed and they

look after the management of the trust. They decide the investment policy and give the benefit of professional investment through the mutual funds. These funds are managed by financial and professional experts. The savings collected from small investors are invested in a safe, secured and profitable manner. Therefore, it is said that mutual fund is a boon to the small investors.

UTI had virtual monopoly in the field of mutual fund from 1964 to 1987. After 1987, State Bank of India, Bank of India and other banks started their mutual funds. After 1991 (due to economic liberalisation) many financial institutions started their mutual funds (e.g. Kothari Pioneer Fund, CRB Capital Markets and so on). In brief, along with UTI, many more mutual funds are now started for the benefit of small investors. They are given recognition by RBI/SEBI. Mutual funds, in general, are popular among the investing class. A mutual fund is formed by the coming together of a number of investors who hand over their surplus funds to a professional organization to manage their funds.

The main function of mutual fund is to mobilize the savings of the general public and invest them in stock market securities. At present, there is diversion of savings of the middle class investors from banks to mutual funds. The government has thrown the field open to the private sector and joint sector mutual funds. The performance of mutual funds is showing significant growth during 1998-99 and 99- 2000. During 2000-01, the public sector and private sector mutual funds (excluding UTI) mobilized resource worth Rs. 11,340 crores as against Rs. 15,400 crores during 1999-00. More than 43 mutual funds are operating in India.

Mutual funds have introduced many schemes for attracting investors and also for collecting their savings. Such schemes include open ended schemes which are open to the investors for all the time. They can buy or sell the units whenever they desire. Such schemes are Regular Income Schemes, Recurring Income Schemes, Cumulative Growth Schemes, etc. There are close-ended schemes in which there is a lock in period of

three to five years and investors cannot buy or sell the investment during that period. Such schemes are Dhanshree 1989 of LIC mutual fund, Magnum Regular Income Scheme 1987 of SBI mutual fund.

Basically, there are four schemes by which mutual funds collect money from the investors such as (1) Growth Schemes (2) Income Schemes (3) Balanced Schemes (4) Tax Saving Schemes. In case of growth schemes the investment grows according to the time and in case of income schemes the investors get regular income from the investments. Balanced schemes are the combination of both these schemes. Tax saving scheme is designed to save income tax while investing in the market. There are different types of investors and their objectives are also different. Therefore, mutual funds have started different schemes in order to suit the objectives of these investors.

Mutual funds are popular investments because of low risk and high returns. There is liquidity in case of open-ended schemes and some of the schemes provide tax savings. There are income schemes which provide regular income to the investors.

The popularity of mutual funds is fast growing in India. The number of such funds is increasing and is getting popular support from the investing class. Investors prefer to give their savings to mutual funds for the safety of their funds and also for securing the benefits of diversified investment. These funds take appropriate investment decisions and handover the benefits of profitable investment to the investors.

Now a days, investors are creating their mutual fund portfolios on the basis of the nature of mutual funds i.e., instead of categorizing the mutual funds in different types (as given above) investors mainly focus on the following categories which are simple to understand and the schemes itself explains the risk factor associated with the particular category.

a. Equity mutual funds: These funds invest a maximum part of their corpus into equities holdings. The structure of the fund may vary for

different schemes. The Equity Funds are sub-classified into following categories depending upon their investment objective.

- i. Diversified Equity Funds (Large Cap)
- ii. Mid-Cap Funds
- iii. Small Cap Funds
- iv. Sector Specific Funds
- v. Tax Savings Funds (ELSS)
- vi. Thematic Funds

Equity investments are meant for a longer time horizon, thus Equity funds rank high on the risk-return matrix.

b. Debt mutual funds: The objective of these funds is to invest in debt papers. Government authorities, private companies, banks and financial institutions are some of the major issuers of debt papers. By investing in debt instruments, these funds ensure low risk and provide stable income to the investors. Debt funds are further classified as:

- i. Gilt Funds
- ii. Income Funds
- iii. MIPs
- iv. Short Term Plans
- v. Liquid Funds

c. Balanced funds: As the name suggest, they are a mix of both equity and debt funds. They invest in both equities and fixed income securities, which are in line with pre-defined investment objective of the scheme. Equity part provides growth and the debt part provides stability in returns.

9) Life Insurance Schemes

Nothing is more important to a person than the feeling that their family is financially secure - at all times. "Life insurance is a contract whereby the insurer, in consideration of a premium paid either in a lump sum or in periodical installments undertakes to pay an annuity or certain sum of money either on the death of the insured or on the expiry of a certain number of years, whichever is earlier."

There are 23 life insurance companies in India. Life Insurance Corporation of India (LIC) is the only Public Sector insurance company, the rest all being private insurance players. Most of the private players have tied up with international insurance biggies for their life insurance foray. The life insurance sector in India has seen a lot of action in the last decade with a lot of new players entering the market. The distribution system for life insurance products involves various intermediaries between the insurer and the insured. The different distribution channels used by insurance companies are, Agents, Brokers, Corporate Agents, Bancassurance. Private insurance companies have been exploring the various distribution channels available instead of concentrating on individual agents.

Insurance Regulatory and Development Authority (IRDA) is the regulatory arm of the government of India which oversees the proper functioning of the insurance sector.

Life insurance is a kind of investment avenue which provides family protection to the investor as well as return on investment in the form of yearly bonus on the policy. The return on investment is reasonably low i.e. 6% p.a. because of risk coverage and tax incentives. The amount of premium paid on a life insurance policy is exempted from taxable income under section 80-C of the Income-tax Act. Though, the maturity period is longer the insurance policy can be surrendered or loan can be availed on the policy, therefore there is some sort of liquidity in this investment. Thus, investment in life insurance is a profitable investment and there is

no risk in this investment.

Life insurance covers the risk that exists in one's life. These risks may arise due to accident, illness or natural causes like fire, flood, earthquake etc. Life insurance aims to protect the family of the life insured so that they may not suffer from financial consequences on the death or disability of the insured person. Life insurance needs to be a mandatory part of every person's life. Life insurance covers three contingencies:

- a. Contingency of death
- b. Contingency of old age
- c. Contingency of disability and critical illness.

The three major concerns of any person are: Dying too early, living too long, and living with disability. Besides, there are other concerns about taking care of children and their future as well as about creating wealth that most individuals think. Life insurance products are generally designed to address such needs. With these situations in mind, life insurance products also provide for risk cover, investment, health care and tax saving.

Life insurance is usually taken by the earning member(s) of the family to ensure that in case of his/her death, and hence the source of income ceasing to exist, the dependent family members would have a lump-sum amount to fall back on. So by paying a small amount every year the earning member of the family can ensure that the future of their loved ones is absolutely secure from a financial point of view. So in the event of death of an insured person, the nominee of the policy would receive an amount called the sum assured which can then be used effectively to plan for their future.

Broadly one can classify their requirements into protecting the family when they die or planning for children's careers or retirement. Whether it is protection or planning needs there are suitable insurance policies

that suffice the need appropriately. For planning needs Endowment, Pension or ULIP will be a good choice based on the risk one can afford to take. For protection needs the traditional Term or whole life policies are must.

The common types of insurance policies are as follows:

- i. Term Insurance
- ii. Whole Life Insurance
- iii. Endowment Insurance
- iv. Money Back Insurance
- v. Annuities (Pension Plans / Retirement Insurance)
- vi. Unit-Linked Insurance Plan (ULIPs)
- vii. Child Life Insurance Policy

10) Real Estates

Investment in real estate includes properties like building, industrial land, plantations, farm houses, agricultural land near cities and flats or houses. Such properties attract the attention of affluent investors. It is an attractive, as well as profitable investment avenue today. A residential building represents the most attractive real estate property for majority of investors. The prices of real estate are increasing day by day. The land is limited on the earth but the population has been increasing. As the demand increases but the supply of land is limited, the prices tend to increase. Therefore, it is attractive investment which generates higher return during a short period of time.

Types of properties are: Residential property, Commercial property, N.A. Plots and Agricultural land. Ownership of a residential house provides owned accommodation to the family and gives satisfaction to the family members. It acts as one useful family asset with saleable value. It is a

long term investment. The government provides tax incentives to the individuals who buy the residential house. The interest paid on borrowings for purchase of house is exempted from income tax. The repayment of principal amount of home loan during a year is also allowed as tax deduction u/s 80C from income tax up to an amount of Rs.150000. Thus, the investment in residential house is also treated as tax saving investment.

Investment in real estate provides capital appreciation of residential buildings, urban land and flats. It gives reasonable return on investment. There is a low risk but there is no liquidity. There are chances of capital appreciation also. The property can also be used as security for raising loans. There is a tax saving in case of residential house. It is a long term investment. There is a quick appreciation in the value of assets.

There is a low liquidity in case of investment in real estates. The risk in the investment is also more as compared to investment in banks and mutual funds. The government rules and regulations regarding buying and selling of the property are troublesome in case of real estates. Stamp duty, registration and legal formalities are complicated and there is a chance of cheating at the time of buying or selling. The amount of investment is huge and therefore the benefits of diversification of investment are not available. In real estate profitability is available at the cost of liquidity. The liquidity is low.

11) Gold and Silver

Gold and silver are the precious objects. Everybody likes gold and hence requires gold or silver. These two precious metals are used for making ornaments and also for investment of surplus funds over a long period of time. In India, gold is an obsession deep-rooted in mythology, religious rites and it is very psychological. In every family at least a little quantity of gold and silver is available. Some people buy these metals as an investment. The prices of gold and silver are also increasing continuously. The prices also depend upon demand and supply of gold. The supply

has been increasing at low speed. However, the demand has been increasing very fast. Therefore, the prices also go on increasing. People use gold and silver at the time of marriages and other festivals. Apart from gold and silver, precious stones such as diamonds, rubies and pearls are also appealing for long term investment particularly among rich people.

Gold and silver are useful as a store of wealth. They act as secret assets. The investment is highly liquid, which can be sold at any time. The market prices are continuously increasing. Therefore, the return on investment is also increasing. The investment is also safe and secured. There is a high degree of prestige value for gold and silver in the society. The benefit of capital appreciation is also available.

The investment in gold and silver is risky due to the chances of theft. It may also cause an injury to the life of the investor. It is a long term investment. Regular income from the investment is not available. This investment is not available for capital formation and economic growth of the country. The traditional attraction for gold and silver is gradually reducing. The import of gold is now free. There is no tax saving on this investment.

Gold and silver, the two most widely held precious metals, appeal to almost all kinds of investors for the following reasons.

- i. Historically, they have been good hedges against inflation.
- ii. They are highly liquid with very low trading commissions.
- iii. They are aesthetically attractive.
- iv. Returns on gold, in general, have been negatively correlated with returns on stocks. So, gold provides a good diversification opportunity.

As against these advantages, investment in gold and silver has the following disadvantages:

- i. They do not provide regular current income.
- ii. There is no tax advantage associated with them.
- iii. There may be a possibility of being cheated.

Investment in gold and silver can be in physical or nonphysical forms. The physical form includes bullion, coins, and jewellery. Gold or silver bars, called bullion, come in a wide range of sizes. Jewellery made of gold or silver may provide aesthetic satisfaction but is not a good form of investment because of high making charges which may not be recovered.

12) Derivative Instruments

A derivative is a product whose value is derived from the value of an underlying asset, index or reference rate. The underlying asset can be equity, forex, commodity or any other asset. If the settlement price of a derivative is based on the stock price of a stock, for e.g., Tata Steel which frequently changes on a daily basis, then the derivative risks will also change on a daily basis. This means that derivative risks and positions must be monitored constantly. A derivative security can be defined as a security whose value depends on the values of other underlying variables. Very often, the variables underlying the derivative securities are the prices of traded securities.

Derivatives are of four types, (1) Forward (2) Futures (3) Options and (4) Swaps. From the point of view of investors and portfolio managers, futures and options are the two most important financial derivatives. They are used for hedging and speculation. Trading in these derivatives has begun in India. The difference between a share and derivative is that shares/securities are an asset while derivative instrument is a contract.

2.5 FEATURES OF INVESTMENT AVENUES

While investing their money, the investors must have some definite ideas

regarding the features their investments must possess. These features must be consistent with the objectives, preferences and constraints of the investors. These investments must also offer optimum facilities and advantages to investors as far as the circumstances permit. The investors, generally, form their investment policies on the basis of the following features:

1. Safety of Principal

The investor, to be certain of the safety of principal, should carefully review the economic and industry trends before choosing the types of investment. To ensure safety of principal, the investor should consider diversification of assets. Adequate diversification involves mixing investment commitments by industry, geographically, by management, by financial type and by maturities. A proper combination of these factors would reduce the risk of loss. Diversification in proper investment programmes must be reasonably accomplished.

2. Liquidity

An investor requires a minimum amount of liquidity in his investments to meet emergencies. Liquidity will be ensured if the investor buys a proportion of readily saleable securities out of his total portfolio. He may, therefore, keep a small proportion of cash, fixed deposits and units which can be immediately made liquid. Investments like stocks and property or real estate cannot ensure immediate liquidity.

3. Income Stability

Regularity of income at a consistent rate is necessary in any investment pattern. Not only stability, it is also important to see that income is adequate after taxes. It is possible to find out some good securities which pay practically all their earnings in dividends.

4. Appreciation and Purchasing Power Stability

Investors should balance their portfolios to fight against any purchasing power instability. Investors should judge price level inflation, explore the possibility of gain and loss in the investments available to them, limitations of personal and family considerations. The investors should also try and forecast which securities will appreciate. A purchase of property at the right time will lead to appreciation in time. Growth stock will also appreciate over time. These, however, should be done through analysis and not as speculation or gamble.

5. Legality and Freedom from Care

All investments should be approved by law. Law relating to minors, estates, trusts, shares and insurance should be studied. Illegal securities will bring out many problems for the investors. One way of being free from care is to invest in securities like Unit Trust of India, Life Insurance Corporation, mutual funds or savings certificates. The management of securities is then left to the care of the Trust who diversifies the investments according to safety, stability and liquidity with the consideration of their investment policy. The identity of legal securities and investments in such securities will also help the investor in avoiding many problems.

6. Tangibility

Intangible securities have many times lost their value due to price level inflation, confiscatory laws or social collapse. Some investors prefer to keep a part of their wealth invested in tangible properties like building, machinery and land. It may, however, be considered that tangible property does not yield an income apart from the direct satisfaction of possession or property.

Table 2.1: Features of Investment Avenues

| Particulars | Risk | Return/ Current Yield | Capital Appropriation | Liquidity/ Marketability | Tax Benefit |
|-------------------------|-------------|----------------------------------|----------------------------------|-------------------------------------|----------------------------|
| Equity Shares | High | Low | High | High | High |
| Debentures | Low | High | Very low | Very low | Nil |
| Bank Deposit | Low | Low | Nil | High | Nil |
| Public Provident Fund | Nil | Nil | Low | Low | Moderate |
| Life Insurance Policies | Nil | Nil | Low | Low | Moderate |
| Real Estate | Low | Low | High in Long term | Moderate | Changes according to rules |
| Gold and Silver | Low | Nil | High in long term | Moderate | Nil |

2.6 SUMMARY

Investment avenues are the outlets of funds. Many types of investment avenues or channels for making investments are available. A sound investment programme can be constructed if the investor familiarizes himself with the various alternative investments available. A bewildering range of investment alternatives fall into two broad categories, viz, financial assets and real assets. Financial assets are paper (or electronic) claim on some issuer such as the government or a corporate body. The important financial assets are equity shares, corporate debentures, government securities, deposit with banks, post office schemes, mutual fund shares, insurance policies, and derivative instruments. Real assets are represented by tangible assets like residential house, commercial property, agricultural farm, gold, precious stones, and art object. As the economy advances, the relative importance of financial assets tends to increase. Of course, by and large the two forms of investments are complementary and not competitive.

2.7 GLOSSARY

- **Share:** The share capital of a company is divided into number of equal parts and each of such part is known as a 'share'.
- **Debenture:** A debenture is a document issued by a company as an evidence of a debt. It is a certificate issued by a company under its seal, acknowledging a debt due by it to its holders.
- **Money market:** Money market is a centre in which financial institutions join together for the purpose of dealing in financial or monetary assets, which may be of short term maturity. The short term generally means a period upto one year.
- **Mutual fund:** Mutual fund is a financial intermediary which collects savings of the people for secured and profitable investment.
- **Derivative:** A derivative is a product whose value is derived from the value of an underlying asset, index or reference rate. The underlying asset can be equity, forex, commodity or any other asset.

2.8 SELF ASSESSMENT QUESTIONS

1. What are the different modes of investment?

2. What do you mean by derivative instruments?

2.9 LESSON END EXERCISES

1. Explain different types of investments.
2. What is the meaning of investment? Discuss the different channels or alternatives available to an investor for making investments.

2.10 SUGGESTED READINGS

1. Sourain Harry, Investment Management, Prentice Hall of India.
2. Maheshwari Yogesh, Investment Management, Prentice Hall of India.
3. Chandra Prasanna, Investment Analysis and Portfolio Management, McGraw Hill.

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CONCEPT OF INVESTMENT MANAGEMENT**STRUCTURE**

- 3.1 Introduction
- 3.2 Objectives
- 3.3 Concept of Investment Management
- 3.4 Scope of Investment Management
- 3.5 Factors Affecting Investment Decisions
- 3.6 Summary
- 3.7 Glossary
- 3.8 Self Assessment Questions
- 3.9 Lesson End Exercises
- 3.10 Suggested Readings
- 3.11 References

3.1 INTRODUCTION

Investing in securities such as shares, debentures and bonds is profitable as well as exciting. It is indeed rewarding, but involves a great deal of risk and calls for scientific knowledge as well as artistic skill. In such investments, both rational as well as emotional responses are involved.

Investing in financial securities is now considered to be one of the best avenues for investing one's savings while it is acknowledged to be one of the most risky avenues of investment.

It is rare to find investors investing their entire savings in a single security. Instead, they tend to invest in a group of securities. Such a group of securities is called a portfolio. Creation of a portfolio helps to reduce risk without sacrificing returns. Investment management deals with the analysis of individual securities as well as the theory and practice of optimally combining securities into portfolio. An investor who understands the fundamental principles and analytical aspects of portfolio management has a better chance of success.

3.2 OBJECTIVES

After going through this lesson, you will be able to:

Explain the meaning of investment management

Understand the scope of investment management

Identify the factors affecting investment decisions

3.3 CONCEPT OF INVESTMENT MANAGEMENT

An investor considering investment in securities is faced with the problem of choosing from among a large number of securities. His choice depends upon the risk-return characteristics of individual securities. He would attempt to choose the most desirable securities and like to allocate his funds over this group of securities. Again he is faced with the problem of deciding which securities to hold and how much to invest in each. The investor faces an infinite number of possible portfolios or group of securities. The risk and return characteristics of portfolios differ from those of individual securities combining to form a portfolio. The investor tries to choose the optimal portfolio taking into consideration the risk-return characteristics of all possible portfolios.

As the economic and financial environment keeps on changing, the risk-return characteristics of individual securities as well as portfolios also change. This calls for periodic review and revision of investment portfolios of investors.

An investor invests his funds in a portfolio expecting to get a good return consistent with the risk that he has to bear. The return realized from the portfolio has to be measured and the performance of the portfolio has to be evaluated. It is evident that rational investment activity involves creation of an investment portfolio.

Investment management, also known as portfolio management or money management, is the process of managing money. It is concerned with efficient management of investment in securities. Investment management is growing rapidly serving a broad array of investors- both individual and institutions with investment portfolio ranging in asset size from few thousands to crores of rupees.

Portfolio: Portfolio is combination of securities. It is a list of securities that belongs to an individual investor or group of investors having certain goals. Although the securities are interrelated, the portfolio in itself is a distinct entity with measurable characteristics and is not just the sum of its component parts.

Management: Management consists of all activities concerned with trying to accomplish the particular goals of the portfolio in an expedient manner.

Portfolio management, thus, basically involves:

- i) A proper investment decision making regarding what to buy and sell.
- ii) Proper money management in terms of investment in a basket of assets so as to satisfy the asset preference of investors.
- iii) Reduce the risk and maximize the returns.

"Portfolio management may be thought of as a decision making process which has to do with choosing and revising portfolio of securities so as to satisfy investor objectives."

Investment or Portfolio management comprises of all the processes involved in the creation and maintenance of an investment portfolio. It deals with security analysis, portfolio analysis, portfolio selection, portfolio revision and portfolio evaluation. It also makes use of analytical techniques of analysis and conceptual theories regarding rational allocation of funds. Portfolio management is a complex process which tries to make investment activity more rewarding and less risky.

Hence, investment portfolio management is a process encompassing many activities aimed at optimizing the investment of one's funds.

3.4 SCOPE OF INVESTMENT MANAGEMENT

Investment management is an ongoing process. It may be (i) active or passive, (ii) use explicit or implicit procedures and (iii) have a risk level that is relatively controlled or uncontrolled.

Investment management involves following activities:

1) Identification of Investors' Requirements

Investors differ from each other in terms of objectives, preferences and constraints. The foundation of investment management is thus, collection of data relating to investors' requirements. The analysis of this data gives an idea about the assets and securities to be selected.

2) Formulation of Investment Policy and Strategy

Once the investors' objectives, preferences and constraints are identified, the next stage is formulation of investment policy. The policy will lay down the different asset classes of investment viz-shares, debentures, bonds etc. and the proportion of funds to be invested in each class. After formulating the investment policy, the next stage is to

prepare the investment strategy. Investment strategy will be formulated for income and capital appreciation and for the level of risk tolerance. The investment strategy will have to be correlated with the expectation of the capital market and the individual sectors of industry. On the basis of investment policy, strategy and investors' expectations of the market, a particular combination of investments is selected.

3) Execution of Strategy

Next stage is the implementation and execution of investment process. This process requires a lot of research, analysis and judgment. The portfolio, thus constructed may relate to the needs of a given level of income, liquidity, safety, high yielding growth stocks etc. The success of the portfolio would depend upon the initiative, innovation and judgment of the person constructing the portfolio.

4) Monitoring of Portfolio

The performance of the portfolio is evaluated and adjustments are made in the portfolio composition from time to time. This is called monitoring and risk structuring of the portfolios. This process is an adjustment of the components of the portfolio to improve the performance to make it optimal and efficient. The changes in investors conditions, market conditions and in industry performance are taken into account in the portfolio management.

3.5 FACTORS AFFECTING INVESTMENT DECISIONS

Investment decision-making process is concerned with how an investor should proceed in making a decision about what marketable securities to invest in, how extensive an investment should be and when the investment should be made.

Investment decisions are influenced by various motives. Some people invest in a business to acquire control and enjoy the prestige associated with it. Some people invest in expensive villas to display their wealth.

Most investors, however, are largely guided by the pecuniary motive of earning a return on their investment.

An individual invests 'postpone consumption' only in response to a rate of return, which must be suitably adjusted for inflation and risk. This basis postulate, in fact, unfolds the nature of investment decisions.

Cash has an opportunity cost and when an investor decides to invest it he/she is deprived of this opportunity to earn a return on that cash. Also, when the general price level rises the purchasing power of cash declines-larger the increase in inflation, the greater the depletion in the buying power of cash. This explains the reason why individuals require a 'real rate of return' on their investments. Now, within the body of investors, some buy government securities or deposit their money in bank accounts that are adequately secured. In contrast, some others prefer to buy, hold and sell equity shares even when they know that they get exposed to the risk of losing their much more than those investing in government securities. The latter group of investors is working towards the goal of getting larger returns than the first group and, in the process, does not mind assuming greater risk. Investors, in general, want to earn as larger returns as possible, subject, of course, to the level of risk they can possibly bear.

The risk factor gets fully manifested in the purchase and sale of financial assets, especially equity shares. It is common knowledge that some investors lose even when the securities markets boom. So there lies the risk.

For earning returns investors have to almost invariably bear some risk. While investors like returns and they abhor risk. Investment decisions, therefore, involve a tradeoff between risk and return. Most investors are risk averse but they expect maximum return from their investments. Every investment must be analyzed because there is some risk in it. Only government securities are risk-less. The Indian investment scene has many schemes to offer to an individual. On an analysis of these

schemes, it appears that the investor has a wide choice. A vast range of investments is in the government sector. These are mostly risk-free but low return yielding. Several incentives are attached to it. The private sector investments consist of equity and preference shares, debentures and financial engineering securities. These have the features of high risk. Ultimately, the investor must make his investment decisions. The dilemma faced by the Indian investor is the reconciliation of profitability, liquidity and risk of investments. Government securities are risk-free and the investor is secured. However, to him, the return or yield is very important as he has limited resources and would like to plan an appreciation of the investments for his future requirements. Government securities give low returns and do not fulfill his objective of money appreciation. Private sector securities are attractive, though risky. Reliance, Infosys, Wipro and Tatas give to the investor the expectation of future appreciation of investment by several times. The multinational and blue chip companies offer very high rates of return and also give bonus shares to their shareholders.

Investment decisions are based on availability of money and information on the economy, industry, and company and the share prices ruling and expectations of the market and of the companies in question.

Following are factors that affect the investment decisions:

- 1. Amount of Investment:** The amount of funds available for investment will influence the form of investment. In case of an individual investor the amount may be small. There are a number of avenues for making such investments like bank deposits, mutual funds, etc. if the investible funds are more than transferable financial securities like shares, debentures etc. may be purchased. Investment in real estate can be thought of if the amount is large.
- 2. Purpose of Investment:** The purpose of investment must be very clear before making it. The purpose makes one think in the same way. The object of an individual investor may be to save tax, earn

fixed return, appreciation in the value of securities, etc. If the purpose is to save tax then master equity linked schemes, public provident fund, general provident fund etc may be the avenues of investment. Similarly other factors will be taken into account while making an investment.

The purpose of an enterprise investor will be different than that of an individual investor. A business enterprise may like to employ idle funds for short period to earn some income. If the management wants to earn higher returns then speculative securities will be preferred. So the purpose of investment greatly influences such decisions.

- 3. Type of Investment:** Another important factor which influences investment decision is the selection of securities. A decision about where to invest is very important. A number of securities are available in the market and which one suits the investor's objective should be taken up. Varied securities may be taken up to suit different needs. If provident fund of employees is to be invested then fixed return securities will be preferred, treasury bills may be the priority if idle funds are to be employed for a short period. The company whose securities are being taken up should also be taken into account. An analysis of present performance and future appraisal of the company's working should be taken up before selecting its securities.
- 4. Timing of Purchase:** The time of purchasing securities is very important. A proper timing of purchase and sale of securities can bring profits to the investor. The securities should be purchased when their prices are low and should be sold when their prices have arisen. Normally, investors, do not time their transactions properly. When prices are low they keep on hoping that prices will still go down. On the other hand, they do not sell when prices are higher still hoping that prices will still rise. A careful analysis of

price changes may help the investor to decide the proper timing of purchase and sale of shares.

5. **Mood of the Market:** Investment decision depends on the mood of the market. As per the empirical studies, share prices depend on the fundamentals of the company only to the extent of 50% and the rest is decided by the mood of the market and the expectations of the company's performance as well as its share price. These expectations depend on the analyst's ability to foresee and forecast the future performance of the company. For, price paid for a share at present depends on the flow of returns in future, expected from the company.
6. **Company's Performance:** The decision to invest will be based on the past performance, present working and the future expectations of the company's performance, both operationally and financially. These, in turn will influence the share prices.
7. **Investor's Perception:** Investment decision will also depend upon the investor's perception on whether the present share price is fair, overvalued or undervalued. If the share price is fair he will hold it (Hold Decision), if it is overvalued, he will sell it (Sale Decision) and if it is undervalued, he will buy it (Buy Decision). These are general rules, but exceptions may be there.
8. **Investor's Preferences:** The investment decision may also depend on the investor's preferences, moods, or fancies. Thus an investor may go on spending spree and invest in cats and dogs of companies, if he has taken a fancy or he is flooded with money from lottery or prizes. A rational investor would however make investment decisions on scientific study of the fundamentals of the company and in a planned manner.
9. **Environmental Considerations:** Many times, investor has to take into account the environmental factors in investment management. His past background, family requirements, the assets of neighbours or of colleagues and other external factors may influence his investment

decisions.

People in rural and semi-urban areas are influenced by their immediate environment and access to avenue. The agriculturists invest in ploughs, tractors and other requirements needed for his occupation and environment. Beyond these, he invests in gold and silver or real estate due to the influence of environment as people are assessed in those places by the amount of gold and real estate, they hold and possess.

On the other hand, the environment in urban and metropolitan centers is different. The alternatives available to them are more varied. The funds are invested in vehicles, consumer durables, mutual funds, corporate securities, and various other instruments. In many semi-urban and urban areas, housing finance companies, finance and investment companies and chit funds attract the public funds with attractive returns and incentives.

3.6 SUMMARY

Investment management deals with the analysis of individual securities as well as the theory and practice of optimally combining securities into portfolio. An investor who understands the fundamental principles and analytical aspects of portfolio management has a better chance of success. Investment or Portfolio management comprises of all the processes involved in the creation and maintenance of an investment portfolio. It deals with security analysis, portfolio analysis, portfolio selection, portfolio revision and portfolio evaluation. It also makes use of analytical techniques of analysis and conceptual theories regarding rational allocation of funds.

The nature of scope of investment management is to- understand the exact meaning of investment, find out different avenues of investment, maximize return and minimize risk, make a programme for investment through evaluating securities, constructing a portfolio and reviewing a portfolio, etc. Investment management involves following activities such as identification of investors' requirements, formulation of investment policy and strategy, execution of strategy and monitoring of portfolio. While making

investment decision, the investor has to take into consideration the number of factors such as the amount of funds available for investment, purpose and type of investment, timing of purchasing securities, mood of the market and so on.

3.7 GLOSSARY

- **Portfolio:** Portfolio means combined holding of many kinds of financial securities i.e. shares, debentures, government bonds, units and other financial assets. The term investment portfolio refers to the various assets of an investor which are to be considered as a unit.
- **Management:** Management consists of all activities concerned with trying to accomplish the particular goals of the portfolio in an expedient manner.

3.8 SELF ASSESSMENT QUESTIONS

1. What is investment management?

2. How environmental consideration affects investment decision?

3.9 LESSON END EXERCISES

1. Explain the scope of investment management.
2. What are the factors to be kept in mind while deciding an investment? Explain.

3.10 SUGGESTED READINGS

1. Sourain Harry, Investment Management, Prentice Hall of India.
2. Maheshwari Yogesh, Investment Management, Prentice Hall of India.
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INVESTMENT/SPECULATION/GAMBLING**STRUCTURE**

- 4.1 Introduction
- 4.2 Objectives
- 4.3 Process of Investment Decisions
- 4.4 Difference between Investment and Speculation
- 4.5 Difference between Investment and Gambling
- 4.6 Investment/ Speculation/ Gambling
- 4.7 Investment and Arbitrage
- 4.8 Summary
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- 4.10 Self Assessment Questions
- 4.11 Lesson End Exercises
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- 4.13 References

4.1 INTRODUCTION

An organized view of the investment process involves analyzing the basic nature of investment decisions and organizing the activities in the decision

process.

Investment process is governed by the two important facets of investment they are risk and return. Therefore, these two basic parameters should be considered which are of critical importance to all investors and the trade off that exists between expected return and risk. The investment management process refers to the process an investor takes to aid him in meeting his investment goals. Certain steps need to be considered while engaging in investment activity, namely, creating a policy statement, choosing the asset mix, developing an investment strategy, selecting the securities, portfolio execution, portfolio revision and performance evaluation.

Though every investment involves an element of risk, yet investment cannot be equated with speculation; because speculation is considered to be just a guess and is not based on any scientific basis. Speculation is about taking up the business risk in the hope of achieving short-term gain. It essentially involves buying and selling activities with the expectation of making a profit from price fluctuations.

On the other hand, gambling involves high risk with an expectation of high returns. Gambling relies on tips, rumours and hunches and it is therefore, considered as unplanned, unscientific and uncalculated risk. In gambling, the outcome is largely a matter of luck, no rational economic reason can be given for it. This is in contrast to what we can say about genuine investments. Unlike investors and speculators, the gamblers are risk lovers in the sense that the risk they assume is quite disproportionate to the expected reward.

4.2 OBJECTIVES

After going through this lesson, you will be able to:

- Know about investment process.
- Differentiate between speculation and investment.
- Differentiate between gambling and investment.

4.3 PROCESS OF INVESTMENT DECISIONS

The investment process involves a series of activities leading to the purchase of securities or other investment alternatives. The investment process can be divided into five stages:

- i) Framing of the investment policy
- ii) Security analysis
- iii) Valuation
- iv) Portfolio construction
- v) Portfolio evaluation

1) Framing of the Investment Policy

For systematic functioning, the government or investor, formulates the investment policy before proceeding to invest. The essential ingredients of the policy are investible funds, objectives and knowledge about investment alternatives and the market.

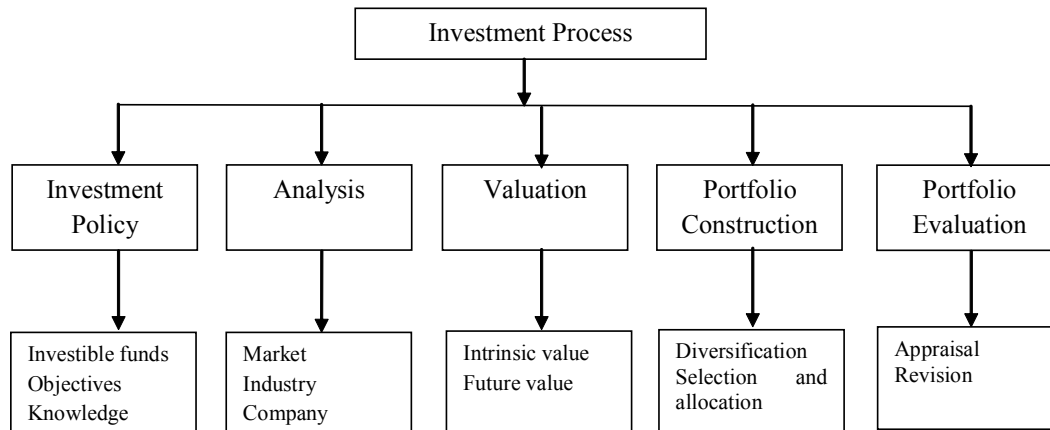


Figure: 4.1 Stages of the Investment Process

a) Investible funds: The entire investment procedure revolves around the availability of investible funds. Funds may be generated through savings or from borrowings. If the funds are borrowed, the investor has to be extra careful in the selection of investment alternatives. He must make sure that the returns are higher than the interest he pays. Mutual funds invest their stockholders' money in securities.

b) Objectives: The objectives are framed on the premises of the required rate of return, need for regular income, risk perception and the need for liquidity. The risk taker's objective is to earn a high rate of return in the form of capital appreciation, whereas the primary objective of the risk-averse is the safety of principal.

c) Knowledge: The knowledge about investment alternatives and markets plays a key role in policy formulation. Investment alternatives range from security to real estate. The risk and return associated with investment alternatives differ from each other. Investment in equity is high-yielding but faces more risk than fixed income securities. Tax sheltered schemes offer tax benefits to the investors.

The investor should be aware of the stock market structure and functions of the brokers. The modes of operation are different in the Bombay Stock Exchange (BSE), National Stock Exchange (NSE), Over-the-Counter Exchange of India (OTCEI). Brokerage charges are also different. Knowledge about stock exchanges enables an investor to trade the stock intelligently.

2) Security Analysis

Securities to be bought are scrutinized through market, industry and company analyses after the formulation of investment policy.

a) Market analysis: The stock market mirrors the general economic scenario. The growth in gross domestic product and inflation is reflected in stock prices. Recession in the economy results in a bear market. Stock

prices may fluctuate in the short- run but in the long-run, they move in trends, i.e. either upwards or downwards. The investor can fix his entry and exit points through technical analysis.

b) Industry analysis: Industries that contribute to the output of major segments of the economy vary in their growth rates overall contribution to economic activity. Some industries grow faster than the GDP and are expected to continue in their growth. For example, the information technology industry has experienced a higher growth rate than the GDP in 1998. The economic significance and the growth potential of the industry have to be analysed.

c) Company analysis: The purpose of company analysis is to help the investors make better decisions. The company's earnings, profitability, operating efficiency, capital structure and management have to be screened. These factors have a direct bearing on stock prices and investor's returns. The appreciation of stock value is a function of the performance of the company. A company with a high product market share is able to create wealth for investors in the form of capital appreciation.

3) Valuation

Valuation helps the investor determine the return and risk expected from an investment in common stock. The **intrinsic value** of the share is measured through the book value of the share and price earning ratio. Simple discounting models also can be adopted to value the shares. Stock market analysts have developed many advanced models to value shares. The real worth of the share is compared with the market price, and investment decisions are then made.

Future value The future value of securities can be estimated by using a simple statistical technique like trend analysis. The analysis of the historical behavior of price enables the investor to predict the future value.

4) Construction Portfolio

A portfolio is a combination of securities. It is constructed in a manner so as to meet the investor's goals and objectives. The investor should decide how

best to reach the goals with the securities available. The investor tries to attain maximum return with minimum risk. Towards this end, he diversifies his portfolio and allocated funds among the securities.

a) Diversification: The main objective of diversification is the reduction of risk in the form of loss of capital and income. A diversified portfolio is comparatively less risky than holding a single portfolio. Several modes are available to diversify a portfolio.

i) **Debt and equity diversification:** Debt instruments provide assured returns with limited capital appreciation. Common stocks provide income and capital gain but with a flavor of uncertainty. Both debt instrument and equity are combined to complement each other.

ii) **Industry diversification:** Industries' growth and their reaction to government policies differ from each other. Banking industry shares may provide regular returns but with limited capital appreciation. Information technology stocks yield higher returns and capital appreciation, but their growth potential in the post-global crisis years was unpredictable. Thus, industry diversification is needed, and it reduces the risk.

iii) **Company diversification:** Securities from different companies are purchased to reduce the risk. Technical analysts suggest that investors buy securities based on price movement. Fundamental analysts suggest the selection of financially sound and investor-friendly companies

b) Selection: Securities have to be selected based on the level of diversification, industry and company analyses. Funds are allocated for selected securities. Selection of securities and the allocation of funds seal the construction of portfolio.

5) Portfolio Evaluation

A portfolio has to be managed effectively. Efficient management calls for evaluation of the portfolio. This process consists of portfolio appraisal and revision.

a) Appraisal: The return and risk performance of security varies from time to time. The variability in returns of securities is measured and compared. Developments in the economy, industry and relevant companies from which stocks are bought have to be appraised. The appraisal warns of the loss and steps can be taken to avoid such losses.

b) Revision: It depends on the results of the appraisal. Low-yielding securities with high risk are replaced with high-yielding securities with low risk factor. The investor periodically revises the components of the portfolio to keep the return at a level.

4.4 DIFFERENCE BETWEEN INVESTMENT AND SPECULATION

"Speculation is an activity, quite contrary to its literal meaning, in which a person assumes high risks, often without regard for the safety of their invested principal, to achieve large capital gains." The time span in which the gain is sought to be made is usually very short.

Investment involves putting money into an asset which is not necessarily marketable in order to enjoy a series of returns. The investor sacrifices some money today in anticipation of a financial return in future. He indulges in a bit of speculation. There is an element of speculation involved in all investment decisions. However, it does not mean that all investments are speculative by nature. Genuine investments are carefully thought out decisions. On the other hand, speculative investment, are not carefully thought out decisions. They are based on tips, and rumors.

Speculation has a special meaning when talking about money. The person who speculates is called a speculator. A speculator does not buy goods to own them, but to sell them later. The reason is that speculator wants to earn profit from the changes of market prices. One tries to buy the goods when they are cheap and to sell them when they are expensive.

Speculation includes the buying, holding, selling and short selling of stocks, bonds, commodities, currencies, real estate collectibles, derivatives or any

valuable financial instrument. It is the opposite of buying because one wants to use them for daily life or to get income from them (as dividends or interest).

Speculation should not be considered purely a form of gambling, as speculators do make an informed decision before choosing to acquire the additional risks. Additionally, speculation cannot be categorized as a traditional investment because the acquired risk is higher than average. More sophisticated investors will also use a hedging strategy in combination with their speculative investment in order to limit potential losses.

Table: 4.1 Difference between Investor and Speculator

| | Investor | Speculator |
|--------------|--|---|
| Time horizon | Plans for a longer time horizon. His holding period may be from one year to few years. | Plans for a very short period. His holding period varies from few days to months. |
| Risk | Assumes moderate risk. | Willing to undertake high risk. |
| Return | Likes to have moderate rate of return associated with limited risk. | Like to have high returns for assuming high risk. |
| Decision | Considers fundamental factors and evaluates the performance of the company regularly. | Considers inside information. |
| Funds | Uses his own funds and avoids borrowed funds. | Uses borrowed funds to supplement his personal resources. |

4.5 DIFFERENCE BETWEEN INVESTMENT AND GAMBLING

The term gambling dates back to antiquity. Most dictionaries refer to 'gamble' as an act involving an element of risk. In particular, a gamble involves taking on risk without demanding compensation in the form of increased expected return. Gambling exhibit some or all of the following characteristics:

- i) Gambling is a typical, chronic and repetitive experience

- ii) Gambling absorbs all other interests
- iii) The gambling displays persistent optimism without winning
- iv) The gambler never stops without winning
- v) The gambler eventually risks more than he or she can afford
- vi) The gambler seeks and enjoys a strange thrill from gambling, a combination of pleasure and pain.

A gamble is usually a very short-term investment in a game or chance. Gambling is different from speculation and investment. First, the time horizon involved in gambling is shorter than in speculation and investment. The results are determined by the roll of a dice or the turn of a card. Secondly, people gamble to entertain themselves. Earning an income from gambling is a secondary factor. Thirdly, the risk, taken in gambling is different from that of investment. Gambling enjoys artificial risks, whereas commercial risks are present in investment activity. Risk and return trade-off is not found in gambling and negative outcomes are expected. On the other hand, during investment, the analysis of risk and return is carried out, as a result of which positive returns are expected by investors. Finally, financial analysis does not reduce the risk proportion involved in gambling.

Investment is a study of employment of funds for the purpose of a return to the investor. It is of long-term horizon and it has to be planned through a proper process of evaluation. The investment process consists of different stages such as preparing an investment policy, making investment analysis, valuation of securities, portfolio construction and review.

4.6 INVESTMENT/SPECULATION/GAMBLING

Investment is well grounded and carefully planned speculation whereas it is an ostrich-like form of involuntary and unconscious speculation at its worst. There are no set rules for permanently establishing which securities are investment and which are speculations. Only constant examination and

vigilance, against a background of knowledge, can enable us to decrease the risks which are inherent in all forms of ownership. Speculation is not the same as gambling and the two should never be confused. The difference between speculation and gambling is that in gambling artificial and unnecessary risks are created whereas in speculation the risks already exist and the question is simple who shall bear them.

Gambling is a far cry from the carefully planned research and scientific procedure which underlies the best speculative practice. The gambler plays rumours, tips, hunches and other unreliable intuitions which should not play any but a negative role in the trained speculator's process. Speculation is a reasoned anticipation of future conditions. It does not rely upon hearsay or labels. It attempts to organize the relevant knowledge as a support for judgments. It is as legitimate and moral as any other form of risk-taking business activity.

In fact, the whole fabric of our society revolves around speculation. Those who write and speak most forcibly against speculation are usually guilty of failing to define their terms. Mere risk assumption is not gambling so long as the size of the risk is known, risk taking is speculating. Gambling has to do with acceptance of risks (1) for their own sake, (2) for the object of pecuniary gains, (3) without knowledge of the exact nature of the risk.

The distinctions between investment, speculation and gambling give us a basic idea of their nature, purpose and role. The basic differentiations between investment, speculation and gambling are:

- I) Investor preferably buys to procure an annual return under conditions of safety, whereas speculators and gamblers buy for appreciation.
- II) The investor presumably buys high degree securities whereas speculators and gamblers buy low grade securities.
- III) The investor holds securities for the longest period of time and the speculator holds it for a short period of time. The holding period of

gamblers can be measured in seconds.

Gambling is artificial and unnecessary risk created for increased expected returns. The difference between investment and gambling is very clear. From the above discussion, it is established that investment is an attempt to carefully plan, evaluate and allocate funds in various investment outlets which offers safety of principal, moderate and continuous returns and long-term commitment.

4.7 INVESTMENT AND ARBITRAGE

Investment is planned commitment of funds from a person's savings into different outlets with the expectation of safe, stable and fair return. Arbitrage is the mechanism of minimizing risk through hedging and taking advantage of price differences in different markets. An arbitrage transaction is the simultaneous purchase of the same or similar security in two different markets. Short-term gains can be expected through such transactions. An investor can also be an arbitrageur if he buys and sells securities in more than one stock exchange to take advantage of the price differentials in such exchanges. Derivatives introduced in the Indian market have a great potential for arbitrage transactions. Arbitrage transactions help in enhancing efficiency and liquidity in the stock market and in increasing the volume of trade. Hedgers, speculators and arbitrageurs can minimize risks and make profits through the arbitrage process.

4.8 SUMMARY

The investment process involves a series of activities leading to the purchase of securities or other investment alternatives. The investment process can be divided into five stages: i) Framing of the investment policy ii) Security analysis iii) Valuation iv) Portfolio construction v) Portfolio evaluation.

For systematic functioning, the government or investor, formulates the investment policy before proceeding to invest. The essential ingredients of the policy are investible funds, objectives and knowledge about investment

alternatives and the market. Thereafter, securities to be bought are scrutinized through market, industry and company analyses after the formulation of investment policy. The investor shall undertake fundamental analysis and technical analysis to select 'stock' related securities. In case on 'bond' related securities, he shall consider yield-to-maturity, credit rating, term-to-maturity, tax shelter, liquidity etc. A portfolio has to be managed effectively. Efficient management calls for evaluation of the portfolio. This process consists of portfolio appraisal and revision.

The distinctions between investment, speculation and gambling give us a basic idea of their nature, purpose and role. Investor preferably buys to procure an annual return under conditions of safety, whereas speculators and gamblers buy for appreciation. Further, the investor presumably buys high degree securities whereas speculators and gamblers buy low grade securities.

4.9 GLOSSARY

- **Security Analysis:** Security analysis is essentially an analysis of the fundamental value of a share and its forecast for the future through the calculation of its intrinsic worth of the share.
- **Diversification:** Diversification means holding of an assortment of securities by investor rather than a limited number of securities.
- **Speculation:** It is an activity in which a person assumes high risks, often without regard for the safety of their invested principal, to achieve large capital gains.
- **Gambling:** It is artificial and unnecessary risk created for increased expected returns.
- **Arbitrage:** An arbitrage transaction is the simultaneous purchase of the same or similar security in two different markets.

4.10 SELF ASSESSMENT QUESTIONS

1. State whether the following statements are True (T) or False (F).

- a) Investments are concerned with risk and return.
- b) Investments involve long-term commitments.
- c) Speculation brings about stable return for long-term period of time.
- d) Speculation is considered with review and analysis and investments with capital gain.
- e) Investments are based on portfolio construction, valuation, identification and analysis..

Answers: a) True b) True c) False d) False e True.

2. Multiple Choice Questions

- a) Investment means _____.
 - I) commitment of funds for future income
 - II) net additions to economy capital stock
 - III) short-term commitment of funds
 - IV) capital gain
- b) Speculation can be distinguished from investment in the following way:
 - I) Investment is high risk & speculation is low risk.
 - II) Investment is for short-term period & speculation covers long-term period.
 - III) Investment is based on planning of funds for safety, liquidity, profitability & speculation on haunches and benefits.
 - IV) Investment is your own funds & speculation consists of other people's funds.
- c) A gambler is one who make ~~78~~ planned investment and _____.

- I) believes in low risk
- II) considers high risk and high profits
- III) expects other people to plan his resources in one best security
- IV) buying government securities with safety of return

Answers: a. (I), b. (III), c. (II).

3. What do you mean by security analysis?

4.11 LESSON END EXERCISES

- 1. Distinguish between investment, speculation and gambling. What is the usefulness of a sound investment plan?
- 2. Investment and speculation are somewhat different and yet similar in certain respects. Explain.
- 3. "The investment process involves a series of activities." Discuss.

4.12 SUGGESTED READINGS

- 1. Sourain Harry, Investment Management, Prentice Hall of India.
- 2. Maheshwari Yogesh, Investment Management, Prentice Hall of India.
- 3. Chandra Prasanna, Investment Analysis and Portfolio Management, McGraw Hill.

4.13 REFERENCES

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Unit-I

Lesson-5

REAL AND FINANCIAL ASSETS

STRUCTURE

| |
|------------------|
| 5.1 Introduction |
|------------------|

5.2 Objectives

5.3 Meaning of Real and Financial Assets

5.4 Real Assets Vs Financial Assets

5.5 Types of Real Assets

5.6 Types of Financial Assets

5.7 Properties of Financial Assets

5.8 Features of an Ideal Investment Programme

5.9 Summary

5.10 Glossary

5.11 Self Assessment Questions

5.12 Lesson End Exercises

5.13 Suggested Readings

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5.1 INTRODUCTION

The investor has various alternative avenues of investment for his savings to flow in accordance with his preferences. These investment alternatives range from money market securities to capital market securities to derivative securities. Earlier, selecting between investment alternatives used to be pretty simple. Since then, time has changed. Investors today have to choose

among thousands of investment alternatives. Hence, it is impossible to make intelligent investment decisions without some knowledge and understanding about the characteristics and features of various alternatives.

Investment alternatives or assets are broadly divided in two categories: real assets and financial assets. Real assets determine the wealth of an economy, whereas financial assets are merely claims to the income generated by real assets.

A firm needs a large variety of real assets to carry on its business. These real assets may be tangible such as land, building, machinery, inventories and so on or intangible such as patents, trademarks, etc. All these assets need to be financed either out of own savings or by lenders of surplus savings. Most of these real assets are financed through selling pieces of paper called financial assets.

Assets are commonly known as anything with a value that represent economic resources or ownership that can be converted into something of value such as cash. Financial assets and real assets, both represent such ownerships of value, even though they are very different to each other based on their features and characteristics.

5.2 OBJECTIVES

After going through this lesson, you will be able to:

- Understand the meaning of real and financial assets
- Differentiate between real and financial assets
- Know different types of real and financial assets

5.3 MEANING OF REAL AND FINANCIAL ASSETS

Real assets are tangible goods in possession of a person. Financial securities represent papers that are dependent on real assets for creating wealth.

1. Real Assets

The real assets refer to value-generating physical assets that the business owns. Common examples include land, buildings, inventory, precious metals, commodities, real estate, land and machinery. These physical assets are important for the business because they carry some type of intrinsic value. Intrinsic value is defined as the exact value of an asset as determined by factors such as location, function and acquisition costs.

The material wealth of the society is determined by the productive capacity of its economy i.e. the goods and services that is provided. This productive capacity depends largely on the real assets that are used to produce goods and the workers, whose skills, are necessary to use those resources. Hence, the physical and human assets, together, generate the entire spectrum of output produced and consumed by the society. When the real assets used by a firm generate income, the income is allocated to investors according to their ownership of the financial assets, issued by the firm.

2. Financial Assets

Financial assets are intangible, meaning that they cannot be seen or felt and may not have a physical presence except for the existence of a document that represents the ownership interest held in the asset. It is important to note that the papers and certificates that represent these financial assets do not have any intrinsic value (the paper held is only a document certifying ownership and is of no value). The paper derives its value from the value of the asset that is represented. Examples of such financial assets include stocks, bonds, funds held in a bank, investments, accounts receivable, company goodwill, copyrights, patents, etc. Regardless of the fact that financial assets do not exist in physical form, they are still recorded in a firm's balance sheet, to represent the value that is held by them.

Financial assets represent a claim by securities, on the income generated by

real assets of some other parties. Such assets can be easily traded, as they are marketable and transferable. Financial assets are transactions between two or more parties. For example, if a person takes an insurance policy of ₹1,00,000 of Life Insurance Corporation, the contract is a liability of LIC but an asset of the person insuring himself because he has a claim over the insurance company to receive the principal sum with interest on the happening of an event or on the completion of a certain number of years

5.4 REAL ASSETS VS FINANCIAL ASSETS

With the advancement of economy, the relative importance of financial assets tends to increase. Even though the real assets differ greatly from financial assets, two forms of investments are complementary and not competitive. The difference between real assets and financial assets can be summarized as follows:

1. Real assets determine the wealth of an economy, whereas financial assets do not represent society's wealth.
2. Real assets contribute directly to the productive capacity of the economy while the contribution of financial assets to the productive capacity is indirect because they facilitate the transfer of funds to enterprises with attractive investment opportunities.
3. Real assets produce goods and services whereas financial assets define the allocation of income or wealth among investors.
4. Real assets appear only on the asset side of the balance sheet, while financial assets appear both sides of the balance sheet.
5. Financial assets are created and destroyed in the ordinary course of doing business. For example, when a loan is repaid, both the creditor's claim and the debtor's obligation stop to exist. However, real assets are destroyed only by accident or by wearing out over time.

6. Investing in real assets carries more risks than investing in paper assets.

5.5 TYPES OF REAL ASSETS

Indian investors have always considered the real or physical assets to be very attractive investments. There are a large number of investment avenues for savers in India. Some of them are marketable and liquid, while others are non marketable. Some of them are highly risky while some others are almost risk less. The investor has to choose proper avenues from among them, depending on his specific need, risk preference, and return expectation.

Investments in real assets are also made when the expected returns are very attractive. Real estate, gold, silver, currency, and other investments such as art are also treated as investments since the expectation from holding of such assets is associated with higher returns.

1. Real Estate

Buying property is an equally strenuous investment decision. Real estate investment is often linked with the future development plans of the location. It is important to check the value while deciding to purchase a movable/ immovable property other than buildings. Besides making a personal assessment from the market, the assistance of government-approved valuers may also be sought. A valuation report indicating the value of the each of the major assets and also the basis and manner of valuation can be obtained from an approved valuer against the payment of a fee. In case of a plantation, a valuation report may also be obtained from recognized private valuers.

2. Bullion Investment

The bullion market offers investment opportunity in the form of gold, silver, and other metals. Specific categories of metals are traded in the metals

exchange. The bullion market presents an opportunity for an investor by offering returns and end value in future. It has been observed that on several occasions, when the stock market failed, the gold market provided a return on investments. The changing pattern of prices in the bullion market also makes this market risky for investors. Gold and Silver prices are not consistent and keep changing according to the changing local/global demands in the market. The fluctuation prices, however, have been compensated by real returns for many investors who have followed a buy and hold strategy in the bullion market.

5.6 TYPES OF FINANCIAL ASSETS

Investments in financial assets consist of securitised (i.e. security forms of) investment and non-securities investment.

The term 'securities' used in the broadest sense, consists of those papers which are quoted and are transferable. Under section 2 (h) of the Securities Contract (Regulation) Act, 1956 (SCRA) 'securities' include:

- i) Shares, scrips, stocks, bonds, debentures, debenture stock or other marketable securities of a like nature in or of any incorporated company or other body corporate.
- ii) Government securities.
- iii) Such other instruments as may be declared by the Central Government as securities, and,
- iv) Rights of interests in securities.

Therefore, in the above context, security forms of investments include equity shares, preference shares, debentures, government bonds, Units of UTI and other Mutual Funds, and equity shares and bonds of Public Sector Undertakings (PSUs).

While non-security forms of investments include all those investments, which are not quoted in any stock market and are not freely marketable.

viz., bank deposits, corporate deposits, post office deposits, National Savings and other small savings certificates and schemes, provident funds, and insurance policies.

Hence, the financial assets can be classified as:

1. Corporate securities: Equity shares, Preference shares, Debentures/ Bonds, GDRs /ADRs, Warrants, Derivatives
2. Deposits in banks and non banking companies
3. Post office deposits and certificates
4. Life insurance policies
5. Provident fund schemes
6. Government and semi government securities
7. Mutual fund schemes

1. Corporate Securities

Joint stock companies in the private sector issue corporate securities. These include equity shares, preference shares, and debentures. Equity shares have variable dividend and hence belong to the high risk high return category; preference shares and debentures have fixed returns with lower risk.

a) *Equity Shares:* By investing in shares, investors basically buy the ownership right to that company. When the company makes profits, shareholders receive their share of the profits in the form of dividends. In addition, when a company performs well and the future expectation from the company is very high, the price of the company's shares goes up in the market. This allows shareholders to sell shares at profit, leading to capital gains. Investors can invest in shares either through primary market offerings or in the secondary market.

b) Preference Shares: Preference shares refer to a form of shares that lie in between pure equity and debt. They have the characteristic of ownership rights while retaining the privilege of a consistent return on investment. The claims of these holders carry higher priority than that of ordinary shareholders but lower than that of debt holders. These are issued to the general public only after a public issue of ordinary shares.

c) Debentures and Bonds: These are essentially long-term debt instruments. Many types of debentures and bonds have been structured to suit investors with different time needs. Though having a higher risk as compared to bank fixed deposits, bonds, and debentures do offer higher returns. Debenture investment requires scanning the market and choosing specific securities that will cater to the investment objectives of the investors.

d) Depository Receipts (GDRs/ADRs): Global Depository Receipts are instruments in the form of a depository receipt or certificate created by the overseas depository bank outside India and issued to non-resident investors against ordinary shares or Foreign Currency Convertible Bonds (FCCBs) of an issuing company. A GDR issued in America is an American Depository Receipt (ADR). Among the Indian companies, Reliance Industries Limited was the first company to raise funds through a GDR issue. Besides GDRs, ADRs are also popular in the capital market. As investors seek to diversify their equity holdings, the option of ADRs and GDRs are very lucrative. While investing in such securities, investors have to identify the capitalization and risk characteristics of the instrument and the company's performance in its home country (underlying asset).

e) Warrants: A warrant is a certificate giving its holder the right to purchase securities at a stipulated price within a specified time limit or perpetually. Sometimes a warrant is offered with debt securities as an inducement to buy the shares at a later date. The warrant acts as a value addition because the holder of the warrant has the right but not the obligation

of investing in the equity at the indicated rate. It can be defined as a long-term call option issued by a company on its shares. A warrant holder is not entitled to any dividends; neither does he have a voting right. But the exercise price of a warrant gets adjusted for the stock dividends or stock splits. On the expiry date, the holder exercises an option to buy the shares at the predetermined price. This enables the investor to decide whether or not to buy the shares or liquidate the debt from the company. If the market price is higher than the exercise price, it will be profitable for the investor to exercise the warrant. On the other hand, if the market price falls below the exercise price, the warrant holder would prefer to liquidate the debt of the firm.

f) Derivatives: The introduction of derivative products has been one of the most significant developments in the Indian capital market. Derivatives are helpful risk-management tools that an investor has to look at for reducing the risk inherent in an investment portfolio. The first derivative product that has been offered in the Indian market is the index future. Besides index futures, other derivative instruments such as index options, stock options, have been introduced in the market.

2. Deposits in Banks and Non Banking Companies

Among non-corporate investments, the most popular are deposits with banks such as savings accounts and fixed deposits. Savings deposits carry low interest rates whereas fixed deposits carry higher interest rates, varying with the period of maturity. Interest is payable quarterly or half-yearly or annually. Fixed deposits may also be recurring deposits wherein savings are deposited at regular intervals. Some banks have reinvestment plans whereby savings are re-deposited at regular intervals or reinvested as the interest gets accrued. The principal and accumulated interests in such investment plans are paid on maturity.

a) Savings Bank Account with Commercial Banks: A safe, liquid, and convenient investment option, a savings bank account is an ideal

investment avenue for setting aside funds for emergencies or unexpected expenses. Investors may prefer to keep an average balance equal to three months of their living expenses. A bank fixed deposit is recommended for those looking for preservation of capital along with current income in the short term. However, over the long-term the returns may not keep pace with inflation.

b) *Company Fixed Deposits:* Many companies have come up with fixed deposit schemes to mobilize money for their needs. The company fixed deposit market is a risky market and ought to be looked at with caution. RBI has issued various regulations to monitor the company fixed deposit market. However, credit rating services are available to rate the risk of company fixed deposit schemes.

The maturity period varies from three to five years. Fixed deposits in companies have a high risk since they are unsecured, but they promise higher returns than bank deposits.

c) *Fixed deposit in non-banking financial companies (NBFCs):* It is another investment avenue open to savers. NBFCs include leasing companies, hire purchase companies, investment companies, chit funds, and so on. Deposits in NBFCs carry higher returns with higher risk compared to bank deposits.

3. Post Office Deposits and Certificates

a) *Post office Deposits:* The investment avenues provided by post offices are non-marketable. However, most of the savings schemes in post offices enjoy tax concessions. Post offices accept savings deposits as well as fixed deposits from the public. There is also a recurring deposit scheme that is an instrument of regular monthly savings.

b) *National Savings Certificates (NSC):* is also marketed by post office to investors. The interest on the amount invested is compounded half-yearly and is payable along with the principal at the time of maturity,

which is six years from the date of issue.

There is variety of post office savings certificates that cater to specific savings and investment requirements of investors and is a risk free, high yielding investment opportunity. Interest on these instruments is exempt from income tax. Some of these deposits are also exempt from wealth tax.

4. Life Insurance Policies

Insurance companies offer many investment schemes to investors. These schemes promote savings and additionally provide insurance cover. LIC is the largest life insurance company in India. Some of its schemes include life policies, convertible whole life assurance policies, endowment assurance policies, Jeevan Saathi, Money Back Plan, Jeevan Dhara, and Marriage Endowment Plan. Insurance policies, while catering to the risk compensation to be faced in the future by investors, also have the advantage of earning a reasonable interest on their investment insurance premiums. Life insurance policies are also eligible for exemption from income tax

5. Provident Fund Scheme

Provident fund schemes are deposit schemes, applicable to employees in the public and private sectors. There are three kinds of provident funds applicable to different sectors of employment, namely, Statutory Provident Fund, Recognised Provident Fund, and Unrecognised Provident Fund. In addition to these, there is a voluntary provident fund scheme that is open to any investor, employed or not. This is known as the Public Provident Fund (PPF). Any member of the public can join the PPF, which is operated by the State Bank of India.

6. Government and Semi-Government Securities

Government and semi-government bodies such as the public sector undertakings borrow money from the public through the issue of government securities and public sector bonds. These are less risky avenues of investment because of the credibility of the government and government

undertakings. The government issues securities in the money market and in the capital market.

7. Mutual Fund Schemes

The Unit Trust of India is the first mutual fund in the country. A number of commercial banks and financial institutions have also set up mutual funds. Mutual funds have been set up in the private sector also. These mutual funds offer various investment schemes to investors. The number of mutual funds that have cropped up in recent years is quite large and though, on an average, the mutual fund industry has not been showing good returns. Selected funds have performed consistently, assuring the investor better returns and lower risk options.

8. Others

a) Equity Linked Savings Schemes (ELSSs): Investing in ELSSs gets investors a tax rebate of the amount invested. ELSSs are basically growth mutual funds with a lock-in period of three years. ELSSs have a risk higher than PPF and NSCs, but have the potential of giving higher returns.

b) Pension Plan: Certain notified retirement/pension funds entitle investors to a tax rebate. UTI, LIC, and ICICI are some financial institutions that offer retirement plans to investors.

5.7 PROPERTIES OF FINANCIAL ASSETS

Financial assets have specific properties that distinguish them from physical and intangible assets. These properties are as follow:

1. Monetary Value

Financial assets are exchange documents with an attached value. Their values are denoted in currency units determined by the government of an economy.

2. Divisibility

Financial instruments are divisible into smaller units. The total value is represented in terms of divisions that can be handled in a trade. The capital of a firm is collected through financial instruments that are issued in a unit format (shares). Each unit represents a face value of the total capital. The divisibility characteristics of financial assets enable all players, small or big, to participate in the market.

3. Convertibility

Financial assets are convertible into any other type of asset. For instance, a borrowing can be converted into capital. A firm might issue, in the first place, a debt instrument, which is to be repaid after the specific duration. At the end of the period, the firm could give the investor an option to convert it into a share of the company. This characteristic of convertibility gives flexibility to financial instruments. Financial instruments need not necessarily be converted into another form of financial assets; they can also be converted into any other type of asset.

4. Reversibility

This implies that a financial instrument can be exchanged for any other asset and logically the so formed asset may be transferred back into the original financial instrument.

5. Liquidity

Liquidity is the distinct feature of financial asset. The financial instruments can be converted into cash at ease, due to the existence of a strong secondary market. The financial assets are quite liquid thereby, making the financial instruments tradable and exit at any point of time.

5.8 FEATURES OF AN IDEAL INVESTMENT PROGRAMME

While investing their money, the investors must have some definite ideas regarding the features that their investments must possess. These features must be consistent with the objectives, preferences and constraints of the investors. These investments must also offer optimum facilities and

advantages to investors as far as the circumstances permit. The investors, generally, form their investment policies on the basis of the following features:

1. Safety of principal

Safety of funds invested is one of the essential ingredients of a good investment programme. Safety of principal signifies protection against any possible loss under the changing conditions. It can be achieved through a careful review of economic and industrial trends before choosing the type of investment. It is clear that no one can make a forecast of future economic conditions with utmost precision. To safeguard against certain errors that may creep in while making an investment decision, extensive diversification is suggested.

The main objective of diversification is the reduction of risk in the loss of capital and income. A diversified portfolio is less risky than holding a single portfolio. Diversification refers to an assorted approach to investment commitments. Diversification may be of two types, namely,

- a) *Vertical diversification* and
- b) *Horizontal diversification*

Under vertical diversification, securities of various companies engaged in different stages of production (from raw material to finished products) are chosen for investment. On the contrary, horizontal diversification means making investment in those securities of the companies that are engaged in the same stage of production.

Apart from the above classification, securities may be classified into bonds and shares which may, in turn, be reclassified according to their types. Further, securities can also be classified according to due date of interest, etc. However, the simplest diversification is holding different types of securities with reasonable concentration in each.

2. Liquidity and Collateral value

A liquid investment is one which can be converted into cash immediately without monetary loss. Liquid investments help investors meet emergencies. Stocks are easily marketable only when they provide adequate return through dividends and capital appreciation. Portfolio of liquid investments enables the investors to raise funds through the sale of liquid securities or borrowing by offering them as collateral security. The investor invests in high grade and readily saleable investments in order to ensure their liquidity and collateral value.

3. Stable income

Investors invest their funds in such assets that provide stable income. Regularity of income is consistent with a good investment programme. The income should not only be stable but also adequate as well.

4. Capital growth

One of the important principles of investment is capital appreciation. A company flourishes when the industry to which it belongs is sound. So, the investors, by recognizing the connection between industry growth and capital appreciation should invest in growth stocks. In short, right issue in the right industry should be bought at the right time.

5. Tax implications

Every investor must plan his investment programme keeping in mind his tax status. Investors should be concerned about the returns on the investments as well as the burden of taxes upon such returns. Real returns are returns after taxes. Tax burden on some investments are more whereas some investments are tax free. The investors should plan their investments in such a way that the tax liability is minimum.

6. Stability of Purchasing Power

Investment is the employment of funds with the objective of earning income or capital appreciation. In other words, current funds are sacrificed with the aim of receiving larger amounts of future funds. So, the investor should consider the purchasing power of future funds. In order to maintain the stability of purchasing power, the investor should analyse the expected price level inflation and the possibilities of gains and losses in the investment available to them.

7. Legality

The investor should invest only in such assets which are approved by law. Illegal securities will land the investor in trouble. Apart from being satisfied with the legality of investment, the investor should be free from management of securities. In case of investments in Unit Trust of India and mutual funds of Life Insurance Corporation, the management of funds is left to the care of a competent body. It will diversify the pooled funds according to the principles of safety, liquidity and stability.

5.9 SUMMARY

Assets are commonly known as anything with a value that represent economic resources or ownership that can be converted into something of value such as cash. Financial assets and real assets, both represent such ownerships of value, even though they are very different to each other based on their features and characteristics. Real assets are tangible goods in possession of a person. Financial securities represent papers that are dependent on real assets for creating wealth.

The real assets may be tangible such as land, building, machinery, inventories and so on or intangible such as patents, trademarks, etc. Whereas financial assets include stocks, bonds, funds held in a bank, investments, accounts receivable, company goodwill, copyrights, patents, etc.

5.10 GLOSSARY

- **Real Assets:** They are tangible assets that have a physical form. Some examples of real assets are land and buildings, furniture, gold, silver, diamonds or artifacts.
- **Financial Assets:** They are intangible, meaning that they cannot be seen or felt and may not have a physical presence except for the existence of a document that represents the ownership interest held in the asset.
- **Intrinsic Value:** Intrinsic value is defined as the exact value of an asset as determined by factors such as location, function and acquisition costs.
- **Warrants:** A warrant is a certificate giving its holder the right to purchase securities at a stipulated price within a specified time limit or perpetually.

5.11 SELF ASSESSMENT QUESTIONS

1. What do you mean by real assets?

2. Give the meaning of financial assets.

5.12 LESSON END EXERCISES

1. Explain different types of financial assets.
2. Explain the meaning and types of real assets.
3. What are the features of an ideal investment programmes? Explain.

5.13 SUGGESTED READINGS

1. Sourain Harry, Investment Management, Prentice Hall of India.
2. Maheshwari Yogesh, Investment Management, Prentice Hall of India.
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DERIVATIVES AND MUTUAL FUNDS**STRUCTURE**

- 6.1 Introduction
- 6.2 Objectives
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 - 6.3.1 Equity Based Securities
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6.1 INTRODUCTION

In India, derivatives markets have been functioning since the nineteenth century, with organized trading in cotton through the establishment of the Cotton Trade Association in 1875. Derivatives, as exchange traded financial instruments were introduced in India in June 2000. The National

Stock Exchange (NSE) is the largest exchange in India in derivatives, trading in various derivatives contracts. The first contract to be launched on NSE was the Nifty 50 index futures contract. In a span of one and a half years after the introduction of index futures, index options, stock options and stock futures were also introduced in the derivatives segment for trading. NSE's equity derivatives segment is called the Futures & Options Segment or F&O Segment. NSE also trades in Currency and Interest Rate Futures contracts under a separate segment. A series of reforms in the financial markets paved way for the development of exchange-traded equity derivatives markets in India. In 1993, the NSE was established as an electronic, national exchange and it started operations in 1994. It improved the efficiency and transparency of the stock markets by offering a fully automated screen-based trading system with real-time price dissemination. A report on exchange traded derivatives, by the L.C. Gupta Committee, set up by the Securities and Exchange Board of India (SEBI), recommended a phased introduction of derivatives instruments with bi-level regulation (i.e., self-regulation by exchanges, with SEBI providing the overall regulatory and supervisory role). Another report, by the J.R. Varma Committee in 1998, worked out the various operational details such as margining and risk management systems for these instruments. In 1999, the Securities Contracts (Regulation) Act of 1956, or SC(R) A, was amended so that derivatives could be declared as securities. This allowed the regulatory framework for trading securities, to be extended to derivatives. The Act considers derivatives on equities to be legal and valid, but only if they are traded on exchanges.

Derivatives trading commenced in India in June 2000 after SEBI granted the final approval to this effect in May 2001. SEBI permitted the derivative segments of two stock exchanges, NSE and BSE, and their clearing house/corporation to commence trading and settlement in approved derivatives contracts. To begin with, SEBI approved trading in index futures contracts based on S&P CNX Nifty and BSE -30 (Sensex) index. This was followed by approval for trading in options based on these two indexes and options on individual securities. The trading in BSE Sensex options commenced on June

4, 2001 and the trading in options on individual securities commenced in July 2001. Futures contracts on individual stocks were launched in November 2001. The derivatives trading on NSE commenced with S&P CNX Nifty Index futures on June 12, 2000. The trading in index options commenced on June 4, 2001 and trading in options on individual securities commenced on July 2, 2001. Single stock futures were launched on November 9, 2001. The index futures and options contract on NSE are based on S&P CNX. Trading and settlement in derivative contracts is done in accordance with the rules, byelaws, and regulations of the respective exchanges and their clearing house/corporation duly approved by SEBI and notified in the official 5 gazette. Foreign Institutional Investors (FIIs) are permitted to trade in all Exchange traded derivative products.

6.2 OBJECTIVES

After reading this lesson, you will be able to know about:

- Different types of securities- equity and debt based

6.3 MEANING AND TYPES OF SECURITIES

Security refers to a financial instrument that represents an ownership position in a publicly-traded corporation (stock), a creditor relationship with governmental body or a corporation (bond), or rights to ownership as represented by an option. A security is a fungible, negotiable financial instrument that represents some type of financial value. The company or entity that issues the security is known as the issuer. There are two types of securities:

- 1) Equity Based Securities
- 2) Debt Based Securities

6.3.1 Equity Based Securities

An equity security is a share of equity interest in an entity such as the capital stock of a company, trust or partnership. The most common form of equity interest is common stock, although preferred equity is also a form of capital

stock. The holder of equity is a shareholder, owning a share, or fractional part of the issuer. Unlike debt securities, which typically require regular payments (interest) to the holder, equity securities are not entitled to any payment. A share is an equity security. Its owner owns one part of the capital of the company which has issued the shares. The shares enable the shareholder the right to take part in the decision-making in the company. If the latter operates with profit, the owners of shares may receive dividends. The amount of the dividend is decided upon by the shareholders at a General Meeting of the Shareholders. Shares may be of two types:

1. **Equity / Ordinary Shares**

Equity shares are also known as Ordinary Shares. Every company has to issue equity shares. Equity capital is also known as Owned Capital or Risk Capital or Venture Capital. Ordinary shares have a face value in terms of price of each share. The price at which the equity shares are issued is the issued price. The price at which equity shares are traded in stock market is their market value.

Indian Companies Act, 1956 defines equity shares as “those shares which are not preference shares.”

Features of Equity Shares:

- a. **Permanent Capital:** Equity share capital represents the permanent capital of the company. They are irredeemable. There is no obligation on the part of the company to repay the capital during the life time of company.
- b. **Fluctuating Dividend:** Equity shares get fluctuating dividend as the rate of dividend depends upon the earnings of the company. There is no guarantee of minimum dividend.
- c. **Limited Liability:** Even though the equity holders share the ownership risk, their liability is limited to the extent of their investment in the share capital of the company.

- d. **Voting Rights:** Equity shareholders enjoy normal voting rights. They can vote on all resolutions passed at the shareholder's meetings.
- e. **Residual Share:** Ordinary Shareholder's claim on assets of the company is residual. Their claim would rank after the claims of creditors and preference shareholders in the event of liquidation. If the liquidation value of assets is insufficient, their claims may remain unpaid.
- f. **Right to Control:** As owners of the company equity holders have the right to control the operations of the company. However their control is indirect as major policies and decisions are approved by Board of directors. In actual practice their control is weak and ineffective.
- g. **Pre-emptive Rights:** Ordinary shareholders have a legal right to be offered by the company, the first opportunity to purchase additional issues of equity capital in proportion to their current holdings.
- h. **Increase Shareholders Wealth:** Equity shares increase shareholders wealth. This is due to regular dividend and issue of bonus shares. When share market is at boom, the share prices also increases considerably.

2. Preference Shares

Preference share capital is a type of long-term capital. It combines the features of equity shares and debentures. It is an ownership security like an ordinary share, but it carries fixed rate of dividend like debentures. The holders of preference shares are entitled to income after the claims of creditors of the company have been met, but before ordinary shareholders receive any income.

Features of Preference Shares:

- a. **Fixed Dividend:** Preference shares are also called a fixed income security. Preference share dividends are fixed and expressed as a percentage of par values.
- b. **Voting Rights:** Ordinarily a preference share holder does not carry voting rights.

- c. **Convertibility:** Sometimes preference shares may be convertible partly or fully into equity shares or debentures at a certain ratio during a specified period.
- d. **Redeemability:** Preference share has a limited life after which it must be retired.
- e. **Cumulative Dividends:** Preference share is cumulative. All unpaid dividends are carried forward and payable before any ordinary dividend is paid.
- f. **Prior Claim on Income and Assets:** Preference shares have a prior claim (preference) over equity share both on the income and assets of the company.

Types of Preference Shares

- a. **Cumulative and Non – Cumulative:** Cumulative preference shares are those in which if dividend is skipped (not given) in any period, it has to be paid subsequently. This is not required in case of non-cumulative preference shares.
- b. **Redeemable and non – Redeemable:** A redeemable preference share matures in a fixed period of time. For non-redeemable preference shares there is no fixed time limit.
- c. **Participating and Non – Participating:** If the company makes good profits, the participating preference shareholders can earn a higher dividend than the fixed one. This is not in case of non-participating preference shareholders.
- d. **Convertible and non – Convertible:** Convertible preference shares can be converted into equity shares on terms and conditions fixed at the time of such issue. Non-convertible preference shares are not converted into equity shares.

6.3.2 Debt Based Securities

Any debt instrument that can be bought or sold between two parties and has basic terms defined, such as amount borrowed, interest rate and maturity/renewal date. Debt securities include government bonds, corporate bonds, CDs, municipal bonds, preferred stock, collateralized securities and zero-coupon securities. The interest rate on a debt security is largely determined by the perceived repayment ability of the borrower; higher risks of payment default almost always lead to higher interest rates to borrow capital. These are also known as “fixed-income securities.”

1. Debentures

Debentures are creditorship securities representing long-term indebtedness of a company. A debenture is an instrument executed by the company under its common seal acknowledging indebtedness to some person or persons to secure the sum advanced. It is, thus, a security issued by a company against the debt. A public limited company is allowed to raise debt or loan through debentures after getting Certificate of Commencement of business if permitted by its Memorandum of Association. Companies Act has not defined the term debenture.

Debentures, like shares, are equal parts of loan raised by a company. Debentures are usually secured by the company by fixed or floating debentures at periodical intervals, generally six months and the company agrees to pay the principal amount at the expiry of the stipulated period according to their terms of issue. Like shares, they are issued to the public at par, at a premium or at a discount. Debenture-holders are creditors of the company. They have no voting rights but their claims rank prior to preference shareholders and equity shareholders. Their exact rights depend upon the nature of debentures they hold.

Debentures can be of following types:

- a. **Redeemable and Irredeemable Debentures :** Redeemable debentures are those which can be redeemed or paid back at the end of a specified period mentioned on the debentures or within a specified period at the option of the company by giving notice to the debenture

holders or by installments as per terms of issue. Irredeemable debentures are those which are repayable at any time by the company during its existence. No date of redemption is specified. The debenture holders cannot claim their redemption. However, they are due for redemption if the company fails to pay interest on such debentures or on winding up of the company. They are also called perpetual debentures.

- b. Secured and Unsecured Debentures :** Secured or mortgaged debentures carry either a fixed charge on the particular asset of the company or floating charge on all the assets of the company. Unsecured debentures, on the other hand, have no such charge on the assets of the company. They are also known as simple or naked debentures.
- c. Registered and Bearer Debentures :** Registered debentures are registered with the company. Name, address and particulars of holdings of every debenture holders are recorded on the debenture certificate and in the books of the company. At the time of transfer, a regular transfer deed duly stamped and properly executed is required. Interest is paid only to the registered debenture holders. Bearer debentures on the other hand, are transferred by mere delivery without any notice to the company. Company keeps no record for such debentures. Debentures-coupons are attached with the debentures-certificate and interest can be claimed by the coupon-holder.
- d. Convertible and Non Convertible debentures :** Convertible debentures are those which can be converted by the holders of such debentures into equity shares or preference shares at stated rates of exchange, after a certain period. Such debentures once converted into shares cannot be reconverted into debentures. Now, a company can also issue partially convertible debentures under which only a part of the debenture amount can be converted into equity shares. Non convertible debentures are those debentures that do not confer

any option to the holder to convert the debentures into equity shares and are redeemed at the expiry of a specified period/(s).

2. Bonds

A **bond** is an instrument of indebtedness of the bond issuer to the holders. It is a debt security, under which the issuer owes the holders a debt and, depending on the terms of the bond, is obliged to pay them interest (the coupon) and/or to repay the principal at a later date, termed the maturity date. Interest is usually payable at fixed intervals (semiannual, annual, sometimes monthly). Very often the bond is negotiable, i.e. the ownership of the instrument can be transferred in the secondary market. This means that once the transfer agents at the bank medallion stamp the bond, it is highly liquid on the second market.

Bonds are issued by public authorities, credit institutions, companies and supranational institutions in the primary markets. The most common process for issuing bonds is through underwriting. When a bond issue is underwritten, one or more securities firms or banks, forming a syndicate, buy the entire issue of bonds from the issuer and re-sell them to investors. The security firm takes the risk of being unable to sell on the issue to end investors. Primary issuance is arranged by *book runners* who arrange the bond issue, have direct contact with investors and act as advisers to the bond issuer in terms of timing and price of the bond issue. The book runner is listed first among all underwriters participating in the issuance in the tombstone ads commonly used to announce bonds to the public. The book runners' willingness to underwrite must be discussed prior to any decision on the terms of the bond issue as there may be limited demand for the bonds.

3. Certificate of Deposit (CD)

Certificate of Deposit (CD) is a negotiable money market instrument and issued in dematerialised form or as a Usance Promissory Note against 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 (RBI), as amended from time to time. Minimum amount of a CD should be Rs.1 lakh, i.e., the minimum deposit that could be accepted from a single subscriber should not be less than Rs.1 lakh and in multiples of Rs. 1 lakh thereafter. CDs can be issued to individuals, corporations, companies, trusts, funds, associations, etc. The maturity period of CDs issued by banks should not be less than 7 days and not more than one year, from the date of issue.

4. Commercial Paper (CP)

Commercial Paper (CP) is an unsecured money market instrument issued in the form of a promissory note. It was introduced in India in 1990 with a view to enabling highly rated corporate borrowers to diversify their sources of short-term borrowings and to provide an additional instrument to investors. Subsequently, primary dealers and all-India financial institutions were also permitted to issue CP to enable them to meet their short-term funding requirements for their operations. Corporate, primary dealers (PDs) and the All-India Financial Institutions (FIs) are eligible to issue CP. It can be issued in denominations of Rs.5 lakh or multiples thereof. All eligible participants shall obtain the credit rating for issuance of Commercial Paper from a credit rating agency. The minimum credit rating shall be A-2.

5. Government Securities

A Government security is a tradable instrument issued by the Central Government or the State Governments. It acknowledges the Government's debt obligation. Such securities are short term (usually called treasury bills, with original maturities of less than one year) or long term (usually called Government bonds or dated securities with original maturity of one year or more). In India, the Central Government issues both, treasury bills and bonds or dated securities while the State

Governments issue only bonds or dated securities, which are called the State Development Loans (SDLs). Government securities carry practically no risk of default and, hence, are called risk-free gilt-edged instruments. Government of India also issues savings instruments (Savings Bonds, National Saving Certificates (NSCs), etc.) or special securities (oil bonds, Food Corporation of India bonds, fertiliser bonds, power bonds, etc.). They are, usually not fully tradable and are, therefore, not eligible to be SLR securities.

(a) Treasury Bills (T-bills)

Treasury bills or T-bills, which are money market instruments, are short term debt instruments issued by the Government of India and are presently issued in three tenors, namely, 91 day, 182 day and 364 day. Treasury bills are zero coupon securities and pay no interest. They are issued at a discount and redeemed at the face value at maturity. For example, a 91 day Treasury bill of Rs.100/- (face value) may be issued at say Rs. 98.20, that is, at a discount of say, Rs.1.80 and would be redeemed at the face value of Rs.100/-. The return to the investors is the difference between the maturity value or the face value (that is Rs.100) and the issue price. The Reserve Bank of India conducts auctions usually every Wednesday to issue T-bills. Payments for the T-bills purchased are made on the following Friday. The 91 day T-bills are auctioned on every Wednesday. The Treasury bills of 182 days and 364 days tenure are auctioned on alternate Wednesdays. T-bills of 364 days tenure are auctioned on the Wednesday preceding the reporting Friday while 182 T-bills are auctioned on the Wednesday prior to a non-reporting Fridays. The Reserve Bank releases an annual calendar of T-bill issuances for a financial year in the last week of March of the previous financial year. The Reserve Bank of India announces the issue details of T-bills through a press release every week.

(b) Cash Management Bills (CMBs)

Government of India, in consultation with the Reserve Bank of India, has decided to issue a new short-term instrument, known as Cash Management Bills (CMBs), to meet the temporary mismatches in the cash flow of the Government. The CMBs have the generic character of T-bills but are issued for maturities less than 91 days. Like T-bills, they are also issued at a discount and redeemed at face value at maturity. The tenure, notified amount and date of issue of the CMBs depends upon the temporary cash requirement of the Government. The announcement of their auction is made by Reserve Bank of India through a Press Release which will be issued one day prior to the date of auction. The settlement of the auction is on T+1 basis. The non-competitive bidding scheme has not been extended to the CMBs. However, these instruments are tradable and qualify for ready forward facility. Investment in CMBs is also reckoned as an eligible investment in Government securities by banks for SLR purpose under Section 24 of the Banking Regulation Act, 1949. First set of CMBs were issued on May 12, 2010.

Instruments:

- i. Fixed Rate Bonds* – These are bonds on which the coupon rate is fixed for the entire life of the bond. Most Government bonds are issued as fixed rate bonds.
For example – 8.24% GS2018 was issued on April 22, 2008 for a tenor of 10 years maturing on April 22, 2018. Coupon on this security will be paid half-yearly at 4.12% (half yearly payment being the half of the annual coupon of 8.24%) of the face value on October 22 and April 22 of each year.
- ii. Floating Rate Bonds* – Floating Rate Bonds are securities which do not have a fixed coupon rate. The coupon is reset at pre-announced intervals (say, every six months or one year) by adding a spread over a base rate. In the case of most floating rate bonds issued by the Government of India so far, the base rate is the weighted average cut-off yield of the last three 364- day Treasury Bills auctions

preceding the coupon reset date and the spread is decided through the auction. Floating Rate Bonds were first issued in September 1995 in India. For example, a Floating Rate Bond was issued on July 2, 2002 for a tenor of 15 years, thus maturing on July 2, 2017. The base rate on the bond for the coupon payments was fixed at 6.50% being the weighted average rate of implicit yield on 364-day Treasury Bills during the preceding six auctions. In the bond auction, a cut-off spread (markup over the benchmark rate) of 34 basis points (0.34%) was decided. Hence the coupon for the first six months was fixed at 6.84%.

- iii. Zero Coupon Bonds* – Zero coupon bonds are bonds with no coupon payments. Like Treasury Bills, they are issued at a discount to the face value. The Government of India issued such securities in the nineties; it has not issued zero coupon bonds after that.
- iv. Capital Indexed Bonds* – These are bonds, the principal of which is linked to an accepted index of inflation with a view to protecting the holder from inflation. A capital indexed bond, with the principal hedged against inflation, was issued in December 1997. These bonds matured in 2002. The government is currently working on a fresh issuance of Inflation Indexed Bonds wherein payment of both, the coupon and the principal on the bonds, will be linked to an Inflation Index (Wholesale Price Index). In the proposed structure, the principal will be indexed and the coupon will be calculated on the indexed principal. In order to provide the holders protection against actual inflation, the final WPI will be used for indexation.
- v. Bonds with Call/ Put Options* – Bonds can also be issued with features of optionality wherein the issuer can have the option to buy-back (call option) or the investor can have the option to sell the bond (put option) to the issuer during the currency of the bond. 6.72% GS2012 was issued on July 18, 2002 for a maturity of 10 years maturing on July 18, 2012. The optionality on the bond could be

exercised after completion of five years tenure from the date of issuance on any coupon date falling thereafter. The Government has the right to buy back the bond (call option) at par value (equal to the face value) while the investor has the right to sell the bond (put option) to the Government at par value at the time of any of the half-yearly coupon dates starting from July 18, 2007.

- vi. **Special Securities** - In addition to Treasury Bills and dated securities issued by the Government of India under the market borrowing programme, the Government of India also issues, from time to time, special securities to entities like Oil Marketing Companies, Fertilizer Companies, the Food Corporation of India, etc. as compensation to these companies in lieu of cash subsidies. These securities are usually long dated securities carrying coupon with a spread of about 20-25 basis points over the yield of the dated securities of comparable maturity. These securities are, however, not eligible SLR securities but are eligible as collateral for market repo transactions. The beneficiary oil marketing companies may divest these securities in the secondary market to banks, insurance companies / Primary Dealers, etc., for raising cash.
- vii. **STRIPS (Separate Trading of Registered Interest and Principal of Securities)** - Accordingly, guidelines for stripping and reconstitution of Government securities have been issued. STRIPS are instruments wherein each cash flow of the fixed coupon security is converted into a separate tradable Zero Coupon Bond and traded. For example, when Rs.100 of the 8.24% GS2018 is stripped, each cash flow of coupon (Rs.4.12 each half year) will become coupon STRIP and the principal payment (Rs.100 at maturity) will become a principal STRIP. These cash flows are traded separately as independent securities in the secondary market. STRIPS in Government securities will ensure availability of sovereign zero coupon bonds, which will facilitate the development of a market determined

zero coupon yield curve (ZCYC). STRIPS will also provide institutional investors with an additional instrument for their asset-liability management. Further, as STRIPS have zero reinvestment risk, being zero coupon bonds, they can be attractive to retail/non-institutional investors. The process of stripping/reconstitution of Government securities is carried out at RBI, Public Debt Office (PDO) in the PDO-NDS (Negotiated Dealing System) at the option of the holder at any time from the date of issuance of a Government security till its maturity. All dated Government securities, other than floating rate bonds, having coupon payment dates on 2nd January and 2nd July, irrespective of the year of maturity are eligible for Stripping/Reconstitution. Eligible Government securities held in the Subsidiary General Leger (SGL)/Constituent Subsidiary General Ledger (CSGL) accounts are maintained at the PDO, RBI, Mumbai. Physical securities shall not be eligible for stripping/reconstitution. Minimum amount of securities that needs to be submitted for stripping/reconstitution will be Rs. 1 crore (Face Value) and multiples thereof.

c) State Development Loans (SDLs)

State Governments also raise loans from the market. SDLs are dated securities issued through an auction similar to the auctions conducted for dated securities issued by the Central Government. Interest is serviced at half-yearly intervals and the principal is repaid on the maturity date. Like dated securities issued by the Central Government, SDLs issued by the State Governments qualify for SLR. They are also eligible as collaterals for borrowing through market repo as well as borrowing by eligible entities from the RBI under the Liquidity Adjustment Facility (LAF).

6.4 SUMMARY

A security is a negotiable financial instrument that represents some type of financial value. The company or entity that issues the security is known as the issuer. Securities may be in the form of equity based, debt based,

derivatives or mutual funds. An equity security is a share of equity interest in an entity such as the capital stock of a company, trust or partnership. The most common form of equity interest is common stock, although preferred equity is also a form of capital stock. On the other hand, debentures are creditor ship securities representing long term indebtedness of a company. A derivative is a special type of contract that derives its value from the performance of an underlying entity.

6.5 GLOSSARY

- **Equity Shares:** Equity/ordinary shares have a face value in terms of price of each share. The price at which the equity shares are issued is the issued price. The price at which equity shares are traded in stock market is their market value.
- **Preference Shares:** Preference share capital is a type of long-term capital. It combines the features of equity shares and debentures. It is an ownership security like an ordinary share, but it carries fixed rate of dividend like debentures.
- **Debentures:** A debenture is an instrument executed by the company under its common seal acknowledging indebtedness to some person or persons to secure the sum advanced.
- **Bonds:** A bond is an instrument of indebtedness of the bond issuer to the holders.
- **Government Securities:** A Government security is a tradable instrument issued by the Central Government or the State Governments. It acknowledges the Government's debt obligation.

6.6 SELF ASSESSMENT QUESTIONS

- 1) Write down different types of equity based securities.
-

- 2) Write a short note on bonds.

6.7 LESSON END EXERCISES

1. What do you mean by securities? Explain different types of equity based and debt based securities.
2. Explain different types of instruments related to government securities.

6.8 SUGGESTED READINGS

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VALUATION OF SECURITIES

STRUCTURE

- 7.1 Introduction
- 7.2 Objectives
- 7.3 Valuation of Securities: Bond Valuation and Different Approaches
- 7.4 Equity Valuation
- 7.5 Summary
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- 7.7 Self Assessment Questions
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7.1 INTRODUCTION

Value of a share or debenture is always from the perspective of an investor. As investment is the sacrifice of current money value for having returns in the future, and therefore, this value is nothing but worth of securities as perceived by an investor. It can also be considered as present value of all the returns associated with the share/debenture likely to be received in the future. This present value is calculated by discounting the future returns at investors

required rate of return. Sometimes, general interest rate prevailing in the market is also used as discount rate. Expected returns by an investor are based on number of factors such as type of investment avenue, level of risk, market trends, financial performance, etc.

Securities can be classified into two groups for the purpose of valuation :

- Fixed income securities: Debenture/bond and preference shares
- Fluctuating income securities: Equity shares

7.2 OBJECTIVES

After going through this lesson, you will be able to understand approaches of:

- Valuation of bond.
- Equity valuation.

7.3 VALUATION OF SECURITIES: BOND VALUATION AND DIFFERENT APPROACHES

It is important for prospective bond buyers to know how to estimate the price of a bond because it will indicate the yield received which will ultimately help to determine - whether the bond should be purchased or not. In this section, we will run through some bond price calculations for various types of bond instruments.

Bonds can be priced at a premium, discount, or at par. If the bond's price is higher than its par value, it will sell at a premium because its interest rate is higher than current prevailing rates. If the bond's price is lower than its par value, the bond will sell at a discount because its interest rate is lower than current prevailing interest rates. When you calculate the price of a bond, you are calculating the maximum price you would want to pay for the bond, given the bond's coupon rate in comparison to the average rate most investors are currently receiving in the bond market. Required yield or required rate of return is the interest rate that a security needs to offer in order to encourage investors to purchase it. Usually the

required yield on a bond is equal to or greater than the current prevailing interest rates.

1. Present Value Method :

The price of a bond is the sum of the present values of all expected coupon payments plus the present value of the par value at maturity. Calculating bond price is simple: all we are doing is discounting the known future cash flows. Remember that to calculate present value (PV) - which is based on the assumption that each payment is re-invested at some interest rate once it is received—we have to know the interest rate that would earn us a known future value. For bond pricing, this interest rate is the required yield. Here is the formula for calculating a bond's price, which uses the basic present value (PV) formula:

$$\text{Bond Price} = \frac{C}{(1+i)} + \frac{C}{(1+i)^2} + \dots + \frac{C}{(1+i)^n} + \frac{M}{(1+i)^n}$$

C = coupon payment

n = number of payments

i = interest rate, or required yield

M = value at maturity, or par value

2. Calculating Current Yield :

A simple yield calculation that is often used to calculate the yield on both bonds and the dividend yield for stocks is the current yield. The current yield calculates the percentage return that the annual coupon payment provides the investor. In other words, this yield calculates what percentage the actual dollar coupon payment is of the price the investor pays for the bond. The multiplication by 100 in the formulas below converts the decimal into a percentage, allowing us to see the percentage return:

$$\text{Current Yield} = \frac{\text{Annual Dollar Interest Paid}}{\text{Market Price}} * 100\%$$

So, if you purchased a bond with a par value of \$100 for \$95.92 and it paid a coupon rate of 5%, this is how you'd calculate its current yield:

$$= \frac{(0.05 * \$100)}{\$95.92} * 100 \% = 5.21\%$$

3. Calculating Yield to Maturity :

The current yield calculation we learned above shows us the return the annual coupon payment gives the investor, but this percentage does not take into account the time value of money or, more specifically, the present value of the coupon payments the investor will receive in the future. For this reason, when investors and analysts refer to yield, they are most often referring to the yield to maturity (YTM), which is the interest rate by which the present values of all the future cash flows are equal to the bond's price. An easy way to think of YTM is to consider it the resulting interest rate the investor receives if he or she invests all of his or her cash flows (coupons payments) at a constant interest rate until the bond matures. YTM is the return the investor will receive from his or her entire investment. It is the return that an investor gains by receiving the present values of the coupon payments, the par value and capital gains in relation to the price that is paid.

To demonstrate this method, we first need to review the relationship between a bond's price and its yield. In general, as a bond's price increases, yield decreases. This relationship is measured using the price value of a basis point (PVBP). By taking into account factors such as the bond's coupon rate and credit rating, the PVBP measures the degree to which a bond's price will change when there is a 0.01% change in interest rates. The charted relationship between bond price and required yield appears as a negative curve:

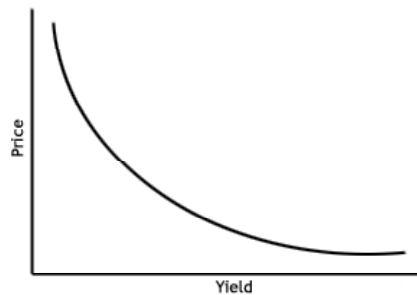


Figure 7.1 : Relationship between Bond Price and Required Yield

This is due to the fact that a bond's price will be higher when it pays a coupon that is higher than prevailing interest rates. As market interest rates increase, bond prices decrease.

The second concept we need to review is the basic price-yield properties of bonds:

Premium bond: Coupon rate is greater than market interest rates. Discount bond: Coupon rate is less than market interest rates.

Thirdly, remember to think of YTM as the yield a bondholder receives if he or she reinvested all coupons received at a constant interest rate, which is the interest rate that we are solving for. If we were to add the present values of all future cash flows, we would end up with the market value or purchase price of the bond. The calculation can be presented as:

$$\text{Bond Price} = \frac{\text{Cashflow 1}}{(1 + \text{yield})^1} + \frac{\text{Cashflow 2}}{(1 + \text{yield})^2} + \dots + \frac{\text{Last Cashflow}}{(1 + \text{yield})^n}$$

There are three main patterns created by the term structure of interest rates:

- A) **Normal Yield Curve:** As its name indicates, this is the yield curve shape that forms during normal market conditions, wherein investors generally believe that there will be no significant changes in the economy, such as in inflation rates, and

that the economy will continue to grow at a normal rate. During such conditions, investors expect higher yields for fixed income instruments with long-term maturities that occur farther into the future. In other words, the market expects long-term fixed income securities to offer higher yields than short-term fixed income securities. This is a normal expectation of the market because short-term instruments generally hold less risk than long-term instruments; the farther into the future the bond's maturity, the more time and, therefore, uncertainty the bondholder faces before being paid back the principal. To invest in one instrument for a longer period of time, an investor needs to be compensated for undertaking the additional risk. Remember that as general current interest rates increase, the price of a bond will decrease and its yield will increase.

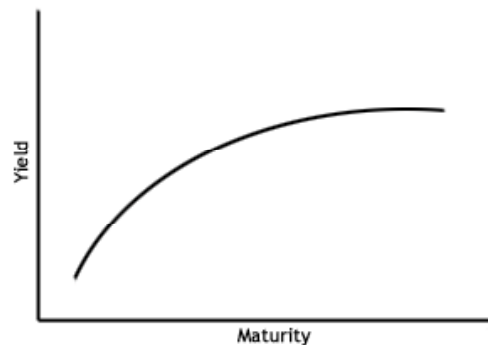


Figure 7.2 : Normal Yield Curve

- B) Flat Yield Curve:** These curves indicate that the market environment is sending mixed signals to investors, who are interpreting interest rate movements in various ways. During such an environment, it is difficult for the market to determine whether interest rates will move significantly in either direction farther into the future. A flat yield curve usually occurs when the market is making a transition that emits different but simultaneous indications of what interest rates will do. In other words, there may be some signals that short-term interest rates will rise and other signals that long-term interest rates will fall. This condition will create a curve that is flatter than its normal positive slope. When the yield curve is flat, investors can maximize their risk/return tradeoff by choosing fixed-income securities with the least risk, or highest credit quality. In the rare instances where in long-term interest rates decline, a flat curve can

sometimes lead to an inverted curve.

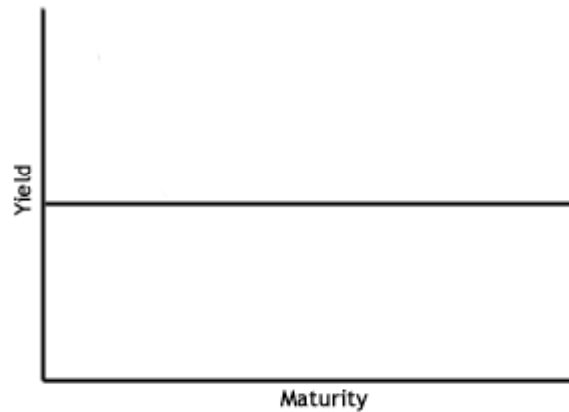


Figure 7.3 : Flat Yield Curve

- C) **Inverted Yield Curve:** These yield curves are rare, and they form during extraordinary market conditions wherein the expectations of investors are completely the inverse of those demonstrated by the normal yield curve. In such abnormal market environments, bonds with maturity dates further into the future are expected to offer lower yields than bonds with shorter maturities. The inverted yield curve indicates that the market currently expects interest rates to decline as time moves farther into the future, which in turn means the market expects yields of long-term bonds to decline. Remember, also, that as interest rates decrease, bond prices increase and yields decline.

You may be wondering why investors would choose to purchase long-term fixed-income investments when there is an inverted yield curve, which indicates that investors expect to receive less compensation for taking on more risk. Some investors, however, interpret an inverted curve as an indication that the economy will soon experience a slowdown, which causes future interest rates to give even lower yields. Before a slowdown, it is better to lock money into long-term investments at present prevailing yields, because future yields will be even lower.

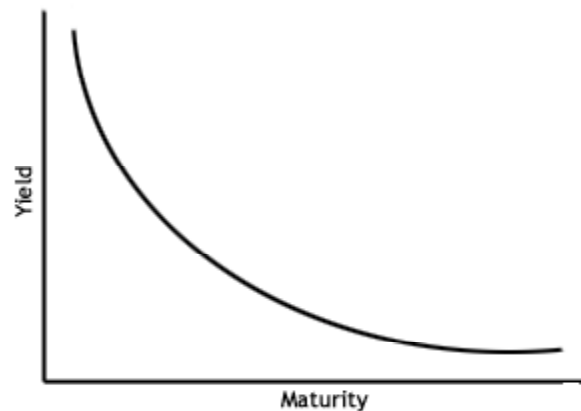


Figure 7.4 : Inverted Yield Curve

4. Duration

There are four main types of duration calculations, each of which differ in the way they account for factors such as interest rate changes and the bond's embedded options or redemption features.

Macaulay Duration

The formula usually used to calculate a bond's basic duration is the Macaulay duration, which was created by Frederick Macaulay in 1938, although it was not commonly used until the 1970s. Macaulay duration is calculated by adding the results of multiplying the present value of each cash flow by the time it is received and dividing by the total price of the security. The formula for Macaulay duration is as follows:

$$\text{Macaulay Duration} = \frac{\sum_{t=1}^n \frac{t \cdot C}{(1+i)^t} + \frac{n \cdot M}{(1+i)^n}}{P}$$

n = number of cash flows , t = time to maturity

C = cash flow , i = required yield

M = maturity (par) value, P = bond price

5. Convexity

Convexity is also useful for comparing bonds. If two bonds offer the same

duration and yield but one exhibits greater convexity, changes in interest rates will affect each bond differently. A bond with greater convexity is less affected by interest rates than a bond with less convexity. Also, bonds with greater convexity will have a higher price than bonds with a lower convexity, regardless of whether interest rates rise or fall. This relationship is illustrated in the following diagram:

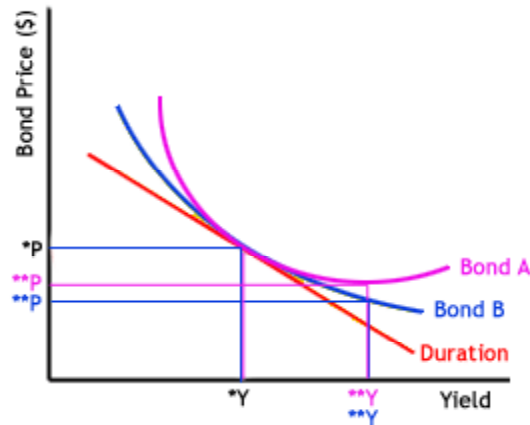


Figure 7.5 : Comparison between Bond 'A' and Bond 'B'

As you can see Bond A has greater convexity than Bond B, but they both have the same price and convexity when price equals $*P$ and yield equals $*Y$. If interest rates change from this point by a very small amount, then both bonds would have approximately the same price, regardless of the convexity. When yield increases by a large amount, however, the prices of both Bond A and Bond B decrease, but Bond B's price decreases more than Bond A's. Notice how at Y the price of Bond A remains higher, demonstrating that investors will have to pay more money (accept a lower yield to maturity) for a bond with greater convexity.

7.4 EQUITY VALUATION

Valuation is the process of determining how much a security is worth of. Security valuation is highly subjective, but it is easiest when one is considering the value of tangible assets, level of debt, and other quantifiable data of the company issuing a security. For example, determining a company's earnings for the current year is easier than determining what the value of the company's brand recognition might be in 10 years. Valuation is important in fundamental analysis, the practitioners of

which usually consider a company's earnings to be indicative of its value. So, it is a form of fundamental analysis that looks to compare the valuation of one security to another, to a group of securities or within its own historical context. Valuation analysis is done to evaluate the potential merits of an investment or to objectively assess the value of a business or asset.

1. Present Value Method

The formula for the present value of a stock with constant growth is the estimated dividends to be paid divided by the difference between the required rate of return and the growth rate.

$$P_0 = \frac{Div_1}{r - g}$$

P₀ = Price of Stock

Div₁ = Estimated Dividends for Next Period

r = Required Rate of Return

g = Growth Rate

The present value of a stock with constant growth is one of the formulas used in the dividend discount model, specifically relating to stocks that the theory assumes will grow perpetually. The dividend discount model is one method used for valuing stocks based on the present value of future cash flows, or earnings.

How is the Present Value of Stock with Constant Growth Derived?

As previously stated, the present value of a stock with constant growth is based on the dividend discount model, which sums the discount of each cash flow to its present value. The formula shown above for stocks with constant growth uses the present value of a growing perpetuity formula, based on the underlying theoretical assumption that a stock will continue indefinitely, or in perpetuity. This assumption is not without scrutiny, however the present value of a growing perpetuity can be used as a comparable measure along with other stock valuation methods for companies that are stable and tend to have a calculable

outcome of steady growth.

Growth Rate in the Present Value of Stock Formula

The growth rate used for calculating the present value of a stock with constant growth can be estimated as

$$g = \textit{retention ratio} \times \textit{ROE}$$

Multiplying the retention ratio by the return on equity can then be reduced to retained earnings divided average stockholder's equity.

It is important to note that in practice, growth cannot be infinitely negative nor can it exceed the required rate of return. A fair amount of stock valuation requires non-mathematical inference to determine the appropriate method used.

Required Rate of Return in the Present Value of Stock Formula

The required rate of return variable in the formula for valuing a stock with constant growth can be determined by a few different methods.

2. Capital Asset Pricing Model

One method for finding the required rate of return is to use the capital asset pricing model. The capital asset pricing model method looks at the risk of a stock relative to the risk of the market to determine the required rate of return based on the return on the market.

$$\textit{Expected Return} = \alpha + \beta(r_m - r_f) + \epsilon$$

Another method that can be used is to determine the required rate of return based on the present value of dividends. This method also uses the present value of a growing perpetuity formula and rearranges the formula to calculate the required rate of return. After rearranging the formula, it is shown as

$$r = \frac{D}{P_0} + g$$

Which is the dividend yield + growth rate.

The arbitrage pricing theory can also be used which is similar to the capital asset pricing model but uses various risk factors and the betas for each risk factor to determine the total risk premium for the stock.

3. Constant Growth Model

Stock Valuation is more difficult than Bond Valuation because stocks do not have a finite maturity and the future cash flows, *i.e.*, dividends, are not specified. Therefore, the techniques used for stock valuation must make some assumptions regarding the structure of the dividends.

A constant growth stock is a stock whose dividends are expected to grow at a constant rate in the foreseeable future. This condition fits many established firms, which tend to grow over the long run at the same rate. Many companies have dividends which are expected to grow steadily into the foreseeable future, and such companies are valued as constant growth stocks. The value of a constant growth stock can be determined using the following equation:

$$P_0 = \frac{D_0(1+g)}{r-g} = \frac{D_1}{r-g}$$

Where

- P_0 = the stock price at time 0,
- D_0 = the current dividend,
- D_1 = the next dividend (*i.e.*, at time 1),
- g = the growth rate in dividends, and
- r = the required return on the stock, and
- $g < r$.

4. Two Stage Growth Model

Many companies experience above normal growth rates for a short period of time before settling in on a lower but stable perpetual growth rate. It would be inappropriate to calculate the stock's intrinsic value based on the single-stage dividend growth model. The two-stage dividend growth model formula is :

$$V_0 = \left[\sum_{t=1}^n \frac{D_0 (1+g_s)^t}{(1+r)^t} \right] + \left[\frac{D_0 (1+g_s)^n \times (1+g_L)}{(1+r)^n \times (r-g_L)} \right]$$

Where V_0 = Stock's intrinsic value;

D_0 = Most recent dividend paid;

g_s = Short- term dividend growth rate;

g_L = Long term dividend growth rate;

r = required rate of return;

t = year (i.e., 1st year, 2nd year, etc.);

n = growth period in years

5. Price Earnings Ratio

The price/earnings ratio (P/E) is the best known of the investment valuation indicators. The P/E ratio has its imperfections, but it is nevertheless the most widely reported and used valuation by investment professionals and the investing public. The financial reporting of both companies and investment research services use a basic earnings per share (EPS) figure divided into the current stock price to calculate the P/E multiple (i.e. how many times a stock is trading (its price) per each dollar of EPS). It's not surprising that estimated EPS figures are often very optimistic during bull markets, while reflecting pessimism during bear markets. Also, as a matter of historical record, it's no secret that the accuracy of stock analyst earnings estimates should be looked at skeptically by investors.

Price Earnings Ratio= Market value per share/ Earning per share

Historically, the average P/E ratio for the broad market has been around 15, although it can fluctuate significantly depending on economic and market conditions. The ratio will also vary widely among different companies and industries and depends on many other factors.

7.5 SUMMARY

Value of a share or debenture is always from the perspective of an investor. As investment is the sacrifice of current money value for having returns in the future, and therefore, this value is nothing but worth of securities as perceived by an investor. It can also be considered as present value of all the returns associated with the share/debenture likely to be received in the future. This present value is calculated by discounting the future returns at investors required rate of return.

It is important for prospective bond buyers to know how to estimate the price of a bond because it will indicate the yield received which help to determine whether the bond should be purchased or not. Similarly, valuation of equity is also important. Value of equity shares is the value as per fundamentals of the company. These fundamentals are reflected in the earnings and dividends of the company.

7.6 GLOSSARY

- **Fixed Income Securities:** These securities are the ones on which the issuing company is bound to pay or has an obligation to provide regular returns at a fixed rate to investors in the form of interest or dividend payment. These are debentures/bonds and preference shares.
- **Fluctuating Income Securities:** These securities are the ones on which the issuing company is not bound to pay or has no obligation to provide regular returns at a fixed rate to investors in the form of interest or dividend payment. These are the equity shares of a company.

7.7 SELFASSESSMENT QUESTIONS

1. What do you mean by valuation?

2. Mention different approaches of valuation of bonds.

7.8 LESSON END EXERCISES

1. Write a detailed note on valuation of equity shares of a company.

7.9 SUGGESTED READINGS

1. Sourain Harry, Investment Management, Prentice Hall of India.
2. Maheshwari Yogesh, Investment Management, Prentice Hall of India.
3. Chandra Prasanna, Investment Analysis and Portfolio Management, McGraw Hill.

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5. V. A. Avadhani, Investment Management, Himalaya Publishing House.
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LEGAL FRAMEWORK OF SECURITY MARKETS IN INDIA**STRUCTURE**

- 8.1 Introduction
- 8.2 Objectives
- 8.3 Security Markets in India
 - 8.3.1 Structure/ Levels of Security Market
 - 8.3.2 Main Financial Instruments and Participants
 - 8.3.3 Role of Security Market
- 8.4 Legal Framework of Security Markets in India
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 - 8.4.2 The Securities Contracts (Regulation) Act, 1956
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- 8.5 Summary
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- 8.7 Self Assessment Questions
- 8.8 Lesson End Exercises

8.9 Suggested Readings

8.10 References

8.1 INTRODUCTION

The importance of the securities market in our life and our economy, as stated so far, did not happen overnight. Countless people have slogged for over two centuries to bring the market to the centre stage. Though the historical records relating to securities market in India is inadequate and obscure, there is evidence to indicate that the loan securities of the East Indian Company used to be traded towards close of the 18th century. By 1830's, the trading in shares of banks started. The trader by the name of broker emerged in 1830 when 6 persons called themselves as share brokers. This number grew gradually. Till 1850, they traded in shares of banks and securities of the East India Company in Mumbai under a sprawling Banyan Tree in front of the Town Hall, which is now in the Horniman Circle Park.

The American Civil War broke out in 1861 which cut off supply of cotton from the USA to Europe. This heightened the demand for cotton from India. Cotton prices increased. Exports of cotton grew, payments were received in bullion. The people woke up only when the American Civil war ended. Then all rushed to sell their securities but there were no buyers. They were left with huge mass of unsalable paper. This occurred then. This also occurs today at regular intervals. The depression was so severe that it paved way for setting up of a formal market. The number of brokers, which had increased during the civil war to about 250, declined. During the civil war, they had become so influential and powerful that even the police had only *Salams* for them. But after the end of the civil war, they were driven from pillar to post by the police. They moved from place to place till 1874 when they found a convenient place, which is now appropriately called *Dalal Street* after their name. On 3rd December 1887, they established a stock exchange called '*Native Share*

and Stock Brokers' Association'. This laid the foundation of the oldest stock exchange in India. The word 'native' indicated that only natives of India could be brokers of the Exchange.

In 1880s a number textile mills came up in Ahmadabad. This created a need for trading of shares of these mills. In 1894, the brokers of Ahmadabad formed "The Ahmadabad Share and Stock Brokers' Association".

The 1870s saw a boom in jute prices, 1880s and 1890s saw boom in tea prices, then followed coal boom. When the booms ended, there were endless differences and disputes among brokers in eastern India which was home to production of jute, tea and coal. This provoked the establishment of "The Calcutta Stock Exchange Association" on June 15, 1908.

Control of capital issues was introduced through the Defence of India Rules in 1943 under the Defence of India Act, 1939 to channel resources to support the war effort. The control was retained after the war with some modifications as a means of controlling the raising of capital by companies and to ensure that national resources were channeled to serve the goals and priorities of the government, and to protect the interests of investors. The relevant provisions in the Defence of India Rules were replaced by the Capital Issues (Continuance of Control) Act in April 1947.

Under the constitution which came into force on January 26, 1950, stock exchanges and forward markets came under the exclusive authority of the central government. Following the recommendations of the A. D. Gorwala Committee in 1951, the Securities Contracts (Regulation) Act, 1956 was enacted to provide for direct and indirect control of virtually all aspects of securities trading and the running of stock exchanges and to prevent undesirable transactions in securities.

8.2 OBJECTIVES

After reading this lesson, you will be able to :

- Understand the meaning of securities market.
- Know the main financial instruments and participants of securities market.
- Comprehend the legal framework of securities market in India.

8.3 SECURITY MARKETS IN INDIA

Securities market is a component of the wider financial market where securities can be bought and sold between subjects of the economy, on the basis of demand and supply. Securities markets encompasses equity markets, bond markets and derivatives markets where prices can be determined and participants both professional and non professionals can meet. There are a number of professional participants of a securities market and these include; brokerages, broker-dealers, market makers, investment managers, speculators as well as those providing the infrastructure, such as clearing houses and securities depositories. A securities market is used in an economy to attract new capital, transfer real assets in financial assets, determine price which will balance demand and supply and provide a means to invest money both short and long term. A securities market is a system of interconnection between all participants that provides effective conditions to attract new capital by means of issuance new security, transfer real asset into financial asset, invest money for short or long term periods with the aim of deriving profitability and determine the prices of securities.

8.3.1 Structure/ Levels of Security Market

Securities markets can be split into two levels. Primary markets, where new securities are issued and secondary markets where existing securities can be bought and sold. Secondary markets can further be split into

organised exchanges, such stock exchanges and over-the-counter where individual parties come together and buy or sell securities directly. For securities holder knowing that a secondary market exists in which their securities may be sold and converted into cash increases the willingness of people to hold stocks and bonds and thus increases the ability of firms to issue securities.

1. Primary Market

The primary market is that part of the capital markets that deals with the issue of new securities. Companies, governments or public sector institutions can obtain funding through the sale of a new stock or bond issue. This is typically done through a syndicate of securities dealers. The process of selling new issues to investors is called underwriting. In the case of a new stock issue, this sale is a public offering.

Features of primary markets : Follow are the features of primary market:

- This is the market for new long term equity capital. The primary market is the market where the securities are sold for the first time. Therefore it is also called the new issue market (NIM).
- In a primary issue, the securities are issued by the company directly to investors.
- The company receives the money and issues new security certificates to the investors.
- Primary issues are used by companies for the purpose of setting up new business or for expanding or modernizing the existing business.
- The primary market performs the crucial function of facilitating capital formation in the economy.
- The new issue market does not include certain other sources of new long term external finance, such as loans from financial institutions.

Borrowers in the new issue market may be raising capital for converting private capital into public capital; this is known as “going public.”

2. Secondary market

The Secondary market, also known as the aftermarket, is the financial market where previously issued securities and financial instruments such as stock, bonds, options, and futures are bought and sold with primary issuances of securities or financial instruments, or the primary market. Investors purchase these securities directly from issuers such as corporations issuing shares in an IPO or private placement, or directly from the federal government in the case of treasuries. After the initial issuance, investors can purchase from other investors in the secondary market.

The secondary market for a variety of assets can vary from loans to stocks, from fragmented to centralized, and from illiquid to very liquid. The major **stock exchanges** are the most visible example of liquid secondary markets - in this case, for stocks of publicly traded companies. Exchanges such as the New York Stock Exchange, NASDAQ and the American Stock Exchange provide a centralized, liquid secondary market for the investors who own stocks that trade on those exchanges. Most bonds and structured products trade “over the counter,” or by phoning the bond desk of one’s broker-dealer. Loans sometimes trade online using a Loan Exchange.

Over-the-counter market: Over the counter (OTC) or off-exchange trading is to trade financial instruments such as stocks, bonds, commodities or derivatives directly between two parties. It is contrasted with exchange trading, which occurs via facilities constructed for the purpose of trading (i.e., exchanges), such as futures exchanges or stock exchanges. OTC stocks are not usually listed nor traded on any stock exchanges, though exchange listed stocks can be traded OTC on the third market. An over-the-counter contract is a bilateral contract in which

two parties agree on how a particular trade or agreement is to be settled in the future. It is usually from an investment bank to its clients directly. Forwards and swaps are prime examples of such contracts. It is mostly done via the computer or the telephone. For derivatives, these agreements are usually governed by an International Swaps and Derivatives Association agreement. This segment of the OTC market is occasionally referred to as the “Fourth Market.”

8.3.2 Main Financial Instruments and Participants

1. Financial Instruments

a) Promissory note

A promissory note, referred to as a note payable in accounting, or commonly as just a “note”, is a contract where one party (the maker or issuer) makes an unconditional promise in writing to pay a sum of money to the other (the payee), either at a fixed or determinable future time or on demand of the payee, under specific terms. They differ from IOUs in that they contain a specific promise to pay, rather than simply acknowledging that a debt exists.

b) Certificate of deposit

A certificate of deposit or CD is a time deposit, a financial product commonly offered to consumers by banks, financial institutions, and credit unions. CDs are similar to savings accounts in that they are insured and thus virtually risk-free; they are “money in the bank”. They are different from savings accounts in that the CD has a specific, fixed term (often three months, six months, or one to five years), and, usually, a fixed interest rate. It is intended that the CD be held until maturity, at which time the money may be withdrawn together with the accrued interest.

c) Bond

Bond is an issued security establishing its holder’s right to receive from

the issuer of the bond, within the time period specified therein, its nominal value and the interest fixed therein on this value or other property equivalent. The bond may provide for other property rights of its holder, where this is not contrary to legislation.

d) Stocks (shares)

i) Common (Equity) shares

Common shares represent ownership in a company and a claim (dividends) on a portion of profits. Investors get one vote per share to elect the board members, who oversee the major decisions made by management. Over the long term, common stock, by means of capital growth, yields higher returns than almost every other investment. This higher return comes at a cost since common stocks entail the most risk. If a company goes bankrupt and liquidates, the common shareholders will not receive money until the creditors, and preferred shareholders are paid.

ii) Preferred stock

Preferred stock represents some degree of ownership in a company but usually doesn't come with the same voting rights. (This may vary depending on the company.) With preferred shares investors are usually guaranteed a fixed dividend forever. This is different than common stock, which has variable dividends that are never guaranteed. Another advantage is that in the event of liquidation preferred shareholders are paid off before the common shareholder (but still after debt holders). Preferred stock may also be callable, meaning that the company has the option to purchase the shares from shareholders at anytime for any reason (usually for a premium). Some people consider preferred stock to be more like debt than equity.

2. Professional Participants

Professional participants in the securities market - legal persons, including credit organizations, and also citizens registered as business persons who

conduct the following types of activity:

- a) **Brokerage** shall be deemed performance of civil-law transactions with securities as agent or commission agent acting under a contract of agency or commission, and also under a power (letter) of attorney for the performance of such transactions in the absence of indication of the powers of agent or commission agent in the contract.
- b) **Dealer** activity shall be deemed performance of transactions in the purchase and sale of securities in one's own name and for one's own account through the public announcement of the prices of purchase and/or sale of certain securities, with an obligation of the purchase and/or sale of these securities at the prices announced by the person pursuing such activity.
- c) **Activity in the management of securities** shall be deemed performance by a legal person or individual business person, in his own name, for a remuneration, during a stated period, of trust management of the following conveyed into his possession and belonging to another person, in the interests of this person or of third parties designated by this person:
 - 1. Securities;
 - 2. Monies (Taxes) intended for investment in securities;
 - 3. Monies and securities received in the process of securities management.
- d) **Clearing** activity shall be deemed activity in determining mutual obligations (collection, collation and correction of information on security deals and preparation of bookkeeping documents thereon) and in offsetting these obligations in deliveries of securities
- e) **Depository** activity shall be deemed activity in rendering of services in the safekeeping of certificates of securities and/or recording and

transfer of rights to securities. Activity in the keeping of a register of owners of securities shall be deemed collection, fixing, processing, storage and provision of data constituting a system of keeping the register of security owners.

Provision of services directly promoting conclusion of civil-law transactions with securities between participants in the securities market shall be deemed activity in the arrangement of trading on the securities market.

8.3.3 Role of Security Market

Security market plays a significant role in the national economy. A developed, dynamic and vibrant security market can immensely contribute for speedy economic growth and development.

Let us get acquainted with the important functions and role of the security market.

1. Mobilization of Savings

Security market is an important source for mobilizing idle savings from the economy. It mobilizes funds from people for further investments in the productive channels of an economy. In that sense it activates the ideal monetary resources and puts them in proper investments.

2. Capital Formation

Security market helps in capital formation. Capital formation is net addition to the existing stock of capital in the economy. Through mobilization of ideal resources it generates savings; the mobilized savings are made available to various segments such as agriculture, industry, etc. This helps in increasing capital formation.

3. Provision of Investment Avenue

Security market raises resources for longer periods of time. Thus it

provides an investment avenue for people who wish to invest resources for a long period of time. It also provides suitable interest rate returns to investors. Instruments such as bonds, equities, units of mutual funds, insurance policies, etc. definitely provides diverse investment avenue for the public.

4. Speed up Economic Growth and Development

Security market enhances production and productivity in the national economy. As it makes funds available for long period of time, the financial requirements of business houses are met by the capital market. It helps in research and development. This helps in, increasing production and productivity in economy by generation of employment and development of infrastructure.

5. Proper Regulation of Funds

Security markets not only helps in fund mobilization, but it also helps in proper allocation of these resources. It can have regulation over the resources so that it can direct funds in a qualitative manner.

6. Service Provision

As an important financial set up security market provides various types of services. It includes long term and medium term loans to industry, underwriting services, consultancy services, export finance, etc. These services help the manufacturing sector in a large spectrum.

7. Continuous Availability of Funds

Security market is place where the investment avenue is continuously available for long term investment. This is a liquid market as it makes fund available on continuous basis. Both buyers and seller can easily buy and sell securities as they are continuously available. Basically security market transactions are related to the stock exchanges. Thus marketability in the security market becomes easy.

8.4 LEGAL FRAMEWORK OF SECURITY MARKETS IN INDIA

There are four main legislations which govern the securities market and these are:

- The Companies Act, 1956
- The Securities Contracts (Regulation) Act, 1956
- The SEBI Act, 1992
- The Depositories Act, 1996

8.4.1 The Companies Act, 1956

The prevalent Indian Companies Act is, for all practical purposes, based on the recommendations of the Company Law Committee, 1952. This committee is also known as Bhabha Committee after its chairman, C. H. Bhabha. This act came into force on 1st April, 1956. The followings are the main provisions of Companies' Act, 1956 regarding issue of securities;

1. Dating of prospectus (Sec 55)

A prospectus issued by or on behalf of a company or in relation to an intended company shall be dated, and that date shall, unless the contrary is proved, be taken as the date of publication of the prospectus.

2. Powers of Securities and Exchange Board of India (Sec 55-A)

That all powers relating to all other matters including the matters relating to prospectus, statement in lieu of prospectus, return of allotment, issue of shares and redemption of irredeemable preference shares shall be exercised by the Central Government, Company Law Board or the Registrar of Companies, as the case may be.

3. Personation for acquisition, etc., of shares (Sec 68A)

Any person who makes in a fictitious name an application to a company

for acquiring, or subscribing for, any shares therein, or otherwise induces a company to allot, or register any transfer of, shares therein to him, or any other person in a fictitious name, shall be punishable with imprisonment for a term which may extend to five years.

4. Applications for, and allotment of, shares and debentures (Sec 72)

No allotment shall be made of any shares in or debentures of a company in pursuance of a prospectus issued generally, and no proceedings shall be taken on applications made in pursuance of a prospectus so issued, 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.

5. Allotment of shares and debentures to be dealt in on stock exchange (Sec 73)

Every company, intending to offer shares or debentures to the public for subscription by the issue of a prospectus shall, before such issue, make an application to one or more recognized stock exchanges for permission for the shares or debentures intending to be so offered to be dealt with in the stock exchange or each such stock exchange.

6. Return as to allotments (Sec 75)

Whenever a company having a share capital makes any allotment of its shares, the company shall, within thirty days thereafter, file with the Registrar a return of the allotments, stating the number and nominal amount of the shares comprised in the allotment, the names, addresses and occupations of the allottees, and the amount, if any, paid or due and payable on each share.

7. Application of premiums received on issue of securities (Sec 78)

Where a company issues securities at a premium, whether for cash

or otherwise, a sum equal to the aggregate amount or value of the premiums on those securities shall be transferred to an account, to be called “the securities premium account”, and the provisions of this Act relating to the reduction of the securities capital of a company shall, except as provided in this section, apply as if the securities premium account were paid-up securities capital of the company.

8. Power to issue shares at a discount (Sec 79)

1. A company shall not issue shares at a discount except as provided in this section.
2. A company may issue at a discount shares in the company of a class already issued, if the following conditions are fulfilled, namely,
 - (i) The issue of the shares at a discount is authorized by a resolution passed by the company in general meeting, and sanctioned by the Company Law Board
 - (ii) The resolution specifies the maximum rate of discount at which the shares are to be issued.

9. Issue of sweat equity shares (Sec 79A)

A company may issue sweat equity shares of a class of shares already issued if the following conditions are fulfilled, namely:-

- (a) The issue of sweat equity shares is authorized by a special resolution passed by the company in the general meeting.
- (b) The resolution specifies 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;
- (c) Not less than one year has, at the issue elapsed since the date on which the company was entitled to commence business.

10. Power to issue redeemable preference shares (Sec 80)

Subject to the provisions of this section, a company limited by shares may, if so authorized by its articles, issue preference shares which are, or at the option of the company are to be liable, to be redeemed.

11. Redemption of irredeemable preference shares, etc. (Sec 80A)

Every preference share issued before the commencement of the Companies (Amendment) Act, 1988, (a) which is irredeemable, shall be redeemed by the company within a period not exceeding five years from such commencement, or

(b) Which is not redeemable before the expiry of ten years from the date of issue thereon in accordance with the terms of its issue and which had not been redeemed before such commencement, shall be redeemed by the company on the date on which such shares is due for redemption or within a period not exceeding ten years from such commencement, whichever is earlier.

12. Nature of shares or debentures (Sec 82)

The shares or debentures or other interest of any member in a company shall be movable property, transferable in the manner provided by the articles of the company.

13. Calls on shares of some class to be made on uniform basis (Sec 91)

Any calls for further share capital are made on shares; such calls shall be made on a uniform basis on all shares falling under the same class. For the purposes of this section, shares of the same nominal value on which different amounts have been paid-up shall be deemed to fall under the same class.

14. Effect of conversion of shares into stock (Sec 96)

Where a company having a share capital has converted any of its

shares into stock, and given notice of the conversion to the Registrar, all the provisions of this Act which are applicable to shares only, shall cease to apply as to so much of the share capital as is converted into stock.

15. Restriction on transfer of shares (Sec 108B)

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 such share, and every such intimation shall include a statement to the particulars of the share proposed to be transferred, the name and address of the person to whom the share is proposed to be transferred, and shareholding, if any, of the proposed transferee in the concerned company and such other particulars as may be prescribed.

The main highlights of the New Indian Companies Act, 2013 are;

- 1. Immediate Changes in stationery :** The letterhead, bills or other official communications, should bear full name, address of its registered office, Corporate Identity Number (21 digit number allotted by Government), Telephone number, fax number, Email id, website address if any.
- 2. One Person Company (OPC):** It's a Private Company having only one Member and at least one Director. No compulsion to hold AGM. Conversion of existing private companies with paid-up capital up to Rs 50 Lacs and turnover up to Rs 2 Crores into OPC is permitted.
- 3. Woman Director:** Every Listed Company /Public Company with paid up capital of Rs 100 Crores or more / Public Company with turnover of Rs 300 Crores or more shall have at least one Woman Director.

4. **Resident Director:** Every Company must have a director who stayed in India for a total period of 182 days or more in previous calendar year.
5. **Loans to director** – The Company cannot advance any kind of loan / guarantee / security to any director, Director of holding company, his partner, his relative, Firm in which he or his relative is partner, private limited in which he is director or member or any bodies corporate whose 25% or more of total voting power or Board of Directors is controlled by him.
6. **Articles of Association-** In the next General Meeting, it is desirable to adopt Table F as standard set of Articles of Association of the Company with relevant changes to suite the requirements of the company. Further, every copy of Memorandum and Articles issued to members should contain a copy of all resolutions / agreements that are required to be filed with the Registrar of companies (ROC).
7. **Disqualification of director-** All existing directors must have Directors Identification Number (DIN) allotted by central government. Directors who already have DIN need not take any action. Directors not having DIN should initiate the process of getting DIN allotted to him and inform companies. The Company, in turn, has to inform registrar.
8. **Financial year-** Under the new Act, all companies have to follow a uniform Financial Year i.e. from 1st April to 31st March. Those companies which follow a different financial year have to align their accounting year to 1st April to 31st March within 2 years. It is desirable to do the same as early as possible since most the compliances are on financial year basis under the new Companies Act.
9. **Appointment of Statutory Auditors-** Every Listed company can appoint an individual auditor for 5 years and a firm of auditors for 10 years. This period of 5 / 10 years commences from the date of

their appointment. Therefore, those companies have reappointed their statutory auditors for more than 5 / 10 years; have to appoint another auditor in Annual General Meeting for year 2014.

8.4.2 The Securities Contracts (Regulation) Act, 1956

In 1952, a draft bill on stock exchanges regulation was prepared by the government and this bill was referred to an expert committee under the chairmanship of A. D. Gorwala. A bill called the Securities Contract (Regulation) Bill was prepared on the same lines and was introduced in the parliament in 1954. With some amendments, Securities Contract Regulation Act, 1956 was passed. The followings are the main provisions of the Securities Contract Act, 1956;

1. Short title, extent and commencement

- This Act may be called the Securities Contracts (Regulation) Act, 1956.
- It extends to the whole of India.
- It shall come into force on such date i.e. 20th February, 1957.

2. Definitions

- (a) 'Contract' means a contract for or relating to the purchase or sale of securities;
- (b) 'Government security' means a security created and issued, whether before or after the commencement of this Act, by the Central Government or a State Government for the purpose of raising a public loan.
- (c) 'Member' means a member of a recognised stock exchange;
- (d) 'Option in securities' means a contract for the purchase or sale of a right to buy or sell, or a right to buy and sell, securities in future & includes a put, or a call in securities.

- (e) 'Prescribed' means prescribed by rules made under this Act;
- (f) 'Recognised stock exchange' means a stock exchange which is for the time being recognised by the Central Government under section 4;
- (g) 'Rules', with reference to the rules relating in general to the constitution and management of a stock exchange, includes, in the case of a stock exchange which is an incorporated association, its memorandum and articles of association;
- (h) 'Securities' include— shares, scripts stocks, bonds, debentures, debenture stock or other marketable securities, government securities and rights or interests in securities;
- (I) 'Stock exchange' means any body of individuals, whether incorporated or not, constituted for the purpose of assisting, regulating or controlling the business of buying, selling or dealing in securities.

3. Application for recognition of stock exchanges

- (1) Any stock exchange, which is desirous of being recognised for the purposes of this Act, may make an application in the prescribed manner to the Central Government.
- (2) Every application shall contain such particulars as may be prescribed and shall be accompanied by a copy of the bye-laws of the stock exchange for the regulation and control of contracts and also a copy of the rules relating in general to the constitution of the stock exchange, and in particular, to—
 - the governing body of such stock exchange, its constitution and powers of management and the manner in which the business is to be transacted;
 - the powers and duties of the office bearers of the stock exchange;

- the admission into the stock exchange of various classes of members, the qualifications for memberships, and the exclusion, suspension, expulsion and re-admission of members there from or there into.

4. Grant of recognition to stock exchanges

If the Central Government is satisfied, after making such inquiry as may be necessary in this behalf and after obtaining such further information, if any, it may grant recognition to the stock exchange subject to the conditions imposed upon it as aforesaid and in such form as may be prescribed. Every grant of recognition to a stock exchange under this section shall be published in the Gazette of India and also in the Official Gazette of the State in which the principal office of the stock exchange is situate, and such recognition shall have effect as from the date of its publication in the Gazette of India. No application for the grant of recognition shall be refused except after giving an opportunity to the stock exchange concerned to be heard in the matter; and the reasons for such refusal shall be communicated to the stock exchange in writing.

5. Withdrawal of recognition

If the Central Government is of opinion that the recognition granted to a stock exchange under the provisions of this Act should, in the interest of the trade or in the public interest, be withdrawn, the Central Government may serve on the governing body of the stock exchange a written notice that the Central Government is considering the withdrawal of the recognition for the reasons stated in the notice, and after giving an opportunity to the governing body to be heard in the matter, the Central Government may withdraw, by notification in the Official Gazette, the recognition granted to the stock exchange.

6. Power of Central Government to call for periodical returns or direct inquires to be made

- (1) Every recognised stock exchange shall furnish to the Central

Government such periodical returns relating to its affairs as may be prescribed.

- (2) Every recognised stock exchange and every member thereof shall maintain and preserve for such periods not exceeding five years such books of account, and other documents as the Central Government, after consultation with the stock exchange concerned, may prescribe in the interest of the trade or in the public interest.
- (3) Where an inquiry in relation to the affairs of a recognised stock exchange or the affairs of any of its members in relation to the stock exchange has been undertaken then they all shall be bound to produce before the authority making the inquiry all such books of account, and other documents in his custody.

7. Annual reports to be furnished to Central Government by stock exchanges

Every recognised stock exchange shall furnish the Central Government with a copy of the annual report, and such annual report shall contain such particulars as may be prescribed.

8. Power of recognised stock exchanges to make bye-laws

- (1) Any recognised stock exchange may, subject to the previous approval of the Central Government, make bye-laws for the regulation and control of contracts.
- (2) In particular, and without prejudice to the generality of the foregoing power, such bye-laws may provide for—
 - the opening and closing of markets and the regulation of the hours of trade;
 - a clearing house for the periodical settlement of contracts and differences there under, the delivery of and payment for securities, the passing on of delivery orders and the regulation and

maintenance of such clearing house;

- the submission to the Central Government by the clearing house as soon as may be after each periodical settlement of all types of securities;
- the regulation or prohibition of blank transfers;
- the number and classes of contracts in respect of which settlements shall be made or differences paid through the clearing house;
- the regulation, or prohibition of bundles or carry-over facilities;
- the fixing, altering or postponing of days for settlements;
- the determination and declaration of market rates, including the opening, closing, highest and lowest rates for securities;
- the terms, conditions and incidents of contracts, including the prescription of margin requirements, if any, and conditions relating thereto, and the forms of contracts in writing;
- the listing of securities on the stock exchange, the inclusion of any security for the purpose of dealings and the suspension or withdrawal of any such securities, and the suspension or prohibition of trading in any specified securities;
- the method and procedure for the settlement of claims or disputes, including settlement by arbitration;
- the fixing of a scale of brokerage and other chargers;
- the making, comparing, settling and closing of bargains;
- the regulation of dealings by members for their own account;
- the separation of the functions of the jobbers and brokers.

9. Power to suspend business of recognised stock exchanges

If in the opinion of the Central Government an emergency has arisen and for the purpose of meeting the emergency the Central Government considers it expedient so to do, it may, by notification in the Official Gazette, for reasons to be set out therein, direct a recognised stock exchange to suspend such of its business for such period not exceeding seven days and subject to such conditions as may be specified in the notification, and, if, in the opinion of the Central Government, the interest of the trade or the public interest requires that the period should be extended, may, by like notification extend the said period from time to time.

10. Contracts in notified areas illegal in certain circumstances

If the Central Government is satisfied, having regard to the nature or the volume of transactions in securities in any State or area, that it is necessary so to do, it may, by notification in the Official Gazette, declare this section to apply to such State or area, and thereupon every contract in such State or area which is entered into after the date of the notification shall be illegal.

11. Licensing of dealers in securities in certain areas

- (1) No person shall carry on or purport to carry on, whether on his own behalf or on behalf of any other person, the business of dealing in securities in any State or area to which section 13 has not been declared to apply.
- (2) No notification under sub-section (1) shall be issued with respect to any State or area unless the Central Government is satisfied, having regard to the manner in which securities are being dealt with in such State or area, that it is desirable or expedient in the interest of the trade or in the public interest that such dealings should be regulated by a system of licensing.
- (3) The restrictions imposed by sub-section (1) in relation to dealing in

securities shall not apply to the doing of anything by or behalf of a member of any recognised stock exchange.

12. Stock exchanges other than recognised stock exchanges prohibited

- (1) No person shall, except with the permission of the Central Government, organise or assist in organising or be a member of any stock exchange (other than a recognised stock exchange) for purpose of assisting in, entering into or performing any contracts in securities.
- (2) This section shall come into force in any State or area on such date as the Central Government may, by notification in the Official Gazette, appoint.

13. Penalties

- (1) Any person who—
 - (a) Without reasonable excuse (the burden of proving which shall be on him) fails to comply with any requisition made under sub-section (4) of section 6; or
 - (b) Enters into any contract in contravention of any of the provisions contained in different sections;
 - (c) Owns or keeps a place other than that of a recognised stock exchange which is used for the purpose of entering into or performing any contracts in contravention of any of the provisions of this Act and knowingly permits such place to be used for such purposes; or
 - (d) Manages, controls, or assists in keeping any place other than that of a recognised stock exchange which is used for the purpose of entering into or performing any contracts in contravention of any of the provisions of this Act.

- (e) Not being a member of a recognised stock exchange or his agent authorised as such under the rules or bye-laws of such stock exchange or not being a dealer in securities licensed under section 17 wilfully represents to or induces any person to believe that contracts can be entered into or performed under this Act through him; or
- (f) Joins, gathers or assists in gathering at any place other than the place of business specified in the bye-laws of a recognised stock exchange any person or persons for making bids or offers or for entering into or performing any contracts in contravention of any of the provisions of this Act;

Shall, on conviction, be punishable with imprisonment for a term which may extend to one year, or with fine, or with both.

- (2) Any person who enters into any contract in contravention of the provisions contained in section 15 or who fails to comply with the orders of the Central Government under section 21 or section 22 shall, on conviction, be punishable with fine which may extend to one thousand rupees.

14. Offences by companies

Where an offence has been committed by a company, every person who, at the time when the offence 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 offence, and shall be liable to be proceeded against and punished accordingly.

15. Power to make rules

- (1) The Central Government may, by notification in the Official Gazette, make rules for the purpose of carrying into effect the objects of this Act.

- (2) In particular, and without prejudice to the generality of the foregoing power, such rules may provide for,—
- (a) The manner in which applications may be made, the particulars which they should contain and the levy of a fee in respect of such applications;
 - (b) The manner in which any inquiry for the purpose of recognizing any stock exchange may be made, the conditions which may be imposed for the grant of such recognition, including conditions as to the admission of members if the stock exchange concerned is to be the only recognised stock exchange in the area; and the form in which such recognition shall be granted;
 - (c) The particulars which should be contained in the periodical returns and annual reports to be furnished to the Central Government;
 - (d) The documents which should be maintained and preserved under section 6 and the periods for which they should be preserved;
 - (e) The manner in which any inquiry by the governing body of a stock exchange shall be made under section 6;
 - (f) The manner in which the bye-laws to be made or amended under this Act shall before being so made or amended be published for criticism;
 - (g) The requirement which shall be complied with by public companies for the purpose of getting their securities listed on any stock exchange ; and
 - (h) Any other matter which is to be or may be prescribed.
- (3) Any rules made under this section shall be subject to the condition of previous publication and shall, as soon as may be, after their publication in the Official Gazette, be laid before both Houses of Parliament.

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

The SEBI, that is, the Securities and the Exchange Board of India, is the national regulatory body for the securities market, set up under the securities and Exchange Board of India Act, 1992, to “protect the interest of investors in securities and to promote the development of, and to regulate the securities market and for matters connected therewith and incidental there to.”

SEBI has its head office in Mumbai and it has now set up regional offices in the metropolitan cities of Kolkata, Delhi, and Chennai. As per the SEBI Act, 1992, the power and functions of the Board encompass the regulation of Stock Exchanges and other securities markets; registration and regulation of the working of stock brokers, sub-brokers, bankers to an issue (a public offer of capital), trustees of trust deeds, registrars to an issues, merchant bankers, under writers, portfolio managers, investment advisors and such other intermediaries who may be associated with the stock market in any way; registration and regulations of mutual funds; promotion and regulation of self-regulatory organizations; prohibiting fraudulent and unfair trade practices and insider trading in securities markets; regulating substantial acquisition of shares and takeover of companies; calling for information from, undertaking inspection, conducting inquiries and audits of stock exchanges, intermediaries and self-regulatory organizations of the securities market; performing such functions and exercising such powers as contained in the provisions of the Capital Issues(Control) Act,1947 and the Securities Contracts (Regulation) Act, 1956, levying various fees and other charges, conducting necessary research for above purposes and performing such other functions as may be prescribed from time to time.

SEBI as the watchdog of the industry has an important and crucial role in the market in ensuring that the market participants perform their duties in accordance with the regulatory norms. The Stock Exchange as a responsible Self Regulatory Organization (SRO) functions to regulate

the market and its prices as per the prevalent regulations. SEBI play complimentary roles to enhance the investor protection and the overall quality of the market.

Management of the Board

The Board consists of a Chairman, two members from amongst the officials of the Ministry of the Central Government dealing with Finance and administration of the Companies Act, 1956, one member from amongst the officials of the Reserve Bank, five other members of whom at least three shall be the whole-time members to be appointed by the central Government. 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 or done by that Board.

Mission of SEBI

Securities & Exchange Board of India (SEBI) formed under the SEBI Act, 1992 with the prime objective of:

- Protecting the interests of investors in securities,
- Promoting the development of, and
- Regulating, the securities market and for matters connected therewith or incidental thereto. Focus being on the greater investor protection, SEBI has become a vigilant watchdog

Functions and powers of SEBI

The Preamble of the Securities and Exchange Board of India describes the basic functions of the Securities and Exchange Board of India as “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.” The followings are the functions of SEBI;

a) Regulatory Functions

1. Regulation of business in the Stock Exchanges.
2. Registration and Regulation of the Working of Intermediaries and Mutual Funds, Venture Capital Funds & Collective Investment Schemes.
3. Prohibiting fraudulent and unfair trade practices and insider trading in the securities market.
4. Inspection and inquiries.
5. Regulating substantial acquisition of shares and take-overs.
6. 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;
7. Levying fees or other charges for carrying out the purposes of this section.

b) Developmental Functions

1. Promoting investor's education and training of intermediaries.
2. Conducting research and publishing information useful to all market participants.
3. Promotion of fair practices and self regulatory organizations.

Powers of SEBI

1. Power to call periodical returns from recognized stock exchanges.
2. Power to compel listing of securities by public companies.
3. Power to levy fees or other charges for carrying out the purposes of regulation.

4. Power to call information or explanation from recognized stock exchanges or their members.
5. Power to grant approval to byelaws of recognized stock exchanges.
6. Power to control and regulate stock exchanges.
7. Power to direct enquiries to be made in relation to affairs of stock exchanges or their members.

General guidelines issued by SEBI

1. **Subscription list:** As per SEBI guidelines, subscription list for public issues should be kept open for 3 working days and it should be disclosed in the prospectus. In the case of right issue, it should not be kept open for more than 60 days. The announcement of the closure of issue should be made only after 90 percent has been subscribed. The gap between closure dates of various issues should not exceed 30 days.
2. **Maximum no. of Shares and application money:** In case of public issue at par, the minimum number of shares for which the application is to be made should be fixed at 200 shares of the face value of Rs. 10 lakh. The minimum application money to be paid shall not be less than 25 percent of the issue price.
3. **Oversubscription:** The quantum of issue should not exceed the amount specified in the prospectus/ letter of offer. No retention of oversubscription is permitted.
4. **Compliance Report:** The lead manager have to file a report in the prescribed form with a compliance certificate from Chartered Accountants to the SEBI with in 45 days of the closure of an issue.
5. **Guidelines for Debentures**
 - a. **Fully Convertible Debentures:** SEBI restricts the conversion

period to 36 months for fully convertible debentures. Conversion after 36 months is permissible only if conversion is made optional with call and put option. Any conversion in part or whole of the debentures will be optional at the hands of the debenture holders. The names of the debenture trustees must be disclosed in the prospectus. The trust deed should be executed within 6 months of the closure of issue.

- b. Non Convertible Debentures (NCD) and Partially Convertible Debentures (PCD):** If the non convertible debentures have the maturity period of more than 18 months, then a debenture redemption reserve (DRR) has to be created in equal instalments or higher amount in the remaining period, if profit permit. If the maturity period of debenture is less than 18 months, it is not necessary to create a charge or appoint a trustee or create DRR. If no charge is created, they are unsecured and are treated as deposits.

The premium amount shall be predetermined at the time of conversion and should be disclosed in the prospectus. Amount of redemption period of maturity and yield of redemption of PCD/ NCD shall also be disclosed in the prospectus.

- c. Issue of Commercial paper:** Commercial paper is one of the non bank sources of working capital finance. It is a money market instrument, unlike debentures which are capital market instruments. Corporate borrowers, especially the large and financially sound can diversify their short term borrowing by the issue of commercial papers. The raising of funds through commercial papers is regulated by the directions of Reserve Bank of India.
- d. Issue of Shares:** Before going to public a company should have a track record of dividend payment in the immediate preceding

three years. In case of a finance company it should have a track record of 2 years of operation or registered as a non banking finance company by the RBI or as intermediary by the SEBI, are eligible to issue the securities as per the guidelines issued on 29th September 1995.

In case of exiting listed companies, they are free to price their new issue. However, the price determination should be done in consultation with the lead managers to the issue. SEBI has the power for vetting of the prospectus to ensure adequacy of disclosures.

e. **Insider Trading:** The most profitable technique employed in the stock market is using one's access to price sensitive information ahead of others. The act has defined the insider and the price sensitive information as

- Who is or was connected with the company
- Who is deemed to have been connected with the company
- Who has received or had access to unpublished price sensitive information
- Who is a director is deemed to be a director as per the definition in the companies act
- Who is an officer or employee of the company
- Who holds a position involving a professional or business relationship with the company
- A subsidiary as per section 370 (IB) on 372 (11)s
- An official or member of a stock exchange
- A dealer in securities or an employee of such dealer member

- A director or employee of a public financial institution
- An official or employee of a self regulatory organisation
- A relative of any of the above
- Banker to the company

Unpublished price sensitive information areas are given below:-

- Financial results of the company
 - Intended declaration of dividends
 - Rights or bonus shares offers
 - Major expansion plans or execution of new projects
 - Amalgamation, mergers and takeovers
 - Disposal of the whole of the undertaking
 - Any changes in the policies, plans or operations of the company
6. **Book Building:** Book building has been accepted as one of the modes of public issue. SEBI issued guidelines relating to 100 percent book building in an issue of security to the public through prospectus. It recommended a two tier underwriting system for book built issue. The syndicate members would be responsible for the primary underwriting and the book runners would take on their liability in case of default.

8.4.4 Depositories Act, 1996

The Depositories Act initially came into force as an ordinance viz. The Depositories Ordinance, 1995 promulgated on 7th January 1996. It was designed to provide a legal framework for establishment of depositories to record ownership details in book entry form. The Act also made consequential amendments in the Companies Act, 1956; the Securities

and Exchange Board of India Act, 1992; the Indian Stamp Act, 1899; the Income tax Act, 1961; and the Benami Transactions (Prohibition) Act, 1988.

The Depositories Act, 1996 was enacted with the objective of ensuring free transferability of securities with speed, accuracy, and security, by making securities of public companies freely transferable subject to certain exceptions by restricting company's right to use discretion in effecting the transfer securities and dispensing with the transfer deed and other procedural requirements under the Companies Act. The Depositories Act, 1996 is an Act to provide for regulation of depositories in securities and for matters connected therewith or incidental thereto.

8.5 SUMMARY

A securities market is used in an economy to attract new capital, transfer real assets in financial assets, determine price which will balance demand and supply and provide a means to invest money both short and long term. A securities market is a system of interconnection between all participants that provides effective conditions to attract new capital by means of issuance of new security, transfer real asset into financial asset, and invest money for short or long term periods with the aim of deriving profitability. Securities market can be split into two levels. Primary markets, where new securities are issued and secondary markets where existing securities can be bought and sold. In India, there are four main legislations which govern the securities market namely; The Companies Act, 1956; The Securities Contracts (Regulation) Act, 1956; The SEBI Act, 1992; The Depositories Act, 1996.

8.6 GLOSSARY

- **Primary Market:** The primary market is that part of the capital markets that deals with the issue of new securities.
- **Secondary Market:** It is the financial market where previously

issued securities and financial instruments such as stocks, bonds, options, and futures are bought and sold with primary issuances of securities or financial instruments.

8.7 SELF ASSESSMENT QUESTIONS

1. Mention the role of securities market.

2. Explain, in brief, the main provisions of Companies Act, 1956 regarding issue of securities.

8.8 LESSON END EXERCISES

1. Explain the structure and role of securities market in India.
2. Write a detailed note on the legal framework of securities market in India.

8.9 SUGGESTED READINGS

1. Sourain Harry, Investment Management, Prentice Hall of India.

2. Maheshwari Yogesh, Investment Management, Prentice Hall of India.
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8.10 REFERENCES

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5. V. A. Avadhani, Investment Management, Himalaya Publishing House.
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7. Gupta L. C., Stock Exchange Trading in India, Prentice Hall of India.
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ORGANIZED STOCK EXCHANGES**STRUCTURE**

- 9.1 Introduction
- 9.2 Objectives
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 - 9.3.1 Features of Stock Exchanges
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9.1 Introduction

The market for long term securities like bonds, equity stocks and preferred stocks is divided into primary market and secondary market. The primary market is the part of the capital market that deals with the new issues of securities. Whereas secondary market, also known as stock exchange, is a market where stock brokers and traders can buy and sell shares of stocks, bonds, and other securities. Many large companies have their stocks listed on a stock exchange.

The origin of the stock exchanges in India can be traced back to the later half of 19th century. After the American Civil War (1860-61) due to the share mania of the public, the number of brokers dealing in shares increased. The brokers organised an informal association in Bombay (now Mumbai) named “The Native Share and Stock Brokers Association” in 1875.

9.2 OBJECTIVES

After going through this lesson, you will be able to know about:

- Features, functions and services of stock exchanges.
- Trading and operational mechanism of stock exchanges in India.
- Listing of securities.

9.3 ORGANIZED STOCK EXCHANGES

The market for long term securities like bonds, equity stocks and preferred stocks is divided into primary market and secondary market. The primary market deals with the new issues of securities. Outstanding securities are traded in the secondary market, which is commonly known as stock market or stock exchange. In the secondary market, the investors can sell and buy securities. Stock market predominantly deals in the equity shares. Debt instruments like bonds and debentures are also traded in the stock market. Well regulated and active stock market promotes capital formation.

Growth of the primary market depends on the secondary market. The health of the economy is reflected by the growth of the stock market.

The origin of the stock exchanges in India can be traced back to the later half of 19th century. After the American Civil War (1860-61) due to the share mania of the public, the number of brokers dealing in shares increased. The brokers organized an informal association in Mumbai named “The Native Stock and Share Brokers Association” in 1875.

Increased activity in trade and commerce during the First World War and Second World War resulted in an increase in the stock trading. Stock exchanges were established in different centers like Chennai, Delhi, Nagpur, Kanpur, Hyderabad and Bangalore. The growth of stock exchanges suffered a setback after the end of World War due to worldwide depression. Most of the stock exchanges in the early stages had a speculative nature of working without technical strength. Securities and Contract Regulation Act, 1956 gave power to the central government to regulate the stock exchanges. The stock exchanges in Mumbai, Calcutta, Chennai, Ahmadabad, Delhi, Hyderabad and Indore were recognized by this Act.

Till recent past, floor trading took place in all stock exchanges. In the floor trading system, the trade takes place through open outcry system during the official trading hours. Trading posts are assigned for different securities where buy and sell activities of securities took place. This system needs to a face to face contact among the traders and restricts the trading volume. The speed of new information reflected on the price was rather slow. The deals were also not transparent and the system favoured the brokers rather than the investors.

The setting up of NSE and OTCEI with the screen based trading facility resulted in more and more stock exchanges turning towards the computer based trading. Bombay stock exchange introduced the screen based trading system in 1995, which is known as BOLT (Bombay On-line Trading System).

Definition and Meaning

Stock Exchange (also called Stock Market or Share Market) is one of the important constituent of capital market. Stock Exchange is an organized market for the purchase and sale of industrial and financial security. It is convenient place where trading in securities is conducted in systematic manner i.e. as per certain rules and regulations.

It performs various functions and offers useful services to investors and borrowing companies. It is an investment intermediary and facilitates economic and industrial development of a country.

Stock exchange is an organized market for buying and selling corporate and other securities. Here, securities are purchased and sold out as per certain well-defined rules and regulations. It provides a convenient and secured mechanism or platform for transactions in different securities. Such securities include shares and debentures issued by public companies which are duly listed at the stock exchange and bonds and debentures issued by government, public corporations and municipal and port trust bodies.

Stock exchanges are indispensable for the smooth and orderly functioning of corporate sector in a free market economy. A stock exchange need not be treated as a place for speculation or a gambling den. It should act as a place for safe and profitable investment, for this, effective control on the working of stock exchange is necessary. This will avoid misuse of this platform for excessive speculation, scams and other undesirable and anti-social activities.

London stock exchange (**LSE**) is the oldest stock exchange in the world. While Bombay stock exchange (**BSE**) is the oldest in India. Similar Stock exchanges exist and operate in large majority of countries of the world.

Definitions of Stock Exchange

According to **Husband and Dockerary**, “Stock exchanges are privately

organized markets which are used to facilitate trading in securities.”

The Indian Securities Contracts (Regulation) Act of 1956, defines Stock Exchange as, “An association, organization 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.”

9.3.1 Features of Stock Exchange

Characteristics or features of stock exchange are:-

1. Market for securities

Stock exchange is a market, where securities of corporate bodies, government and semi-government bodies are bought and sold.

2. Deals in second hand securities

It deals with shares, debentures bonds and such securities already issued by the companies. In short it deals with existing or second hand securities and hence it is called secondary market.

3. Regulates trade in securities

Stock exchange does not buy or sell any securities on its own account. It merely provides the necessary infrastructure and facilities for trade in securities to its members and brokers who trade in securities. It regulates the trade activities so as to ensure free and fair trade.

4. Allows dealings only in listed securities

In fact, stock exchanges maintain an official list of securities that could be purchased and sold on its floor. Securities which do not figure in the official list of stock exchange are called unlisted securities. Such unlisted securities cannot be traded in the stock exchange.

5. Transactions effected only through members

All the transactions in securities at the stock exchange are affected only through its authorised brokers and members. Outsiders or direct investors are not allowed to enter in the trading circles of the stock exchange. Investors have to buy or sell the securities at the stock exchange through the authorised brokers only.

6. Association of persons

A stock exchange is an association of persons or body of individuals which may be registered or unregistered.

7. Recognition from Central Government

Stock exchange is an organised market. It requires recognition from the Central Government.

8. Working as per rules

Buying and selling transactions in securities at the stock exchange are governed by the rules and regulations of stock exchange as well as SEBI Guidelines. No deviation from the rules and guidelines is allowed in any case.

9. Specific location

Stock exchange is a particular market place where authorised brokers come together daily (i.e. on working days) on the floor of market called trading circles and conduct trading activities. The prices of different securities traded are shown on electronic boards, after the working hours of market is closed. All the working of stock exchanges is conducted and controlled through computers and electronic system.

10. Financial Barometers

Stock exchanges are the financial barometers and development indicators of national economy of the country. Industrial growth and stability is reflected in the index of stock exchange.

9.3.2 Functions and Services of Stock Exchanges

1. Maintains Active Trading

Shares are traded on the stock exchanges, enabling the investors to buy and sell securities. The prices may vary from transaction to transaction. A continuous trading increases the liquidity or marketability of the shares traded on the stock exchange.

2. Fixations of prices

Price is determined by the transactions that flow from investors demand and suppliers preferences. Usually the traded prices are made known to the public. This helps the investors to make better decisions.

3. Ensure safe and fair dealing

The rules, regulations and by-laws of the stock exchanges provide a measure of safety to the investors. Transactions are conducted under competitive conditions enabling the investors to get a fair deal.

4. Aids in financing the industry

A continuous market for shares provides a favourable climate for raising capital. The negotiability and transferability of the securities helps the companies to raise long term funds. When it is easy to trade the securities, investors are willing to subscribe to the initial public offerings. This stimulates the capital formation.

5. Dissemination of information

Stock exchanges provide information through their various publications. They publish the share prices traded on daily basis along with the volume traded. Directory of corporate information is useful for the investor's assessment regarding the corporate. Handouts, handbooks and pamphlets provide information regarding the functioning of stock exchanges.

6. Performance inducer

The prices of stock reflect the performance of the traded companies. This

makes the corporate more concerned with its public image and tries to maintain good performance.

7. Self regulating organisation

The stock exchanges monitor the integrity of the members, brokers, listed companies and clients. Continuous internal audit safeguard the investors against unfair trade practices. It settles the dispute between member brokers, investors and brokers.

9.3.3 Organization of Stock Exchange

A comprehensive legal framework was provided by the Securities Contracts (Regulation Act), 1956 and the Securities and Exchange Board of India Act, 1992. A three tier regulatory structure comprising the Ministry of Finance, the securities and Exchange board of India and the Governing Board of Stock Exchanges regulates the functioning of the stock exchanges.

1. Ministry of Finance

The Stock Exchange Division of the Ministry of Finance has powers related to the application of the provision of the SGR Act and licensing of dealers in the other area. According to SEBI Act, the Ministry of Finance has the appellate and supervisory powers over the SEBI. It has power to grant recognition to the stock exchanges and regulation of their operations. Ministry of Finance has the power to approve the appointments of executive chiefs and nominations of the public representatives in the governing boards of the stock exchanges. It has the responsibility of preventing undesirable speculation.

2. The Securities and Exchange Board of India

The SEBI even though was established in the year 1988, received statutory powers only on 30th Jan 1992. Under the SEBI Act, a wide variety of powers is vested in the hands of SEBI. SEBI has the powers to regulate the business of stock exchanges, other security markets and mutual funds. Registration and regulation of market intermediaries are also carried out by SEBI. It has the responsibility to prohibit the fraudulent unfair trade

practices and insider dealings. Takeovers are also monitored by the SEBI. Stock exchanges have to submit periodic and annual returns to SEBI. SEBI has the multi-pronged duty to promote the healthy growth of the capital market and protect the investors.

3. The Governing Board

The governing board of the stock exchange consists of elected member, directors, government nominees and public representatives. Rules, byelaws and regulations of the stock exchange provide substantial powers to the Executive directors for maintaining efficient and smooth day to day functioning of the stock exchange. The governing board has the responsibility to maintain an orderly and well regulated market. The governing body of the stock exchange consists of 13 members of which (a) 6 members of the stock exchange (b) Central Government nominates not more than three members (c) the board nominates three public representatives (d) SEBI nominates persons not exceeding three and (e) the stock exchange appoints one executive director.

One third of the elected members retire at annual general meeting. The retired member can offer himself for election if he is not elected for two consecutive years. If a member serves in the governing body for two years consecutively, he should refrain from offering himself for another two year.

The members of the governing body elect the president and vice president. It needs no approval from the central government or board. The office tenure for the president and vice president is one year. They can offer themselves for re-election, if they have not held office for two consecutive years. In that case they can offer themselves for re-election after a gap of one year period.

9.3.4 Stock Exchanges in India

1. Bombay Stock Exchange (BSE)

Bombay stock exchange was established in 1875 as “The Native Share and

Stock Brokers Association”. It is the oldest one in Asia. It is a voluntary non-profit making Association of persons (AOP) and has converted itself into demutualised and corporate entity. It has evolved over the years into its present status as the Premier Stock Exchange in the country. It is the first Stock Exchange in the country to have obtained permanent recognition in 1956 from the Govt. of India under the Securities Contracts (Regulation) Act, 1956.

The Exchange while providing an efficient and transparent market for trading in securities, debt and derivatives upholds the interests of the investors and ensures redressal of their grievances whether against the companies or its own member-brokers. It also strives to educate and enlighten the investors by conducting investor education programmes and making available to them necessary information inputs.

A Governing Board having 20 directors is the apex body, which decides the policies and regulates the affairs of the Exchange. The Governing Board consists of 9 elected directors, who are from the broking community (one third of them retire every year by rotation), three SEBI nominees, six public representatives and an Executive Director & Chief Executive Officer and a Chief Operating Officer.

2. National Stock Exchange (NSE)

The National Stock Exchange (NSE) of India became operational in the capital market segment on 3rd November, 1994 in Mumbai. NSE is India’s leading stock exchange covering various cities and towns across the country. NSE was set up by leading institutions to provide a modern, fully automated screen-based trading system with national reach. The Exchange has brought about unparalleled transparency, speed & efficiency, safety and market integrity. It has set up facilities that serve as a model for the securities industry in terms of systems, practices and procedures.

NSE has played a catalytic role in reforming the Indian securities market in terms of microstructure, market practices and trading volumes. The market today uses state-of-art information technology to provide an efficient and

transparent trading, clearing and settlement mechanism, and has witnessed several innovations in products & services viz. demutualization of stock exchange governance, screen based trading, compression of settlement cycles, dematerialization and electronic transfer of securities, securities lending and borrowing, professionalization of trading members and intensive use of information technology.

Objectives of NSE

The followings are the objectives of NSE:

- To establish nationwide trading facilities for all types of securities.
- Ensuring equal access to investors all-over the country through an appropriate communication network.
- Meeting international benchmarks and standards.
- Enabling shorter settlement cycles and book entry settlements.

Membership

The following are eligible to apply for membership subject to the regulatory norms and provisions of SEBI and as provided in the Rules, Regulations, Byelaws and Circulars of the Exchange -

a) Individuals (Sole Proprietor)

Table 9.1 : Criteria for Membership in NSE for Individual (Sole Proprietor)

| Criteria | |
|-----------------|--|
| Age | Minimum age : 21 years |
| Status | Indian Citizen |
| Education | At least HSC or equivalent qualification |
| Experience | Applicant should have an experience for not less than two years as a partner with, or an authorised assistant or authorised clerk or remisier or apprentice to a member. |

b) Partnership Firms registered under the Indian Partnership Act, 1932

Where the applicant is a partnership firm, the applicant shall identify a Dominant Promoter Group as per the norms of the Exchange at the time of making the application. Any change in the shareholding of the partnership firm including that of the said Dominant Promoter Group or their sharing interest shall be effected only with the prior permission of NSEIL/SEBI.

Table 9.2 : Criteria for Partnership Firms

| Criteria | |
|--------------------------------|---|
| Age | Minimum age of partner(s) : 21 years |
| Status | Registered Partnership firm under Indian Partnership Act, 1932 |
| Education | Partners should be at least HSC or equivalent qualification |
| Designated Partners | Identify at least two partners as designated partners who would be taking care of the day to day management of the partnership firm |
| Designated Partners Experience | Should have a minimum of 2 years experience in an activity related to dealing in securities or as portfolio manager or as investment consultant or as a merchant banker or in financial services or treasury, broker, sub broker, authorised agent or authorised clerk or authorised representative or remisier or apprentice to a member of a recognized stock exchange, dealer, jobber, market maker, or in any other manner in dealing in securities or clearing and settlement thereof. |
| Dominant Promoter Norms | Identify partner's sharing interest as per Exchange DPG norms |

c) Corporations, Companies or Institutions or subsidiaries of such Corporations, Companies or Institutions set up for providing financial services

A Company as defined in the Companies Act, 1956 (1 of 1956), shall be eligible to be admitted as a member of a Stock Exchange:

Table 9.3 : Criteria for Corporations

| | |
|---------------------------------|---|
| Age | Minimum age of director(s) : 21 years |
| Status | Corporate registered under The Companies Act, 1956 (Indian) |
| Minimum Paid up Equity Capital | ₹ 30 lakhs |
| Designated Directors | Identification of at least two directors as designated directors who would be managing the day to day trading operations |
| Education | Each of the Designated Directors should be at least HSC or equivalent qualification |
| Designated Directors Experience | Should have a minimum of 2 years experience in an activity related to dealing in securities or as portfolio manager or as investment consultant or as a merchant banker or in financial services or treasury, broker, sub broker, authorised agent or authorised clerk or authorised representative or remisier or apprentice to a member of a recognized stock exchange, dealer, jobber, market maker, or in any other manner in dealing in securities or clearing and settlement thereof. |
| Dominant Promoter Norms | Identify dominant group as per Exchange DPG norms |

Who cannot become a member?

Further to the capital and network requirements, no entity shall be admitted as a member/partner or director of the member if :-

- It has been adjudged bankrupt or a receiver order in bankruptcy has been made against him or he has been proved to be insolvent even though he has obtained his final discharge;
- It has compounded with his creditors for less than full discharge of debts;
- It has been convicted of an offence involving a fraud or dishonesty;
- It is engaged as a principal or employee in any business other than that of Securities, except as a broker or agent not involving any personal financial liability or for providing merchant banking, underwriting or corporate or investment advisory services, unless he undertakes to sever its connections with such business on admission, if admitted;
- It has been at any time expelled or declared a defaulter by any other

Stock Exchange or he has been debarred from trading in securities by an Regulatory Authorities like SEBI, RBI etc;

3. Over The Counter Exchange of India (OTCEI)

OTCEI was incorporated in 1990 as a Section 25 company under the Companies Act 1956 and is recognized as a stock exchange under Section 4 of the Securities Contracts Regulation Act, 1956. The Exchange was set up to aid enterprising promoters in raising finance for new projects in a cost effective manner and to provide investors with a transparent & efficient mode of trading.

OTCEI introduced many novel concepts to the Indian capital markets such as screen-based nationwide trading, sponsorship of companies, market making and scrip less trading. As a measure of success of these efforts, the Exchange today has 115 listings and has assisted in providing capital for enterprises that have gone on to build successful brands for themselves like VIP Advanta, Sonora Tiles & Brilliant mineral water, etc.

The Promoters

OTCEI is incorporated as a company under sec. 25 of the Indian Companies Act, 1956. As per the registration norms, OTCEI will be obliged to plough back all its profits and will not be allowed to declare dividends on its share capital. The main promoters are UTI, ICICI, IDBI, IFCI, GIC, SBI Capital Markets and Canbank Financial Services.

Intermediaries

The Exchange has three types of intermediaries called Members, Dealers and Sponsors, who contribute to the Exchange's activities by trading and enabling listing of companies on the Exchange. Members and Dealers may carry out the activities of trading, underwriting, market making and participation in bought out deals, but Dealers cannot sponsor an issue for listing. Sponsors can perform the function of sponsorship of issues, but are not permitted to participate in secondary market activities.

Eligibility Criteria

- A company should have a minimum paid-up capital of Rs. 30 lakhs and the minimum offer to the public should be 25% of the issued capital or Rs. 20 lakhs worth of shares in face value, whichever is higher. SEBI Guidelines on Disclosure and Investor Protection will be applicable to all OTCEI issues.
- Every company that intends to get listed has to be sponsored by a merchant banker (Member/ Sponsor) of the Exchange. The Sponsor of the issue must arrange for Market Makers to give Buy & Sell quotes in the securities for an initial period of 18 months.
- Relaxation in listing norms as compared to other stock exchanges.

Listing Fee

Table 9.4 : Listing Fee on OTCEI

| | |
|-------------------------|---|
| Initial Listing Fees : | Rs. 7,500/- |
| Annual Listing Fees : | |
| Paid up Capital : | Amount of Annual Fees : |
| Upto 3 crores | Rs. 7,500/- |
| 3 crores to 10 crores | Rs. 15,000/- |
| 10 crores to 20 crores | Rs. 25,000/- |
| 20 crores to 50 crores | Rs. 40,000/- |
| 50 crores to 100 crores | Rs. 85,000/- |
| Above Rs. 100 crores | Rs. 1,000/- for every Rs. 10 crores or part thereof of the capital. |

Procedure Adopted for the Listing of Scrips

- An OTCEI member is appointed as a sponsor for the company's issue. The sponsor appraises the project or company on technical, managerial, commercial, economical and financial aspects. The sponsor certifies the OTCEI regarding its appraisal.
- The sponsor determines the price of the company shares offered to the public, members and dealer of the OTCEI.
- The sponsor gets all statutory consent and compliances with all SEBI guidelines.
- The sponsor registers the issue with OTCEI and places the equity.
- The listing application has to be made to the OTCEI as per its rules and regulations.
- After getting the approval, the allotment is made.

Common Grievances

Investor grievances can be largely classified as:

1. Company-related
 - Non-receipt of securities sent for transfer
 - Non-receipt of corporate benefits, e.g. dividends/interest/bonus/ rights, etc.
 - Non-receipt of share certificates in exchange for counter receipts
2. Broker- related
 - Non-rectification of documents returned as bad delivery by the broker
 - Non-receipt of funds/ securities on sale/ purchase

Procedure for Grievance Redressal

OTCEI tries to resolve complaints received from investors at the earliest. A format for lodging complaints is devised in order to get the required details from the investor. Complaint is given a unique reference number and the investor is sent an acknowledgment. Complaint is forwarded to Company/Registrar/Broker, who are asked to reply within 21 days. If complaint remains unresolved within 30 days from date of acknowledgment, investor may again approach OTCEI with reference number.

Trading practices on BSE and NSE

Trading

Simply, trading means the activity of buying and selling of goods and services. In Stock market trading means the buying and selling of commodities on a short term basis hoping to make quick profit.

Bombay Stock Exchange (BSE)

In March 1995, the Bombay (Mumbai) Stock Exchange has introduced screen based trading BOLT (BSE on line Trading). The BOLT is designed to get best bids and offers from jobber's book as well as the best buy and sell orders from the order book. Now the BOLT has a nationwide network. Trading Work Stations are connected with the main Computer at Mumbai through Wide Area Network (WAN).

The securities traded in the BSE are classified into three groups namely, specified shares or A and non specified securities. The later is sub divided into B1 and B groups. A group contains the companies with large outstanding shares, good track record and large volume of business in the secondary market. Carry forward transactions for a period of 90 days are permitted in A group shares. A group contains 150 companies. Relatively liquid securities come under the B1 group and it comprises 746 companies. The remaining shares are placed under the B group. Settlements of all the shares are carried out through the clearing house. The settlement period is reduced from 14 days to 7 days for

all scrips.

Presently total no. of listed companies on BSE is 5,485 out of which 1310 are suspended due to regulatory framework and 4175 companies are eligible for trading. Total no. of scrips traded are 3018 and total no. of orders are 31,40,33,006 including equity, derivatives and currency rates and interest orders. Market capitalization of BSE Listed Co. is Rs. 9377672 Cr. with a total no. of 2,63,03,810 registered investors.

National Stock Exchange (NSE)

The companies with the minimum paid up capital of Rs 10 crores are listed in NSE. The software in the NSE trading system is known as National Exchange for Automated Trading (NEAT). The trade takes place through computers.

The trading member's computers are connected with the central computers at NSE through leased lines and VSAT (Very Small Aperture Terminals) which are small dish antenna. Communication is carried out with the help of the satellites. Network management centre is set up to enable remote diagnosing and solving problems related to network throughout the day. This helps the traders to carry out their activities with minimum interruption.

Various orders are entered by the trading members depending upon the time, price and volume related conditions.

Day Order

a) Time Based Orders

Day order is valid only for the entered day. If not matched during the day it is cancelled automatically at the end of the day. The system keeps the order till the trader cancels the order.

A good till day order: Here the trader specifies the number of days the order should be in the system, if not matched. The system eliminates the order at the end of this period.

Immediate or cancel order: This enables the trading member to buy or sell a security when the order is released into the market. If not matched, the order will be removed from the market.

b) Price Based Orders

Stop loss order: Here the order is activated only when the market price of the respective security crosses a threshold price, until then the order does not enter into the system. If the price falls below or is equal to limit price, immediately the system releases the order.

c) Volume Related Conditions

Undisclosed value order: In this type of order the trading member can disclose only a part of the order value of the market. Once the trade is over the next shares are released into the market and so on.

Minimum fill order: The trading member specifies the minimum amount of order that should be filled. For example an order of 800 with minimum fill may require that each trade should be for a minimum of 200 each and a maximum of 400.

All or none order: Here the trading members impose the conditions that the full order should be matched. The orders received are processed immediately to find out the matching order. If they are not matched according to the order conditions they are stored in different books. Orders are stored in the sequence of best price and within the price by time priority.

The following table shows the growth of capital market segment in form of traded securities and total turnover:

Table 9.5 : Growth of Capital Market in India

| Month/Year | No. of Securities traded | Traded Quantity (Lakhs) | Total Turnover (Cr. Rs.) |
|------------|--------------------------|-------------------------|--------------------------|
| Aug. 2014 | 2047 | 154647 | 294758 |
| 2012-13 | 1683 | 1659160 | 278229 |
| 2011-12 | 1807 | 1616978 | 2810893 |
| 2010-11 | 1607 | 1824515 | 3577412 |
| 2009-10 | 1968 | 2215530 | 4138024 |
| 2008-09 | 1327 | 1426354 | 2752023 |
| 2007-08 | 1264 | 1498469 | 3551038 |
| 2000-01 | 1201 | 329536 | 1339510 |

9.4 TRADING AND OPERATIONAL MECHANISM OF STOCK EXCHANGES IN INDIA

The major stock market reforms by Securities and Exchange Board of India (SEBI) and Government of India are discussed as below:

1. Trading system

For a long time the trading on the stock exchanges were carried out by “public outcry” in the trading ring. This system lacked transparency. The introduction of information technology in the working of the stock exchanges is a landmark in the history of capital markets. Some of the major changes include

Introduction of screen based trading systems in all the exchanges namely

- a) The Over The Counter Exchange of India (OTCEI)
- b) National Stock Exchange (NSE)
- c) The Bombay Stock Exchange (BSE)

2. Depository

One of the major drawbacks was that the securities were held in the form of certificates. This led to the problem in physical storage and transfer of

certificates. The transaction costs were also higher due to physical movement of paper and the incidence of stamp duty. National Security Depository Ltd (NSDL) was set up in 1996 as India's first depository. A depository is an entity which holds the securities in electronic form on behalf of the investor. This is done through the dematerialization of the holdings at the request of the investor. Dematerialization is the process by which physical certificates of the investor are destroyed and an equal number of securities are created to the amount of investor. This also enables the transfer of securities by book entries. The risks of bad deliveries are also eliminated. The transaction costs are also reduced due to less flow of paper and transfer of security through depository does not attract stamp duty. Further the depository also handles all the corporate actions like exercising for rights, collection of dividends, credit for bonus, exercising of warrants, conversion of option etc, on behalf of the investor.

3. Clearing mechanism

The clearing houses attached to the stock exchanges functioned only as conduits to delivery of securities and money. The NSE was the first stock exchange to set up a clearing corporation. The National Securities Clearing Corporation (NSCC) assumes the counterparty risk in all trading deals made on the exchange. NSCC acts as a counterparty for all the trades and the default risk in the deal is borne by it. NSE has created a special Trade Guarantee fund for this purpose and loss due to defaults will be met by drawing from its corpus.

4. Settlement system

Trading in securities is internationally done on rolling settlement basis. One of the key areas of change was the change in the settlement time duration in the stock exchange transactions. The settlement duration was reduced to T+2 systems (i.e. the trade will be settled on the 2nd day from the date of execution of the transaction).

5. Carry forward system

The Indian stock exchanges have been an amalgam of cash market and forward market. The prices of the steps on the exchange did not reflect their 'true' price in the underlying cash market. Further there was indiscriminate and rampant speculation in the market. Defaults were common and other members were forced to "accommodate" the defaulting member. Often, the defaults had a snowballing effect and the entire market would be in the throes of a major payment crisis. This frequently resulted in the closure of the exchanges for a few days. In order to curb the prevailing malpractices, SEBI banned carry forward transactions on all stock exchanges.

6. Book building

Book building is the process of price discovery in primary market. One of the drawbacks of the free pricing was the pricing mechanism. The issue price has to be decided around 60-70 days before the opening of the issue. Further the issuer has no clear idea about the market perception of the price determined. Introduction of book building helps in overcoming the limitation and results in market driven pricing of securities.

7. Registration of Intermediaries

SEBI started the process of registration of some of the intermediaries associated with the process of issue management. This is done to ensure professionalization of the intermediaries and to curb the malpractices indulged by some of the intermediaries. Registration has become mandatory for the primary market intermediaries such as merchant bankers, share transfer agents, bankers and debenture trustees etc.

9.5 LISTING OF SECURITIES

Listing refers to the admission of the security of a public limited company on a recognized stock exchange for trading. Listing of securities is undertaken with the primary objective of providing marketability, liquidity and transferability to

securities. After the promulgation of Companies act, 1988, listing of securities offered to the public, became compulsory. The section 73, of the companies act states that any company intending to offer shares or debentures to the public through the issue of prospectus should make an application to one or more recognized stock exchanges for permission to be traded in the respective stock exchange. After the permission is granted, the company becomes eligible to list its securities in the stock exchange.

The objectives of listing are mainly to:

- Provide liquidity to securities;
- Mobilize savings for economic development;
- Protect interest of investors by ensuring full disclosures.

1. Listing of Securities on BSE

The BSE Limited has a dedicated Listing Department to grant approval for listing of securities of companies in accordance with the provisions of the Securities Contracts (Regulation) Act, 1956.

BSE has set various guidelines and forms that need to be adhered to and submitted by the companies. These guidelines will help companies to expedite the fulfillment of the various formalities and disclosure requirements that are required at various stages of:

- i. Public Issues
 - Initial Public Offering
 - Further Public Offering
- ii. Preferential Issues
- iii. Indian Depository Receipts
- iv. Amalgamation

v. Qualified Institutions Placements

A company intending to have its securities listed on BSE has to comply with the listing requirements prescribed by it. Some of the requirements are as under:

a. Minimum Listing Requirements for New Companies

The following eligibility criteria have been prescribed for listing of companies on BSE, through Initial Public Offerings (IPOs) & Follow-on Public Offerings (FPOs):

- The minimum post-issue paid-up capital of the applicant company shall be Rs. 10 crore for IPOs & Rs.3 crore for FPOs; and
- The minimum issue size shall be Rs. 10 crore; and
- The minimum market capitalization of the Company shall be Rs. 25 crore (market capitalization shall be calculated by multiplying the post-issue paid-up number of equity shares with the issue price).

Further:

- In respect of the requirement of paid-up capital and market capitalization, the issuers shall be required to include in the disclaimer clause forming a part of the offer document that in the event of the market capitalization (product of issue price and the post issue number of shares) requirement of BSE not being met, the securities of the issuer would not be listed on BSE.
- The applicant, promoters and/or group companies, shall not be in default in compliance of the listing agreement.
- The above eligibility criteria would be in addition to the conditions prescribed under SEBI (Issue of Capital & Disclosure Requirements) Regulations, 2009.
- The Issuer shall comply to the guidance/ regulations applicable to listing as

bidding inter alia from:

1. Securities Contracts (Regulations) Act 1956
2. Securities Contracts (Regulation) Rules 1957
3. Companies Act 1956
4. Securities and Exchange Board of India Act 1992
5. And any other circular, clarifications, guidelines issued by the appropriate authority.

b. Minimum Requirements for Relisting on BSE

Companies delisted by BSE and seeking relisting at BSE are required to make a fresh public offer and comply with the extant guidelines of SEBI and BSE regarding initial public offerings.

c. Permission to Use the Name of BSE in an Issuer Company's Prospectus

Companies desiring to list their securities offered through a public issue are required to obtain prior permission of BSE to use the name of BSE in their prospectus or offer for sale documents before filing the same with the concerned office of the Registrar of Companies.

d. Submission of Letter of Application

As per Section 73 of the Companies Act, 1956, a company seeking listing of its securities on BSE is required to submit a Letter of Application to all the stock exchanges where it proposes to have its securities listed before filing the prospectus with the Registrar of Companies.

e. Allotment of Securities

As per the Listing Agreement, a company is required to complete the allotment of securities offered to the public within 30 days of the date of closure of the subscription list and approach the Designated Stock

Exchange for approval of the basis of allotment.

In case of Book Building issues, allotment shall be made not later than 15 days from the closure of the issue, failing which interest at the rate of 15% shall be paid to the investors.

f. Trading Permission

As per SEBI Guidelines, an issuer company should complete the formalities for trading at all the stock exchanges where the securities are to be listed within 7 working days of finalization of the basis of allotment.

A company should scrupulously adhere to the time limit specified in SEBI (Disclosure and Investor Protection) Guidelines 2000 for allotment of all securities and dispatch of allotment letters/share certificates/credit in depository accounts and refund orders and for obtaining the listing permissions of all the exchanges whose names are stated in its prospectus or offer document. In the event of listing permission to a company being denied by any stock exchange where it had applied for listing of its securities, the company cannot proceed with the allotment of shares. However, the company may file an appeal before SEBI under Section 22 of the Securities Contracts (Regulation) Act, 1956.

g. Requirement of 1% Security

Companies making public/rights issues are required to deposit 1% of the issue amount with the Designated Stock Exchange before the issue opens. This amount is liable to be forfeited in the event of the company not resolving the complaints of investors regarding delay in sending refund orders/share certificates, non-payment of commission to underwriters, brokers, etc.

h. Payment of Listing Fees

All companies listed on BSE are required to pay to BSE the Annual Listing Fees by 30th April of every financial year as per the Schedule of Listing Fees prescribed from time to time.

The schedule of Listing Fees for the year 2013-14, is given here under:

Table 9.6 : Securities*other than Privately Placed Debt Securities and Mutual Funds

| Sr No. | Particulars | Amount(Rs.) |
|--------|----------------------------|---|
| 1 | Initial Listing Fees | Rs 20,000 |
| 2 | Annual Listing Fees | |
| (i) | Upto Rs. 5 Crs. | Rs 15,000 |
| (ii) | Rs.5 Crs. To Rs.10 Crs. | Rs 25,000 |
| (iii) | Rs.10 Crs. To Rs.20 Crs. | Rs 40,000 |
| (iv) | Rs.20 Crs. To Rs.30 Crs | Rs 60,000 |
| (v) | Rs.30 Crs. To Rs.100 Crs. | Rs.70,000/- plus Rs. 2,500/- for every increase of Rs. 5 crs or part thereof above Rs. 30 crs. |
| (vi) | Rs.100 Crs. to Rs.500 Crs. | Rs.125,000/- plus Rs. 2,500/- for every increase of Rs. 5 crs or part thereof above Rs. 100 crs. |
| (vii) | Rs.500 Crs. to Rs.1000 Crs | Rs.375,000/- plus Rs. 2,500/- for every increase of Rs. 5 crs or part thereof above Rs. 500 crs. |
| (viii) | Above Rs. 1000 Crs | Rs.625,000/- plus Rs. 2,750/- for every increase of Rs. 5 crs or part thereof above Rs. 1000 crs. |

Note: In case of debenture capital (not convertible into equity shares), the fees will be 75% of the above fees. * includes equity shares, preference shares, indian depository receipts, fully convertible debentures, partly convertible debentures and any other security convertible into equity shares.

Table 9.7 : Privately Placed Debt Securities

| Sr No. | Particulars | Amount(Rs.) |
|--------|--------------------------|--|
| 1 | Initial Listing Fees | Nil |
| 2 | Annual Listing Fees | |
| (i) | Upto Rs. 5 Crs. | Rs 2,500 |
| (ii) | Rs.5 Crs. To Rs.10 Crs. | Rs 3,750 |
| (iii) | Rs.10 Crs. To Rs.20 Crs. | Rs 7,500 |
| (iv) | Above Rs.20 Crs. | Rs.7,500/- plus Rs.200/- for every increase Rs.1Cr.or part there of above Rs. 20crs. Subject to a maximum of Rs.30,000/- per instrument. |

Note: Cap on the annual listing fee of debt instruments per issue is Rs.5, 00,000/- per annum.

Table 9.8 : Mutual Fund

| Sr No. | Particulars | Amount(Rs.) |
|--------|--|-------------|
| 1 | Initial Listing Fees | Nil |
| 2 | Annual Listing Fees for tenure of the scheme Payable per 'month or part thereof' | |
| (i) | Issue size up to Rs.50 Crs | Rs 1,000 |
| (ii) | Above Rs.50 Crs. and up to Rs.100 Crs. | Rs 2000 |
| (iii) | Above Rs.100 Crs. and up to Rs.300 Crs. | Rs 3,600 |
| (iv) | Above Rs.300 Crs. and up to Rs.500 Crs. | Rs.5,900 |
| (v) | Above Rs.500 Crs.and up to Rs. 1000 Crs. | Rs. 9,800 |
| (vi) | Above Rs. 1000 Crs. | Rs. 15,600 |

i. Compliance with the Listing Agreement

Companies desirous of getting their securities listed at BSE are required to enter into an agreement with BSE called the Listing Agreement, under which they are required to make certain disclosures and perform certain acts, failing which the company may face some disciplinary action, including suspension/delisting of securities. As such, the Listing Agreement is of great importance and is executed under the common seal of a company.

j. Cash Management Services (CMS) - Collection of Listing Fees

In order to simplify the system of payment of listing fees, BSE has entered into an arrangement with HDFC Bank for collection of listing fees from 141 locations all over the country. Details of the HDFC Bank branches are available on website (www.bseindia.com) as well as on the HDFC Bank website (www.hdfcbank.com) This facility is being provided free of cost.

k. Advertisement

The company should not advertise in newspapers that 'issue oversubscribed or 'thanks' to the investing public for their overwhelming response. If the company gives such an advertisement, listing will be refused by the stock exchange after intimation to the stock exchange division of the ministry of finance.

l. Public offer size

The size of the public offer and value of the share should be stated in the first

page of the prospectus. If the shares are issued at premium, that also should be stated. Preferential allotment to the directors and workers of the company and the reservation for allotment to the non resident Indians should be clearly indicated in the prospectus.

2. Listing of Securities on NSE

NSE plays an important role in helping Indian companies' access equity capital, by providing a liquid and well-regulated market. As of March 2010, there were 1,470 companies listed on NSE. The companies listed on the Exchange are from various sectors of the economy such as - heavy industry, software, refinery, public sector units, infrastructure, and financial services. Wide range of securities such as stocks, bonds and other securities can be listed in the Capital Market (Equities) segment and its Wholesale Debt Market segment. Listing means formal admission of a security to the trading platform of the Exchange. It provides liquidity to investors without compromising the need of the issuer for capital and ensures effective monitoring of conduct of the issuer and trading of the securities in the interest of investors. The issuer wishing to have trading privileges for its securities satisfies listing requirements prescribed in the relevant statutes and in the listing regulations of the Exchange. It also agrees to pay the listing fees and comply with listing requirements on a continuous basis. All the issuers who list their securities have to satisfy the corporate governance requirement framed by regulators.

a. Paid up capital

The paid up equity capital of the applicant shall not be less than Rs.10 crore and the capitalization of the applicant's equity shall not be less than Rs. 25 crore.

b. Listing Agreement

All companies seeking listing of their securities on the Exchange are required to enter into a formal listing agreement with the Exchange. The agreement specifies all the quantitative and qualitative requirements to be continuously

complied with by the issuer for continued listing. The Exchange monitors such compliance and companies who do not comply with the provisions of the listing agreement may be suspended from trading on the Exchange. The agreement is being increasingly used as a means to improve corporate governance.

c. Compliance by Listed Companies

NSE has institutionalized a process of verifying compliance of various conditions of the listing agreement. It conducts a periodic review for compliance on account of announcement of book closure/record date, announcement of quarterly results, submission of shareholding pattern, annual reports, appointment of compliance officer, corporate governance report, investor grievances and various disclosures etc.

d. Disclosures by Listed Companies

It is essential that all critical price sensitive/material information relating to securities is made available to the market participants and the investors immediately to enable them to take informed decisions in respect of their investments in securities. The Exchange therefore ensures certain important timely disclosures by listed companies and disseminates them to market through the NEAT terminals and through its website. These disclosures include corporate actions, quarterly/half yearly results, decisions at board meeting, non-promoters' holding, announcements / press releases etc.

e. Listing Fee

The listing fee on NSE, applicable from April 1, 2011 is as follows:

Table 9.9 : Listing Fee on NSE

| Particulars | Amount (Rs.) |
|--|--------------|
| Initial Listing Fees | 50,000 |
| Annual Listing Fees (based on paid up share, bond and/or debenture capital) Up to ₹5 Crore | 18,000 |
| Above ₹ 5 Crore and up to ₹ 10 Crore | 31,500 |
| Above ₹ 10 Crore and up to ₹ 20 Crore | 57,500 |
| Above ₹ 20 Crore and up to ₹ 30 Crore | 90,000 |
| Above ₹ 30 Crore and up to ₹ 40 Crore | 1,00,000 |
| Above ₹ 40 Crore and up to ₹ 50 Crore | 1,05,000 |
| Above ₹ 50 Crore and up to ₹ 100 Crore | 1,75,000 |
| Above ₹ 100 Crore and up to ₹ 150 Crore | 2,00,000 |
| Above ₹ 150 Crore and up to ₹ 200 Crore | 2,40,000 |
| Above ₹ 200 Crore and up to ₹ 250 Crore | 2,75,000 |
| Above ₹ 250 Crore and up to ₹ 300 Crore | 3,10,000 |
| Above ₹ 300 Crore and up to ₹ 350 Crore | 3,40,000 |
| Above ₹ 350 Crore and up to ₹ 400 Crore | 3,75,000 |
| Above ₹ 400 Crore and up to ₹ 450 Crore | 4,35,000 |
| Above ₹ 450 Crore and up to ₹ 500 Crore | 5,00,000 |

Listing Procedure: Obtaining the listing permission from stock exchanges involves various steps. The steps are as follow:

- i. Preliminary discussion:** The Company desirous of getting its security listed on the stock exchange should have detailed discussion with the stock exchange authorities. The discussion enables it to understand the various compliances to be complied with for listing its securities.
- ii. Article of association approval:** The article of association will be approved only if it fulfills certain requirements. They are:
 - a. Common form of transfer should be used
 - b. Once the shares are fully paid, they should be free from all lien and in the case of partly paid shares the company's lien is restricted to the call money alone.

- c. The calls carried out in advance are entitled to interest rate but not for dividends or any other declared profits.
- d. The free dealing in company's shares should not be restricted by any provision
- e. The company should comply with the section 205-A of companies act in the case of dividends.

If the company is not able to comply with any of the requirements of the Rule 19(2) (a) of the Securities Contract Regulation Act, the company should give an undertaking to make necessary amendments in the article of association as required in the next annual general meeting of the company. On the basis of the undertaking, the security will be permitted to trade on the stock exchange. If the article of association provides veto powers to any director/ or group of directors, the relevant article should be amended to remove such powers to get the securities listed.

- iii. Draft prospectus approval:** Getting approval for the draft prospectus is the essential prerequisite for the security to be listed. Before finalizing the draft prospectus the company authority should hold a discussion with the stock exchange authorities. While seeking approval, the prospectus should contain all the conditions put by the stock exchange. The prospectus should clearly state the following:
 - a. The name of regional stock exchange and any other stock exchange(s) where it intends to enlist its securities.
 - b. It should specify the date of commencement of the subscription and the date of closing the subscription.
- iv. Listing application:** Any company when it intends to offer share to the public through prospectus, should make an application to the stock exchange or exchanges where the share is to be listed. A formal application form should be filed before filing the prospectus with the

Registrar of Companies. A number of certificates have to be submitted with the application. They are listed below:

- a. Three certified copies of memorandum and articles of association and debenture trust deed.
 - b. Copies of prospectus, offer for sale made during the last five years and circulars and advertisement regarding the offer made during the last five years.
 - c. Copy of every letter, report, balance sheet, valuation, contract, court order or any other document that is given in the prospectus.
 - d. Certified copies of the service agreements of secretaries, treasurers, managing directors, technical directors, general manager and manager.
 - e. Certified copies of underwriting, brokerage, vendors, promoter's selling agents and sales manager's agreement.
 - f. Particulars regarding the material contract, technical advice and collaboration, concessions and similar other documents.
 - g. Copies of agreement with the Industrial Finance Corporation, Industrial Credit and Investment Corporation and such other bodies.
 - h. Details regarding the reorganization, reconstruction, amalgamation and details of the company's activities.
 - i. Specimen copies of the share certificate, debenture certificate, letters of allotment, letters of acceptance, letter of renunciation, transfer receipts and renewal receipts.
- v. **Listing agreement regarding projection of profitability :** Generally companies make projections regarding the profitability of the company at the time of the issue of capital and give an abridged statement of the balance sheet and profit and loss account. Many times the projections are

not met with. To provide protection to the investors, SEBI amended the listing agreement by inserting a new clause 43. Accordingly the company has to submit yearly statement showing the variation between projections given in the prospectus and the actual achieve. The reasons for the variation in the profitability projections and actual should be given.

- vi. Listing agreement and cash flow statement:** The representatives of SEBI, the stock exchanges of Mumbai, Calcutta, Ahmadabad, NSE and Institute of Chartered Accountant of India framed the norms for the inclusion cash flow statement in the annual reports. The cash flow statement discloses the actual cash flow operations in the company. This would provide better quality to the shareholder. To comply with the international standards this has been imposed as a part of listing agreement.

De-listing

There are two kinds of delisting which can be done from the Exchanges as per the SEBI (Delisting of Securities) Guidelines, 2003 in the following manner:

- **Voluntary De-listing of Companies :** Any promoter or acquirer desirous of delisting securities of the company under the provisions of these guidelines shall obtain the prior approval of shareholders of the company by a special resolution passed through postal ballot, make a public announcement in the manner provided in these guidelines, make an application to the delisting exchange for seeking in-principle approval in the form specified by the exchange, and comply with such other additional conditions as may be specified by the concerned stock exchanges from where securities are to be de-listed. Any promoter of a company which desires to de-list from the stock exchange shall also determine an exit price for delisting of securities in accordance with the book building process as stated in the guidelines. The stock exchanges shall provide the infrastructure facility for display of the price at the terminal of the trading members to enable the investors to access the price on the screen to bring transparency to the delisting process.

- **Compulsory De-listing of Companies :** The stock exchanges may de-list companies which have been suspended for a minimum period of six months for non-compliance with the listing agreement. The stock exchanges have to give adequate and wide public notice through newspapers and also give a show cause notice to a company. The exchange shall provide a time period of 15 days within which representation may be made to the exchange by any person who may be aggrieved by the proposed delisting. The Stock Exchanges may, after consideration of the representation received from the aggrieved persons, delist the securities of such companies. The stock exchange shall ensure that adequate and wide public notice is given through newspaper and on the notice boards/trading systems of the stock exchanges and shall ensure disclosure in all such notices of the fair value of such securities.

9.6 SUMMARY

A stock exchange is a market where stock brokers and traders can buy and sell shares of stocks, bonds, and other securities. Many large companies have their stocks listed on a stock exchange. The functions of stock exchange are to maintain active trading, fix prices, ensure safe and fair dealing, disseminate information and so on. The company intending to have its securities listed on stock exchanges has to comply with the listing requirements prescribed by respective stock exchange.

9.7 GLOSSARY

- **Listing:** Listing refers to the admission of the security of a public limited company on a recognised stock exchange for trading.
- **Delisting:** The term ‘delisting’ of securities means removal of securities of a listed company from a stock exchange.
- **Depository:** A depository is an entity which holds the securities in electronic form on behalf of the investor.
- **Book Building:** It refers to the process of generating, capturing and

recording investor demand for shares during an Initial Public Offering (IPO) or other securities during their issuance process, in order to support efficient price discovery. Usually, the issuer appoints a major investment bank to act as a major securities underwriter or book runner.

9.8 SELF ASSESSMENT QUESTIONS

1. Explain, in brief, the features of stock exchange.

2. Give the meaning of listing of securities.

9.9 LESSON END EXERCISES

1. Explain the requirements for listing of securities.
2. Differentiate between voluntary delisting and compulsory delisting.

9.10 SUGGESTED READINGS

1. Sourain Harry, Investment Management, Prentice Hall of India.
2. Maheshwari Yogesh, Investment Management, Prentice Hall of India.

3. Chandra Prasanna, Investment Analysis and Portfolio Management, McGraw Hill.

9.11 REFERENCES

1. Donald E. Fisher and Ronald J. Jordan, Securities Analysis and Portfolio Management, Prentice Hall, New Delhi.
2. V K Bhalla, Fundamentals of Investment Management, S. Chand
3. Punithavathy Pandian, Securities Analysis and Portfolio Management, Vikas Publishing House Pvt Ltd.
4. Shashi K. Gupta and Rosy Joshi, Securities Analysis and Portfolio Management (Investment Management), Kalyani Publishers.
5. V. A. Avadhani, Investment Management, Himalaya Publishing House.
6. Francis and Archer, Portfolio Management, Prentice Hall of India.
7. Gupta L. C., Stock Exchange Trading in India, Prentice Hall of India.
8. Agarwal, O.P., Security Analysis and Investment Management, Himalaya Publishing House.

ONLINE TRADING**STRUCTURE**

- 10.1 Introduction
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10.1 INTRODUCTION

Financial markets, consisting of capital market and money market, constitute one of the major elements of the corporate operating environment. All the corporate entities have an inevitable relationship with the capital market. In the primary market segment of capital market, a company issues various types of securities to raise funds whereas in the secondary market, the securities already issued, are traded. The Indian capital market, a growing one, has been undergoing through the various process of reforms in the light of globalisation and liberalisation policies initiated by the Government since 1991. The formation of SEBI in 1992 and consequent sweeping changes brought about in view of increasing number of market participants including foreign players, unwarranted delay in transfer of securities, problem of duplicate or forged shares, bad delivery, loss or theft of share certificates, the SEBI has issued a number of rules and regulations for the supervision, monitoring and control of activities of market participants so that interest of all those concerned could be protected. The traditional method of settlement which was based upon physical delivery of securities certificates has been replaced by computerised online trading (paperless trading) or depository system of securities to ensure safety, security, transparency and promptness in clearing and settlement system.

10.2 OBJECTIVES

After going through this lesson, you will be able to:

- Understand the meaning of online trading and dematerialisation.
- Know the conditions and procedure for dematerialisation.
- Define depositories and depository participants.

- Comprehend WAP enabled trading.

10.3 ONLINE TRADING

Online trading which is also known as **electronic trading**, sometimes called **etrading**, is a method of trading securities (such as stocks, and bonds), foreign exchange or financial derivatives electronically. Information technology is used to bring together buyers and sellers through an electronic trading platform and network to create virtual market places such as NASDAQ, NYSE Arca and Globex which are also known as electronic communication networks (ECNs). Electronic trading is rapidly replacing human trading in global securities markets.

Electronic trading is in contrast to older floor trading and phone trading and has a number of advantages. For many years stock exchanges were physical locations where buyers and sellers met and negotiated. Exchange trading would typically happen on the floor of an exchange, where traders would shout and indicate at one another – a process known as open outcry or pit trading. With the improvement in communications technology in the late 20th century, the need for a physical location became less important and traders started to transact from remote locations in what became known as electronic trading. Electronic trading made transactions easier to complete, monitor, clear, and settle and this helped stimulate on its development.

One of the earliest examples of widespread electronic trading was on Globex, the CME Group's electronic trading platform conceived in 1987 and launched fully in 1992. This allowed access to a variety of financial markets such as treasuries, foreign exchange and commodities.

Set up in 1971, NASDAQ was the world's first electronic stock market, though it originally operated as an electronic bulletin board, rather than offering straight-through processing (STP).

By 2011 investment firms on both the buy side and sell side were increasing their spending on technology for electronic trading. With the result that many floor traders and brokers were removed from the trading process. Traders

also increasingly started to rely on algorithms to analyze market conditions and then execute their orders automatically.

The move to electronic trading compared to floor trading continued to increase with many of the major exchanges around the world moving from floor trading to completely electronic trading.

Trading in the financial markets can broadly be split into two groups:

- **Business-to-business (B2B)** trading, often conducted on exchanges, where large investment banks and brokers trade directly with one another, transacting large amounts of securities, and
- **Business-to-consumer (B2C)** trading, where retail (e.g. individuals buying and selling relatively small amounts of stocks and shares) and institutional clients (e.g. hedge funds, fund managers or insurance companies, trading far larger amounts of securities) buy and sell from brokers or “dealers”, who act as middle-men between the clients and the B2B markets.

While the majority of retail trading in the United States happens over the Internet, retail trading volumes are dwarfed by institutional, inter-dealer and exchange trading. However, in developing economies, especially in Asia, retail trading constitutes a significant portion of overall trading volume.

Similarly, B2C trading traditionally happened over the phone and, while some still does, more brokers are allowing their clients to place orders using electronic systems. Many retail (or “discount”) brokers (e.g. Charles Schwab, E-Trade) went online during the late 1990s and most retail stock-broking probably takes place over the web now.

For stock trading, the process of connecting counterparties through electronic trading is supported by the **Financial Information eXchange (FIX)** Protocol. Used by the vast majority of exchanges and traders, the FIX Protocol is the industry standard for pre-trade messaging and trade execution. While the FIX Protocol was developed for trading stocks, it has

been further developed to accommodate commodities, foreign exchange, derivatives, and fixed income trading.

10.3.1 Impact of Online Trading

The increase of electronic trading has had some important implications:

- **Reduced cost of transactions** – By automating as much of the process as possible (often referred to as “straight-through processing” or STP), costs are brought down. The goal is to reduce the incremental cost of trades as close to zero as possible, so that increased trading volumes don’t lead to significantly increased costs. This has translated to lower costs for investors.
- **Greater Liquidity** – electronic systems make it easier to allow different companies to trade with one another, no matter where they are located. This leads to greater liquidity (i.e. there are more buyers and sellers) which increases the efficiency of the markets.
- **Greater Competition** – While electronic trading hasn’t necessarily lowered the cost of entry to the financial services industry, it has removed barriers within the industry and had a globalisation-style competition effect.
- **Increased Transparency** – Electronic trading has meant that the markets are less opaque. It’s easier to find out the price of securities when that information is flowing around the world electronically.
- **Tighter Spreads** – The “spread” on an instrument is the difference between the best buying and selling prices being quoted; it represents the profit being made by the market makers. The increased liquidity, competition and transparency means that spread have tightened, especially for commoditised, exchange-traded instruments.

For retail investors, financial services on the web offer great benefits. The primary benefit is the reduced cost of transactions for all concerned as well as the ease and the convenience. Web-driven financial transactions

bypass traditional hurdles such as logistics.

10.3.2 Technology and Systems

Electronic trading systems are typically proprietary software (*etrading platforms* or electronic trading platforms), running on COTS (commercial off the shelf) hardware and operating systems, often using common underlying protocols, such as TCP/IP.

Exchanges typically develop their own systems (sometimes referred to as matching engines), although sometimes an exchange will use another exchange's technology and some newer electronic exchanges use 3rd-party specialist software providers.

Exchanges and ECNs generally offer two methods of accessing their systems –

- an exchanged-provided GUI (Graphic User Interface), which the trader runs on his or her desktop and connects directly to the exchange/ECN, and
- an Application Programming Interface (API) which allows dealers to plug their own in-house systems directly into the exchange/ECN's.

From an infrastructure point of view, most exchanges will provide “gateways” which sit on a company's network, acting in a manner similar to a proxy, connecting back to the exchange's central system. ECNs will generally forego the gateway/proxy, and their GUI or the API will connect directly to a central system, across a leased line.

Many brokers develop their own systems, although there are some third-party solutions providers specializing in this area. Like ECNs, brokers will often offer both a GUI and an API (although it's likely that a slightly smaller proportion of brokers offer an API, as compared with ECNs), and connectivity is typically direct to the broker's systems, rather than through a gateway.

Investment banks and other dealers have far more complex technology

requirements, as they have to interface with multiple exchanges, brokers and multi-dealer platforms, as well as their own pricing, P&L, trade processing and position-keeping systems. Some banks will develop their own electronic trading systems in-house, but this can be costly, especially when they need to connect to many exchanges, ECNs and brokers. There are a number of companies offering solutions in this area.

10.3.3 Advantages of Online Trading

There are many advantage of online trading. These are as follows :

- 1 It is fully automated trading process in which broker is independent to trade from anywhere.
- 2 Traders have direct control over their trading portfolio.
- 3 Ability to trade multiple markets and products
- 4 Real-time market data
- 5 Faster trade execution which is crucial in day trading and swing trading
- 6 Discount commission rates
- 7 Choice of routing orders to different market makers or specialists
- 8 Low capital requirements, high leverage offered by brokers for trading on margin, easy to open account and easy to manage account, and no geographical limits. So online trading favors active traders.

List of websites offering online trading;

www.icicidirect.com

www.midirect.com

www.5paise.com

www.kotakstreet.com

www.sharekhan.com

www.debtonthenet.com

www.moneypore.com

www.cybercash.com

www.bizfinance.com

www.ecoins.com

www.jpmorgan.com

10.4 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 Depository Participant (DP). The client has to deface and surrender the certificates registered in its name to the DP. After intimating National Securities Depository Limited (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.

10.4.1 Important Conditions for Dematerialisation

The followings are the conditions for dematerialisation of securities;

- 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 performance 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 Registrar & Transfer (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.

10.4.2 Procedure for Dematerialisation of Securities

The following steps will be followed for dematerialisation of securities:

1. 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”.
2. 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.

3. 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
4. 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.
5. 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.

6. The DRN so generated is entered in the space provided for the purpose in the dematerialisation request form.
7. 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.
8. The DM forwards the request to the Issuer/ R&T agent electronically.
9. The DP will fill the relevant portion viz., the authorisation portion of the demat request form.
10. The DP will punch the certificates on the company name so that it does not destroy any material information on the certificate.
11. The DP will then dispatch the certificates along with the request form and a covering letter to the Issuer/ R&T agent.
12. 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.
13. The DM will electronically authorise the creation of appropriate credit balances in the client's account.
14. The DPM will credit the client's account automatically.
15. The DP must inform the client of the changes in the client's account following the confirmation of the request.
16. 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.

Accounts/Transactions by Book Entry

Account Opening

- The Depository shall keep accounts separately in respect of each Participant. The Depository shall keep a record of each Client's account which shall be updated on a daily basis.
- The Participant shall maintain separate accounts in respect of each Client and its own account. The Participant shall intimate the balances held in its own account and Client account to Depository on a daily basis.
- Any prospective Client who wishes to avail the services of the Depository will have to open an account with the Depository through a Participant.
- The Client will have to make an application for this purpose to the Participant in the format specified under the Business Rules.
- Once the application has been accepted by the Participant, the applicant will be issued a Client account number.

10.4.3 Rematerialisation

A Client may withdraw its security balances with the Depository at any point of time by making an application to that effect to the Depository through its Participant.

A Participant holding its own securities in the Depository may withdraw its security balances with the Depository by making an application to that effect to the Depository.

The Client shall make the request for withdrawal of the balance in his account in the Rematerialisation Request Form (hereinafter referred to as RRF) as specified in the Business Rules.

On receipt of the RRF, the Participant shall check whether sufficient free relevant security balance is available in the account of the Client. If there is sufficient balance, the Participant shall accept the said RRF and block the balance of the Client to the extent of the rematerialisation quantity and electronically intimate the request to the Depository.

On receipt of the request the Depository shall block the balance of the Participant to the extent of rematerialisation quantity in Depository system.

The Depository will intimate electronically all such accepted rematerialisation applications to the Issuer or its Registrar & Transfer Agent on a daily basis.

The Participant shall forward the RRF to the Issuer or its Registrar and Transfer Agent within seven days of accepting such request from the Client. The Issuer or its Registrar & Transfer Agent after validating the RRF will confirm electronically to the Depository that the RRF has been accepted. Thereafter the Issuer or its Registrar and Transfer Agent shall dispatch the share certificates arising out of the rematerialisation request within a period of thirty days from receipt of such Rematerialisation Request Form.

On receipt of such acceptance from the Issuer or its Registrar and Transfer Agent, the Depository shall remove the balances from the respective Participant's account and the Participant shall remove the balance from the respective Client's account.

10.4.4 Account Closure

A Client wanting to close an account shall make an application, in the format specified to that effect in the Business Rules to the Participant.

The Client may close its account if no balances are standing to its credit in the account. In case any balances exist, then the account may be closed in the

following manner:-

- By rematerialisation of all its existing balances in its account; and / or;
- by transferring its security balances to its other account held either with the same Participant or with a different Participant.

The Participant shall ensure that all pending transactions as well as suspended accounts have been adjusted before closing such account. After ensuring that there are no balances in the Client account, the Participant shall execute the request for closure of the Client's account.

10.4.5 Transfer of Balances

The Participant shall not execute any debit or credit in the account of the Client without authorisation from such Client.

The mode and the form of authorisation shall be specified in the Business Rules.

Where there is transfer of balance from the Client of one Participant to the Client of another Participant, both the delivering and the receiving Participant must enter instructions for delivery and receipt respectively. After the instructions are matched in the Depository system, such transfer shall be executed in the Participant's account in the Depository and the Participant shall in turn execute such transfer in the Client's account.

In the event of a Participant ceasing to be a Participant for the Depository, the Client of that Participant may, either request for rematerialisation of securities or request for the transfer of balances in its account with another Participant.

The Depository may on receipt of a court order transfer the balances standing in the Participant's account to another Participant account.

10.5 DEPOSITORIES AND DEPOSITORY PARTICIPANTS

Depository Participant (DP) is described as an agent of the depository. They are the intermediaries between the depository and the investors. The relationship between the DPs and the depository is governed by an agreement made

between the two under the Depositories Act. In a strictly legal sense, a DP is an entity who is registered as such with SEBI under the sub section 1A of Section 12 of the SEBI Act. As per the provisions of this Act, a DP can offer depository-related services only after obtaining a certificate of registration from SEBI. As of 2012, there were 288 DPs of NSDL and 563 DPs of CDSL registered with SEBI.

SEBI (D&P) Regulations, 1996 prescribe a minimum net worth of Rs. 50 lakh for stockbrokers, R&T agents and non-banking finance companies (NBFC), for granting them a certificate of registration to act as DPs. If a stockbroker seeks to act as a DP in more than one depository, he should comply with the specified net worth criterion separately for each such depository. No minimum net worth criterion has been prescribed for other categories of DPs; however, depositories can fix a higher net worth criterion for their DPs.

Depository is an institution or a kind of organization which holds securities with it, in which trading is done among shares, debentures, mutual funds, derivatives, futures and options (F&O) and commodities. The intermediaries perform their actions in variety of securities at Depository on behalf of their clients. These intermediaries are known as Depositories Participants. Fundamentally, there are two sorts of depositories in India. One is the National Securities Depository Limited (NSDL) and the other is the Central Depository Service (India) Limited (CDSL). Every Depository Participant (DP) needs to be registered under this Depository before it begins its operation or trade in the market.

A Depository Participant is the registered agent of the depository concerned and it is through the DP that an investor gets the services of a depository. To avail this service, one has to open a Depository Account with the DP and shares for Dematerialisation have to be surrendered after it have been duly transferred to his name. Banks, financial institutions and stock brokers are acting as Depository Participants after obtaining the required approval from SEBI and also complying with other statutory requirements. The DP account links the investor to the Depository which in turn has electronic links with the Stock Exchanges, corporate and their Transfer agents etc as stated above.

This interface of the depository with various associates opens up a lot of services to the investor through the DP account such as payment or receipt of shares towards his transactions via Stock Exchanges, receipt of bonus or right shares from the corporate in which he is a share holder, registering of share transfer, dematerialisation and many more.

Depository System: How it works

A depository system carries out its activities through various associates that include depository participants (DP), issuing companies and their share transfer agents, clearing corporation of Stock Exchanges etc. The depository is electronically linked to each of these business partners via satellite links or through leased lines.

The Depository is electronically linked to DPs, clearing houses of Stock Exchanges, corporate and share transfer agents that are registered under the depository to avail its services etc through VSAT. This integrated system including the electronic links as stated above and the software at NSDL and each business partner's end is called the National Electronic Settlement and Transfer System (NEST).

Benefits of Depository System

- In the depository system, the ownership and transfer of securities takes place by means of electronic book entries.
- Bad deliveries could be eliminated since shares are registered in the electronic form that cannot be mutilated easily.
- Elimination of all risks associated with physical certificates
- Dealing in physical securities has associated security risks of theft of stocks, mutilation of certificates, and loss of certificates during movements through and from the registrars etc. Such problems do not arise in the depository environment.
- No stamp duty for transfer of any kind of securities in the depository.

- This waiver extends to equity shares, debt instruments and units of mutual funds etc in the depository. Thus, cost can be reduced.
- **Immediate transfer and registration of securities:** In the depository environment, once the securities are credited to the investors account on pay out, he becomes the legal owner of the securities. There is no further need to send it to the company's registrar for registration. Having purchased securities in the physical environment, the investor has to send it to the company's registrar so that the change of ownership can be registered and this usually takes many months. So long as the shares are with the company or its agent for transfer, the investor could not sell it in the market even the price is very attractive and this increases his opportunity cost. To overcome this problem, investors used to keep shares without effecting ownership transfer but this is risky because they will not get their entitlements for dividend, bonus, rights etc, if any, and the share in question will become bad delivery if one book closure is missed.
- **Faster settlement cycle:** The exclusive demat segments follow rolling settlement cycle of T+2 i.e. the settlement of trades will be on the 5th working day from the trade day. This will enable faster turnover of stock and more liquidity with the investor.
- **Faster disbursement of non cash corporate benefits:** NSDL provides for direct credit of non cash corporate entitlements like rights, bonus etc to an investor's account, thereby ensuring faster disbursement and avoiding risk of loss of certificates in transit.
- **Low brokerage for trading in dematerialised securities:** Brokers provide this benefit to investors as dealing in dematerialised securities reduces their back office cost of handling paper and also eliminates the risk of being the introducing broker.
- **Elimination of problems related to address Change, Transmission etc.:** In case of change of address or transmission of demat shares, investors

are saved from undergoing the entire change procedure with each company or registrar. Investors have to only inform their DP with all relevant documents and the required changes are effected in the database of all the companies, where the investor is a registered holder of securities.

- Elimination of problems related to selling securities on behalf of a minor. A natural guardian is not required to take court approval for selling demats securities on behalf of a minor.

Eligibility

As per Regulation 19(a) of SEBI (Depositories & Participants) Regulations, following are the categories that are eligible to become DPs:

- (i) A public financial institution as defined in section 4A of the Companies Act, 1956
- (ii) A bank included for the time being in the Second Schedule to the Reserve Bank of India Act, 1934
- (iii) A foreign bank operating in India with the approval of Reserve Bank of India
- (iv) A state financial corporation established under the provisions of section 3 of the State Financial Corporations Act, 1951
- (v) An institution engaged in providing financial services, promoted by any of the institutions mentioned in sub clause (i), (ii), (iii), (iv), jointly or severally
- (vi) A custodian of securities who has been granted a certificate of registration by the Board under sub-section (1A) of section 12 of the Act
- (vii) A clearing corporation or a clearing house of a stock exchange
- (viii) A stock broker who has been granted certificate of registration by the Board under sub-section (1) of section 12 of the Act: Provided that the stock broker shall have a minimum net worth of rupees 50 lakhs and

the aggregate value of the portfolio of securities of the beneficial owners held in dematerialised form in a depository through him shall not exceed 100 times of the net worth of the stock broker. Provided further that if the stock broker seeks to act as a participant in more than one depository, he shall comply with the criteria specified in the first proviso separately for each such depository. Provided further that where the stockbroker has a minimum net worth of Rupees Ten crore, the limits on the aggregate value of the portfolio of securities of the beneficial owners held in dematerialized form in a depository through him shall not be applicable.

- (ix) A non-banking finance company, having a net worth of not less than rupees fifty lakhs - Provided that such company shall act as a participant only on behalf of itself and not on behalf of any other person. Provided further that a non-banking finance company may act as a participant on behalf of any other person, if it has a net worth of Rs. 50 crore in addition to the net worth specified by any other authority.
- (x) A registrar to an issue or share transfer agent who has a minimum net worth of rupees ten crores and who has been granted a certificate of registration by the board under sub-section (1) of section 12 of the Act.

Services/Functions of the Depository Participant (DP)

1. **Account Opening:** To utilise the services offered by a depository, any person having investment in any security or intending to invest in securities needs to have a demat account with a CDSL-DP. The holder of such demat account is called as “**Beneficial Owner (BO)**”. A BO can maintain a demat account with zero balance in such account. A BO can open more than one account with the same or multiple DPs, in the same name/s and order, if he/she desires so. The investor can approach any DP/s of his/her choice to open a demat account.
2. **Dematerialisation:** Dematerialisation is a process by which physical certificates (of shares / debentures / other securities) are converted into electronic balances. A BO has to submit the request for dematerialisation

by submitting the demat request form (DRF) duly completed along with the concerned physical certificates, to his/her DP.

3. **Processing Delivery & Receipt Instructions:** To settle trades done on a stock exchange (on-market trades) and trades, which are directly settled between two BOs (off-market trades), BOs submit duly completed delivery instructions in the prescribed form to DP. For receipt of securities into his/her account, a BO can give one time “standing instruction” to DP. Once such a standing instruction is given to the DP, there is no need to submit separate instructions for receipt every time the investor buys securities.
4. **Account Statement:** Generally a DP sends to the BO, a statement of his account, monthly, if there is any transaction in the account or every quarter if the account is not operated during that period. The balances and transactions can also be viewed by the BOs through CDSL web based facility ‘*easi*’.
5. **Rematerialisation:** Rematerialisation is the process by which the electronic balances held in the demat account can be converted back into physical certificates.
6. **Pledging:** If the BO decides to pledge any securities in his BO account, he can avail of the same by submitting the pledge creation form duly completed, to his DP.
7. **Nomination:** Individual BOs have a facility for nomination in favour of an individual. If the sole or all the joint holders are deceased, the shares of different companies held in the demat account will be transmitted easily to the demat account of the nominee on submission of the death certificate and transmission form.

It may be noted that in the event of the death of one of the joint holders, the securities will be transmitted in the demat account of the surviving holders.

- 8. Transmission of Securities:** CDSL offers a facility for transmission of balances held in BO account/s (to other BO account/s) if so required due to death, lunacy, bankruptcy, insolvency or required due to operation of any law.
- 9. Change in Address:** A BO who wishes to register his change in address submits his/her request in writing to his/her DP. The changes entered by the DP in the CDSL system will be automatically downloaded to all the companies in which the BO is holding securities. This facility offered by CDSL saves money, time and effort for the BO.
- 10. Bank Account Details:** SEBI has made it mandatory for companies to print details of bank account of the BO on dividend/interest warrants etc. to prevent possibilities of misuse of the warrants. All BOs should submit a request in writing to the DP if they wish to record / change their bank account details.
- 11. SMS:** CDSL sends SMS regarding transactions and modifications in account details to the mobile number registered in the account.

10.6 WAP ENABLED TRADING

The SEBI Committee on Internet Based Trading and Services in its meeting held on August 2, 2000 approved the minimum requirements for brokers offering securities trading through wireless medium on Wireless Application Protocol (WAP) platform. SEBI-registered brokers who have been granted permission to provide Internet based trading services can introduce WAP trading after obtaining permission from respective stock exchanges. SEBI has stipulated the minimum conditions to be fulfilled by trading members to start Internet based trading and services.

WAP trading at NSE

NSE became the first exchange to grant permission to its members for providing WAP trading services. NSE has granted permission to one of its trading members M/s. Gogia Capital Services Ltd. to provide securities trading through WAP.

This is the first WAP enabled online stock trading facility in the country. The WAP technology has been harnessed jointly by NSE, IT and Bharti Telesoft using Bharti Telesoft's WAP interface and NSE.

WAP stands for **Wireless Application Protocol**. As per the dictionary definition for each of these words we have:

- **Wireless:** Lacking or not requiring a wire or wires pertaining to radio transmission.
- **Application:** A computer program or piece of computer software that is designed to do a specific task.
- **Protocol:** A set of technical rules about how information should be transmitted and received using computers.

WAP is the set of rules governing the transmission and reception of data by computer applications on or via wireless devices like mobile phones. WAP allows wireless devices to view specifically designed pages from the Internet using only plain text and very simple black-and-white pictures.

WAP is a standardized technology for cross-platform, distributed computing very similar to the Internet's combination of Hypertext Markup Language (HTML) and Hypertext Transfer Protocol (HTTP), except that it is optimized for:

- low-display capability
- low-memory
- Low-bandwidth devices, such as personal digital assistants (PDAs), wireless phones, and pagers.

WAP is designed to scale across a broad range of wireless networks like GSM, IS-95, IS-136, and PDC.

Who is behind WAP?

The Wireless Application Protocol (WAP) is a result of joint efforts taken by

companies teaming up in an industry group called WAP Forum (www.wapforum.org). On June 26, 1997, Ericsson, Motorola, Nokia, and Unwired Planet took the initiative to start a rapid creation of a standard for making advanced services within the wireless domain a reality. In December 1997, WAP Forum was formally created and after the release of the WAP 1.0 specifications in April 1998, WAP Forum membership was opened to all.

The WAP Forum now has over 500 members and represents over 95 percent of the global handset market. Companies such as Nokia, Motorola and Ericsson are all members of the forum.

The objective of the forum is to create a license-free standard that brings information and telephony services to wireless devices.

Why is WAP Important?

Until the first WAP devices emerged, the Internet was a Internet and a mobile phone was a mobile phone. You could surf the Net, do serious research, or be entertained on the Internet using your computer, but this was limited to your computer.

Now with the appearance of WAP, the scene is that we have the massive information, communication, and data resources of the Internet becoming more easily available to anyone with a mobile phone or communications device.

WAP being open and secure, is well suited for many different applications including, stock market information, weather forecasts, enterprise data, and games.

Despite the common misconception, developing WAP applications requires only a few modifications to existing web applications. The current set of web application development tools will easily support WAP development, and in the future more development tools will be announced.

WAP Micro browser

To browse a standard internet site you need a web browser. Similar way to browse a WAP enabled website, you would need a micro browser. A Micro Browser is a small piece of software that makes minimal demands on hardware, memory and CPU. It can display information written in a restricted mark-up language called WML. Although, tiny in memory footprint it supports many features and is even scriptable. Today, all the WAP enabled mobile phones or PDAs are equipped with these micro browsers so that you can take full advantage of WAP technology.

WAP - Key Features

Some of the key features offered by WAP are given below :

- 1. A programming model similar to the Internet's:** Though WAP is a new technology, but it reuses the concepts found on the Internet. This reuse enables a quick introduction of WAP-based services, since both service developers and manufacturers are familiar with these concepts today.
- 2. Wireless Markup Language (WML):** You must be using HTML language to develop your web-based application. Same way, WML is a markup language used for authoring WAP services, fulfilling the same purpose as HTML does on the Web. In contrast to HTML, WML is designed to fit small handheld devices.
- 3. WML Script:** Once again, you must be using Java Script or VB script to enhance the functionality of your web applications. Same way, WML Script can be used to enhance the functionality of a service, just as Java script can be utilized in HTML. It makes it possible to add procedural logic and computational functions to WAP based services.
- 4. Wireless Telephony Application Interface (WTAI):** The WTAI is an application framework for telephony services. WTAI user agents are able to make calls and edit the phone book by calling special WML Script functions or by accessing special URLs. If one writes WML decks containing names of

people and their phone numbers, you may add them to your phone book or call them right away just by clicking the appropriate hyperlink on the screen.

Optimized protocol stack: The protocols used in WAP are based on well-known Internet protocols, such as HTTP and Transmission Control Protocol (TCP), but they have been optimized to address the constraints of a wireless environment, such as low bandwidth and high latency.

10.7 SUMMARY

Online trading is a method of trading securities electronically. It is in contrast to older floor trading and phone trading and has number of advantages such as reduced transaction costs, greater liquidity, increases transparency, etc. Further, traditional settlement method which was based upon physical delivery of securities certificates has been replaced by computerised on line trading (paperless trading) or depository system of securities to ensure safety, security, transparency and promptness in clearing and settlement system.

10.8 SOLVED EXERCISES

1. Why should investors prefer to buy shares in the depository mode?

When you buy shares already in the depository mode, you will become the owner of those shares in the depository within a day of the settlement being completed. You will not have to apply to the Company for registering the shares in your name. Thus, there will be no possibility of loss or theft when the share certificates are posted to the company. You will have no fear that any fake or stolen shares may have been delivered to you.

2. Are you restricted to having accounts with only one depository participant?

There are absolutely no restrictions on the number of DPs you can open accounts with. Opening an account with a DP is very similar to opening a

bank account. Just as you can have savings or current accounts with more than one bank, you can open accounts with more than one Depository Participant.

However, you would need to open accounts in the same sequence of names in which the shares are held by you. For example, if you hold some shares jointly in the names A, B, C and some shares also in the names A, C, B you would need to open 2 DP accounts.

3. Do you have to keep any minimum balance of securities in your account?

No, the Depository has not prescribed any minimum balance. In fact, you can have zero balance in your account. However, the DPs may fix some minimum limits.

10.9 GLOSSARY

- **Dematerialisation:** It is the process by which the physical share certificates of an investor are taken by the Company and an equivalent number of securities are credited in electronic form at the request of the investor.
- **Depository:** It is an organisation like a Central Bank where the securities of a shareholder are held in the electronic form at the request of the shareholder through the medium of a Depository Participant.

10.10 SELF ASSESSMENT QUESTIONS

1. What do you mean by online trading?

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2. Write short note on Depository Participant.

10.11 LESSON END EXERCISES

1. Explain the meaning and process of dematerialisation.
2. What do you mean by depository system? Explain its merits.

10.12 SUGGESTED READINGS

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INTRODUCTION TO MUTUAL FUNDS**STRUCTURE**

- 11.1 Introduction
- 11.2 Objectives
- 11.3 Concept of Mutual Funds
- 11.4 Origin of the Mutual Funds
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- 11.6 Summary
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11.1 INTRODUCTION

The concept of mutual fund is a new feather in the cap of Indian capital market but not to international capital markets. In India, first mutual fund started in 1964 when United Trust of India (UTI) was established in the similar line of operation of the UK based Investment Trust Companies.

A mutual fund collects the savings from small investors, invest them in government

and other corporate securities and earn income through interest and dividends, besides capital gains. The driving force of mutual funds is the 'safety of the principal' guaranteed, plus the added advantage of capital appreciation together with the income earned in the form of interest or dividend. People prefer mutual funds to bank deposits, life insurance and even bonds because with a little money, they can get into the investment game. One can own a string of blue chips like ITC, TISCO, Reliance, etc., through mutual funds. Thus, mutual funds act as a gateway to enter into big companies hitherto inaccessible to an ordinary investor with his small investment.

11.2 OBJECTIVES

After going through this lesson, you will be able to:

- Define the meaning of mutual funds.
- Understand different schemes of mutual funds.

11.3 CONCEPT OF MUTUAL FUNDS

A mutual fund is nothing but a pool of the investors' funds. It works on the principle of 'small drops of water make a big ocean'. For instance, if one has ₹1000 to invest, it may not fetch very much on its own. But, when it is pooled with ₹1000 each from a lot of other people, then, one could create a 'big fund' large enough to invest in a wide varieties of shares and debentures on a commanding scale and thus, enjoy the economies of large-scale operations. Hence, a mutual fund is a form of collective investment. It is formed by coming together of a number of investors who transfer their surplus funds to a professionally qualified organization to manage it. To get the surplus funds from investors, the fund adopts a simple technique. Each fund is divided into a small fraction called 'units' of equal value. Each investor is allocated units in proportion to the size of his investment. Thus, every investor, whether big or small, will have a stake in the fund and can enjoy the wide portfolio of the investment held by the fund. Hence, mutual funds enable of small and large investors to participate in and derive the benefit of the capital market growth. It has emerged as a

popular vehicle of creation of wealth due to high return, lower cost and diversified risk.

According to Securities and Exchange Board of India (Mutual Funds) Regulations, December 9, 1996, a "mutual fund" means a fund established in the form of a trust to raise money through the sale of units to the public or a section of the public under one or more schemes for investing in securities, including money market instruments.

These mutual funds are referred to as Unit Trusts in UK and as open-ended investment companies in the USA.

According to Weston J. Fred and Brigham, E. F., Unit Trusts are 'Corporations which accept dollars from savers and then use these dollars to buy stocks, long term bonds, short-term debt instruments issued by business or government units; these corporations pool funds and thus reduce risk by diversification'.

Kamm, J. O. defines an open-ended investment company as 'an organization formed for the investment of funds obtained from individuals and institutional investors who in exchange for the funds receive shares which can be redeemed at any time at their underlying asset values.'

Features of Mutual Funds: The important features of a mutual fund are as follows:

1. A mutual fund belongs to those who have contributed to that fund and thus, the ownership of the fund lies in the hands of the investors.
2. Since all the investors cannot take part in management of the fund, it is left in the hands of investment professionals who earn a fee for their services.
3. The pool of funds collected is invested in a portfolio of marketable securities.
4. The investors' share in the fund is represented by 'units' just like shares in the case of share capital of a company. The unit value depends upon the

value of the portfolio held by the fund. Hence, the value changes almost every day and it is called Net Asset Value.

5. Generally, the investment portfolio of the mutual fund is created according to the objective of the fund. For example, a sectoral mutual fund invests its funds in a specific sector like IT sector, oil sector, etc.

11.4 ORIGIN OF THE MUTUAL FUNDS

The origin of the concept of mutual fund dates back to the dawn of commercial history. It is said that Egyptians and Phoenicians sold their shares in vessels and caravans with a view of spreading the risk attached with these risky ventures. Hence, the real credit of introducing the modern concept of mutual fund goes to the Foreign and Colonial Government Trust of London established in 1868. Thereafter, a large number of close-ended mutual funds were formed in the USA in 1930s followed by many countries in Europe, the Far East and Latin America. In most of the countries, both open-ended and close-ended types were popular. In India, it gained momentum only in 1980, though it began in the year 1964 with the Unit Trust of India launching its first fund, the Unit Scheme 1964.

11.5 TYPES OF MUTUAL FUNDS

In the investment market, one can find a variety of investors with different needs, objectives and risk-taking capacities. For instance, a young businessman would like to get more capital appreciation for his funds and he would be prepared to take greater risks than a person who is just on the verge of his retiring age. So, it is very difficult to offer one fund to satisfy all the requirements of investors. Just as one shoe is not suitable for all legs, one fund is not suitable to meet the vast requirements of all investors. Therefore, different types of funds are available to the investor. It is completely left to the discretion of the investors to choose any one of them depending upon his requirement and his risk-taking capacity.

Mutual fund schemes can be classified into many types as given in the Figure

11.1.

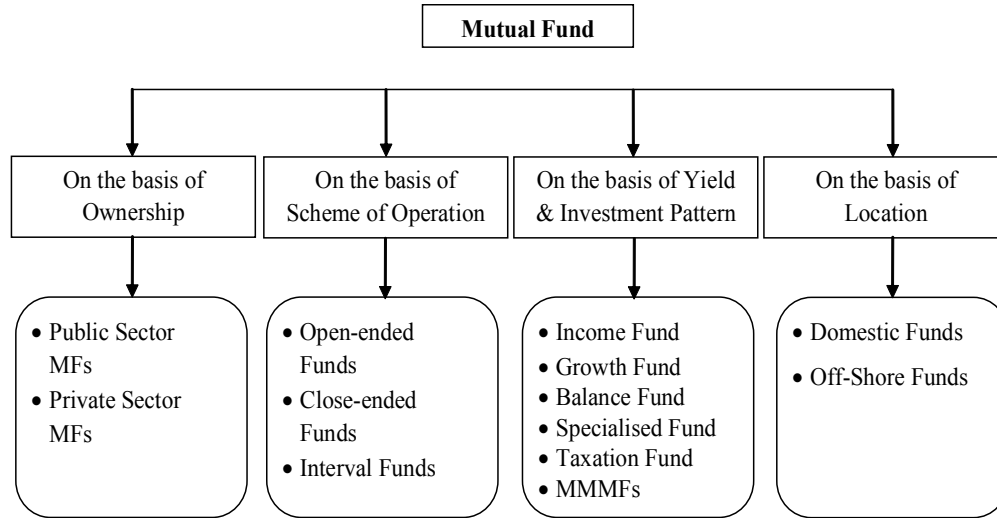


Figure: 11.1 Types of Mutual Funds/Schemes

1. According to Ownership

According to ownership, mutual funds in India may be classified as:

a) *Public Sector Mutual Funds*

United Trust of India (UTI) has been functioning in the arena of Mutual Fund business in India since 1963- 1964. It was only after 23 years in 1987 that a second fund was established in India by the State Bank of India. SBI mutual fund was the first among all the public sector commercial banks that started operations during November 1987. Thereafter a number of public sector organization like IND Bank MF, CAN Bank MF, BOI MF, PNB MF, LIC MF etc joined in the mutual fund business in a short span of time.

b) *Private Sector Mutual Funds*

The Government of India allowed the private sector companies to join the Mutual Fund Industry on February 14, 1992. SEBI regulations, 1996 provide guidelines for registration, constitution, management and schemes of mutual funds.

2. According to the Scheme of Operation

According to the scheme of operation, the Mutual funds could be divided into three categories.

a) Open-Ended Funds

Open ended scheme means a scheme of Mutual funds which offers units for sale without specifying any duration for redemption. These schemes do not have a fixed maturity and entry to the fund is always open to investors who can subscribe it at any time. The investors have a option to get their holdings redeemed at any time. The fund redeems or repurchases the units/ shares at periodically announced rates. These repurchase rates are based upon the net current asset value of the fund. The Unit scheme 1964 of UTI, ULIP, Dhanraksha and Dhanvirdhi of LIC Mutual fund are some of the examples of open ended schemes.

The main features of the open-ended funds are:

- i. There is complete flexibility with regard to one's investment or disinvestment. In other words, there is free entry and exit of investors in an open-ended fund. There is no time limit. The investor can join in and come out from the fund as and when he desires.
- ii. These units are not publicly traded but, the fund is ready to repurchase them and resell them at any time.
- iii. The investor is offered instant liquidity in the sense that the units can be sold on any working day. In fact, the fund operates just like a bank account, wherein one can get cash across the counter for any number of units sold.
- iv. The main objective of this fund is income generation. The investors get dividend, rights or bonuses as rewards for their investment.
- v. Since the units are not listed on the stock market, their prices are linked to the Net Asset Value (NAV) of the units. The NAV is

determined by the fund and it varies from time-to-time.

- vi. Generally, the listed prices are very close to their Net Asset Value. The fund fixes a different price for their purchases and sales.
- vii. The fund manager has to be very careful in managing the investments because he has to meet the redemption demands at any time made during the life of the scheme.

Hence, the open-ended funds have a perpetual existence and their corpus is ever-changing depending upon the entry and exit of members.

b) Closed-Ended Funds

A closed ended scheme means any scheme of mutual fund in which the period of maturity of the scheme is specified. The corpus of close-ended scheme is fixed and an investor can subscribe directly to the scheme only at the time of initial issue. After the initial issue is closed a person can buy or sell the units of the scheme in the secondary market. It is always easier to manage a close-ended scheme as the fund managers can evolve long term investment strategies depending upon the life of the scheme. Dhanshree and Dhanasamardhi of LIC mutual fund, Canshare of Canara Bank, Ind Jyothi and Swaran Jyothi of Indian Bank are some of the examples of closed ended mutual fund schemes.

The main features of the close-ended funds are as follows:

- i. The period and/or the target amount of the fund is definite and fixed beforehand.
- ii. Once the period is over and/or the target is reached, the door is closed for the investors. They cannot purchase any more units.
- iii. These units are publicly traded through stock exchange and generally, there is no repurchase facility by the fund.
- iv. The main objective of this fund is capital appreciation.
- v. The whole fund is available for the entire duration of the scheme and there

will not be any redemption demands before its maturity. Hence, the fund manager can manage the investments efficiently and profitably without the necessity of maintaining the liquidity.

- vi. At the time of redemption, the entire investment pertaining to a close-ended scheme is liquidated and the proceeds are distributed among the unit-holders.
- vii. From the investors' point of view, it may attract more tax since the entire capital appreciation is realized in at one stage itself.
- viii. If the market condition is not favourable, it may also affect the investor since he may not get the full benefit of capital appreciation in the value of the investment.
- ix. Generally, the prices of close-ended scheme units are quoted at a discount of up to 40 per cent below their Net Asset Value (NAV).

c) Interval Schemes/ Funds

An interval scheme is a scheme of Mutual fund which is kept open for a specific interval and after that it operates as a closed scheme. Interval schemes have been permitted by the SEBI in recent years only. The scheme is open for sale or repurchase at fixed predetermined intervals which are disclosed in the offer document.

3. According to Portfolio

Mutual funds can also be classified according to portfolio or the objectives of the fund. Some of these funds are discussed as follows:

a) Income Funds

These funds aim at generating and distributing regular income to the members on a periodical basis. It concentrates more on the distribution of regular income and it also sees that the average return is higher than that of the income from bank deposits.

The main features of the income funds are:

- i. The investor is assured of regular income at periodic intervals, say half-yearly or yearly and so on.
- ii. The main objective of this type of fund is to declare regular dividends and not capital appreciation.
- iii. The pattern of investment is oriented towards high and fixed income yielding securities like debentures, bonds, etc.
- iv. This is best suited to the old and retired people who may not have any regular income.
- v. It concerns itself with short-run gains only.

b) Growth Funds

These funds aim at providing capital appreciation in the value of investment. Such funds invest in growth oriented securities have a potential to appreciate in long run.

The main features of the growth funds are:

- i. The growth oriented funds aims at meeting the investors' need for capital appreciation.
- ii. The investment strategy, therefore, conforms to the fund objective by investing the funds predominantly on equities with high growth potential.
- iii. The fund tries to get capital appreciation by taking much risks and investing on risk-bearing equities and high growth equity shares.
- iv. The fund may declare dividend, but its principal objective is only capital appreciation.
- v. This is best suited to salaried and business people who have high risk-bearing capacity and ability to defer liquidity. They can accumulate wealth

for future needs.

c) *Balanced or Conservative Funds*

Balanced funds spend both on common stock and preferred stock. Some part of funds is spent on buying equity while other part is used in acquiring interest bearing debentures and preference shares ensuring certain amount of dividend.

d) *Specialised Funds*

These invest in a particular type of securities of companies dealing in a particular product, firms in a particular industry or of certain income producing securities. They offer special schemes so as to meet the specific needs of specific categories of people like pensioners, widows, etc. There are also funds for investments in securities of specified areas. For instance, Japan Fund, South Korea Fund, etc. In fact, these funds open the door for foreign investors to invest on the domestic securities of these countries.

Again, certain funds may be confined to one particular sector or industry like fertilisers, automobiles, petroleum, etc. These funds carry heavy risks since the entire investment is in one industry. But, there are high risk-taking investors who prefer this type of fund. The best example of this type is the Petroleum Industry Funds in the USA.

e) *Taxation Funds*

Mutual funds may be designed to suit the tax payers. The contributors to such funds get some concession in income tax. A taxation fund is basically a growth-oriented fund. But, it offers tax rebates to the investors either in the domestic or foreign capital market. It is suitable to salaried people who want to enjoy tax rebates particularly during the month of February and March. In India, at present, the law relating to tax rebates is covered under section 88 of the Income Tax Act, 1961.

f) *Money Market Mutual Funds (MMMFs)*

These funds are basically open-ended mutual funds and as such they have all

the features of the open-ended fund. But, they invest in highly liquid and safe securities like commercial paper, banker's acceptance, certificates of deposits, treasury bills, etc. These instruments are called money market instruments. They take the place of shares, debentures and bonds in a capital market. They pay money market rates of interest. These funds are called 'money funds' in USA and they have been functioning since 1972. Investors generally use it as a 'parking place' or 'stop-gap arrangement' for their cash resources till they finally decide about the proper avenue for their investment, i.e. long-term financial assets like bonds and stocks.

Since MMMFs are a new concept in India, the RBI has laid down certain stringent regulations. For instance, the entry to MMMFs is restricted only to scheduled commercial banks and their subsidiaries. MMMFs can invest only in specified short-term money market instruments Commercial Papers, Certificates of Deposits and 182-day Treasury Bills. They can also lend to call market. These funds go for safe and liquid investment. Frequent realisation of interest and redemption of fund at short notice are the special features of this fund. The funds will not be subject to reserve requirements. The repurchase could be subject to a minimum lock-in period of 3 months.

4. According to Location

a) Domestic Funds

These are the funds which mobilise savings of people within the country where investment are made.

b) Off-shore Funds

Off-shore mutual funds are those which raise or mobilise funds in country other than where investments are to be made. These funds attract foreign savings for investment in India.

5. Other Classification

a) Dual Funds

This is a special kind of close-ended funds. It provides a single investment opportunity for two different types of investors. For this purpose, it sells two types of investment stocks, viz., income shares and capital shares. Those investors who seek current investment income can purchase income shares. They receive all the interest and dividends earned from the entire investment portfolio. However, they are guaranteed a minimum annual dividend payment. The holders of capital shares receive all the capital gains earned on those shares and they are not entitled to receive any dividend of any type.

b) *Leveraged Funds*

These funds are also called borrowed funds since they are used primarily to increase the size of value of portfolio of a mutual fund. When the value increases, the earning capacity of the fund also increases. The gains are distributed to the unit-holders. This is resorted to only when the gains from the borrowed funds are more than the cost of borrowed funds.

c) *Bond Funds*

These funds employ their resources in bonds. These investments ensure fixed and regular income. The main thrust of these funds is mostly on income rather than capital gains. They differ from income funds in the sense that income funds offer an average returns higher than that of from bank deposits and also capital gains lesser than that in equity shares.

d) *Fund-of-Funds*

A fund-of-funds scheme is a mutual fund scheme that invests in other mutual fund schemes. The concept is widely prevalent abroad. Mutual funds in India are being allowed to launch fund-of-funds.

e) *Stock/ Equity Fund*

These are mainly invested in shares of the companies. The investments may vary from blue chip companies to newly established companies.

11.6 SUMMARY

The origin of the concept of mutual fund dates back to the dawn of commercial history. It is said that Egyptians and Phoenicians sold their shares in vessels and caravans with a view of spreading the risk attached with these risky ventures. Hence, the real credit of introducing the modern concept of mutual fund goes to the Foreign and Colonial Government Trust of London established in 1868. In India, it gained momentum only in 1980, though it began in the year 1964 with the Unit Trust of India launching its first fund, the Unit Scheme 1964. A mutual fund collects the savings from small investors, invest them in government and other corporate securities and earn income through interest and dividends, besides capital gains. The driving force of mutual funds is the 'safety of the principal' guaranteed, plus the added advantage of capital appreciation together with the income earned in the form of interest or dividend. There are different types of funds are available to the investor such as open-ended funds, close-ended funds, income fund, growth fund, balanced fund, off-shore fund and so on. It is completely left to the discretion of the investors to choose any one of them depending upon his requirement and his risk-taking capacity.

11.7 GLOSSARY

- **Open ended Funds:** Open-ended fund is a scheme of mutual funds which offers units for sale without specifying any duration for redemption.
- **Closed ended Fund:** A closed ended scheme means any scheme of mutual fund in which the period of maturity of the scheme is specified.
- **Interval Scheme:** An interval scheme is a scheme of mutual fund which is kept open for a specific interval and after that it operates as a closed scheme.
- **Balanced Funds:** The investor may wish to balance his risk between various sectors such as asset size, income or growth. Therefore, the fund is a balance between various attributes desired.
- **Off-shore Funds:** Off-shore mutual funds are those funds which are meant

for non-residential investors.

11.8 SELFASSESSMENT QUESTIONS

1. Fill in the blanks:
 - a. Most funds have a particular they focus on when investing.
 - b. Tax efficient mutual fund aims to tax bills, such as keeping turnover levels low or shying away from companies that provide dividends.
 - c. Mutual Funds are subject to
 - d. can purchase and sell mutual fund units through various types of intermediaries.
 - e. The corpus of the fund and its duration are prefixed underfunds.
 - f.fund invests in highly liquid securities like commercial paper.
 - g. The small investor's gateway to enter into big companies is.....

| |
|---|
| <p>Answers: a. Strategy b. Minimise c. Market risk d. Investors e. Close-ended f. Money market-mutual g. Mutual fund</p> |
|---|

11.9 LESSON END EXERCISES

1. Define mutual fund and describe the various schemes that can be offered by it.
2. 'Mutual funds provide stability to share prices, safety to investors and resources to prospective entrepreneurs'. Discuss.

11.10 SUGGESTED READINGS

1. Chandra Prasanna, Investment Analysis and Portfolio Management, McGraw Hill.

2. Francis and Archer, Portfolio Management, Prentice Hall of India.

11.11 REFERENCES

1. E. Gordon and K. Natarajan, Financial Markets and Services, Himalaya Publishing House.
2. V K Bhalla, Fundamentals of Investment Management, S. Chand.
3. Punithavathy Pandian, Securities Analysis and Portfolio Management, Vikas Publishing House Pvt Ltd.
4. Shashi K. Gupta and Rosy Joshi, Securities Analysis and Portfolio Management (Investment Management), Kalyani Publishers.
5. V. A. Avadhani, Investment Management, Himalaya Publishing House.

MUTUAL FUNDS IN INDIA

STRUCTURE

- 12.1 Introduction
- 12.2 Objectives
- 12.3 Importance of Mutual Funds
- 12.4 Estimation of Net Asset Value of Mutual Funds
- 12.5 SEBI Guidelines on Mutual Funds
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12.1 INTRODUCTION

Mutual funds have emerged as the best in terms of variety, flexibility, diversification, liquidity as well as tax benefits. Besides, through mutual funds investors can gain access to investment opportunities that would otherwise

be unavailable to them due to limited knowledge and resources. Mutual funds have the capability to provide solutions to most investors' needs, however, the key is to do proper selections and have a process for monitoring.

In order to protect the interest of the investors, SEBI formulates policies and regulates the mutual funds. It notified regulations in 1993 (fully revised in 1996) and issued guidelines from time to time. Mutual fund either promoted by public or by private sector entities are governed by these regulations. As a result, the Indian mutual fund industry witnessed robust growth and stricter regulation from SEBI since 1996.

12.2 OBJECTIVES

After studying this lesson, you will be able to:

- Discuss significance of mutual funds.
- Calculate net asset value of mutual fund.
- Know about evolution of mutual funds in India.

12.3 IMPORTANCE OF MUTUAL FUNDS

The mutual fund industry has grown at a phenomenal rate in the recent past. One can witness a revolution in the mutual fund industry in view of its importance to the investors in general and the country's economy at large. The importance of mutual funds are discussed below:

1. Channelizing Savings for Investment

Mutual funds act as a vehicle in galvanizing the savings of the people by offering various schemes suitable to the various classes of customers for the development of the economy as a whole. A number of schemes are being offered by mutual funds so as to meet the varied requirements of the masses, and thus, savings are directed towards capital investments directly. In the absence of mutual funds, these savings would have remained idle. Thus, the whole economy benefits due to cost-efficient and optimum use and allocation of scarce financial and real

resources in the economy for its speedy development.

2. Diversified Investment

Small investors cannot afford to purchase the shares of the highly established companies because of high market price. The mutual funds provide this opportunity to small investors. Even a very small investor can afford to invest in mutual funds. The investors can enjoy the wide portfolio of the investments held by the fund. It diversifies its risks by investing in a variety of securities (equity shares, bonds etc.) The small and medium investors cannot do this.

3. Provide Better Returns

Mutual funds can pool funds from a large number of investors. In this way huge funds can be mobilized. Because of the huge funds, the mutual funds are in a position to buy securities at cheaper rates and sell securities at higher prices. This is not possible for individual investors. In short, mutual funds are able to give good and regular returns to their investors.

4. Better Liquidity

At any time the units can be sold and converted into cash. Whenever investors require cash, they can avail loans facilities from the sponsoring banks against the unit certificates.

5. Rendering Expertise Investment Service at Low Cost

The management of the fund is generally assigned to professionals who are well trained and have adequate experience in the field of investment. The investment decisions of these professionals are always backed by informed judgment and experience. Thus, investors are assured of quality services in their best interest. Due to the complex nature of the securities market, a single investor cannot do all these works by himself or he cannot go to a professional manager who manages individual portfolios. In such a case, he may charge hefty management fee. The intermediation fee is the lowest being 1 percent in case of a mutual fund.

6. Reduce Risk

There is only a minimum risk attached to the principal amount and return for the investments made in mutual funds. This is due to expert supervision, diversification and liquidity of units.

7. Providing Research Services

A mutual fund is able to command vast resources and hence it is possible for it to have an in-depth study and carry out research on corporate securities. Each fund maintains a large research team which constantly analyses the companies and the industries and recommends the funds to buy or sell a particular share. Thus, investments are made purely in the basis of thorough research. Since research involves a lot of time, efforts and expenditure, an individual investor cannot take up this work. By investing in a mutual fund, the investor gets the benefit of the research done by the fund.

8. Offer Tax Benefits

Mutual funds offer tax benefits to investors. For instance, under section 80 L of the Income Tax Act, a sum of ₹ 10,000 (₹ 13000 to UTI) received as dividend from a mutual fund is deductible from the gross total income. Under section 88 A, 20 percent of the amount invested is allowed to be deducted from the tax payable. Under the Wealth Tax Act, investments in mutual fund are exempted up to ₹ 5 lakh.

The mutual funds themselves are totally exempt from tax on all income on their investments. But all other companies have to pay taxes and they can declare dividends only from the profits after tax. But, mutual funds do not deduct tax at source from dividends. This is really a boon to investors.

9. Support Capital Market

Mutual funds play a vital role in supporting the development of capital markets. The mutual funds make the capital market active by means of providing a sustainable domestic source of demand for capital market instruments. In other

words, the savings of the people are directed towards investment in capital markets through these mutual funds. They also provide a valuable liquidity to the capital market. In this way, the mutual funds make the capital market active and stable. When foreign investors and speculators exit and re-enter the markets *en masse*, mutual funds keep the market stable and active.

10. Promote Industrial Development

The economic development of any nation depends upon its industrial advancement and agricultural development. Industrial units raise funds from capital markets through the issue of shares and debentures. Mutual funds supply large funds to capital markets. Besides, they create demand for capital market instruments (share, debentures etc.). Thus mutual funds provide finance to industries and thereby contributing towards the economic development of a country.

11. Keep the Money Market Active

An individual investor cannot have any access to money market instruments since the minimum amount of investment is out of his reach. On the other hand, mutual funds keep the money market active by investing money on the money market instruments. In fact, the availability of more money market instruments itself is a good sign for a developed money market which is essential for the successful functioning of the central bank in a country.

12. Reducing the Marketing Cost of New Issues

The mutual funds help to reduce the marketing cost of the new issues. The promoters used to allot a major share of the initial public offering to the mutual funds and thus they are saved from the marketing cost of such issues.

13. Well Regulated

All Mutual Funds are registered with SEBI and they function within the provisions of strict regulations designed to protect the interests of investors. The operations

of Mutual Funds are regularly monitored by SEBI.

12.4 ESTIMATION OF NET ASSET VALUE OF MUTUAL FUNDS

The Net asset value (NAV) is the market price of each unit of a particular scheme in relation to all the assets of the scheme. It can otherwise be called 'the intrinsic value' of each unit. This value is a true indicator of the performance of the fund. If the NAV is more than the face value of the unit, it clearly indicates that the money invested on that unit has appreciated and the fund has performed well.

Illustration

For instance, Fortune Mutual Fund has introduced a scheme called Millionaire Scheme. The Scheme size is ₹100 crore. The value of each unit is ₹10. It has invested all the funds in shares and debentures and the market value of the investment comes to ₹200 crore.

$$\begin{aligned}\text{Now, NAV} &= \frac{200 \text{ crore}}{100 \text{ crore}} \times \text{value of each unit} \\ &= 2 \times 10 = 20\end{aligned}$$

Thus, the value of each unit is ₹10 is worth ₹20.

Hence, the NAV = ₹20.

This NAV forms the basis for fixing the repurchase price and reissue price.

The investor can call up the fund any time to find out the NAV. Some mutual funds publish the NAV weekly in two or three leading daily newspapers.

12.5 SEBI GUIDELINES ON MUTUAL FUNDS

Mutual funds in India are now governed under the Securities and Exchange Board of India (mutual fund) Regulations, 1996. SEBI has provided a four tier system for managing the affairs of mutual funds. The four constituents in the organisation of a mutual fund are:

1. The Sponsoring Company, called Sponsor

SEBI (mutual funds) Regulations define Sponsor as any person who acts alone or in combination with another body corporate, establishes a mutual fund. SBI Mutual fund is sponsored by State Bank of India. LIC MF is sponsored by Life Insurance Corporation (LIC) of India. Sponsors have to comply with the following regulations laid down by SEBI.

- a) Application and fee:** A sponsor has to file an application for registration of a mutual fund in the prescribed form along with an application with fee of Rs.100000. The sponsors must furnish all information and give clarifications as may be required by the board.
- b) Eligibility criteria:** The sponsor may be granted a certificate of registration provided following conditions are satisfied :
 - i) The sponsor has a sound track record and general reputation of fairness and integrity in all his business transactions for not less than 5 years.
 - ii) The sponsor has contributed at least 40% of the worth of Asset Management Company (AMC).
 - iii) A trustee has been appointed by the sponsors who will act as trustee for the mutual fund.
 - iv) An AMC is appointed to manage and operate the scheme of such funds.
 - v) A custodian is appointed to keep custody of the securities and carry out the custodian activities.
- c) Grant of certificate of registration.**
- d) Annual fee.**

2. The trustees

SEBI (mutual fund) Amendment regulations 1999 defines trustee as "a person who holds the property of the mutual fund in trust for benefit of the unit-holders

and includes a trustee company and the directors of the trustee company." SEBI (mutual fund) regulations, 1996 from 16 to 18 contain guidelines with regard to operation of trustees

3. Asset management company (AMC)

SEBI regulations require that mutual funds be managed by a separate body corporate. The sponsor or the trustee shall appoint an AMC. The application for the approval of AMC has to be made in Form D. The appointment of AMC can be terminated by majority of the trustees or by 75% of the unit-holders of the scheme. Any change in the appointment of AMC requires the prior approval of the Board and the unit-holders.

4. Custodian

Custodian is defined under SEBI (mutual funds) Regulations, 1996 as " a person who has been granted a certificate of registration to carry on the business of custodian of securities under the securities and Exchange Board of India (custodian of securities) Regulations, 1996. Custodian provides custodial services and ensures safe-keeping of securities. He performs the following functions.

- a) Maintains accounts of securities of a client.
- b) Collects the benefits or rights accruing to the client in respect of securities.
- c) Maintains and reconciles the records of securities.
- d) Helps in transfer of the securities in the name of trust.
- e) Prevents any manipulation of records and documents.

12.6 MUTUAL FUNDS IN INDIA

In India, the mutual fund industry has been monopolized by the Unit Trust of India ever since 1963. Now, the commercial banks like the State Bank of India, Canara Bank, Indian Bank, Bank of India and the Punjab National Bank have entered into the field. To add the list are the LIC of India and the private sector

banks and other financial institutions. These institutions have successfully launched a variety of schemes to meet the diverse needs of millions of small investors. The Unit Trust of India has introduced huge portfolio of schemes like Unit 64, Mastergain, Mastershare, etc. It is the country's largest mutual fund company with over 25 million investors.

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 player's penetration, the total assets rose up to 1218.05 billion. Today there are 33 mutual fund companies in India.

The major mutual fund companies in India are being discussed below:

1. ABN AMRO Mutual Fund

ABN AMRO Mutual Fund was setup on April 15, 2004 with ABN AMRO Trustee (India) Pvt. Ltd. as the Trustee Company. The AMC, ABN AMRO Asset Management (India) Ltd. was incorporated on November 4, 2003. Deutsche Bank A G is the custodian of ABN AMRO Mutual Fund.

2. Birla Sun Life Mutual Fund

Birla Sun Life Mutual Fund is the joint venture of Aditya Birla Group and Sun Life Financial. Sun Life Financial is a global organization evolved in 1871 and is being represented in Canada, the US, the Philippines, Japan, Indonesia and Bermuda apart from India. Birla Sun Life Mutual Fund follows a conservative long-term approach to investment. Recently it crossed Assets Under Management (AUM) of 10,000 crores.

3. Bank of Baroda Mutual Fund (BOB Mutual Fund)

Bank of Baroda Mutual Fund or BOB Mutual Fund was set up on October 30, 1992 under the sponsorship of Bank of Baroda. BOB Asset Management Company Limited is the AMC of BOB Mutual Fund and was incorporated on November 5, 1992. Deutsche Bank AG is the custodian.

4. ING Vysya Mutual Fund

ING Vysya Mutual Fund was setup on February 11, 1999 with the same named Trustee Company. It is a joint venture of Vysya and ING. The AMC, ING Investment Management (India) Pvt. Ltd. was incorporated on April 6, 1998.

5. Prudential ICICI Mutual Fund

The mutual fund of ICICI is a joint venture with Prudential Plc. of America, one of the largest life insurance companies in the US of A. Prudential ICICI Mutual Fund was setup on 13th of October, 1993 with two sponsorers, Prudential Plc. and ICICI Ltd. The Trustee Company formed is Prudential ICICI Trust Ltd. and the AMC is Prudential ICICI Asset Management Company Limited incorporated on 22nd of June, 1993.

6. State Bank of India Mutual Fund

State Bank of India Mutual Fund is the first Bank sponsored Mutual Fund to launch offshore fund, the India Magnum Fund with a corpus of 225 crores approximately. Today it is the largest Bank sponsored Mutual Fund in India. They have already launched 35 Schemes out of which 15 have already yielded handsome returns to investors. State Bank of India Mutual Fund has more than 5,500 Crores as AUM. Now it has an investor base of over 8 Lakhs spread over 18 schemes.

7. Unit Trust of India Mutual Fund

UTI Asset Management Company Private Limited, established in Jan 14, 2003, manages the UTI Mutual Fund with the support of UTI Trustee Company Private Limited. UTI Asset Management Company presently manages a corpus of over 20000 Crores. The sponsors of UTI Mutual Fund are Bank of Baroda (BOB), Punjab National Bank (PNB), State Bank of India (SBI), and Life Insurance Corporation of India (LIC). The schemes of UTI Mutual Fund are Liquid Funds, Income Funds, Asset Management Funds, Index Funds, Equity Funds and Balance Funds.

8. Standard Chartered Mutual Fund

Standard Chartered Mutual Fund was set up on March 13, 2000 is sponsored

by Standard Chartered Bank. The Trustee is Standard Chartered Trustee Company Pvt. Ltd. Standard Chartered Asset Management Company Pvt. Ltd. is the AMC which was incorporated with SEBI on December 20, 1999.

Today, mutual funds have started playing a positive role in the country's saving revolution.

No doubt, mutual funds have become a very popular investment vehicle for small investors. The dominance of retail mutual fund industry can be seen from the following analysis of folios of mutual funds.

Table 12.1: Number of Folios of Mutual Funds

| Category | March 2010 | September 2010 | March 2011 |
|---------------------------------|--------------------|--------------------|--------------------|
| Corporates | 3,77,519 | 3,59,372 | 3,91,836 |
| Bank/FIs | 3,671 | 11,315 | 11,883 |
| Foreign Institutional Investors | 133 | 134 | 130 |
| High Net Worth Individuals | 6,56,334 | 7,05,199 | 7,79,226 |
| Retail Investors | 4,69,26,405 | 4,59,02,299 | 4,60,51,758 |
| Total | 4,79,64,062 | 4,69,78,319 | 4,72,34,833 |

Source: Association of Mutual Funds in India.

As of March 2018, individual investors held 55 per cent of the total mutual fund assets in India. The number of small retail investors has grown to 67 million as of March 2018 from 46.4 million in March 2009, taking their share of total assets to 25 per cent from 21 per cent. The share of high net worth individuals (HNIs) in total assets has risen to 30 per cent from 22 per cent, as their folio count increased nearly seven-fold to 3.9 million from 0.6 million.

12.7 SUMMARY

The mutual fund industry has grown at a phenomenal rate in the recent past. One can witness a revolution in the mutual fund industry in view of its importance to the investors in general and the country's economy at large.

In India, the mutual fund industry has been monopolized by the Unit Trust of India ever since 1963. Now, the commercial banks like the State Bank of India, Canara Bank, Indian Bank, Bank of India and the Punjab National Bank have entered into the field. To add the list are the LIC of India and the private sector banks and other financial institutions.

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 player's penetration, the total assets rose up to 1218.05 billion. Today there are 33 mutual fund companies in India.

12.8 GLOSSARY

- **Net Asset Value:** The Net asset value (NAV) is the market price of each unit of a particular scheme in relation to all the assets of the scheme.
- **Money Market:** A money market is a mechanism through which short term funds are loaned and borrowed and through which a large part of the financial transaction of a particular country or of the world are cleared.
- **Capital Market:** The term capital market refers to the institutional arrangements for facilitating the borrowing and lending of long-term funds.
- **Sponsor:** As per SEBI (mutual funds) Regulations, sponsor is any person who acts alone or in combination with another body corporate, establishes a mutual fund.

12.9 SELF ASSESSMENT QUESTIONS

1. What do you mean by Net Asset Value? How is it computed?

2. Write short notes on:

a) State Bank of India Mutual Fund

b) Unit Trust of India Mutual Fund

12.10 LESSON END EXERCISES

1. Define mutual funds. Explain its importance.
2. Discuss the status of mutual fund in India.

12.11 SUGGESTED READINGS

1. Chandra Prasanna, Investment Analysis and Portfolio Management, McGraw Hill.

2. Francis and Archer, Portfolio Management, Prentice Hall of India.

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SECURITY MARKET ANALYSIS

STRUCTURE

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13.1 INTRODUCTION

Security Analysis is the analysis of tradable financial instruments called securities. These can be classified into debt securities, equities, or some hybrid of the two. More broadly, futures contracts and tradable credit derivatives are sometimes included. Furthermore, a detailed readout of the unit will help you to visualize that *Security Analysis* is typically divided into Fundamental Analysis, which relies upon the examination of fundamental business factors such as financial statements, and Technical Analysis, which focuses upon price trends and momentum. Quantitative analysis may use indicators from both areas.

Investment is the basic driving force of any business activity. It is the source of growth, supports management's explicit competitive strategies, and it is normally based on careful plans (capital budgets) for committing existing or new funds to three main areas:

- Working capital (cash balances, receivables due from customers, and inventories, less trade credit from suppliers and other normal current obligations).
- Physical assets (land, buildings, machinery and equipment, office furnishings, computer systems, laboratory equipment, etc.).
- Major spending programs (research and development, product or service development, promotional programs, etc.) and acquisitions.

Note that investment is broadly defined here in terms of resource commitments which are to be recovered over time, not by the narrow accounting classification which are, for example, categorize most spending programmes as ongoing expenses, despite their longer-range impact.

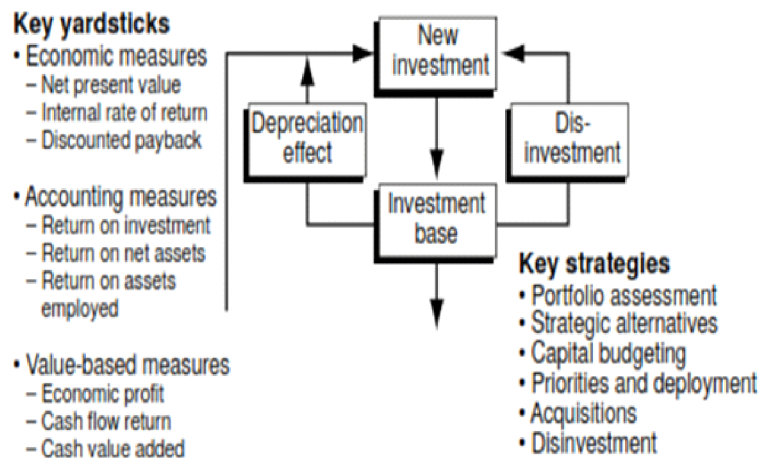


Fig. 13.1 : Investment Portfolio of the systems accompanied by major yardsticks and key strategies.

During the periodic planning process, when capital budgets are formulated, management normally chooses from a variety of options those new investments that are expected to exceed or at least meet targeted economic returns. The level of these returns generally is related to shareholder expectations via the cost of capital

calculation. Making sound investment choices and implementing them successfully—so that the actual results in fact exceed the cost of capital standard—is a key management responsibility that leads to value creation. New investment is the key driver of growth strategies that cause enhanced shareholder value, but only if carefully established investment standards are met or exceeded.

At the same time, successful companies periodically make critical assessments of how their existing investment base (portfolio) is deployed, to see if the actual performance and outlook for the individual products, services, and business segments warrant continued commitment within the context of the company's strategic posture. If careful analysis demonstrates below-standard economic results and expectations about a particular market or activity, then the opposite of investment, disinvestment, becomes a compelling option. As we'll see, such poor performing activities destroy shareholder value. Disposing of the assets involved or selling the operating unit as a going concern will allow the funds received to be redeployed more advantageously elsewhere. Also, the sale of any equipment being replaced by newer facilities will provide funds for other purposes. Shareholder value creation thus depends on a combination of ongoing successful performance of existing investments, and the addition of successful new investments - a continued re-assessment of the company's total portfolio of activities. The yardsticks helpful in selecting new investments and disinvestments are generally economic criteria. They are based on cash flows, measuring the trade-off between investment funds committed now and the expected stream of future operational cash flow benefits, and residual values.

As discussed above, the decision to invest resources is one of the key drivers of the business financial system. Sound investments that implement well-founded strategies are essential to creating shareholder value, and they must be analyzed both in a proper context and with sound analytical methods. Whether the decision involves committing resources to new facilities, a research and development project, a marketing programme, additional working capital, an acquisition, or investing in a financial instrument, an economic trade-off must be made between the resources expended now and the expectation of future cash benefits to be obtained. Analyzing this trade-off is essentially a valuation process that makes

an economic assessment of a combination of positive and negative cash flow patterns. The task is difficult by nature because it deals with future conditions subject to uncertainties and risks – yet this basic valuation principle is common to all investments, large and small.

13.2 OBJECTIVES

After going through this unit, you will be able to understand:

- Meaning of security market analysis.
- Trends, indicators and patterns.
- Methods of technical analysis.

13.3 DEFINITION OF SECURITY ANALYSIS

The analysis of various tradable financial instruments is called security analysis. Security analysis helps a financial expert or a security analyst to determine the value of assets in a portfolio or an individual security. In other words, security analysis is a method which helps to calculate the value of various assets and also find out the effect of various market fluctuations on the value of tradable financial instruments (also called securities).

13.4 CLASSIFICATION OF SECURITY ANALYSIS

Security Analysis is broadly classified into three categories:

- 1. Fundamental Analysis:** Fundamental Analysis refers to the evaluation of securities with the help of certain fundamental business factors, such as, financial statements, current interest rates as well as competitor's products and financial market.
- 2. Technical Analysis:** Technical analysis refers to the analysis of securities and helps the finance professionals to forecast the price trends through past price trends and market data.
- 3. Quantitative Analysis:** Quantitative analysis refers to the analysis of securities using quantitative data.

The difference between fundamental and technical analysis stands from the fact that, fundamental analysis is done with the help of financial statements, competitor's market, market data and other relevant facts and figures whereas technical analysis is more to do with the price trends of securities.

13.5 FUNDAMENTAL ANALYSIS

As already discussed above, in the fundamental approach, an attempt is made to analyze various fundamental or basic factors that affect the risk-return of the securities. The effort is to identify those securities that one perceives as 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 marketplace provides an opportunity for a discerning investor to detect such discrepancy. The moment such a description is identified, a decision to invest or disinvest is made. 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 its 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 the 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 $IV = MP$, preference based*

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. But it should however be noted that the use of an analytical framework does not guarantee an actual decision, but it does guarantee an informed and considered investment decision, which would hopefully be better as it is based on relevant and crucial information.

13.5.1 Economy-Industry-Company Analyses – Framework

The main ingredients of the fundamental approach include economy, industry and company fundamentals and all these constituents should be taken into account, that form different but special steps in making an investment decision. These constituents 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.

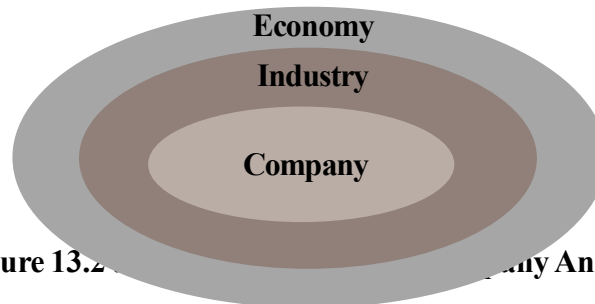


Figure 13.2 Economy-Industry-Company Analyses

13.6 ECONOMY ANALYSIS

The investment decisions of individuals and the institutions are made in the economic set-up of a particular country. It thus becomes essential to understand the state economy of that country at the macro level. The analysis of the state of the economy at the macro level incorporates the performance of the economy in the past, how it is performing in the present and how it is expected to perform in the future. Also it is important to know as to how various sectors of the economy are going to grow in the future.

13.6.1 Macro-Economic Analysis

The analysis of the following factors indicate the trends in macro-economic changes the effect the risk and return on investments:

| | | |
|---------------------------------------|---------------------------------------|--|
| ❖ Money supply | ❖ Monsoons | ❖ Foreign investments |
| ❖ Industrial production | ❖ Fiscal deficit | ❖ Trends in capital market |
| ❖ Capacity utilization | ❖ Credit/Deposit Ratio | ❖ Stage of the business cycle |
| ❖ Unemployment | ❖ Industrial wages | ❖ Foreign exchange reserves |
| ❖ Inflation | ❖ Technological innovations | ❖ Stock of food grains & essential commodities |
| ❖ Growth in GDP | ❖ Infrastructural facilities | ❖ Foreign trade and balance of payments position |
| <hr/> | | |
| ❖ Institutional lending | ❖ Interest rates | ❖ Productivity factors of production |
| ❖ Stock prices | ❖ Cost of living index | ❖ Status of political and economic stability |
| ❖ Debt recovery and Loans outstanding | ❖ Economic policies of the government | ❖ Industrial policies of the government |

Figure 13.3 : Macro - Economic Factors

Note that, in a globalized business environment the top-down analysis of a firm must begin with the global economy. The global economy has a bearing on the export prospects of the firm, the competition it faces from international competitors and the profitability of its overseas investors.

The government employs two broad classes of macroeconomic policies, viz, demand-side policies and supply-side policies. Traditionally, the focus was mostly on fiscal and monetary policies, the two major tools of demand-side economics. From 1980s onwards, however, supply-side economics has received a lot of attention. Now let us discuss these two policies in brief.

a) Fiscal Policy, is concerned with the spending and tax initiatives of the government. It is the most direct tool to simulate or dampen the economy. An increase in government spending simulates the demand for goods and services, whereas a decrease deflates the demand for goods and services. By the same token, a decrease in tax rates increases the consumption of goods and services and an increase in tax rates decreases the consumption of goods and services.

b) Monetary Policy, is concerned with the manipulation of money supply in the economy. Monetary policy affects the economy mainly through its impact on interest rates. The main tools of monetary policy are: Open Market Operations, Bank Rate and Reserve Requirements & Direct Credit Controls.

13.6.2 Investment Making Process

In the economy, each of the sectors show signs of stagnation and degradation. Thus, one needs to examine and understand by studying historical performance of various sectors of the economy in the past, their performances at the present and then forming the expectations about their performances in the future. It is through this systematic process that one would be able to realize various relevant investment opportunities whenever these arise. Sectorial analysis, therefore, is carried out along with overall economy analysis as the rate of growth in overall economy often differs from the rate within various sectors.

Rationale of the above type of analysis depends on economic considerations too. The way people in general, their income and the way they spend these earnings would in ultimate analysis decide which industry or bunch of industries would grow in the future. Such spending affects corporate profits, dividends and prices of the shares. It is word of caution that, neglecting this analysis while deciding where to invest would be at one's peril.

Thus, it should be noted and kept in mind that analysis of historical performance of the economy is a starting point. But for the analyst to decide whether to invest or not, expected future performance of the overall economy along with its segments is most relevant. Thus, all efforts should be made to forecast the performance of the economy so that the decision to invest or to disinvest the securities can be a beneficial one. Decisions can be made in the most haphazard manner. A healthy outlook about the economy goes a long way in boosting the investment climate in general and investment in securities in particular.

13.6.3 Economic Forecasting & Techniques

Economic forecasting is very much essential for making investment decision. As has already been discussed that the fortunes of specific industries and the firms

depend upon how the economy looks like in the future, both for short & long terms. Accordingly, forecasting techniques can be categorized as **Short-term forecasting techniques**, refers to a much shorter period, as a quarter or a few quarters or an intermediate period which ranges from three to five years. **Long-term forecasting techniques**, refers to the forecast made for more than five years in general and particularly for a period of ten years or more.

The techniques that are generally used for short-term economic forecasting include: Economic Indicators, Diffusion Index, Anticipatory Surveys and Economic Model building.

1. Economic Indicators – Barometric or Indian Approach: In this approach, various types of indicators are studied to find out as to how the economy is likely to behave in future. For meaningful interpretations, these indicators are roughly categorized as,

- (a) *Leading Indicators*, these indicators lead the economic activity in their outcome, that is, these are those time series data of variables that reach their high points as well as low points in advance of the economic activity.
- (b) *Lagging Indicators*, are the time series data of variables that lag behind in their consequences, viz-a-viz, the economy, that is, these reach their turning points after the economy has already reached its own.

In developed countries, data related to various indicators are published at short-intervals. As a example, the Department of Commerce publishes data regarding various indicators in each of the following categories:

Table 13.1 : Economic Indicators

| Leading Indicators | Coincidental Indicators | Lagging Indicators |
|--|--|--|
| <ul style="list-style-type: none"> ❖ Average weekly hours of manufacturing production workers. ❖ Average weekly in initial unemployment claims. ❖ Contacts and orders for plant and machinery. ❖ Index of S&P 500 stock prices. ❖ Change in sensitive material prices. ❖ Index of consumer expectations. | <ul style="list-style-type: none"> ❖ Index of industrial production. ❖ Manufacturing and trade sales. ❖ Employee on non-agricultural payrolls. ❖ Personal income less transfer payments. | <ul style="list-style-type: none"> ❖ Average duration of unemployment. ❖ Ratio of manufacturing and trade inventories to sales. ❖ Average prime rate. ❖ Outstanding commercial and industrial loans. |

2. Diffusion Index: It is an indicator of the extensiveness or spread of an expansion or contraction. It has been developed by the National Bureau of Economic Research, USA. The diffusion index is categorized under two heads, viz, Composite or Consensus Index and Component Evaluation Index.

(a) *Composite or Consensus Index:* It combines several indicators into one single measure, in order to measure the strength or weakness in the movements of these particular time series of data. For instance, if there are 10 leading indicators, out of them 4 are moving up and others are not. How is it interpreted?

$$\text{Diffusion Index} = \frac{\text{No. of members in the set in the same direction}}{\text{Total no. of members in the set}} = \frac{4}{10} = 0.4$$

It means that in the next month, if the diffusion index is moved to 0.6, it certainly is a strong confirmation of the economic advance.

(b) *Component Evaluation Index:* It is a narrow type of index, which examines a particular series taking into consideration its components. It measures the breadth of the movement within a particular series.

3. Anticipatory Survey: It is a very simple method through which the investors can form their expectations with respect to the future state of the economy. Generally, it

incorporates expert opinion with construction activities, plant and machinery expenditure, level of inventory and like, that are important economic activities. Anticipatory surveys can also incorporate the opinion or future plans of consumers regarding their spending. So long as people plan and budget their expenditure and implement their plans accordingly, such surveys should provide valuable input, as a starting point.

A word of caution is that it requires a continuous monitoring. Furthermore, survey results cannot be regarded as forecasts per se and there is no guarantee that the intentions surveyed would certainly materialize. However, despite of the given limitations, surveys are very popular in practice and used for short-term forecasts.

4. Economic Model Building – Geometric Model Building Approach: It is the approach to determine the precise relationship between the dependent and the independent variables. In fact, econometrics is a discipline wherein the application of mathematics and statistics techniques is a part of economic theory. It pre-supposes the precise and clear relationship between the dependent and independent variables and the onus of such well-defined relationship with its attendant assumptions rests with the analyst. Thus by geometrics, the analyst is able to forecast a variable more precisely than by any other approach.

Static Model Building or GNP Model Building or Sectorial Analysis is frequently used. These use National Accounting Framework in making short-term forecasts. The various steps involved in using this approach include the following:

Step-1: Hypothesize the total demand in the economy as measured by its total income (GNP) based on likely conditions in the country, such as, war, peace, political instability, economic changes, level and rate of inflation, etc..

Step-2: Forecast the GNP figure by estimating the levels of its various components, such as, Consumption expenditure, Private cosmetic investment, Government purchases of goods and services, Net exports, etc..

Step-3: Forecasting the individual components of GNP, and then adding them up to obtain a figure of GNP.

Step-4: Then comparing the total of GNP and arriving at an independent estimate

approximately. The forecast of GNP is an overall forecast for internal consistency. This is done to ensure that both the total forecast and the permanent forecast make sense and fit together in a reasonable manner.

Step-5: Thereafter, with considerable amount of judgment analyze the details described above towards the building of GNP model.

13.7 INDUSTRY ANALYSIS

After conducting an analysis of the economy and identifying the direction it is likely to take in the short, interim and long term, the analyst must look into various sectors of the economy in terms of various industries. An industry is a homogenous group of companies, that is, companies with similar characteristic can be divided into one industrial group. There are many bases on which grouping of companies can be done. Some of the useful bases for classifying industries from the investment decision point of view are as follows:

Growth Industry: This is an industry that is expected to grow consistently and its growth may exceed the average growth of the economy.

Cyclical Industry: In this category of the industry, the firms included are those that move closely with the rate of industrial growth of the economy and fluctuate cyclically as the economy fluctuates.

Defensive Industry: It is a grouping that includes firms, which move steadily with the economy and less than the average decline of the economy in a cyclical downturn.

Another useful criterion to classify industries is on the basis of the various stages of their development that shall be discussed later on.

13.7.1 Importance of Industry Analysis

The importance of carrying out industry analysis can be understood from the following points:

- (a) Firms in each different industry typically experience similar levels of risk and similar rates of return. As such, industry analysis can also be useful in knowing the investment-worthiness of a firm;

Economic theory points out that competitive firms in an industry try to maximize their profits by adopting fairly similar policies with respect to, the labor-capital ratio utilized by each firm; mark ups, profit margins and selling prices; advertising and promotional programmes; research and development expenditures; protective measures of the government, and like.

- (b) Mediocre stocks in a growth industry usually out-perform the best stocks in a stagnant industry. This points out the need for knowing not only company prospects but also industry prospects.

13.7.2 Key Indicators / Factors in Industry Analysis

The analyst is free to choose his or her own indicators for analyzing the prospects of an industry. However, many commonly adopt the following indicators:

Table 13.2 : Indicators in Industry Analysis

| Performance Factors | Environment Factors | Outcome Factors |
|---|--|---|
| <ul style="list-style-type: none"> ❖ Past Sales. ❖ Past Earnings. | <ul style="list-style-type: none"> ❖ Attitude of government. ❖ Labor conditions. ❖ Competitive conditions. ❖ Technological progress. | <ul style="list-style-type: none"> ❖ Industry share prices. ❖ Strengths and weaknesses. ❖ Opportunities and threats. ❖ Price earnings multiple with reference to key factors. |

13.7.3 Techniques of Industry Analysis

Techniques that help to evaluate the factors mentioned above include the following:

:

- (a) **End Use and Regression Analysis:** It is the process whereby the analyst or investor attempts to dial the factor that determines the demand for the output of the industry. This is also known as End-use Demand Analysis. In this process, the investor hopes to uncover the factors that explain the demand. Some of the factors may be found to be powerful in explaining the demand of the product, like disposable income per capital consumption, price elasticity of demand and per capital income. In order to identify the factors that affect the demand, statistical techniques like regression analysis and correlation are often

employed. These statistical techniques help to identify the important factors or variables.

(b) Input-Output Analysis: This analysis helps us understand demand analysis in greater detail. Input of analysis is a very useful technique that reflects the flow of goods and services through the economy, including intermediate steps in the production process as the goods proceed from the raw material stage through to consumption. This information is reflected in the input-output table that reflects the pattern of consumption at all stages, and not merely at the final stage of consumption of final goods. This is done to detect any changing patterns. It might also indicate the growth or decline of industries.

13.7.4 Analytical Frameworks of Industry Analysis

Every industry passes through different stages in its lifetime, referred to as “Industry Life Cycle Stages (Product Life Cycle Theory)”. The stages can be identified as: Pioneering Stage (Introduction); Expansion Stage (Growth); Stagnation Stage (Maturity) and Decay Stage (Decline).

(a) Pioneering Stage, is characterized by introduction of a new product and an uptrend in business cycle that encourages new product introduction. Demand keeps on growing at an increasing rate. Competition is generated by the entry of new firms to grab the market opportunities. Weaker firms face premature death while stronger survive to grow and expand.

(b) Expansion Stage, is characterized by the hectic activity of firms surviving the pioneering stage. After overcoming the teething problems, the firms continue to improve financially and competitively. The market continues to grow but slowly, offering steady and slow growth in sales of the industry. It is a phase of consolidation wherein companies establish durable policies relating to dividends and investments.\

(c) Stabilization Stage, shows signs of slow progress and also prospects of decay. The stagnation in the economy and the pedestrian nature of the product call for innovative strategies to begin a new life-cycle. In this stage the industry faces the problem of ‘latent obsolescence’, a term used to state wherein earlier

signs of decline have emerged. Symptoms of latent obsolescence include, changing social habits, high labor costs, changes in technology, stationary demand, and like etc.

(d) Decay Stage, occurs when the industry fails to detect the death signal and implement proactively or reactively appropriate strategies. Obsolescence manifests itself, effecting a decline in sales, profit, dividends and share prices.

Now the question rises as to what are the implications of the discussed points to the investors. Let us discuss this so as to understand the life-cycles from investors or analysts point of view.

The approach discussed above is useful to the analyst as it gives insights and not apparent merits and demerits of investments in a given industry at a given point of time. Now what the investor has to do is that he has to: collect relevant data to identify the industry life cycle stages; forecast the probable life period of the stage; and decide whether to buy, hold or sell.

The above discussion can be diagrammatically represented for better understanding, as depicted in Figure 13.4.

| | | Performance | |
|------------|------|---------------------|--------------------------|
| | | Low | High |
| Importance | High | A. Concentrate here | B. Keeping the good work |
| | Low | C. Take enough care | D. If overkill, divert |

Figure 13.4 : Importance-Performance Matrix

The figure presents the Important-Performance Matrix along with indicators of each stage. Although the industry analysis seems to be very simple, but in reality proper identification of the life cycle stages is quite complicated and difficult to depict. The internal analysis can be done periodically to evaluate the strengths and weaknesses either by inside company executives or outside consultants. This can be done by constructing a form as given below in the form of a Table 13.3. Herein, each factor-major & minor needs to be displayed along with their

strengths and weakness. It is important to mention here that since all the factors are not equally important, hence, it is necessary to rate the importance of each factor as high, medium or low.

Table 13.3 : Strength - Weakness Analysis (Sample Table)

| Factors | | Performance | | | Importance | | |
|----------------------|----------------------|-------------|---------|-------|------------|--------|-----|
| Major | Minor | Major | Neutral | Minor | High | Medium | Low |
| Marketing | Service Reputation | | | | | | |
| | Distribution cost | | | | | | |
| | Sales force | | | | | | |
| | Market locations | | | | | | |
| | etc.. | | | | | | |
| Finance | Cost of capital | | | | | | |
| | Funds availability | | | | | | |
| | Financial stability | | | | | | |
| | Profitability | | | | | | |
| | etc.. | | | | | | |
| Manufacturing | Facilities | | | | | | |
| | Economies of scale | | | | | | |
| | Capacity utilization | | | | | | |
| | Manufacturing costs | | | | | | |
| | etc.. | | | | | | |
| etc.. | etc.. | | | | | | |

13.7.5 Forecasting Methods for Industry Analysis

The techniques for analyzing information about industry within a time framework are as explained below.

(a) The Market Profile: A market profile consists of those endogenous characteristics that have a significant bearing on demand or the way in which it can be developed.

Its basic elements include: number of establishments, geographical locations of establishments, number of employees, value of sales, value added by manufacturing, capital expenditures, degree to which establishments are specialized and Importance of their output in the national total.

The trends of these elements when analyzed, reveal vital information about the position and progress of the industry. As an illustration, some lead points are as given below,

- ✓ A decrease in number of establishments and employment accompanied by an increase in the other elements of the profile means increased automation;
- ✓ An increase in the value of sales, unaccompanied by an increase in value added and capital expenditure signifies price rise;
- ✓ A fall in the share of the industry in national total implies decline of the industry; and
- ✓ An increase in the value added without an increase in capital expenditure signifies increase in labor productivity.

(b) Cumulative Methods: These are based either on market surveys or statistical measurements, as discussed below,

(i) Surveys: These are carried out by research agencies, consultants, industry associations and the research bureau of media. These surveys generally study the current facilities and demand, future demand and proposed investment, and thereby the expansion prospects, viz-a-viz, demand gap. Other factors like, strengths and weaknesses of the organization, environmental forces are also brought into focus to evaluate the future of the industry. Surveys adopt the methodology of inquiry, through questionnaires and interviews. The subjects will be either manufacturer or dealers / end-users.

(ii) Correlation and regression analysis: Statistical methods like correlation and regression analysis can be of much help in demand measurement. The following steps have general applications,

- Determine the total requirement for the type of product in question by present customers in each industry classification. This can be done by asking the customer or obtaining the estimate from the salesmen or by

comparing with other customers of same size and class.

- Correlation product requirement of customer establishments with a variable to output for which accurate published data are available. Generally, employment is the most useful variable.

The correlation can be observed by preparing a scatter diagram or calculating mathematically, using the formula given below,

$$\text{Degree of relationship (r)} = \frac{N\Sigma(xy) - (\Sigma x)(\Sigma y)}{[\Sigma x^2 - (\Sigma x)^2][\Sigma y^2 - (\Sigma y)^2]}$$

Where x = number of employees ; & y = number of product items ; observation

The nearer the correlate 'N' coefficient is to +1 or -1, the closer the relationship of the two variables under study. The significance of the relationship can be determined using hypothesis testing procedure.

- Apply the relationship to estimate demand. If the degree of correlation between purchases of a given product by present customers and their employment size is considered significant, the demand estimation can be done as follows:
 - ❖ Computing the average number of items purchased per employee and applying this ratio to the total employment;
 - ❖ Formulating an estimating equation through regression model, as given,

$$\begin{aligned}\Sigma y &= Na + b \Sigma x \\ x\Sigma y &= a \Sigma x + b \Sigma x^2\end{aligned}$$

where 'a' equals the number of products purchased when employment is zero; and 'b' equals the amount of change in the number of products purchased with every change in total employment.

The latter method is more accurate because it is more sensitive to the influence of independent variable on dependent variable.

Furthermore, Multiple Regression Analysis facilitates the study of impact of more than one independent variable on the dependent variable, as

$$Y = a + bx_1 + cx_2 + dx_3 + ex_4 + fx_5$$

where Y = yearly sales in lakhs of rupees;

x_1 = yearly sales (lagged one year) in lakhs of rupees;

x_2 = yearly advertising expenditure in lakhs of rupees;

x_3 = a dummy variable;

x_4 = year; and

x_5 = disposable personal income in lakhs of current rupees.

(iii) Time series analysis: It consists of decomposing the original sales series over a period of time. The elements derived are,

- *Trend (T)*, is the result of basic developments in population, capital formulation and technology. It is found by fitting a straight or curved line through past sales.
- *Cycle (C)*, captures the wave-like movement of sales. Many sales are affected by the swings in general economic activity, which tends to be somewhat periodic. The cyclical component can be useful in intermediate range forecasting.
- *Season (S)*, refers to a consistent pattern of sales movements within the year. The term season describes any recurrent sales pattern. The seasonal component may be related to weather factors, holidays and trade customs. The seasonal pattern provides a norm for forecasting short-range sales.
- *Erratic Events (E)*, refers to the unpredictable sales caused by unforeseen events like strikes, riots, war scares, floods and other disturbances.

Another time series technique is *Exponential Smoothing*. For industries with several items in product line, this technique is useful to produce efficient and

economical short-run forecasts. It requires only three pieces of information, viz, This period's actual sales (Q_t); This period's smoothed sales (Q_t); and A smoothing parameter 'a'

where Sales forecast for next period is $(Q_{t+1}) = Q_t + (1 - a)Q_t$

The initial level of smoothed sales can simply be the average sales for the last few periods. The smoothing constant is derived by trial and error testing of different smoothing constants between zero and one, to find the constant that produces the best fit of past sales.

13.8 COMPANY ANALYSIS

The real test of an analyst's competence lies in its ability to see not only the macro effects but also the micro effects. Superior judgment is an outcome of intelligence, synthesis and inference drawing. That is why, besides economic analysis and industry analysis, individual company analysis is also important.

13.8.1 Importance of Company's Analysis

For estimating the intrinsic value of the company one has to look at two major aspects: the company's business in terms of products, services, capabilities, competitiveness etc. and corresponding business strategy & the resultant financial performance. In this module we will focus more on the first part i.e. strategy analysis with some emphasis on new financial performance tools.

Company Analysis vs. Stock Valuation: Having identified a good company in terms of earnings and growth potential, one has to value the stock of the company separately. It is quite likely that the stock of a good company is priced very high in the market, i.e. market price is higher than the intrinsic value of the stock. The reverse can also be true.

Growth Companies vs. Growth Stocks: Growth companies are those that show more than average growth in sales and earnings. Growth companies can also be defined as those earning rate of return more than the expected rate of return from the investors' point view, i.e. weighted average cost of capital. However growth

stocks are those that show higher rate of return than other stocks in the market with similar risk characteristics. Such stocks show a superior risk adjusted rate of return. It is also true that such stocks will not consistently show superior adjusted rate of return. Because of superior performance, there will be more demand for the stocks and the stocks will be priced high in the market. As a result the superior return will vanish and the stocks will show normal return.

Defensive Companies vs. Defensive Stocks: Companies with ability to show earnings while withstanding an economic downturn are known as defensive companies. These companies are characterized with low business and financial risk. Whereas stocks with a negative systematic risk i.e. of β (as per CAPM) are known as defensive stocks. Such stocks are likely to show positive return when market moves downward. Such stocks are to be avoided in a bull phase.

Cyclical Companies vs. Cyclical Stocks: Cyclical companies are those whose sales and earnings will be greatly influenced by aggregate business activity. These companies do well during economic expansion and poorly during economic contraction. Cyclical stocks are those that will experience changes in their rates of return greater than changes in overall market rates of return. Such stocks will have high beta.

Value versus Growth Investing: Growth stocks will have positive earnings surprises and above-average risk adjusted rates of return because the stocks are undervalued. Value stocks appear to be under valued for reasons besides earnings growth potential. Value stocks usually have low P/E ratio or low P/B ratio. It is imperative for investors to analyze the companies for their performance and subsequently find the intrinsic value of the stocks of the companies. If the intrinsic value of the stock is higher than the market price, one can take a buy decision.

13.8.2 Economic, Industry and Structural Links to Company Analysis

Strategy Analysis: Strategy refers to a plan of action designed to achieve a particular goal. The word is of military origin, deriving from the Greek word

στρατηγός (stratēgos), which roughly translates as “general”. Firms without proper strategies from time to time can face premature death. Such firms have a passive management that does not explore new opportunities and adapt to the changes happening in the surrounding. Table 13.4 lists different levels of strategy and corresponding management decisions for a typical firm. All the decisions affect the cash flows of a company, hence are important from analysis and valuation point of view.

Table 13.4 : Levels of Strategy & Corresponding Management Decisions

| Levels of Strategy | Management Decision |
|----------------------|--|
| Corporate Strategy | Activities to enhance substantial competitive advantage <ul style="list-style-type: none"> ✓ Selecting the Business to do? ✓ Entering New Market ✓ Exiting/ withdrawal from market |
| Business Strategy | ✓ Decisions to maximize competitive position within the chosen market |
| Operational Strategy | ✓ Planning for execution of the goal of the strategic business unit (SBU) |

Firm Competitive Strategies: As discussed in Industry Analysis, five competitive forces as suggested by Michael E Porter are: Current rivalry, Threat of new entrants, Potential substitutes and Bargaining power of suppliers. Porter’s five force analysis helps in determining potential attractiveness of an industry-insight of margins. One can take a decision about exit from or entry into an industry. With the help of a systematic and structured analysis of market structure and competitive situation, one can define different strategies that reduces power of competitive forces. Company can adopt defensive or offensive competitive strategy. Defensive strategy involves positioning firm so that its capabilities provide the best means to deflect the effect of competitive forces in the industry. Offensive strategy involves using the company’s strength to affect the competitive industry forces, thus improving the firm’s relative industry position.

Porter also suggested two major strategies:

Low-Cost Strategy: The firm seeks to be the low-cost producer, and hence the cost leader in its industry. This could be because of economies of scale, technology,

access to cheap resources etc.

Differentiation Strategy: Firm positions itself as unique in the industry. The differentiating factor needs to be truly unique so that it generates more revenue for the firm compared to other competitors. The incremental revenue because of uniqueness also should exceed the cost of creating that uniqueness.

However, companies may opt for different strategies depending upon the products. ***SWOT and PEST Analysis:*** SWOT analysis involves the examination of a firm's Strengths, Weaknesses, Opportunities and Threats. Strengths and Weaknesses are internal to the firm where as Opportunities and Threats are external to the firm. A firm should continuously build upon its strength [like, R&D, Brand Power, Good Customer Service etc.] and mitigate the weaknesses. Similarly, a firm must grab the opportunity like entering a new market and be ahead of its competitors. Threats need to be mitigated so that the goals are achieved as expected. One should also focus on PEST analysis that consists of: Political & Legal Changes [e.g. change in government regulation and policy]; Economic Changes [e.g. change in business condition, interest rates etc.]; Social Changes [e.g. change in demography]; Technological Changes [e.g. new inventions, patents etc.].

Finally the firm should analyze its internal capabilities and resources and augment those to be ahead of others.

13.8.3 Framework of Company Analysis

The two major components of company analysis are: Financial and Non-financial.

A good analyst gives proper weightage to both these aspects and tries to make an appropriate judgment. In the process of evaluating the investment-worthiness of a company's securities, the analyst will be concerned with two broad categories information, viz, internal and external.

Internal information consists of the data and events relating to the enterprise as publicized by it. *External information* comprises the reports and analyses made by sources outside the company, viz, media and research agencies.

(a) *Financial Analysis:* Financial analysts interested in making investments in

equality shares of a company will be concerned with the prospects of rise in value of the firm. Let us understand the financial analysis by describing the Asset value vs. Earnings value.

The asset value of a security is determined by estimating the liquidating value of the firm, deducting the claims of the firm's creditors and allocating the remaining net asset value of the firm over the outstanding shares of stock. The asset value is usually estimated by consultation with: a specialist who appraises asset value and/or an accountant who gives book value of the firm.

This method is suitable only for companies heading towards bankruptcy. For them, the firm's income and dividends will be declining and discontinuous. Hence, they will have negligible value. On the other hand, for going concerns, the intrinsic value far exceeds the value of the firm's physical assets. There is a definite lack of relationship between book value and real value, in the case of prosperous firms.

Therefore, investment analysis focus their attention on the trends of earnings and the related factors like dividends, bonus issues, right shares and appreciation of the market value of the share. It is believed that the appropriate indices for a company's performance are market price per share (MPS) and earnings per share (EPS).

(b) Non-Financial Analysis: A general impressionistic view is also important in evaluating the worth of a company for investing in securities. This could be obtained by gathering and analyzing information about companies, publicized in the media, the stock exchange directory, annual reports and prospectus.

The internal factors related to the company survival and image include: History and business of the company; Top management team; Collaboration agreements; Product range; Future plans of expansion / diversification; R&D; Corporate image; Industrial relations scenario; Corporate social responsibility, Human Resource inventory, etc..

Besides these internal factors, the external environment related to company's

survival and image include: Statutory controls; Government policy; Industry Life Cycle Stages; Business Cycle Stages; Environmentalism; Consumerism, etc..

13.8.4 Forecasting Earnings

It is necessary to estimate a stock's future income because the value of the share is the present value of the future income. This is done by focusing on:

- (a) Identification of variables which will have impact on income; and
- (b) Determining the extent of change in income due to change in the identified variables, by employing appropriate method of forecasting.

(a) Identification of variables which will have impact on income: Basically changes in income result from changes in operations of the business and In the Financing of the business.

- *Operations and Earnings:* The operating cycle of a firm starts with cash converted into inventory. Inventory turns into sale and accounts receivables, which finally becomes cash.

Return on Investment (ROI) is the measure of the firm's operating result.

$$\text{ROI} = \frac{\text{EBIT}}{\text{Investment}} = \frac{\text{EBIT}}{\text{Sales}} \times \frac{\text{Sales}}{\text{Investment}}$$

There are two products, viz, Profit margins on sale and Turnover of assets.

- *Financing and Earnings:* the two main sources of financing an enterprise are: Borrowings and Issue of new shares.

Debt financing provides leverage to common shareholders. It raises the earnings per share but also risk. Equity financing is advisable where new shares can be sold at a price in excess of asset value per share, as it improves EPS. This is possible only when the company management can maintain a reasonably higher ROI.

From above, it is clear that EPS and changes in earnings are functions of:

Turnover of investment, Margin on sales, Effective interest rate (cost of borrowed funds), Debit equity ratio, Equity base and Effective tax rate.

(b) Determining the extent of change method: Different methods of forecasting earnings are available. The two categories into which the methods fall are given below,

- *Earlier Methods:* Earnings method, Market Share/Profit margin share/Breakeven analysis, Projected financial statement.
- *Modern Techniques:* Regression & Correlation analysis, Trend or Time series analysis, Decision tree analysis, Simulation.

13.9 SUMMARY

Security Analysis is the analysis of tradable financial instruments called securities. Investment is broadly defined in terms of resource which commitments are to be recommended over time. Thus, it is the basic driving force for any business activity

13.10 GLOSSARY

- **Fundamental Analysis :** It refers to the evaluation of securities with the help of certain fundamental business factors such as financial statements, current interest rates, etc.
- **Diffusion Index :** It is an indicator of the extensiveness or spread of an expansion or contraction.
- **Defensive companies :** Defensive companies are the companies with the ability to show earnings while withstanding an economic downturn.

13.11 SOLVED EXERCISES

1. Explain the meaning of investment? What are the qualities and constraint of successful investment?

Ans: It is the current commitment / holding of money or other resources in the expectation of reaping further benefits and that will compensate the investor

for: The time the investors hold the fund, Expected rate of inflation, Uncertainty of the future.

➤ *Qualities for Successful Investment:* Contrary thinking, Patience, Composure, Flexibility, Decisiveness.

➤ *Major Investment Constraints are:* Time, Age, Risk Tolerance, Tax Liability, Income fluctuations, Economic Conditions.

2. What is a fundamental analysis and what are the major components of the same?

Ans: For estimating the price of a stock, the security analyst must forecast the earnings and cash flows that can be expected from the firm. This is primarily known as fundamental analysis. Fundamental analysis – also known as EIC analysis – comprises of:

➤ Economic Analysis

➤ Industry Analysis

➤ Company Analysis

3. What are the key domestic economic variables to be considered for economic analysis?

Ans: The following domestic economic variables need to be considered for economic analysis.

➤ Gross Domestic Product

➤ Industrial Growth Rate

➤ Monsoon and Agriculture

➤ Employment and Capacity Utilization

➤ Price Level and Inflation

➤ Interest Rates

➤ Budget Deficit

➤ Sentiment: Consumers' and producers' optimism or pessimism

4. What is a diffusion index?

Ans: It is a measure of breadth or dispersion of changes in some phenomenon. It is based on the trends, direction of change, rate of change and comparison of previous business cycles. One can set of a diffusion index of leading indicators by counting the number of indicators that rise during a particular period and expressing it as a percentage of total.

5. State the different types of interrelationship among inflation, interest rates and security prices?

- Ans:**
- Inflation and interest rates generally move together.
 - Interest rates and bond prices are inversely related.
 - There is no direct and consistent relationship between interest rates and stock prices. It varies over period of time.

13.12 SELF ASSESSMENT QUESTIONS

1. Define Economic Value Added and Market Value Added?

2. What are the factors that one should consider while analyzing global stocks?

13.13 LESSION END EXERCISES

1. Why is industry analysis important as part of security analysis?
2. What is meant by sector rotation?
3. State the different attributes of the five competitive forces identified by Michael E Porter.
4. Define growth company and growth stock.
5. Explain value vs. growth investing.

13.14 SUGGESTED READINGS

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TECHNICAL ANALYSIS**STRUCTURE**

14.1 Introduction

14.2 Objectives

14.3 Meaning of Technical Analysis

14.3.1 Underlying Assumptions of Technical Analysis

14.3.2 Difference between Technical Analysis and Fundamental Analysis

14.3.3 Advantages of Technical Analysis

14.3.4 Challenges of Technical Analysis

14.4 Tools/Indicators for Technical Analysis

14.5 Methods of Technical Analysis

14.6 Summary

14.7 Glossary

14.8 Self Assessment Questions

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14.10 Suggested Readings

14.11 References

14.1 INTRODUCTION

Prices of securities in the stock market fluctuate daily on account of continuous buying and selling. Stock prices move in trends and cycles and are never stable. An investor in the stock market is interested in buying securities at a low price and selling them at a high price so as to get a good return on his investment. He, therefore, tries to analyse the movement of share prices in the market. Two approaches are commonly used for this purpose. One of these is the **fundamental analysis** wherein the analyst tries to determine the true worth or intrinsic value of a share based on the current and future earning capacity of the company. He would buy the share when its market price is below its intrinsic value. The second approach to security analysis is called **technical analysis**. It is an alternative approach to the study of stock price behaviour.

14.2 OBJECTIVES

After going through this lesson, you will be able to understand:

- The meaning of technical analysis.
- The advantages and challenges of technical analysis.
- Various methods of technical analysis.

14.3 MEANING OF TECHNICAL ANALYSIS

The International Federation of Technical Analysts defines technical analysis as “the systematic method of analyzing financial instruments, including securities, futures and interest rate products, with only market-delivered information such as price, volume, volatility and open interest”.

Technical analysis involves a study of market generated historical data like prices and volumes to determine the future direction of price movement than to measure a financial assets intrinsic value. Technical analysts’ approach of investment is essentially a reflection of the view that the historical performance of a financial asset like stocks and markets are indications of future movement. The predictability of technical analysis is based up on the market-delivered

information such as price, volatility, volume, trading pattern and open interest.

It involves the examination of past market data such as prices and the volume of trading, which leads to an estimate of future price trends and therefore an investment decision. The fundamental assumption is that using data from the market itself is a good idea because the market is its own best predictor.

14.3.1 Underlying Assumptions of Technical Analysis

Following are the four assumptions that support the basic approach of technical analysis:

- ✓ The market value of any good or service is determined solely by the interaction of supply and demand;
- ✓ Supply and demand are governed by numerous factors, both rational and irrational;
- ✓ Disregarding minor fluctuations, the prices for individual securities and the overall value of the market tend to move in trends, which persist for appreciable lengths of time; and
- ✓ Prevailing trends change in reaction to shifts in supply and demand relationships and these shifts can be detected in the action of the market

14.3.2 Difference between Technical Analysis and Fundamental Analysis

These two terms refer to different approaches for investment decision by using different methodologies and research techniques for forecasting the future trends of price movement. Fundamental analysis is an investment strategy or philosophy which attempts to measure the intrinsic value of a financial asset like stock by studying everything from the macro economic and industry conditions to the internal management and financial condition of companies. Technical analysis, on the other hand, is the evaluation of financial assets historical market statistics such as past prices, volatility, trading volume to measure a financial assets future price. It does not look in to the intrinsic value rather it uses charts to identify patterns and trends that may suggest what a financial asset like stock will do in the future.

Technical analysts believe that there is no point of evaluating the fundamentals as the all fundamental information must have already reflected in the stock's price. Fundamental analysis takes a relatively long-term approach as compared to the short term approach of the technical analysts. In other words the basic difference between fundamental and technical analysts can be seen as the difference between investing versus trading.

However, in the world of stock analysis, which strategy works best is always debated and perhaps the combination of both gives the suggestive results.

Table : 14.1 Distinction between Fundamental and Technical Analyses

| S.No. | Fundamental | Technical |
|-------|---|--|
| 1 | The fundamental analysis is long term in nature. It is conservative in its approach. It acts on 'What should be'. | The technical analysis is short-term oriented. It is aggressive in nature. It acts on 'What is'. |
| 2 | The fundamental analyst adopts a buy-and hold policy. He does not usually expect any significant increase in the value of his investments in less than a year. | The technical analyst believes in making a quick buck. He snuffles his investments quite often and foresees changes in stock prices. |
| 3 | He considers total gain from equity investment which consists of current yield by way of dividends and long-term gains by way of capital appreciation. | He does not distinguish between current income and capital gains. He is interested in short-term profits. |
| 4 | He forecast stock prices on the basis of economic, industry and company statistics. The principal decision variables take the form of earnings and dividends. He makes a judgement of the stock's value with a risk-return. | He forecasts security prices by studying patterns of supply of and demand for securities. Technical analysis is study of stock exchange information. |
| 5 | He uses tools of financial analysis and statistical forecasting techniques. | He uses mainly changes of financial variables besides some quantitative tools. |

14.3.3 Advantages of Technical Analysis

The advantages of applying technical analysis to the markets are:

- It is applicable across all markets, instruments, and time frames, where price patterns, oscillators and overlay indicators are all treated in exactly the same manner. No new learning is required in order to trade new markets or time frames, unlike in fundamental analysis where the analyst must be conversant with the specifics of each stock or market.

- There is no need to study the fundamentals of the markets traded or analysed in order to apply technical analysis, since technical analysts believe that all information that impacts or potentially may impact the stock or market is already reflected in the price on the charts.
- Technical analysis provides a clear visual representation of the behaviour of the markets, unlike in fundamental analysis where most of the data is in numerical form.
- It provides timely and precise entry and exit price levels, preceded by technical signals indicating potential bullishness or bearishness. It also has the ability to pinpoint potential time of entry via time projection techniques not available to fundamentalists. Fundamental analysis does not provide the exact price or time of entry.
- It makes the gauging of market risk much easier to visualize. Volatility is more obvious on the charts than it is in numerical form.
- The concerted effort of market participants acting on significantly clear and obvious price triggers in the markets helps create the reaction required for a more reliable trade. This is the consequence of the self-fulfilling prophecy.

14.3.4 Challenges of Technical Analysis

Despite the assertions of technical analysis, this analysis is not a sure-fire method. The various limitations of technical were pointed out by its critics as given under:

- **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, fundamentalists argue that charting techniques are no different from palmistry.
- **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.

- **Unreliable Changes:** Changes in market behaviour observed and studied by technical analysts may not always be reliable owing to ignorance or intelligence or manipulative tendencies of some participants.

A false piece of information or wrong judgement may result in trade at a lower than market price. If the technicians fail to wait for confirmation, they incur losses.

With actively traded stocks, the prices may be the result of battle of wits and not the intrinsic value. In the game of making money, two knowledgeable persons may engage in buying and selling with the hope that everyone would make money at the expense of the others. In this game, many may lose, if they are not cleverer and luckier.

- **Unpredictable Changes:** Technicians expect changes to take place in a known and gradual fashion.
 - a) **History does not repeat itself:** One of the major limitations of technical analysis is that the entire data is based on the past. It is presumed that future resembles the past. There is no guarantee that history repeats itself. Systems become more sophisticated and people become more mature, effecting a different pattern of behaviour. Further, unexpected events like a change of the government, or a violent agitation or a natural calamity may produce a different pattern of behaviour. This contingency is not taken into account in making projections.
 - b) **No gradual shifts:** It is presumed that shifts in supply and demand occur gradually rather than instantaneously. Since these shifts are expected to continue as the price gradually reacts to new or other factors, the price change pattern is extrapolated to predict further price changes. However, economists asserted that this is a wrong proposition. The random walk

theory has shaken the conceptual foundation of technical analysis. They believe that securities price changes are a series of random numbers, which occur in reaction to the random arrival of news.

- **Less Precise Tools:** The greatest limitation of technical analysis is perhaps the mechanical precision it gives to the entire exercise of investment in equity share,). However, the tools are subject to errors, breakdown and misinterpretation.
- **False Signals can Occur:** Technical analysis is a signalling device. Like a thermometer, it may give a false indication when there is no alarm, but when there is cause for alarm, the signal will almost invariably be flashed.

Hence, it could be concluded that technical analysis is essentially an imperfect science and an art. It helps those who have good skills, of course, not always.

14.4 TOOLS / INDICATORS FOR TECHNICAL ANALYSIS

Following are some of the trading rules that are the major tools for technical analysis:

- **Trading Rules:** Contrary-opinion or trading against crowd

Many analysts rely on rules developed from the premise that the majority of investors are wrong as the market approaches peaks and troughs. Technicians try to determine whether investors are strongly bullish or bearish and then trade in the opposite direction.

Under this popular trading strategy technical analysts follow certain technical indicators:

- ❖ *Mutual fund cash positions:* Mutual funds assumed to act incorrectly before a market turning point. Low liquidity or low cash positions with mutual funds imply funds fully invested (bullish) and market is near or at peak. On the other hand high liquidity implies funds are bearish and thus considered a good time to buy.
- ❖ *Credit balances in brokerage accounts:* Credit balances in the brokerage

account increases when investors sell stocks and leave the proceeds for future investments. Technical analysts look for the build-up of credit balances as a bullish indicator as the investors expect to reinvest the money in the short term. On the other hand a lower credit balance is an indicator of bearish indicator as it suggests lower purchasing power or a sell signal as the market approaches a peak.

- ❖ *Investment advisory opinions:* If a large proportion of investment advisory services gives an indication of sell signals and are bearish with respect to future market movement, the technical analysts considers this as the approach of a bull market signal in the near future.
- ❖ *Ratio of trading volume:* The ratio of trading volume is considered a measure of speculative activity when the market is in the boom phase or an over-bought phase. Recently rather than its absolute value of high or low the direction of volume ratio is considered as better proxy for market movement.
- ❖ *Put-Call Ratio:* A higher put/call ratio indicates a pervasive bearish attitude which technicians consider a bullish indicator.
- ❖ *Future traders bullish on stock exchange futures:* As per the contrary investment strategy when the 70% percent of speculators are bullish the contrary opinion technicians say it is bearish market and on the opposite when this declines to 30% it becomes a bullish signal
- ❖ *Confidence index:* Ratio of average yield on top 10 grade corporate bonds divided by the yield on Stock markets' average of 40 bonds. This ratio is positively related to the contrary investment opinion strategy i.e., if it shows a high value then it indicates a bullish sign and if it is low it gives the bearish sign.
- ❖ *T-Bill-Eurodollar yield spread:* It measures the investor's confidence among alternative economic assets. If it shows a declining trend, the stock market experiences a trough shortly.

- ❖ *Debit balances in margin/brokerage accounts:* An increase in debit balances implies buying and it is considered a bullish sign while decline in debt balance would indicate selling by the investors and would be a bearish indicator. It indicates investor's confidence in the market to invest while borrowing money.
- ❖ *Williams's percent range (Williams %R):* This technical indicator was named after it was developed by Larry Williams. This attempts to measure overbought and oversold market conditions with the value of %R falls between a value of 100 and 0. The trading rule for this indicator follows a simple approach: If value of %R=20%, then it indicates overbought market and when the value of %R =80% the market is considered as oversold.

14.5 METHODS OF TECHNICAL ANALYSIS

Several methods or instruments that are commonly used by technical analysts for determining the future movement of stock prices are as follows:

a) Charting the Market

Chartists use bar charts, candlestick, or point and figure charts to look for patterns which may indicate future price movements. They also analyze volume and other psychological indicators (breadth, % of bulls vs % of bears, put/call ratio, etc.). Strict chartists don't care about fundamentals at all.

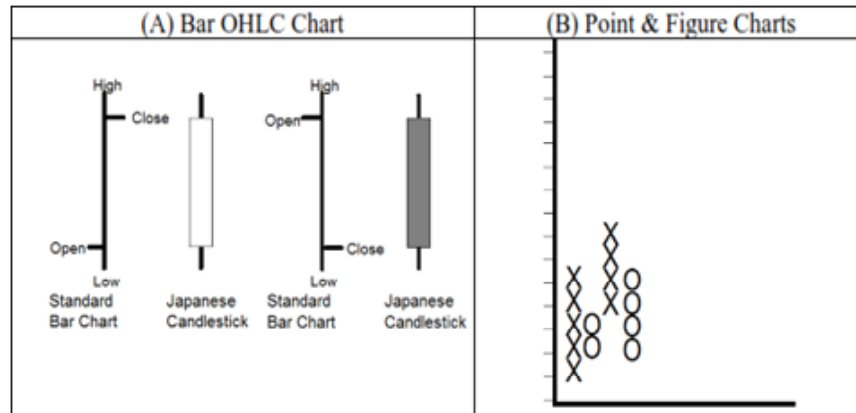


Figure 14.1 : Bar OHLC Chart and Point & Figure Charts

- i) *Drawing Bar (OHLC) Charts:* In a open high low close (OHLC) chart each bar is composed of 4 elements: Open, High, Low, Close. Note that the candlestick body is empty (white) on up days, and filled (some color) on down days.
- ii) *Drawing Point & Figure Charts:* Point and figure charts are independent of time. An X represents an up move. An O represents a down move. The Box Size is the number of points needed to make an X or O. The Reversal is the price change needed to recognize a change in direction. Typically, P&F charts use a 1-point box and a 3-point reversal.

b) Trends, Indicators & Patterns

There are, literally, hundreds of technical indicators used to generate buy and sell signals, but we will discuss here some of the more popular and widely used technical indicators.

- i) *Trend Lines:* A trend line is a straight line that connects two or more price points and then extends into the future to act as a line of support or resistance. An uptrend line has a positive slope and is formed by connecting two or more low points. The second low must be higher than the first for the line to have a positive slope. Uptrend lines act as support and indicate that net-demand (demand less supply) is increasing even as the price rises.

A rising price combined with increasing demand is very bullish and shows a strong determination on the part of the buyers. As long as prices remain above the trend line, the uptrend is considered solid and intact. A break below the uptrend line indicates that net-demand has weakened and a change in trend could be imminent.

A downtrend line has (Decline Line) a negative slope and is formed by connecting two or more high points. The second high must be lower than the first for the line to have a negative slope.

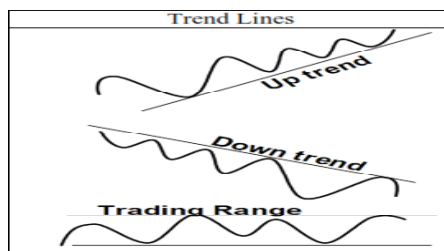


Figure 14.2 : Trend Lines

Downtrend lines act as resistance, and indicate that net-supply (supply less demand) is increasing even as the price declines. A declining price combined with increasing supply is very bearish and shows the strong resolve of the sellers. As long as prices remain below the downtrend line, the downtrend is considered solid and intact. A break above the downtrend line indicates that net-supply is decreasing and a change of trend could be imminent.

- ii) *Resistance Level:* Resistance is the price level at which selling is thought to be strong enough to prevent the price from rising further. The logic dictates that as the price advances towards resistance, sellers become more inclined to sell and buyers become less inclined to buy. By the time the price reaches the resistance level, it is believed that supply will overcome demand and prevent the price from rising above resistance. Resistance does not always hold and a break above resistance signals that the bulls have won out over the bears. A break above resistance

shows a new willingness to buy and/or a lack of incentive to sell. Resistance breaks and new highs indicate buyers have increased their expectations and are willing to buy at even higher prices. In addition, sellers could not be coerced into selling until prices rise above resistance or above the previous high. Once resistance is broken, another resistance level will have to be established at a higher level. Resistance levels are usually above the current price, but it is not uncommon for a security to trade at or near resistance. In addition, price movements can be volatile and rise above resistance briefly. Sometimes it does not seem logical to consider a resistance level broken if the price closes 1/8 above the established resistance level. For this reason, some traders and investors establish resistance zones.

- iii) *Support and Resistance*: Support and resistance lines indicate likely ends of trends. Resistance results from the inability to surpass prior highs. Support results from the inability to break below to prior lows. With continuation of trading gradually the support becomes resistance, and vice versa.

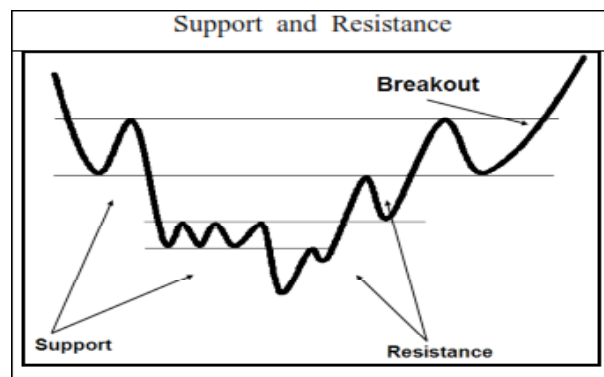


Figure 14.3 : Support and Resistance

- iv) *Relative Strength Index (RSI)*: The Relative Strength Index (RSI) is developed by J. Welles Wilder in his 1978 book entitled “**New Concepts in Technical Trading Systems**” as a price momentum oscillator to gauge overbought/oversold levels. Initially he recommended using a 14-day RSI,

but now a days the 9-day and 25-day RSI have also gained popularity. RSI is a rescaled measure of the ratio of average price changes on up days to average price changes on down days.

The most important thing to understand about RSI is that a level above 70 indicates a stock is overbought, and a level below 30 indicates that it is oversold (it can range from 0 to 100).

In mathematical terms: $RSI = 100 - \frac{100}{(1+RS)}$

where, $RS = \text{Average Upward Price Move} / \text{Average Downward Price Move}$.

Thus the RS is calculated as the ratio of two exponentially smoothed moving averages, AG/AL. AG is the average price gain over some period and AL is the average price dropover some the same period. Since a stocks can remain overbought or oversold for long periods of time, so RSI alone isn't always a great timing tool.

c) *Simple Moving Averages*

A moving average is simply the average price (usually the closing price) over the last N periods. They are used to smooth out fluctuations of less than N periods. For instance, in a 10-day moving average, the last 10 closing prices are added together and then divided by 10.

d) *Price Patterns*

Technicians look for many patterns in the time series of prices. These patterns are reputed to provide information regarding the size and timing of subsequent price moves. But it is worth to remember that the efficient market hypothesis (EMH) says these patterns are illusions, and have no real meaning. In fact, they can be seen in a randomly generated price series.

- i) *Head and Shoulders (H&S)*: This formation is characterized by two small peaks on either side of a larger peak. This is a reversal pattern, meaning that it signifies a change in the trend.

- ii) *Double Tops and Bottoms*: These formations are similar to the H&S formations, but there is no head. These are reversal patterns with the same measuring implications as the H&S.
- iii) *Rounded Tops & Bottoms*: Rounding formations are characterized by a slow reversal of trend.
- iv) *Triangles*: Triangles are continuation formations in three flavors, such as, ascending, descending and symmetrical. Typically, triangles should break out about half to three quarters of the way through the formation.
- v) *Broadening Formations*: These formations are like reverse triangles. These formations usually signal a reversal of the trend.

Following table gives a graphical representation of above mentioned trend patterns.

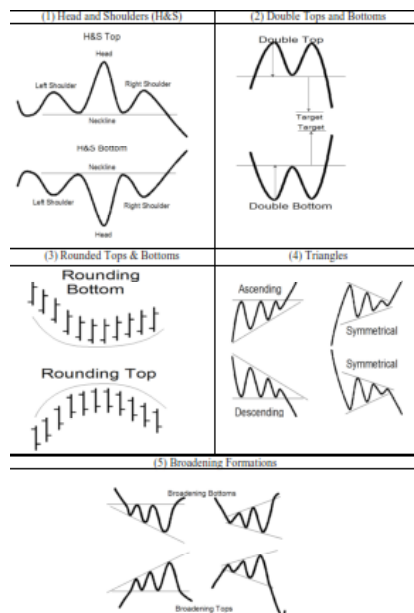


Figure 14.4 Different types of patterns in the Time Series of Prices

e) *Moving Average Convergence / Divergence*

Moving average convergence/divergence (MACD) was developed by

Gerald Appel as a way to keep track of a moving average crossover system. Appel defined MACD as the difference between a 12-day and 26-day moving average. A 9-day moving average of this difference is used to generate signals. When this signal line goes from negative to positive, a buy signal is generated and when it goes from positive to negative, a sell signal is generated. MACD is best used in choppy (trend-less) markets, and is subject to whipsaws (in and out rapidly with little or no profit).

Mathematically, $MACD = (\text{Shorter term moving average}) - (\text{Longer term moving average})$

f) *On Balance Volume*

On Balance Volume (OBV) was developed by Joseph Granville, one of the most famous technicians of the 1960's and 1970's. OBV is calculated by adding volume on up days, and subtracting volume on down days as Granville believed that "volume leads price." To use OBV, you generally look for OBV to show a change in trend (a divergence from the price trend). If the stock is in an uptrend, but OBV turns down, that is a signal that the price trend may soon reverse.

g) *Bollinger Bands*

Bollinger bands were created by John Bollinger (former FNN technical analyst, and regular guest on CNBC). Bollinger Bands are based on a moving average of the closing price. They are two standard deviations above and below the moving average. A buy signal is given when the stock price closes below the lower band, and a sell signal is given when the stock price closes above the upper band. When the bands contract, that is, a signal that a big move is coming, but it is impossible to say if it will be up or down. The buy signals are far more reliable than the sell signals.

14.6 SUMMARY

Technical analysis is the analysis of share prices and the traded volume to predict the near future price movement. It is 90% psychological and 10%

logical, which means market is driven by psychology of investor in 90% of the time and, it is 10% of the times when logical factors affect the market. Technical analysis is used for different purposes-predicting overall market trend, as well as making a prediction about individual shares. There are various methods of technical analysis such as Charts, trends, indicators, patterns and so on.

14.7 GLOSSARY

- **Technical Analysis:** Technical analysis is the forecasting technique that utilise historical share price data.
- **Trend:** Trend is the direction of movement of share prices in the market. When the prices move upwards, it is rising trend or uptrend. When the prices move downwards, we have a falling trend or downtrend.
- **Support and Resistance:** Support and Resistance are price levels at which the downtrend or uptrend in price movements is reversed.

14.8 SELF ASSESSMENT QUESTIONS

1. What is technical analysis? Mention its assumptions.

2. Define the term trend lines.

14.9 LESSON END EXERCISES

1. Define technical analysis. Describe various methods of technical analysis.
2. Explain the merits and demerits of technical analysis as a tool of security analysis.

14.10 SUGGESTED READINGS

1. Chandra Prasanna, Investment Analysis and Portfolio Management, McGraw Hill.
2. Francis and Archer, Portfolio Management, Prentice Hall of India.

14.11 REFERENCES

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DOW THEORY AND RANDOM WALK HYPOTHESIS**STRUCTURE**

- 15.1 Introduction
- 15.2 Objectives
- 15.3 Dow Theory
- 15.4 Random Walk Hypothesis
- 15.5 Forms of Market Efficiency
 - 15.5.1 Empirical Tests of Weak Form Efficiency
 - 15.5.2 Empirical Tests of Semi-strong Form Efficiency
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15.1 INTRODUCTION

Stock prices are determined by a number of factors such as fundamental factors, technical factors and psychological factors. The behaviour of stock prices is studied with the help of different methods such as fundamental analysis and technical analysis. Fundamental analysis seeks to evaluate the intrinsic value of securities by studying the fundamental factors affecting the performance of the economy, industry and companies. Technical analysis believes that the past behaviour of stock prices gives an indication of the future behaviour. It tries to study the patterns in stock price behaviour through charts and predict the future movement in prices. There is a third theory on stock price behaviour which questions the assumptions of technical analysis. The basic assumption in technical analysis is that stock price movement is quite orderly and not random. The new theory questions this assumption. From the results of several empirical studies on stock price movements, the advocates of the new theory assert that share price movements are random. The new theory came to be known as Random Walk Theory because of its principal contention that share price movements represent a random walk rather than an orderly movement.

15.2 OBJECTIVES

After going through this lesson, you will be able to understand:

- Dow Theory
- Random Walk Theory
- Difference between fundamental analysis, technical analysis and efficient market hypothesis

15.3 DOW THEORY

Whatever is generally being accepted today as technical analysis has its roots in the Dow theory. The theory is so called because it was formulated by Charles H. Dow who was the editor of the Wall Street Journal in U.S.A. In

fact, the theory was presented in a series of editorials in the Wall Street Journal during 1900 - 1902 .

Charles Dow formulated a hypothesis that the stock market does not move on a random basis but is influenced by three distinct cyclical trends that guide its direction. According to Dow theory, the market has three movements and these movements are simultaneous in nature. These movements are the primary movements, secondary reactions and minor movements.

The primary movement is the long range cycle that carries the entire market up or down. This is the long-term trend in the market. The secondary reactions act as a restraining force on the primary movement. These are in the opposite direction to the primary movement and last only for a short while. These are also known as corrections. For example, when the market is moving upwards continuously, this upward movement will be interrupted by downward movements of short durations. These are the secondary reactions. The third movement in the market is the minor movements which are the day-to-day fluctuations in the market. The minor movements are not significant and have no analytical value as they are of very short duration. The three movements of the market have been compared to the tides, the waves and the ripples in the ocean.

According to Dow theory, the price movements in the market can be identified by means of a line chart. In this chart, the closing prices of shares or the closing values of the market index may be plotted against the corresponding trading days. The chart would help in identifying the primary and secondary movements. Figure 15.1 shows a line chart of the closing values of the market index. The primary trend of the market is upwards but there are secondary reactions in the opposite direction. Among the three movements in the market, the primary movement is considered to be the most important.

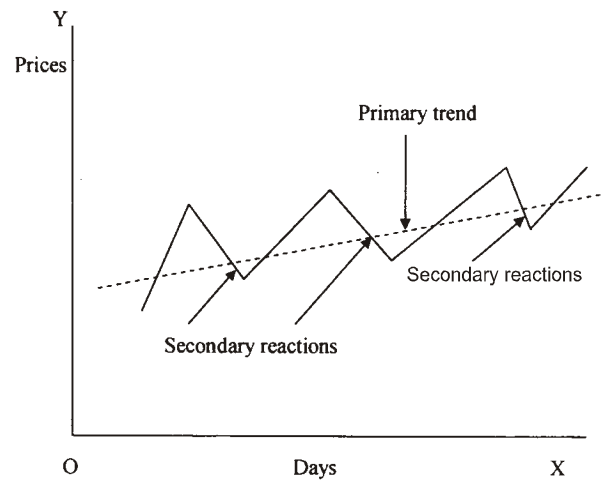


Figure 15.1 : Primary Trend and Secondary Reactions

The primary trend is said to have three phases in it, each of which would be interrupted by a counter move or secondary reaction which would retrace about 33 - 66 per cent of the earlier rise or fall.

a) *Bullish Trend*

During a bull market (upward moving market), in the first phase the prices would advance with the revival of confidence in the future of business. The future prospects of business in general would be perceived to be promising. This will prompt investors to buy shares of companies. During the second phase, prices would advance due to the improvements in corporate earnings. In the third phase, prices advance due to inflation and speculation. Thus, during the bull market, the line chart would exhibit the formation of three peaks. Each peak would be followed by a bottom formed by the secondary reaction. Each peak would be higher than the previous peak, each successive bottom would be higher than the previous bottom. According to Dow theory, the formation of higher bottoms and higher tops indicates a bullish trend. The three phases of a bull market are depicted in Figure 15.2.

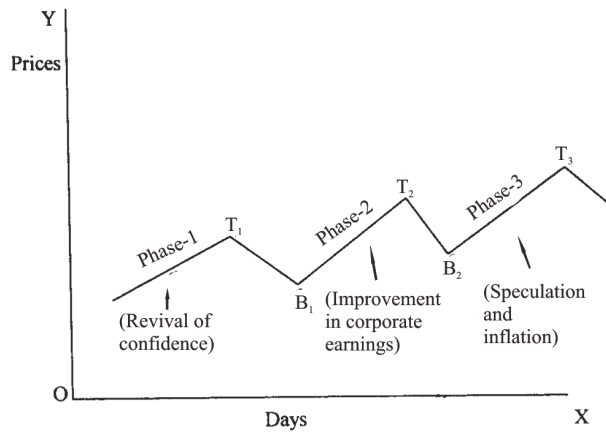


Figure 15.2 : Three Phases of a Bull Market

b) Bearish Trend

The bear market is also characterized by three phases. In the first phase, prices begin to fall due to abandonment of hopes. Investors begin to sell their shares. In the second phase, companies start reporting lower profits and lower dividends. This causes further fall in prices due to increased selling pressure. In the final phase, prices fall still further due to distress selling. A bearish market would be indicated by the formation of lower tops and lower bottoms. The three phases of a bear market are depicted in Figure 15.3.

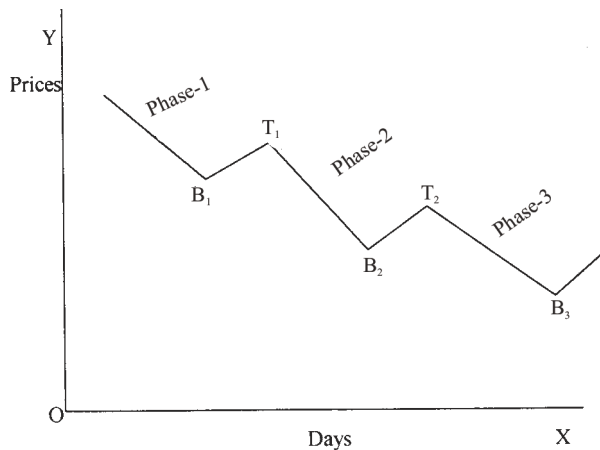


Figure 15.3 : Three Phases of a Bear Market

The Dow theory laid emphasis on volume of transactions also. According to the theory, volume should expand along the main trend. This means that if the main trend is bullish, the volume should increase with the rise in prices and fall during the intermediate reactions. In a bearish market when prices are falling, the volume should increase with the fall in prices and be smaller during the intermediate reactions.

The theory also makes certain assumptions which have been referred to as the hypotheses of the theory.

The **first hypothesis** states that the primary trend cannot be manipulated. It means that no single individual or institution or group of individuals and institutions can exert influence on the major trend of the market. However, manipulation is possible in the day-to-day or short-term movements in the market. The **second hypothesis** states that the averages discount everything. What it means is that the daily prices reflect the aggregate judgment and emotions of all stock market participants. In arriving at the price of a stock the market discounts (that is, takes into account) everything known and predictable about the stock that is likely to affect the demand and supply position of the stock. The **third hypothesis** states that the theory is not infallible. The theory is concerned with the trend of the market and has no forecasting value as regards the duration or the likely price targets for the peak or bottom of the bull and bear markets.

15.4 RANDOM WALK THEORY

Stock price behaviour is explained by the theory in the following manner. A change occurs in the price of a stock only because of certain changes in the economy, industry or company. Information about these changes alters the stock prices immediately and the stock moves to a new level, either upwards or downwards, depending on the type of information. This rapid shift to a new equilibrium level whenever new information is received, is a recognition of the fact that all information which is known is fully reflected in the price of the stock. Further change in the price of the stock will occur only as a result

of some other new piece of information which was not available earlier. Thus, according to this theory, changes in stock prices show independent behaviour and are dependent on the new pieces of information that are received but within themselves are independent of each other. Each price change is independent of other price changes because each change is caused by a new piece of information.

The basic premise in random walk theory is that the information on changes in the economy, industry and company performance is immediately and fully spread so that all investors have full knowledge of the information. There is an instant adjustment in stock prices either upwards or downwards. Thus, the current stock price fully reflects all available information on the stock. Therefore, the price of a security two days ago can in no way help in speculating the price two days later. The price of each day is independent. It may be unchanged, higher or lower from the previous price, but that depends on new pieces of information being received each day.

The random walk theory presupposes that the stock markets are so efficient and competitive that there is immediate price adjustment. This is the result of good communication system through which information can be spread almost anywhere in the country instantaneously. Thus, the random walk theory is based on the hypothesis that the stock markets are efficient. Hence, this theory later came to be known as the efficient market hypothesis (EMH) or the efficient market model.

The Efficient Market Hypothesis

This hypothesis states that the capital market is efficient in processing information. An efficient capital market is one in which security prices equal their intrinsic values at all times, and where most securities are correctly priced. The concept of an efficient capital market has been one of the dominant themes in academic literature since the 1960s.

According to Elton and Gruber, "when someone refers to efficient capital markets, they mean that security prices fully reflect all available information".

According to Eugene Fama, in an efficient market, prices fully reflect all available information. The prices of securities observed at any time are based on correct evaluation of all information available at that time.

The efficient market model is actually concerned with the speed with which information is incorporated into security prices. The technicians believe that past price sequence contains information about the future price movements because they believe that information is slowly incorporated in security prices. This gives technicians an opportunity to earn excess returns by studying the patterns in price movements and trading accordingly.

Fundamentalists believe that it may take several days or weeks before investors can fully assess the impact of new information. As a consequence, the price may be volatile for a number of days before it adjusts to a new level. This provides an opportunity to the analyst who has superior analytical skills to earn excess returns.

The efficient market theory holds the view that in an efficient market, new information is processed and evaluated as it arrives and prices instantaneously adjust to new and correct levels. Consequently, an investor cannot consistently earn excess returns by undertaking fundamental analysis or technical analysis.

15.5 FORMS OF MARKET EFFICIENCY

The capital market is considered to be efficient in three different forms: the weak form, semi-strong form and the strong form. Thus, the efficient market hypothesis has been subdivided into three forms, each dealing with a different type of information. The weak form deals with the information regarding the past sequence of security price movements, the semi-strong form deals with the publicly available information, while the strong form deals with all information, both public and private (or inside).

The different forms of efficient market hypothesis have been tested through several empirical studies. The tests of the weak form hypothesis are essentially tests of whether all information contained in historical prices of securities is

fully reflected in current prices. Semi-strong form tests of the efficient market hypothesis are tests of whether publicly available information is fully reflected in current stock prices. Finally, strong form tests of the efficient market hypothesis are tests of whether all information, both public and private (or inside), is fully reflected in security prices and whether any type of investor is able to earn excess returns.

15.5.1 Empirical Tests of Weak Form Efficiency

The weak form of the efficient market hypothesis (EMH) says that the current prices of stocks already fully reflect all the information that is contained in the historical sequence of prices. The new price movements are completely random. They are produced by new pieces of information and are not related or dependent on past price movements. Therefore, there is no benefit in studying the historical sequence of prices to gain abnormal returns from trading in securities. This implies that technical analysis, which relies on charts of price movements in the past, is not a meaningful analysis for making abnormal trading profits.

The weak form of the efficient market hypothesis is thus a direct repudiation of technical analysis.

Two approaches have been used to test the weak form of the efficient market hypothesis. One approach looks for statistically significant patterns in security price changes. The alternative approach searches for profitable short-term trading rules.

a) Serial Correlation Test

Since the weak form EMH postulates independence between successive price changes, such independence or randomness in stock price movements can be tested by calculating the correlation between price changes in one period and changes for the same stock in another period. The correlation coefficient can take on a value ranging , from - 1 to 1; a positive number indicates a direct relation, a negative value implies an inverse relationship

and a value close to zero implies no relationship. Thus, if correlation coefficient is close to zero, the price changes can be considered to be serially independent.

b) Run Test

The run test is another test used to test the randomness in stock price movements. In this test, the absolute values of price changes are ignored, only the direction of change is considered. An increase in price is represented by + sign. The decrease is represented by - sign. When there is no change in prices, it is represented by '0'. A consecutive sequence of the same sign is considered as a run. For example, the sequence + + + - - has two runs. In other words, a change of sign indicates a new run. The sequence - - - + + 0 - - - + + + + has five runs; a run of three - 's, followed by a run of two + 's, another run of one 0, a fourth run of three - 's and a fifth run of four + 's. In a run test, the actual number of runs observed in a series of stock price movements is compared with the number of runs in a randomly generated number series. If no significant differences are found, then the security price changes are considered to be random in nature.

c) Filter Tests

If stock price changes are random in nature, it would be extremely difficult to develop successful mechanical trading systems. Filter tests have been developed as direct tests of specific mechanical trading strategies to examine their validity and usefulness.

It is often believed that, as long as no new information enters the market, the price fluctuates randomly within two barriers-one lower, and the other higher-around the fair price. When new information comes into the market, a new equilibrium price will be determined. If the news is favourable, then the price should move up to a new equilibrium above the old price. Investors will know that this is occurring when the price breaks through the old barrier. If investors purchase at this point, they will benefit from the price increase to the new equilibrium level.

Likewise, if the news received is unfavourable, the price of the stock will decline to a lower equilibrium level. If investors sell the stock as it breaks the lower barrier, they will avoid much of the decline. Technicians set up trading strategies based on such patterns to earn excess returns. The strategy is called a filter rule. The filter rule is usually stated in the following way: Purchase the stock when it rises by x per cent from the previous low and sell it when it declines by x per cent from the subsequent high. The filters may range from 1 percent to 50 per cent or more. The alternative to this active trading strategy is the passive buy and hold strategy.

The returns generated by trading according to the filter rule are compared with the returns earned by an investor following the buy and hold strategy. If trading with filters results in superior returns that would suggest the existence of patterns in price movements and negate the weak form EMH.

d) Distribution Pattern

It is a rule of statistics that the distribution of random occurrences will conform to a normal distribution. Then, if price changes are random, their distribution should also be approximately normal. Therefore, the distribution of price changes can be studied to test the randomness or otherwise of stock price movements.

In the 1960s the efficient market theory was known as the **random walk theory**. The empirical studies regarding share price movements were testing whether prices followed a random walk.

Two articles by Roberts and Osborne, both published in 1959, stimulated a great deal of discussion of the new theory then called random walk theory.

Roberts' study compared the movements in the **Dow Jones Industrial Average** (an American stock market index) with the movement of a variable generated from a random walk process. He found that the random walk process produced patterns which were very similar to those of the Dow Jones index.

Osborne's study found a close resemblance between share price changes and the random movement of small particles suspended in a solution, which is known in Physics as the Brownian motion. Both the studies suggested that share price changes are random in nature and that past prices had no predictive value.

During the 1960s there was an enormous growth in serial correlation testing. None of these found any substantial linear dependence in price changes. Studies by Moore, Fama and Hagerman and Richmond are some of the early studies in this area. Moore found an average serial correlation coefficient of - 0.06 for price changes measured over weekly intervals. Fama's study tested the serial correlation for the thirty stocks comprising the Dow Jones industrial average for the five years prior to 1962. The average serial correlation coefficient was found to be 0.03. Both the coefficients were not statistically different from zero; thus both the studies supported the random walk theory.

Fama also used run tests to measure dependency. The results again supported the random walk theory. Many studies followed Moore's and Fama's work each of which used different databases. The results of these studies were much the same as those of Moore and Fama.

Hagerman and Richmond conducted similar studies on securities traded in the 'over-the-counter' market and found little serial correlation. Serial correlation tests of dependence have also been carried out in various other stock markets around the world. These have similarly revealed little or no serial correlation.

Much research has also been directed towards testing whether mechanical trading strategies are able to earn above average returns. Many studies have tested the filter rules for its ability to earn superior returns. Early American studies were those by Alexander, who originally advocated the filter strategy, and by Fama and Blume. There were similar studies in the United Kingdom by Dryden and in Australia by Praetz. All these studies have found that filter strategies did not achieve above average returns. Thus, the results of empirical

studies have been virtually unanimous in finding little or no statistical dependence and price patterns and this has corroborated the weak form efficient market hypothesis.

15.5.2 Empirical Tests of Semi-Strong Form Efficiency

The semi-strong form of the efficient market hypothesis says that current prices of stocks not only reflect all informational content of historical prices, but also reflect all publicly available information about the company being studied. Examples of publicly available information are-corporate annual reports, company announcements, press releases, announcements of forthcoming dividends, stock splits, etc. The semi-strong hypothesis maintains that as soon as the information becomes public the stock prices change and absorb the full information. In other words, stock prices instantaneously adjust to the information that is received.

The implication of semi-strong hypothesis is that fundamental analysts cannot make superior gains by undertaking fundamental analysis because stock prices adjust to new pieces of information as soon as they are received. There is no time gap in which a fundamental analyst can trade for superior gains. Thus, the semi-strong hypothesis repudiates fundamental analysis.

Semi-strong form tests deal with whether or not security prices fully reflect all publicly available information. These tests attempt to establish whether share prices react precisely and quickly to new items of information. If prices do not react quickly and adequately, then an opportunity exists for investors or analysts to earn excess returns by using this information. Therefore, these tests also attempt to find if analysts are able to earn superior returns by using publicly available information.

There is an enormous amount and variety of public information. Semi-strong form tests have been performed with respect to many different types of information. Much of the methodology used in semi-strong form tests has been introduced by Fama, Fisher, Jensen and Roll. Their study was the first of the studies that were directly concerned with the testing of the semi-strong

form of EMH. Subsequent to their study, a number of refinements have been developed in the test procedure. The general methodology followed in these studies has been to take an economic event and measure its impact on the share price. The impact is measured by taking the difference between the actual return and expected return on a security. The expected return on a security is generally estimated by using the market model (or single index model) suggested by William Sharpe. The following model is used for estimating expected returns :

$$R_i = a_i + b_i R_m + e_i$$

where

R_i = Return on security i.

R_m = Return on a market index.

a_i and b_i = Constants.

e_i = Random error.

This analysis is known as Residual analysis. The positive difference between the actual return and the expected return represents the excess return earned on a security. If the excess return is close to zero, it implies that the price reaction following the public announcement of information is immediate and the price adjusts to a new level almost immediately. Thus, the lack of excess returns would validate the semi-strong form EMH.

Major studies on the impact of capitalisation issues such as stock splits and stock dividends have been conducted in the United States by Fama, Fisher, Jensen and Roll and Johnson, in Canada by Finn, and in the United Kingdom by Firth. All these studies found that the market adjusted share prices instantaneously and accurately for the new information. Both Pettit and Watts have investigated the market's reaction to dividend announcements. They both found that all the price adjustment was over immediately after the announcement and thus, the market had acted quickly in evaluating the

information.

Other items of information whose impact on share prices have been tested include announcements of purchase and sale of large blocks of shares of a company, takeovers, annual earnings of companies, quarterly earnings, accounting procedure changes, and earnings estimates made by company officials. All these studies which made use of the Residual analysis approach, showed the market to be relatively efficient.

Ball and Brown tested the stock market's ability to absorb the informational content of reported annual earnings per share information. They found that companies with good earnings report experienced price increase in stock, while companies with bad earnings report experienced decline in stock prices. But surprisingly, about 85 per cent of the informational content of the earnings announcements was reflected in stock price movements prior to the release of the actual earnings figure. The market seems to adjust to new information rapidly with much of the impact taking place in anticipation of the announcement.

Joy, Litzenberger and McEnally tested the impact of quarterly earnings announcements on the stock price adjustment mechanism. Some of their results, however, contradicted the semi-strong form of the efficient market hypothesis. They found that the favourable information contained in published quarterly earnings reports was not always instantaneously adjusted in stock prices. This may suggest that the market does not adjust share prices equally well for all types of information.

It may be stated that a great majority of the semi- strong efficiency tests provide strong empirical support for the hypothesis; however, there have been some contradictory results too. Most of the reported results show that stock prices do adjust rapidly to announcements of new information and that investors are typically unable to utilize this information to earn consistently above average returns.

15.5.3 Tests of Strong Form Efficiency

The strong form hypothesis represents the extreme case of market efficiency. The strong form of the efficient market hypothesis maintains that the current security prices reflect all information both publicly available information as well as private or inside information. This implies that no information, whether public or inside, can be used to earn superior returns consistently.

The directors of companies and other persons occupying senior management positions within companies have access to much information that is not available to the general public. This is known as inside information. Mutual funds and other professional analysts who have large research facilities may gather much private information regarding different stocks on their own. These are private information not available to the investing public at large.

The strong form efficiency tests involve two types of tests. The first type of tests attempt to find whether those who have access to inside information have been able to utilize profitably such inside information to earn excess returns. The second type of tests examine the performance of mutual funds and the recommendations of investment analysts to see if these have succeeded in achieving superior returns with the use of private information generated by them.

Jaffe, Lorie and Niederhoffer studied the profitability of insider trading (i.e. the investment activities of people who had inside information on companies). They found that insiders earned returns in excess of expected returns. Although there have been only a few empirical studies on the profitability of using inside information, the results show, as expected, that excess returns can be made. These results indicate that markets are probably not efficient in the strong form.

Many studies have been carried out regarding the performance of American mutual funds using fairly sophisticated evaluation models. All the major

studies have found that mutual funds did no better than randomly constructed portfolios of similar risk. Firth studied the performance of Unit Trusts in the United Kingdom during the period 1965 - 75. He also found that unit trusts did not outperform the market index for their given levels of risk. A small research has been conducted into the profitability of investment recommendations by investment analysts. Such studies suggest that few analysts or firms of advisers can claim above average success with their forecasts.

The results of research on strong form EMH may be summarized as follows:

- I. Inside information can be used to earn above average returns.
2. Mutual funds and investment analysts have not been able to earn superior returns by using their private information.

In conclusion, it may be stated that the strong form hypothesis is invalid as regards inside information, but valid as regards private information other than inside information.

15.6 EMH VS FUNDAMENTAL AND TECHNICAL ANALYSIS

There are three broad theories concerning stock price movements. These are the **fundamental analysis, technical analysis and efficient market hypothesis**. Fundamental analysts believe that by analysing key economic and financial variables they can estimate the intrinsic worth of a security and then determine what investment action to take. Fundamental analysis seeks to identify underpriced securities and overpriced securities. Their investment strategy consists in buying underpriced securities and selling overpriced securities, thereby earning superior returns.

A technical analyst maintains that fundamental analysis is unnecessary. He believes that history repeats itself. Hence, he tries to predict future movements in share prices by studying the historical patterns in share price movements. The efficient market hypothesis is expressed in three forms. The weak form of the EMH directly contradicts technical analysis by

maintaining that past prices and past price changes cannot be used to forecast future price changes because successive price changes are independent of each other. The semi-strong form of the EMH contradicts fundamental analysis to some extent by claiming that the market is efficient in the dissemination and processing of information and hence, publicly available information cannot be used consistently to earn superior investment returns.

The strong form of the EMH maintains that not only is publicly available information useless to the investor or analyst but all information is useless.

Even though the EMH repudiates both fundamental analysis and technical analysis, the market is efficient precisely because of the organized and systematic efforts of thousands of analysts undertaking fundamental and technical analysis. Thus, the paradox of efficient market hypothesis is that both fundamental and technical analyses are required to make the market efficient and thereby validating the hypothesis.

15.7 SUMMARY

Charles Dow formulated a hypothesis that the stock market does not move on a random basis but is influenced by three distinct cyclical trends that guide its direction. These movements are the primary movements, secondary reactions and minor movements. The primary movement is the long range cycle that carries the entire market up or down. This is the long-term trend in the market. The secondary reactions act as a restraining force on the primary movement. The third movement in the market is the minor movements which are the day-to-day fluctuations in the market. The three movements of the market have been compared to the tides, the waves and the ripples in the ocean.

According to the random walk theory, changes in stock prices show independent behaviour and are dependent on the new pieces of information that are received but within themselves are independent of each other. Each price change is independent of other price changes because each

change is caused by a new piece of information.

The basic premise in random walk theory is that the information on changes in the economy, industry and company performance is immediately and fully spread so that all investors have full knowledge of the information. There is an instant adjustment in stock prices either upwards or downwards.

The random walk theory presupposes that the stock markets are so efficient and competitive that there is immediate price adjustment. This is the result of good communication system through which information can be spread almost anywhere in the country instantaneously. Thus, the random walk theory is based on the hypothesis that the stock markets are efficient. Hence, this theory later came to be known as the efficient market hypothesis (EMH) or the efficient market model.

15.8 GLOSSARY

- **Bull Market:** A bull market is the condition of a financial market of a group of securities in which prices are rising or are expected to rise.
- **Bear Market:** The term bear market is opposite of bull market. In bear market, prices of securities are falling.

15.9 SELF ASSESSMENT QUESTIONS

1. What is Random Walk Theory?

2. Write short note on Run test.

15.10 LESSON END EXERCISES

1. “When someone refers to efficient capital markets, they mean that security prices fully reflect all available information.” Discuss
2. Explain the strong form of efficient market hypothesis. How far is it validated?
3. Compare and contrast efficient market hypothesis with fundamental and technical analyses.

15.11 SUGGESTED READINGS

1. Francis and Archer, Portfolio Management, Prentice Hall of India.
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15.12 REFERENCES

1. Elton, Edwin J., and Martin J. Gruber, 1994, Modern Portfolio Theory and Investment Analysis, 4th ed., John Wiley & Sons, New York.
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INTRODUCTION TO PORTFOLIO MANAGEMENT

STRUCTURE

- 16.1 Introduction
- 16.2 Objectives
- 16.3 Meaning of Portfolio Management
- 16.4 Objectives of Portfolio Management
- 16.5 Need for Portfolio Management
- 16.6 Types of Portfolio Management
- 16.7 Model of Portfolio Management
- 16.8 Summary
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16.1 INTRODUCTION

Investment management has two general definitions. One relating to advisory services and the other relating to corporate finance.

In the first instance, a Financial Advisor or financial services company provides investment management by coordinating and overseeing a client's financial portfolio, for example, investments, budgets, accounts, insurance and taxes.

In Corporate Finance, investment management is the process of ensuring that a company's tangible and intangible assets are maintained, accounted for, and put to their highest and best use.

16.2 OBJECTIVES

After going through this lesson, you will be able to explain:

- Portfolio Management.
- Objectives of portfolio management.
- Types of portfolio management.

16.3 MEANING OF PORTFOLIO MANAGEMENT

- **Portfolio** - is a group of financial assets such as shares, stocks, bonds, debt instruments, mutual funds, cash equivalents, etc. A portfolio is planned to stabilize the risk of non-performance of various pools of investment.
- **Management** - is the organization and coordination of the activities of an enterprise in accordance with well-defined policies and in achievement of its pre-defined objectives.
- **Portfolio Management** - guides the investor in a method of selecting the best available securities that will provide the expected rate of return for any given degree of risk and also to mitigate (reduce) the risks. It is a strategic decision which is addressed by the top-level managers.

For Example, Consider that the investor Mr. Mohan has ₹ 1,00,000 and wants to invest his money in the financial market other than real estate investments. Here, the rational objective of the investor is to earn a considerable rate of return with less possible risk.

So, the ideal recommended portfolio for Mr. Mohan can be as follows,

Table 16.1 : Mr. Mohan Investment Portfolio

| S. No. | Investor's Portfolio | Investment | Percentage | Security | Returns |
|--------|-----------------------|------------|------------|----------|---------|
| 1. | Government Bonds | ₹25,000 | 25% | High | Low |
| 2. | Bank's Fixed Deposits | ₹15,000 | 15% | High | Average |
| 3. | Shares | ₹35,000 | 35% | Low | High |
| 4. | Mutual Funds | ₹25,000 | 25% | Average | Average |

16.4 OBJECTIVES OF PORTFOLIO MANAGEMENT

The objectives of portfolio management are applicable to all financial portfolios. These objectives, if considered, results in a proper analytical approach towards the growth of the portfolio. Furthermore, overall risk needs to be maintained at the acceptable level by developing a balanced and efficient portfolio. Finally, a good portfolio of growth stocks often satisfies all objectives of portfolio management. The main objectives of portfolio management in finance are as follows:-

- (i) **Security of Principal Investment:** Investment safety or minimization of risks is one of the most important objectives of portfolio management. Portfolio management not only involves keeping the investment intact but also contributes towards the growth of its purchasing power over the period. The motive of a financial portfolio management is to ensure that the investment is absolutely safe. Other factors such as income, growth, etc., are considered only after the safety of investment is ensured.
- (ii) **Consistency of Returns:** Portfolio management also ensures to provide the stability of returns by reinvesting the same earned returns in profitable and good portfolios. The portfolio helps to yield steady returns. The earned returns should compensate the opportunity cost of the funds invested.

- (iii) Capital Growth:** Portfolio management guarantees the growth of capital by reinvesting in growth securities or by the purchase of the growth securities. A portfolio shall appreciate in value, in order to safeguard the investor from any erosion in purchasing power due to inflation and other economic factors. A portfolio must consist of those investments, which tend to appreciate in real value after adjusting for inflation.
- (iv) Marketability:** Portfolio management ensures the flexibility to the investment portfolio. A portfolio consists of such investment, which can be marketed and traded. Suppose, if your portfolio contains too many unlisted or inactive shares, then there would be problems to do trading like switching from one investment to another. It is always recommended to invest only in those shares and securities which are listed on major stock exchanges, and also, which are actively traded.
- (v) Liquidity:** Portfolio management is planned in such a way that it facilitates to take maximum advantage of various good opportunities upcoming in the market. The portfolio should always ensure that there are enough funds available at short notice to take care of the investor's liquidity requirements.
- (vi) Diversification of Portfolio:** Portfolio management is purposely designed to reduce the risk of loss of capital and/or income by investing in different types of securities available in a wide range of industries. The investors shall be aware of the fact that there is no such thing as a zero risk investment. More over relatively low risk investment give correspondingly a lower return to their financial portfolio.
- (vii) Favorable Tax Status:** Portfolio management is planned in such a way to increase the effective yield an investor gets from his surplus invested funds. By minimizing the tax burden, yield can be effectively improved. A good portfolio should give a favorable tax shelter to the investors. The portfolio should be evaluated after considering income tax, capital gains tax, and other taxes.

16.5 NEED FOR PORTFOLIO MANAGEMENT

- Portfolio management presents the best investment plan to the individuals as per their income, budget, age and ability to undertake risks.
- Portfolio management minimizes the risks involved in investing and also increases the chance of making profits.
- Portfolio managers understand the client's financial needs and suggest the best and unique investment policy for them with minimum risks involved.
- Portfolio management enables the portfolio managers to provide customized investment solutions to clients as per their needs and requirements.

16.6 TYPES OF PORTFOLIO MANAGEMENT

Portfolio Management is classified as follows,

- (i) **Active Portfolio Management:** As the name suggests, in an active portfolio management service, the portfolio managers are actively involved in buying and selling of securities to ensure maximum profits to individuals.
- (ii) **Passive Portfolio Management:** In a passive portfolio management, the portfolio manager deals with a fixed portfolio designed to match the current market scenario.
- (iii) **Discretionary Portfolio Management Services:** In discretionary portfolio management services, an individual authorizes a portfolio manager to take care of his financial needs on his behalf. The individual issues money to the portfolio manager who in turn takes care of all his investment needs, paper work, documentation, filing and so on. In discretionary portfolio management, the portfolio manager has full rights to take decisions on his client's behalf.

- (iv) **Non-Discretionary Portfolio Management Services:** In non-discretionary portfolio management services, the portfolio manager can merely advise the client what is good and bad for him but the client reserves full right to take his own decisions.

16.7 MODEL OF PORTFOLIO MANAGEMENT

As has already been discussed that, Portfolio Management refers to the art of managing various financial products and assets to help an individual earn maximum revenues with minimum risks involved in the long run. Portfolio management helps an individual to decide where and how to invest his hard earned money for guaranteed returns in the future.

Let us now discuss the different Models of Portfolio Management.

- (i) **Capital Asset Pricing Model:** Capital Asset Pricing Model also abbreviated as CAPM was proposed by Jack Treynor, William Sharpe, John Lintner and Jan Mossin. When an asset needs to be added to an already well diversified portfolio, Capital Asset Pricing Model is used to calculate the asset's rate of profit or rate of return (ROI).

In Capital Asset Pricing Model, the asset responds only to:

- Market risks or non diversifiable risks often represented by beta;
- Expected return of the market; and
- Expected rate of return of an asset with no risks involved.

Where Non Diversifiable Risks are those risks which are similar to the entire range of assets and liabilities.

Capital Asset Pricing Model is used to determine the price of an individual security through security market line (SML) and how it is related to systematic risks.

where Security Market Line is nothing but the graphical representation of capital asset pricing model to determine the rate of return of an

asset sensitive to non diversifiable risk (Beta).

$$\text{SML} : E(R_i) = R_f + \beta_i[E(R_M) - R_f]$$

- (ii) **Arbitrage Pricing Theory:** Stephen Ross proposed the Arbitrage Pricing Theory in 1976. Arbitrage Pricing Theory highlights the relationship between an asset and several similar market risk factors.

According to Arbitrage Pricing Theory, the value of an asset is dependent on macro and company specific factors.

- (ii) **Modern Portfolio Theory:** Modern Portfolio Theory was introduced by Harry Markowitz. According to Modern Portfolio Theory, while designing a portfolio, the ratio of each asset must be chosen and combined carefully in a portfolio for maximum returns and minimum risks.

In Modern Portfolio Theory emphasis is not laid on a single asset in a portfolio, but how each asset changes in relation to the other asset in the portfolio with reference to fluctuations in the price. Modern Portfolio theory proposes that a portfolio manager must carefully choose various assets while designing a portfolio for maximum guaranteed returns in the future.

- (iii) **Value at Risk Model:** Value at Risk Model was proposed to calculate the risk involved in financial market. Financial markets are characterized by risks and uncertainty over the returns earned in future on various investment products. Market conditions can fluctuate anytime giving rise to major crisis.

The potential risk involved and the potential loss in value of a portfolio over a certain period of time is defined as value at risk model. Value at Risk model is used by financial experts to estimate the risk involved in any financial portfolio over a given period of time.

- (iv) **Jensen's Performance Index :** Jensen's Performance Index was

proposed by Michael Jensen in 1968. Jensen's Performance Index is used to calculate the abnormal return of any financial asset (bonds, shares, securities) as compared to its expected return in any portfolio. Also called Jensen's alpha, investors prefer portfolio with abnormal returns or positive alpha.

Jensen's alpha = Portfolio Return – [Risk Free Rate + Portfolio Beta * (Market Return – Risk Free Rate)]

$$\alpha_J = R_i - [R_f + \beta_{iM} \cdot (R_M - R_f)]$$

- (v) **Treynor Index:** Treynor Index model named after Jack L Treynor is used to calculate the excess return earned which could otherwise have been earned in a portfolio with minimum or no risk factors involved.

$$T = \frac{r_i - r_f}{\beta_i}$$

where T is Treynor ratio / index

16.8 SUMMARY

Portfolio is a collection of different financial investments held by a person at a point of time. These financial investments might include equity shares, debentures, preference shares, fixed deposit schemes of companies, etc. A portfolio is always considered to be best compared to the investment in an individual share because securities held in a portfolio certainly offer a better combination of risk and return. Portfolio management presents the best investment plan to the individuals as per their income, budget, age and ability to undertake risks. Portfolio management is classified as active, passive, discretionary and non-discretionary.

16.9 GLOSSARY

- **Investment:** It is buying or creating an asset with the exception of capital appreciation, dividends (profit), interest earnings, rents or save

combination of these returns.

- **Alternative Investment:** It is an investment in asset classes other than stocks, bonds and cash.
- **Portfolio:** It is a group of financial assets, such as, share stocks, bonds, debit instruments, mutual fund, cash equivalents, etc..
- **Management:** It is the organization and coordination of the activities of an enterprise in accordance with well-defined policies in achievement of its pre-defined objectives.

16.10 SELF ASSESSMENT QUESTIONS

- 1) Discuss the meaning of portfolio management.

- 2) Why portfolio is considered to be better than individual investment ?

16.11 LESSON END EXERCISE

- 1) What do you mean by portfolio management? Explain its types.

16.12 SUGGESTED READINGS

1. Chandra Prasanna, Investment Analysis and Portfolio Management, McGraw Hill.
2. Francis and Archer, Portfolio Management, Prentice Hall of India.

16.13 REFERENCES

1. Punithavathy Pandian, Securities Analysis and Portfolio Management, Vikas Publishing House Pvt Ltd.
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3. A P Dash, Securities Analysis and Portfolio Management, I. K. International Publishing House Pvt. Ltd.

PRINCIPLES AND INGREDIENTS OF PORTFOLIO MANAGEMENT

STRUCTURE

- 17.1 Introduction
- 17.2 Objectives
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17.1 INTRODUCTION

Portfolio management is the art of putting money in fairly safe, quite profitable and reasonably in liquid form. The investors attempt to find the best combination of risk and return in the first and usually the foremost goal. In choosing among different investment opportunities certain aspects of risk management should be considered. These include:

- a) The selection of a level of risk and return that reflects the investor's

tolerance for risk and desire for return, i.e. personal preferences

- b) The management of investment alternatives to expand the set of opportunities available at the investors acceptable risk levels.

The very averse investor might choose to invest in mutual funds. The more risk-tolerant investor might choose shares, if they offer higher returns. Much more can be done to help the investor to secure most desirable opportunities. Investment opportunities can be packaged together by forming portfolios. This will increase the number of investment opportunities available at any specified risk level. Thus, the potential for creating portfolios changes the whole problem of investment choice. Risk adverse investors may be unable to find a way to invest in shares and debentures to earn higher returns from the opportunities through portfolios.

Hence, portfolio management involves construction of portfolio based upon investor's objectives, constraints, preferences for his risk and returns and his tax liability. It is reviewed and adjusted from time to time in tune with the market conditions. The evaluation is to be done in terms of targets set for risk and return changes in the portfolio are to be made in order to meet the changing conditions. Portfolio management is a dynamic process which involves the following tasks:

- a) Identification of the objectives, constraints and preferences of investors for formulation of investment policy.
- b) Develop and implement strategies in tune with investment policy formulated. It will help in the selection of asset classes and securities in each class depending upon their risk return attributes.
- c) Review and monitoring of the performance of the portfolio by continuous overview of the market conditions and performance of the companies.
- d) Evaluation of the portfolio for the results to compare with target and make some adjustments for the future.

17.2 OBJECTIVES

After going through this lesson, you will be able to understand;

- Principles of portfolio management
- Ingredients of portfolio management

17.3 PRINCIPLES OF PORTFOLIO MANAGEMENT

A portfolio is the collection of securities held at a point of time to achieve investment objectives of an investor. Portfolio is created keeping all the constraints of the portfolio so as to achieve the objective within the limitations. Portfolio creation is done on the basis of certain fundamental principles which are applicable universally and followed by the portfolio managers for either maximization of the return or minimization of risk.

The emphasis of portfolio management varies from investor to investor. Some may desire higher earnings, others may opt for capital gain and still others want combination of both. Despite various variations, there are several objectives which should be considered as basic to well executed investment programme. These might rightly be called as guiding principles of portfolio management. Following are the principles of portfolio management:

1. Safety of Funds

Security of funds is the first consideration in setting investment objectives. Whatever securities are to be bought it must be ensured that the money invested will not be lost. Security investment is subject to credit risk which arises out of default of payment. Credit risk in an investment depends upon the debtor's ability and willingness to repay the funds on maturity. In respect of government securities, condition of economy which supports the obligations, profitability performance of state units and tax borrowings power of the government would determine the ability of government issuing the securities. Willingness of the government is the product of attitude of public officials and the people towards debt repayment. The character of

the people is very important in this respect because public officials derive their strengths and mandate from them. Further it is the people who detect or express in the final analysis, the actions of public officials.

Political stability is essential for debt repayment by the different parts of the world. Political upheavals have resulted in the reputations of debt by the government.

In evaluating securities, state of economy should also be taken into account as the government derives the funds necessary for repayment of principles and interest. The government of a prosperous country or region is considered to possess considerable ability to repay in debt.

Tax structure and administration as well as tax machinery are essential for rating securities. Where tax rate is low and coverage of tax is wider in scope, the government would be able to raise adequate amount of tax revenues to support its obligations provided the tax machinery is adequate and effective.

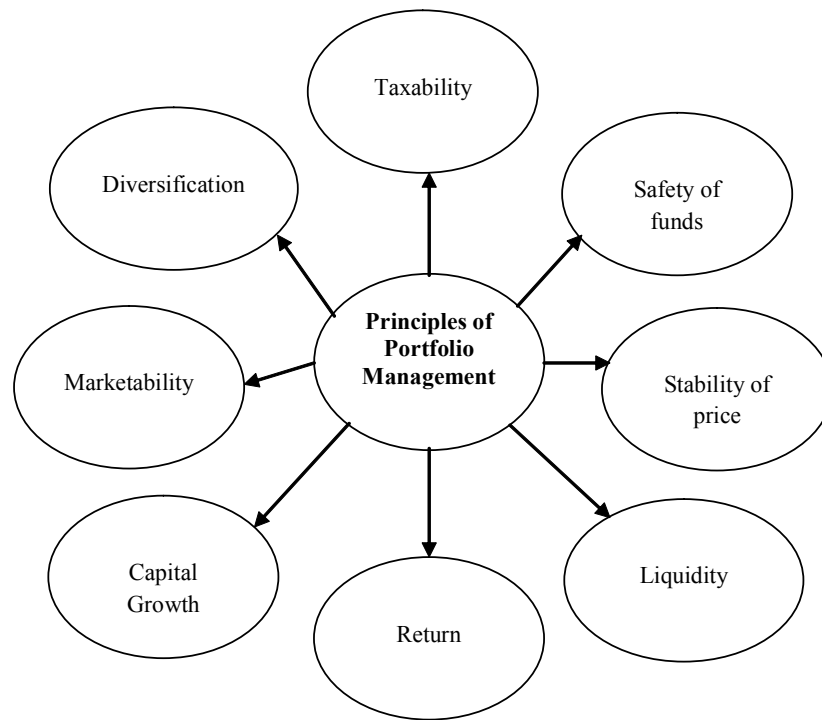


Figure 17.1: Principles of Portfolio Management

2. Stability of Price

Investors need a high degree of stability of funds in their investment portfolios. Because of a thin equity cushion, they cannot afford any loss or shrinkage in the value of securities. Security investment is subject to money rate risk, besides credit risk. Money rate risk involves the movement in market values given changes in the interest rate. The fluctuation in values of securities is of great significance to an investor. Each investor accepts the current yield of the market at the time he pays. If there is a change in interest rate, the yield which the investor receives when he bought may be above or below the current rate. In the event of sale of securities, the security holder stands to lose or gain. In case of increase in interest rate bonds carrying contractual interest rate will entitle to capital loss if these are disposed off before maturity. There would be no loss if they are held

till maturity.

3. Liquidity

While choosing securities for an investor, investment liquidity principle should be adequately cared for. A liquid security is one which can be disposed off in substantial quantities in the market at short notice with negligible capital loss. Therefore, the term liquidity when applied to a security immediately applies a high degree of marketability so that if at any time the company requires a large amount of cash to meet its extraordinary demands it can liquidate a portion of security investment.

Unless they are such as can be placed quickly in the market and in fairly large blocks without any appreciable price disturbance, the company will not be able to release funds at reasonable rates.

Government and municipal bonds as well as port trust bonds can be disposed off in fairly big lots without forcing down their market prices. It may be difficult to liquidate corporate shares without suffering material loss. Securities of reputed business concerns are however, marketable even in big lots without forcing down their prices.

4. Return

The fourth cardinal principle that should engage the attention of management is the return on portfolio. The portfolio should comprise such securities as may assure the investor a fair and stable return on the investment. While considering the income factor, it would be pertinent to take into account the rate of interest or dividend rate, tax exemption benefit, loss or gain, if any, at the time of redemption.

5. Capital Growth

Appreciation of capital is a desirable objective of portfolio management. This does not imply that every investor must invest in growth stocks. Capital growth is necessary to improve the long range position of the

investor, to maintain purchasing power and to offer flexibility of management. Capital growth focuses on yield and measure both risk and reward. The greater the prospect of capital growth, higher the yield and lower the risk.

6. Marketability

Another objective of sound portfolio management is marketability. It refers to the ability to buy or sell the securities easily and quickly without involving material loss. It is the function of price and size of the market for a given stock. Size of market is conditioned by the size of the company, number of stockholders and the general public interest in the stock. Stocks of smaller companies are less marketable than larger or big companies.

The place where stock is traded also influences the marketability of a stock. For example, stocks traded in Bombay Stock Market have greater marketability than those traded in other stock exchanges in the country.

7. Diversification

Diversification should be the important rule of portfolio management. It implies holding of an assortment of securities by investors rather than a limited number of securities. It may take the form of unit, industry, geography, maturity, type of security and management. Through diversification the management can reduce the investment risk if it could not be avoided altogether. If unanticipated losses occur according to pure chance, the holding of investment issues spread over a wide enough area will tend to reduce the losses to about their average probable value. Risk of declining industry suddenly adversely affected by new development can be offset by diversification and competitive changes where one company advances while other declines can also be offset in part.

8. Taxability

Taxability of securities has gained considerable significance in the management of investment portfolio during the last decade. The problem is how to retain as much of income and capital gain as possible. With

progressive tax rate on ordinary income, it is difficult to save income. This is why, while constructing investment portfolio, the manager should include such securities which are exempted from levy of income tax and wealth tax. There are certain categories of securities which are exempted from levy of income tax and wealth tax. For example, in India interest on Treasury Saving Deposit Certificates, 12 year National Plan Saving Certificate and such other certificates issued by the Central Government is tax free. Similarly, certain securities such as 10 year Saving Deposits Certificates, Post Office Certificates, Post Office Cash Certificates and Post Office National Saving Certificates are exempted from income tax and wealth tax.

17.4 INGREDIENTS OF PORTFOLIO MANAGEMENT

The finance manager is engaged portfolio management. He endeavors to select securities for investment portfolio so as to satisfy investment needs of the firm. For that he has to look after several factors or key ingredients of portfolio management. These ingredients of portfolio management are discussed below:

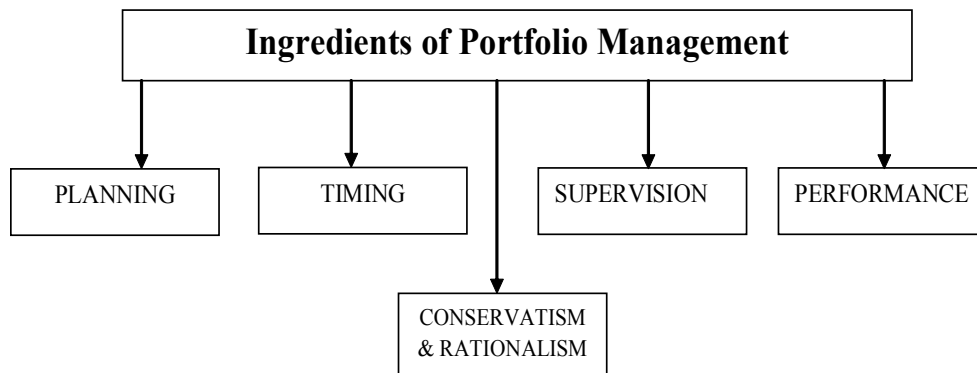


Figure 17.2: Ingredients of Portfolio Management

1. Planning

Planning is the first ingredient of the portfolio management. This implies that the management, while preparing a list of securities for a portfolio,

will give due consideration to investment needs of the investor. As a matter of fact, the plan must reflect the investor's needs. If this is not done the investment portfolio prepared by the management might not meet the investor's needs and at times land him in financial crisis. Therefore, the management must have a clear understanding of the investor's objectives. It would be in fitness of things if these objectives are spelled out clearly to ease preparation of suitable investment portfolio. For example if the enterprise desires higher income on its investment, the management will select further portfolio such securities from income type securities as promise greater income to the investor. A well defined course of action determined in advance fulfills investor's needs and averts risk involved in the investment.

2. Timing

Time horizon relevant to the portfolio is another ingredient of the portfolio management. While undertaking investment plan, the portfolio manager should take into consideration timing of investment. When funds should be invested in securities and when it should be disposed off so as to make maximum gains out of it must receive the attention of the manager. We know stock prices move up and down very frequently due to internal and external factors. The portfolio manager should after observing the price behavior of the stocks in the market and anticipating price trends that could emerge in the near future, decide when a stock price is high or low. Accordingly, he should try to buy stock close to its low price and liquidate it if desired at a time when its price will be ruling high.

3. Conservatism and Rationalism

The investor should be conservative and act rationally while making decisions. The concept of conservatism is extremely useful particularly in the area of investment where risk is inherent. As stated earlier, risk and gain are co-related. It is prudent to accept reasonable gain for reasonable

risk rather than to accept undue risk with a strong possibility of loss. Another tenet of the portfolio management is rationalism in investment decisions. Every time a stock is to be purchased the investor should examine the place it has in the portfolio and what is expected of it. Usually, investment is made on the basis of expectations and therefore, decisions should be made rationally on these bases.

4. Supervision

Effective portfolio management calls for regular supervision of securities in the portfolio. In the modern competitive and dynamic world where economic and business conditions change from time to time, it is necessary that an investor should frequently analyse the company and the security to ensure that it fulfills the needs of the investor. If on analysis it is found that the fundamental position of the security has undergone remarkable changes, the security may be replaced. For example, if a stock appears over price in the market it might be sold. Such type of supervision secures the investor from financial loss and therefore, should form inseparable part of the portfolio management.

5. Performance

Performance appraisal of the investment portfolio is an important part of portfolio management as it ensures that we are meeting investment goals of the organization. For example, if an investment decision was based upon the expectation of a 10 percent yield for a 3 or 5 years period, it is desirable to determine whether we have achieved this objective or are in the process of doing so. If the specified goal has not been achieved, we must find out the underlined reasons. There may be a myriad of factors responsible for the variation but the task should be undertaken. Regular performance appraisal tends to minimise risk and improves return.

17.5 SUMMARY

Portfolio management is the art of putting money in fairly safe, quite profitable and reasonably in liquid form. Portfolio management involves construction of portfolio based upon investor's objectives, constraints, preferences for his risk and returns and his tax liability. It is reviewed and adjusted from time to time in tune with the market conditions. The evaluation is to be done in terms of targets set for risk and return changes in the portfolio are to be made in order to meet the changing conditions. Portfolio construction is done on the basis of certain fundamental principles which are applicable universally and followed by the portfolio managers for either maximization of the return or minimization of risk. These principles includes: safety of funds, stability of price, liquidity, return, capital growth, marketability, diversification and taxability. Further, while creating portfolio, the portfolio manager has to consider factors such as planning, timing, conservatism, supervision and performance so as to satisfy the investment needs of the firm.

17.6 GLOSSARY

- **Portfolio Construction:** It is the allocation of funds among a variety of financial assets available for investment.

17.7 SELF ASSESSMENT QUESTIONS

1. What are the principles of portfolio management?

2. Mention the factors that are to be considered while creating a portfolio.

17.8 LESSON END EXERCISES

1. Define portfolio management. Explain the principles of portfolio management.
2. Describe the ingredients of portfolio management.

17.9 SUGGESTED REFERENCES

1. Chandra Prasanna, Investment Analysis and Portfolio Management, McGraw Hill.
2. Francis and Archer, Portfolio Management, Prentice Hall of India.

17.10 REFERENCES

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3. A P Dash, Securities Analysis and Portfolio Management, I. K. International Publishing House Pvt. Ltd.

SELECTION OF PORTFOLIO**STRUCTURE**

18.1 Introduction

18.2 Objectives

18.3 Selection of Portfolio

18.4 Markowitz Diversification

18.4.1 Determining the Efficient Set

18.4.2 Selecting the Best Portfolio out of the Efficient Set

18.4.3 Demerits of the Model

18.5 Summary

18.6 Glossary

18.7 Self Assessment Questions

18.8 Lesson End Exercises

18.9 Suggested Readings

18.10 References

18.1 INTRODUCTION

Diversification of portfolio is necessary. Rational behaviour of investors implies that risk minimisation has always been the preference of all the

investors. To minimise the risk, one success mantra is- diversification in portfolio. While including securities in a portfolio, one can achieve diversification in several ways- industry-wise diversification, scrip-wise diversification, duration level diversification, avenue-wise diversification. Harry Markowitz propounded concept of negative correlation to achieve a different kind of diversification in the creation of portfolio. He was of the opinion that while including securities in a portfolio, one must try to include negatively correlated shares in his portfolio. By negative correlation, we mean a situation when one share shows upward movement, then the other is likely to show downward movement; thereby negative effect of one is covered by the positive outcome of the other. In certain cases, when shares have a perfect negative correlation and these are combined judiciously in the portfolio, the risk of portfolio can even be brought down to zero level and returns are maintained. Hence, a perfect diversification can help in maximising return and minimising the risk.

18.2 OBJECTIVES

After going through this lesson, you will be able to :

- Understand Markowitz Theory.
- Elaborate the concept of efficient portfolio.
- Construct efficient frontier.

18.3 SELECTION OF PORTFOLIO

In today's financial marketplace, a well-maintained portfolio is vital to any investor's success. As an individual investor, you need to know how to determine an asset allocation that best conforms to your personal investment goals and strategies. In other words, your portfolio should meet your future needs for capital and give you peace of mind. Investors can construct portfolios aligned to their goals and investment strategies by following a systematic approach.

But, throughout the entire portfolio construction process (discussed below), it is vital that you remember to maintain your diversification above all else. It is not enough simply to own securities from each asset class, you must also diversify within each class. Ensure that your holdings within a given asset class are spread across an array of subclasses and industry sectors.

As already mentioned, investors can achieve excellent diversification by using mutual funds and ETFs. These investment vehicles allow individual investors to obtain the economies of scale that large fund managers enjoy, which the average person would not be able to produce with a small amount of money. On the whole, a well-diversified portfolio is your best bet for consistent long-term growth of your investments. It protects your assets from the risks of large declines and structural changes in the economy over time. Monitor the diversification of your portfolio, making adjustments when necessary, and you will greatly increase your chances of long-term financial success.

The following 4-steps elaborates about the approach for selecting a portfolio.

Step 1: Determining the Appropriate Asset Allocation for You

Ascertaining your individual financial situation and investment goals is the first task in constructing a portfolio. Important items to consider are age, how much time you have to grow your investments, as well as amount of capital to invest and future capital needs. For example, a single college graduate just beginning his or her career and a 55-year-old married person expecting to help pay for a child's college education and plans to retire soon will have very different investment strategies.

A second factor to take into account is your personality and risk tolerance. That is to say, are you the kind of person who is willing to risk some money for the possibility of greater returns? Everyone would like to reap high returns year after year, but if you are unable to sleep at night when

your investments take a short-term drop, chances are the high returns from those kinds of assets are not worth the stress.

As you can see, clarifying your current situation and your future needs for capital, as well as your risk tolerance, will determine how your investments should be allocated among different asset classes. The possibility of greater returns comes at the expense of greater risk of losses (a principle known as the risk / return tradeoff) - you don't want to eliminate risk so much as optimize it for your unique condition and style. For example, the young person who won't have to depend on his or her investments for income can afford to take greater risks in the quest for high returns. On the other hand, the person nearing retirement needs to focus on protecting his or her assets and drawing income from these assets in a tax-efficient manner.

For the above discussion it is important to understand if you are Conservative or Aggressive Investor.

Let us discuss Conservative vs. Aggressive Investors.

Generally, the more risk you can bear, the more aggressive your portfolio will be, devoting a larger portion to equities and less to bonds and other fixed-income securities. Conversely, the less risk that's appropriate, the more conservative your portfolio will be. Here are two examples, one suitable for a conservative investor and another for the moderately aggressive investor.

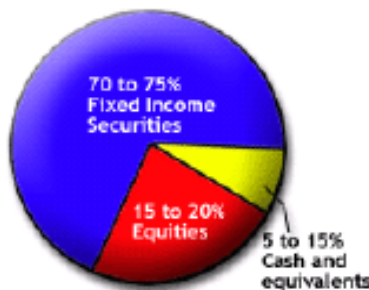


Figure 18.1 : Conservative Portfolio

The main goal of a conservative portfolio is to protect its value. The allocation shown above would yield current income from the bonds, and would also provide some long-term capital growth potential from the investment in high-quality equities.

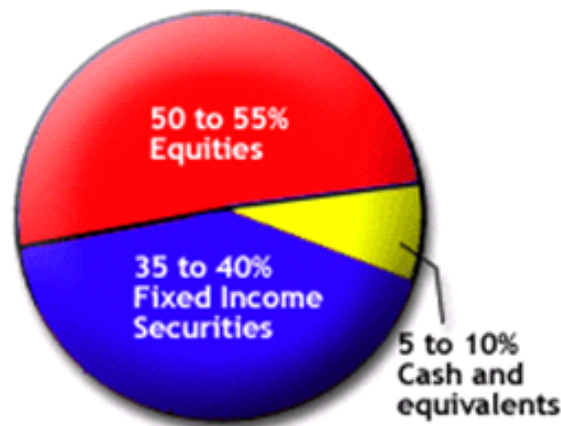


Figure 18.2 : Moderately Aggressive Portfolio

A moderately aggressive portfolio satisfies an average risk tolerance, attracting those willing to accept more risk in their portfolios in order to achieve a balance of capital growth and income.

Step 2: Achieving the Portfolio Designed in Step 1

Once you've determined the right asset allocation, you simply need to divide your capital between the appropriate asset classes. On a basic level, this is not difficult: equities are equities, and bonds are bonds.

But you can further break down the different asset classes into subclasses, which also have different risks and potential returns. For example, an investor might divide the equity portion between different sectors and market caps, and between domestic and foreign stock. The bond portion might be allocated between those that are short term and long term, government versus corporate debt and so forth.

There are several ways you can go about choosing the assets and securities to fulfill your asset allocation strategy (remember to analyze the quality and potential of each investment you buy - not all bonds and stocks are the same):

- **Stock Picking** - Choose stocks that satisfy the level of risk you want to carry in the equity portion of your portfolio - sector, market cap and stock type are factors to consider. Analyze the companies using stock screeners to shortlist potential picks, then carry out more in-depth analyses on each potential purchase to determine its opportunities and risks going forward. This is the most work-intensive means of adding securities to your portfolio, and requires you to regularly monitor price changes in your holdings and stay current on company and industry news.
- **Bond Picking** - When choosing bonds, there are several factors to consider including the coupon, maturity, the bond type and rating, as well as the general interest rate environment.
- **Mutual Funds** - Mutual funds are available for a wide range of asset classes and allow you to hold stocks and bonds that are professionally researched and picked by fund managers. Of course, fund managers charge a fee for their services, which will detract from your returns. Index funds present another choice; they tend to have lower fees because they mirror an established index and are thus passively managed.
- **Exchange-Traded Funds (ETFs)** - If you prefer not to invest with mutual funds, ETFs can be a viable alternative. You can basically think of ETFs as mutual funds that trade like stocks. ETFs are similar to mutual funds in that they represent a large basket of stocks - usually grouped by sector, capitalization, country and the like - except that they are not actively managed, but instead track a chosen index or other basket of stocks. Because they are passively managed, ETFs offer cost savings over mutual funds while providing diversification. ETFs also cover a wide range of asset classes and can be a useful tool

for rounding out your portfolio.

Step 3: Reassessing Portfolio Weightings

Once you have an established portfolio, you need to analyze and rebalance it periodically because market movements may cause your initial weightings to change. To assess your portfolio's actual asset allocation, quantitatively categorize the investments and determine their values' proportion to the whole. The other factors that are likely to change over time are your current financial situation, future needs and risk tolerance. If these things change, you may need to adjust your portfolio accordingly. If your risk tolerance has dropped, you may need to reduce the amount of equities held. Or perhaps you're now ready to take on greater risk and your asset allocation requires that a small proportion of your assets be held in riskier small-cap stocks.

Essentially, to rebalance, you need to determine which of your positions are over-weighted and underweighted. For example, say you are holding 30% of your current assets in small-cap equities, while your asset allocation suggests you should only have 15% of your assets in that class. Rebalancing involves determining how much of this position you need to reduce and allocate to other classes.

Step 4: Rebalancing Strategically

Once you have determined which securities you need to reduce and by how much, decide which underweighted securities you will buy with the proceeds from selling the over-weighted securities. To choose your securities, use the approaches discussed in Step 2.

When selling assets to rebalance your portfolio, take a moment to consider the tax implications of readjusting your portfolio. Perhaps your investment in growth stocks has appreciated strongly over the past year, but if you were to sell all of your equity positions to rebalance your portfolio, you may incur significant capital gains taxes. In this case, it

might be more beneficial to simply not contribute any new funds to that asset class in the future while continuing to contribute to other asset classes. This will reduce your growth stocks' weighting in your portfolio over time without incurring capital gains taxes.

At the same time, always consider the outlook of your securities. If you suspect that those same over-weighted growth stocks are ominously ready to fall, you may want to sell in spite of the tax implications. Analyst opinions and research reports can be useful tools to help gauge the outlook for your holdings. And tax-loss selling is a strategy you can apply to reduce tax implications.

18.4 MARKOWITZ DIVERSIFICATION

Markowitz Diversification is defined as – “A strategy that seeks to combine in a portfolio assets with returns that are less than perfectly positively correlated, in an effort to lower portfolio risk (variance) without sacrificing return”.

Harry Markowitz put forward this model in 1952. It assists in the selection of the most efficient portfolio by analyzing various possible portfolios of the given securities. By choosing securities that do not ‘move’ exactly together, the HM model shows investors how to reduce their risk. The HM model is also called Mean-Variance Model due to the fact that it is based on expected returns (mean) and the standard deviation (variance) of the various portfolios. Harry Markowitz made the following assumptions while developing the HM model:

Assumption-1: Risk of a portfolio is based on the variability of returns from the said portfolio.

Assumption-2: An investor is risk averse.

Assumption-3: An investor prefers to increase consumption.

Assumption-4: The investor's utility function is concave and increasing,

due to his risk aversion and consumption preference.

Assumption-5: Analysis is based on single period model of investment.

Assumption-6: An investor either maximizes his portfolio return for a given level of risk or maximizes his return for the *minimum* risk.

Assumption-7: An investor is rational in nature.

Now, in order to choose the best portfolio from a number of possible portfolios, each with different return and risk, two separate decisions are to be made:

- (i) Determination of a set of efficient portfolios.
- (ii) Selection of the best portfolio out of the efficient set.

18.4.1 Determining the Efficient Set

A portfolio that gives maximum return for a given risk, or minimum risk for given return is an efficient portfolio. Thus, portfolios are selected as follows:

- (a) From the portfolios that have the same return, the investor will prefer the portfolio with lower risk; and (b) From the portfolios that have the same risk level, an investor will prefer the portfolio with higher rate of return.

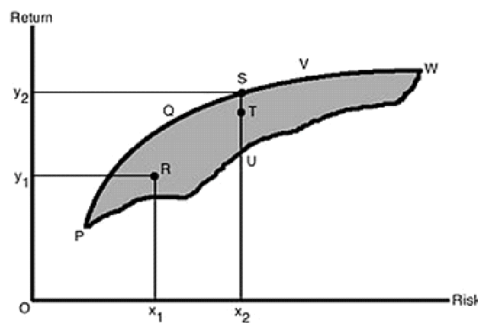


Figure-18.3: Risk-Return of Possible Portfolios

As the investor is rational, they would like to have higher return. And as he is risk averse, he wants to have lower risk. In Figure-18.3, the shaded area PVWP includes all the possible securities an investor can invest in. The efficient portfolios are the ones that lie on the boundary of PQVW. For example, at risk level x_2 , there are three portfolios S, T, U. But portfolio S is called the efficient portfolio as it has the highest return, y_2 , compared to T and U. All the portfolios that lie on the boundary of PQVW are efficient portfolios for a given risk level.

The boundary PQVW is called the Efficient Frontier. All portfolios that lie below the Efficient Frontier are not good enough because the return would be lower for the given risk. Portfolios that lie to the right of the Efficient Frontier would not be good enough, as there is higher risk for a given rate of return. All portfolios lying on the boundary of PQVW are called Efficient Portfolios. The Efficient Frontier is the same for all investors, as all investors want maximum return with the lowest possible risk and they are risk averse.

18.4.2 Selecting the Best Portfolio out of the Efficient Set

For selection of the optimal portfolio or the best portfolio, the risk-return preferences are analyzed. An investor who is highly risk averse will hold a portfolio on the lower left hand of the frontier, and an investor who isn't too risk averse will choose a portfolio on the upper portion of the frontier.

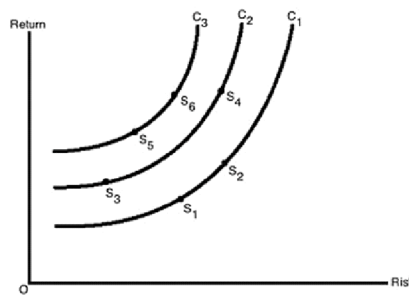


Figure-18.4 : Risk-Return Indifference Curve

Figure-18.4 shows the risk-return indifference curve for the investors.

Indifference curves C_1 , C_2 and C_3 are shown. Each of the different points on a particular indifference curve shows a different combination of risk and return, which provide the same satisfaction to the investors. Each curve to the left represents higher utility or satisfaction. The goal of the investor would be to maximize his satisfaction by moving to a curve that is higher. An investor might have satisfaction represented by C_2 , but if his satisfaction/utility increases, he/she then moves to curve C_3 . Thus, at any point of time, an investor will be indifferent between combinations S_1 and S_2 or S_5 and S_6 .

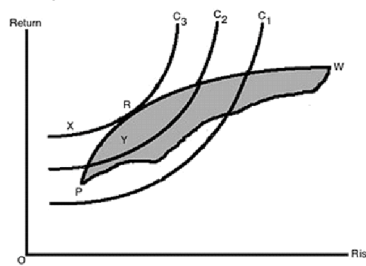


Figure-18.5 : Efficient Frontier & Indifference Curves

The investor's optimal portfolio is found at the point of tangency of the efficient frontier with the indifference curve. This point marks the highest level of satisfaction the investor can obtain. This is shown in Figure-18.5. R is the point where the efficient frontier is tangent to indifference curve C_3 , and is also an efficient portfolio. With this portfolio, the investor will get highest satisfaction as well as best risk-return combination (a portfolio that provides the highest possible return for a given amount of risk). Any other portfolio, say X, isn't the optimal portfolio even though it lies on the same indifference curve as it is outside the feasible portfolio available in the market. Portfolio Y is also not optimal as it does not lie on the best feasible indifference curve, even though it is a feasible market portfolio. Another investor having other sets of indifference curves might have some different portfolio as his best/optimal portfolio.

All portfolios so far have been evaluated in terms of risky securities only, and it is possible to include risk-free securities in a portfolio as

well. A portfolio with risk-free securities will enable an investor to achieve a higher level of satisfaction. This has been explained in Figure-18.6.

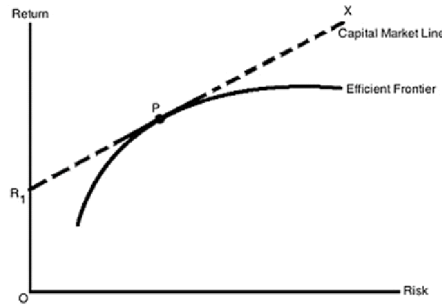


Figure 18.6: The Combination of Risk-Free Securities with the Efficient Frontier and CML

R_1 is the risk-free return, or the return from government securities, as government securities have no risk. R_1PX is drawn so that it is tangent to the efficient frontier. Any point on the line R_1PX shows a combination of different proportions of risk-free securities and efficient portfolios. The satisfaction an investor obtains from portfolios on the line R_1PX is more than the satisfaction obtained from the portfolio P. All portfolio combinations to the left of P show combinations of risky and risk-free assets, and all those to the right of P represent purchases of risky assets made with funds borrowed at the risk-free rate.

In the case that an investor has invested all his funds, additional funds can be borrowed at risk-free rate and a portfolio combination that lies on R_1PX can be obtained. R_1PX is known as the Capital Market Line (CML). This line represents the risk-return trade off in the capital market. The CML is an upward sloping curve, which means that the investor will take higher risk if the return of the portfolio is also higher. The portfolio P is the most efficient portfolio, as it lies on both the CML and Efficient Frontier, and every investor would prefer to attain this portfolio, P. The P portfolio is known as the Market Portfolio and is also the most diversified portfolio. It consists of all shares and other securities in the capital market.

In the market for portfolios that consists of risky and risk-free securities, the CML represents the equilibrium condition. The Capital Market Line says that the return from a portfolio is the risk-free rate plus risk premium. Risk premium is the product of the market price of risk and the quantity of risk, and the risk is the standard deviation of the portfolio.

The CML equation is :

$$R_p = I_{RF} + (R_M - I_{RF}) \sigma_p / \sigma_M$$

where,

R_p = Expected Return of Portfolio

R_M = Return on the Market Portfolio

I_{RF} = Risk-Free rate of interest

σ_M = Standard Deviation of the market portfolio

σ_p = Standard Deviation of portfolio

$(R_M - I_{RF})/\sigma_M$ is the slope of CML. $(R_M - I_{RF})$ is a measure of the risk premium, or the reward for holding risky portfolio instead of risk-free portfolio. σ_M is the risk of the market portfolio. Therefore, the slope measures the reward per unit of market risk.

The features of CML are:

1. At the tangent point, i.e. Portfolio P, is the optimum combination of risky investments and the market portfolio.
2. Only efficient portfolios that consist of risk free investments and the market portfolio P lie on the CML.
3. CML is always upward sloping as the price of risk has to be positive. A rational investor will not invest unless he knows he will be compensated for that risk.

Figure-18.7 shows that an investor will choose a portfolio on the efficient

frontier, in the absence of risk-free investments. But when risk-free investments are introduced, the investor can choose the portfolio on the CML (which represents the combination of risky and risk-free investments). This can be done with borrowing or lending at the risk-free rate of interest (I_{RF}) and the purchase of efficient portfolio P. The portfolio an investor will choose depends on his preference of risk. The portion from I_{RF} to P, is investment in risk-free assets and is called Lending Portfolio. In this portion, the investor will lend a portion at risk-free rate. The portion beyond P is called Borrowing Portfolio, where the investor borrows some funds at risk-free rate to buy more of portfolio P.

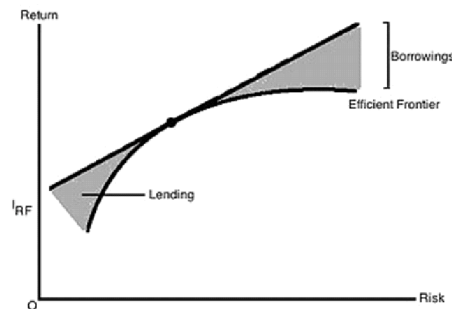


Figure-18.7: CML and Risk-Free Lending and Borrowing

18.4.3 Demerits of the Model

- Unless positivity constraints are assigned, the Markowitz solution can easily find highly leveraged portfolios (large long positions in a subset of investable assets financed by large short positions in another subset of assets), but given their leveraged nature the returns from such a portfolio are extremely sensitive to small changes in the returns of the constituent assets and can therefore be extremely ‘dangerous’. Positivity constraints are easy to enforce and fix this problem, but if the user wants to ‘believe’ in the robustness of the Markowitz approach, it would be nice if better-behaved solutions (at the very least, positive weights) were obtained in an unconstrained manner when the set of investment assets is close to the available investment opportunities (the market

portfolio) – but this is often not the case.

- Practically more vexing, small changes in inputs can give rise to large changes in the portfolio. Mean-variance optimization has been dubbed an ‘error maximization’ device (Scherer 2002): “an algorithm that takes point estimates (of returns and covariances) as inputs and treats them as if they were known with certainty will react to tiny return differences that are well within measurement error”. In the real world, this degree of instability will lead, to begin with, to large transaction costs, but it is also likely to shake the confidence of the portfolio manager in the model.
- The amount of information (the covariance matrix, specifically, or a complete joint probability distribution among assets in the market portfolio) needed to compute a mean-variance optimal portfolio is often intractable and certainly has no room for subjective measurements (‘views’ about the returns of portfolios of subsets of investable assets).

18.5 SUMMARY

Markowitz Portfolio Model is based on the fact that investors are interested in maximizing the returns while creating the portfolio; these returns are either holding period returns or expected returns. At the same time, investors have the aim to minimise the risk associated with the portfolio; this tendency of the investors reflects risk aversion behaviour. This model emphasizes on the creation of efficient portfolio. Markowitz’s theory of selection of securities and construction of efficient portfolio is based on two fundamental attributes of securities- i) mean return and ii) variance of return. This approach assumes that investors are risk-averse and utility maximisers.

18.6 GLOSSARY

- **Efficient Portfolio:** An efficient portfolio is one which gives maximum return for a given level of risk or mini mise risk for a given level of return.

- **Risk Averse:** Risk averse nature means an investor must be compensated suitably for higher risk taken by him.

18.7 SELFASSESSMENT QUESTIONS

1. Write short note on Markowitz Diversification.

2. Why Markowitz Diversification is also called Mean-Variance Model?

18.8 LESSON END EXERCISES

1. Critically examine Markowitz Portfolio Theory.

18.9 SUGGESTED READINGS

1. Alexander, G. J., William, S. F., Jeffery, B. V., Fundamentals of Investment, 3rd Edition, Pearson Education.
2. Fisher and Jordan, Security Analysis and Portfolio Management, 4th Edition, Prentice Hall.

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1. Punithavathy Pandian, Securities Analysis and Portfolio Management, Vikas Publishing House Pvt Ltd.
2. Shashi K. Gupta and Rosy Joshi, Securities Analysis and Portfolio Management (Investment Management), Kalyani Publishers.
3. A P Dash, Securities Analysis and Portfolio Management, I. K. International Publishing House Pvt. Ltd.
4. Chandra Prasanna, Investment Analysis and Portfolio Management, 3rd Edition, Tata McGraw Hill.

INVESTMENT AND TAXATIONS

STRUCTURE

- 19.1 Introduction
- 19.2 Objectives
- 19.3 Definition-Tax and Taxation
- 19.4 Investment and Taxation
- 19.5 Long Term and Short Term Capital Gains
- 19.6 Taxation of Capital Gains
- 19.7 Summary
- 19.8 Glossary
- 19.9 Self Assessment Questions
- 19.10 Lesson End Exercises
- 19.11 Suggested Readings
- 19.12 References

19.1 INTRODUCTION

As an investor, one should look for investment options that not only help him/her to save tax but also generate tax free income. While choosing among the investment alternatives, an investor must consider certain factors such as safety, liquidity and returns as well as taxability of the investment

alternative. If the income earned is taxable, the scope to make money over the long run gets constrained. All investments are not tax exempt. Investment income is generated by either the income it produces during the ownership of the investment (e.g. interest, dividends, or rent) or the gain it produces when the investment is sold at an appreciated value. Investment income such as interest and rent is considered as ordinary income and will generally be taxed according to ordinary income tax rate. Whereas income generated from the sale of a capital asset that is held for more than one year is generally considered a capital gain and is taxed at long-term capital gains rates.

19.2 OBJECTIVES

After going through this lesson, you will be able to understand:

- The concept of tax and taxation
- Meaning of capital assets
- Taxation of capital gains

19.3 DEFINITION – TAX & TAXATION

- **Tax** – It is an involuntary fee levied on corporations or individuals that is enforced by a level of government in order to finance government activities.

The word '**tax**' is from the Latin word '*taxo*' meaning '**rate**'. It is a financial charge or other levy imposed upon a taxpayer (an individual or legal entity) by a State or the functional equivalent of a state to fund various public expenditures. A failure to pay or evasion of or resistance to taxation, is usually punishable by law. Taxes are also imposed by many administrative divisions. Taxes consist of direct or indirect taxes and may be paid in money or as its labour equivalent.

- **Taxation** – It refers to the act of a taxing authority actually levying tax. Taxation as a term that applies to all types of taxes, from income to gift to estate taxes. It is usually referred to as an act, and any revenue collected is

usually called “taxes”.

19.4 INVESTMENT AND TAXATION

Investments provide regular and stable income as well as also give relief in taxation. Provisions of Income Tax Act, 1961 and Wealth Tax Act, 1957 have significant impact on the investor’s investment decision.

A tax payer can claim following deductions, rebates and relief under various Acts in India.

- a) **Income Tax** - According to Income Tax Act 1961, every person, who is an “assesse” and whose total income exceeds the maximum exemption limit, shall be chargeable to the income tax at the rate or rates prescribed in the Finance Act. Such income tax shall be paid on the total income of the previous year in the relevant assessment year.

Investments in approved categories are eligible for deduction under section 80C of Income Tax Act. Total amount deposited/invested in various approved saving categories or ₹150,000 per annum, whichever is less shall be allowed as deduction. Deduction u/s 80C shall be allowed only to (i) an individual (ii) A Hindu Undivided Family. Amount invested in following categories shall qualify for deduction u/s 80C.

- i) Deposits made in Provident Funds.
- ii) Payment of Life Insurance Premium.
- iii) Amount deposited in the Sukanya Samridhi Account.
- iv) Deposits made in Unit Linked Insurance Plan (UPIL).
- v) Amount invested in NSS.
- vi) Amount invested in notified Pension Funds set up by Mutual Funds or UTI.
- vii) Term deposit with Bank.
- viii) Investment in Notified bonds issued by NABARD.

ix) Deposit in Post office Time Deposit and Senior Citizens Saving Scheme, etc.

- b) Wealth Tax :** Wealth tax, in India, is levied under Wealth-tax Act, 1957. Wealth tax is a tax on the benefits derived from property ownership. The tax is to be paid year after year on the same property on its market value, whether or not such property yields any income. Under the Act, the tax is charged in respect of the wealth held during the assessment year by the following persons: Individual, Hindu Undivided Family (HUF) and Company.

Chargeability to tax also depends upon the residential status of the assessee same as the residential status for the purpose of the Income Tax Act. Wealth tax is not levied on productive assets, hence investments in shares, debentures, UTI, mutual funds, etc are exempt from it. The assets chargeable to wealth tax are guest house, residential house, commercial building, motor car, jewellery, bullion, utensils of gold, silver, yachts, boats and aircrafts, Urban land and Cash in hand (in excess of ₹50,000 for Individual & HUF only).

The tax based on the value of the assets as on March 31, is levied at the rate of 1 per cent of the amount that exceeds ₹30 Lakhs limit.

One residential house is exempt from Wealth Tax while ownership of more than one house will attract wealth tax liability.

- c) Capital Gains Tax :** A capital gain is income derived from the sale of an investment. A capital investment can be a home, a farm, a ranch, a family business, work of art etc. In most years slightly less than half of taxable capital gains are realized on the sale of corporate stock. The capital gain is the difference between the money received from selling the asset and the price paid for it.

Capital gain also includes gain that arises on “transfer” (includes sale, exchange) of a capital asset and is categorized into short-term gains and long-term gains.

The capital gains tax is different from almost all other forms of taxation in that

it is a voluntary tax. Since the tax is paid only when an asset is sold, taxpayers can legally avoid payment by holding on to their assets—a phenomenon known as the “lock-in effect.”

The scope of capital asset is being widened by including certain items held as personal effects such as archaeological collections, drawings, paintings, sculptures or any work of art. Presently no capital gain tax is payable in respect of transfer of personal effects as it does not fall in the definition of the capital asset. To restrict the misuse of this provision, the definition of capital asset is being widened to include those personal effects such as archaeological collections, drawings, paintings, sculptures or any work of art. Transfer of above items shall now attract capital gain tax the way jewellery attracts despite being personal effect as on date. Capital gain is categorized into short term and long term gains.

Gains arising on transfer of a capital asset held for not more than 36 months (12 months in the case of a share held in a company or other security listed on recognized stock exchange in India or a unit of a mutual fund) prior to its transfer are “short-term”. Capital gains arising on transfer of capital asset held for a period exceeding the aforesaid period are “long-term”.

Section 112 of the Income-Tax Act, provides for the tax on long-term capital gains, at 20 per cent of the gain computed with the benefit of indexation and 10 per cent of the gain computed (in case of listed securities or units) without the benefit of indexation.

- d) Double Taxation Relief :** Double Taxation means taxation of the same income of a person in more than one country. This results due to countries following different rules for income taxation. There are two main rules of income taxation i.e. (a) Source of income rule and (b) residence rule.

As per source of income rule, the income may be subject to tax in the country where the source of such income exists (i.e. where the business establishment is situated or where the asset / property is located) whether the income earner is a resident in that country or not.

On the other hand, the income earner may be taxed on the basis of the residential status in that country. For example, if a person is resident of a country, he may have to pay tax on any income earned outside that country as well.

Further, some countries may follow a mixture of the above two rules. Thus, problem of double taxation arises if a person is taxed in respect of any income on the basis of source of income rule in one country and on the basis of residence in another country or on the basis of mixture of above two rules.

In India, the liability under the Income Tax Act arises on the basis of the residential status of the assessee during the previous year. In case the assessee is resident in India, he also has to pay tax on the income, which accrues or arises outside India, and also received outside India. The position in many other countries being also broadly similar, it frequently happens that a person may be found to be a resident in more than one country or that the same item of his income may be treated as accruing, arising or received in more than one country with the result that the same item becomes liable to tax in more than one country.

Relief against such hardship can be provided mainly in two ways: (a) Bilateral relief, (b) Unilateral relief.

(i) Bilateral Relief - The Governments of two countries can enter into Double Taxation Avoidance Agreement (DTAA) to provide relief against such Double Taxation, worked out on the basis of mutual agreement between the two concerned sovereign states. This may be called a scheme of 'bilateral relief' as both concerned powers agree as to the basis of the relief to be granted by either of them.

(ii) Unilateral Relief - The above procedure for granting relief will not be sufficient to meet all cases. No country will be in a position to arrive at such agreement with all the countries of the world for all time. The hardship of the taxpayer however is a crippling one in all such cases. Some relief can be provided even in such cases by home country irrespective of whether the

other country concerned has any agreement with India or has otherwise provided for any relief at all in respect of such double taxation. This relief is known as unilateral relief.

- e) **Taxation on Dividend** - Dividend declared or distributed by an Indian company or by a mutual fund on its units is fully exempted with effect from 1-4-2003.
- f) **Interest Taxation** - (explained in detail in lesson No. 20).

19.5 LONG-TERM AND SHORT-TERM CAPITAL GAINS

With complex capital gains tax structure, it's wise to first make yourself aware on the net returns i.e. post tax returns you will earn, whenever you intend to make any investment. This section shall elaborate upon as to how long term and short term capital gains are derived and how it can help in reducing your taxability. This also help in analyzing the amount of wealth creation that you will create after paying your tax liabilities.

There are various asset classes like equity, debt, gold, & real estate where you invest according to the time horizon of your goals and risk appetite. The gains from these investments are termed as capital gains and taxed differently. Since any tax liability impact your returns from the investment, it's important to have awareness on the net gains you will receive. The capital gains from above mentioned asset classes is classified as long term or short term based on the holding period of investment. For example, in real estate, if you have held the asset for more than 3 years it is treated as long term. Contrary to this in equities, investment for more than a year is treated as long term.

Let us now see some calculations to show how long term and short term capital gains are derived and how it can help in reducing taxability:

(a) Long term Capital Gains

A long term capital gain arises when you hold any asset for a defined period. This period ranges from one year to three year across different asset classes. Any gain or loss accruing on long-term capital assets shall be known as long term capital gain or loss. The long-term capital assets

are the assets which are held by an investor for a period exceeding 36/24 months/12 months as the case may be, months immediately preceding the date of their transfer. The table below shows the holding period for long term gains in various asset classes and the applicable tax rate:

Table 19.1 : Holding period for Long Term Gains in Various Assets

| Asset | Min. holding period for Long Term | Taxation * |
|--|--|--|
| Equity | 1 year | Zero |
| Debt | 1 year | Whichever is beneficial- 10% without indexation 20% with Indexation benefit |
| Real Estate | 3 year | 20% with indexation benefit |
| Gold | 3 year Physical Gold e- 1 year Gold ETF / Gold Mutual Fund | 20% with indexation benefit Whichever is beneficial- 10% without indexation 20% with Indexation benefit |
| Bonds/NCDS | 1 year | 10% without any indexation |
| *Education Cess of 3% is applicable on all tax rates | | |

***The non-indexed gain would have been Rs 15 lakh**

As can be inferred from the data, equities enjoy zero taxability on long term capital gains while in real estate or physical gold investment you have to pay a flat rate. Due to these variations the post-tax returns from these asset classes can vary substantially. There are provisions in income tax to reduce LTCG through indexation or save LTCG tax from some of these instruments by investing it in other alternatives.

Indexation Benefit: Inflation constantly erodes real value of money through rise in prices. Due to this even if your investment have risen four times the purchasing power of money will have went down 50% from the time you made investment. To reduce the impact of inflation on your investment, indexation benefit is provided in calculating long term capital gains. Through this benefit you can adjust your capital gains from inflation by applying an appropriate factor from cost inflation index to the original units.

Here is how indexation benefits works:

Cost of purchasing a property in 2007: ₹35,00,000

Cost of selling the property in 2011: ₹50,00,000

Inflation Index - 2007: 551 ; Inflation Index - 2011: 785

Indexed Purchase cost = $35,00,000 \times \frac{785}{551} = ₹49,86,388$

Long Term Capital Gains = $50,00,000 - 49,86,388 = ₹13,612*$

Tax on LTCG = $13,612 \times 20\% = ₹2,722$

Education Cess = $2722 \times 3\% = ₹82$

Total Tax on LTCG = ₹2,804

Thus, the indexation benefit reduces the tax liability substantially which otherwise would have been a huge payout for any investor.

(b) Short Term Capital Gains

Investments in any asset class if held for a very short period is taxed as short term capital gains. Any gain or loss accruing to the investor on short term capital assets is known as short term capital gain or loss.

Short term capital asset is that which is held by an investor/assessee for not more than 36 months immediately preceding the date of its transfer [Sec 2 (42A)]. But following assets shall be treated as short term capital assets if these assets are held by its owner (before transfer) for not more than 12 months.

- i) a security and shares of companies listed in a recognised Stock Exchange in India.
- ii) a unit of an equity oriented fund.
- iii) a zero coupon bonds.

Following assets shall be treated as short term capital assets if such assets are held by its owner (before transfer) for not more than 24 months.

- i) Unlisted shares of companies.
- ii) An immovable property being land and building or both.

Table 19.2 : Holding Period for Short Term Gains

| Asset | Holding period for Short Term Gains | Tax Rate* |
|-------------|-------------------------------------|-----------------|
| Equity | Less than 1 year | 15% |
| Debt | Less than 1 year | Added to income |
| Gold | Physical/e-Gold- Below 3 year | Added to income |
| | ETF/Gold MF - Below 1 year | |
| Real Estate | Below 3 year | Added to Income |
| Bonds/NCD | Less than 1 year | Added to Income |

***Education cess of 3% is applicable on all tax rates**

Except equity, short term gains from other assets is included in investor's income and taxed at slab rate. The data below highlights the taxation structure in case of short term capital gains:

This is how short term capital gains are calculated:

Cost of Equity Mutual Funds units bought in 2011: ₹1,00,000

Price of same units sold after 6 months: ₹1,20,000

Short Term capital Gains: ₹20,000

Tax Applicable = $20,000 \times 15\% = ₹3,000$

Education Cess = $3000 \times 3\% = ₹90$

Total Tax payable = ₹3,090

19.6 TAXATION OF CAPITAL GAINS

A capital gain is a profit that results from disposing of a capital asset, such as

stock, bond or real estate, where the amount realized from the sale exceeds the purchase price. Conversely, a capital loss arises if the proceeds from the sale of a capital asset are less than the purchase price.

Normally, long-term capital gains (LTCG) are taxed at lower rates than short-term capital gains (STCG). The basis of differentiation between the two is the period of holding. Immovable property and unlisted shares become long-term assets when held for more than 36 months; in case of listed shares, the period of holding is just 12 months for the categorization.

Thus, listed shares have an edge over immovable property in terms of tax treatment and unlisted shares due to lower period for recognition as long-term asset. LTCG from sale of immovable properties is chargeable to tax at 20%. This is unlike listed securities where LTCG on shares dealt on recognized stock exchange are exempt, provided Securities Transaction Tax (STT) has been paid. If listed shares are transferred off market, the rate of tax will be 10% without indexation, or 20% with it. For unlisted shares, LTCG is applicable at 20% after considering the benefit of indexation. If the asset is of short term in nature, STCG on listed securities (on which is STT is paid) is taxable at 15%, while on unlisted securities as well as immovable property, the tax payable is as per slab rate applicable to the taxpayer.

Income from land or building is taxable except for agricultural income, which is specifically exempted. If immovable property is a building, then a flat 30% standard deduction is available from the amount of rent less municipal tax paid on the property. Over and above the same, if an individual is planning to invest from borrowed funds, the interest outgo on funds borrowed for the purchase of house is also eligible for deduction against such rental income received. As against it, dividend received on shares - whether listed or unlisted - is fully exempt from tax in the hands of the recipient if the company distributing it has paid DDT.

Investment in listed equity shares under the Rajiv Gandhi Equity Savings Scheme (RGESS) by a resident taxpayer is eligible for deduction up to a

maximum of ₹25,000 subject to certain conditions. However, for immovable property, you can avail tax advantage on investment of the profit earned from the sale of any long-term capital asset into acquisition of residential house. Further, investment of capital gains earned from transfer of a residential property into another would help save capital gains tax. Also, in case of a loss from house property, an option of setting it off against any income of the taxpayer is available. This tax benefit surely gets amplified when looked at from the angle of salaried individuals.

19.7 SUMMARY

The tax is to be levied on any profit or gain occurring on the transfer of a capital asset. Capital assets refer to the property of any kind held by an investor whether or not connected with his business or profession and any security held by a Foreign Institutional Investor which has invested in such security in accordance with the regulations made under SEBI Act, 1992. Capital assets have been divided into short term capital assets and long term capital assets. Any gain or loss accruing to the investor on short term capital assets is known as short term capital gain or loss whereas any gain or loss accruing on long-term capital assets shall be known as long term capital gain or loss.

19.8 GLOSSARY

- **Holding Period:** The period of holding implies the period for which the asset is owned by an investor (assessee) or held by him as owner. It starts from the day when the asset is acquired by the assessee and ends on the day when it is sold/ disposed off/transferred otherwise.
- **Capital Assets:** Capital assets refer to the property of any kind held by an investor whether or not connected with his business or profession and any security held by a Foreign Institutional Investor which has invested in such security in accordance with the regulations made under SEBI Act, 1992.
- **Short Term Capital Gain:** Any gain or loss accruing to the investor on

short term capital assets [Sec 2 (42A)] is known as short term capital gain or loss.

- **Long-Term Capital Gain:** Any gain or loss accruing on long-term capital assets shall be known as long term capital gain or loss.

19.9 SELF ASSESSMENT QUESTIONS

1. What do you mean by short term capital assets?

2. Define long term capital gain.

19.10 LESSON END EXERCISES

1. How will you distinguish between Capital Gain and Income? Why is it important to make this distinction?
2. Define the 'Capital Gain'. Write a detailed note on taxation of capital gains.

19.11 SUGGESTED READINGS

1. V. P. Gaur, Rajeev Puri and Puja Gaur, Direct Tax Laws, Kalyani Publishers.

19.12 REFERENCES

1. V. A. Avadhani, Investment Management, Himalaya Publishing House.
2. Shashi K. Gupta and Rosy Joshi, Securities Analysis and Portfolio Management (Investment Management), Kalyani Publishers.
3. S. S. Kaptan, Investment Management, Sarup and Sons, New Delhi.
4. Vinod K. Singhania and Kapil Singhania, Direct Taxes Law and Practice, Taxmann.

DIVIDEND AND INTEREST TAXATION**STRUCTURE**

- 20.1 Introduction
- 20.2 Objectives
- 20.3 Dividend Taxation
- 20.4 Interest Taxation
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20.1 INTRODUCTION

The term dividend refers to that portion of profit (after tax) which is distributed among the shareholders of the firm. As per existing tax

provisions, income from dividends is tax free in the hands of the investor. Further the dividends from domestic companies are tax-exempt, dividends from foreign companies are taxable in the hands of investor.

Furthermore, under the Income Tax Act, different types of interests are levied for various kinds of delays/defaults. Section 234 A, 234 B and 234 C deals with interest levied for (i) delay in filing the return of income (ii) non-payment or short payment of advance tax; and (iii) non-payment or short payment of individual instalment or instalments of advance tax.

20.2 OBJECTIVES

After going through this lesson, you will be able to know about:

- Taxation of dividend and interest income
- Tax saving ideas
- Tax free bonds

20.3 DIVIDEND TAXATION

The term dividend refers to that portion of profit (after tax) which is distributed among the shareholders of the firm and the profit which is not distributed is known as retained earnings. Under section 2 (22) of the Income tax Act any distribution of profits, whether in cash or by way of debentures or deposit certificates, is treated as dividend to the extent it is from out of the accumulated profits, whether these profits are capitalised or not. Distribution to the extent of accumulated profits will be treated as dividend, even when it is upon reduction of capital or liquidation of the company.

Dividend in its ordinary usage means the amount paid or received by a shareholder in proportion to his shareholding in a company, out of the total sum, so distributed. Dividend income is taxable irrespective of the fact whether it is paid in cash or kind or whether it is paid out of taxable

income or tax free income by the company.

Under section 2 (22) the following payments or distribution by a company to its shareholders are deemed as dividends to the extent of accumulated profits of the company:

- a) Any distribution entailing the release of company's assets
- b) Any distribution of debenture, debenture stock, deposit certificates and bonus to preference shareholders.
- c) Distribution on liquidation of company
- d) Distribution on reduction of capital
- e) Any payment by way of loan or advance by a closely-held company to a shareholder holding substantial interest provided the loan should not have been made in the ordinary course of business and money-lending should not be a substantial part of the company's business.

Deduction of tax at source: A domestic company is required to deduct tax at source on dividend income which is not subject to dividend tax u/s 115-O. Therefore, a closely held company should deduct tax at source on the amount of any loan granted to substantially interested shareholder, where it is covered by accumulated profits u/s 2 (22). If it fails to deduct such tax, it is liable to penalty u/s 271C.

Distribution/ Redemption of bonus share to equity shareholders [Sec 2 (22) (a)]: Capitalisation of the accumulated profits by issuing bonus shares to equity shareholders is not deemed to be dividend. Accordingly, a domestic company is not liable to pay dividend tax on such capitalisation of profits. However, redemption of such shares is deemed to be dividend. Accordingly, a domestic company should avoid redemption of such shares to avoid payment of dividend tax.

Distribution of bonus share to preference shareholders [Sec 2 (22)

(b)]: Distribution of accumulated profits by issuing bonus shares to preference shareholders is deemed to be dividend. Any such capitalisation of profits by a domestic company on or after 1st of April, 2003 will create dividend tax liability for it. However, the shareholder is entitled to claim exemption in respect of such dividend u/s 10 (34).

Distribution of debenture or debenture-stock/debenture certificate

[See 2 (22) (b)]: Distribution of accumulated profits by way of debenture or debenture-stock/ debenture certificate to shareholders (whether equity or preference) is deemed to be dividend. Any such issue on or after 1st of April, 2003 will i) create dividend tax liability for a domestic company and ii) capital gain tax liability for the shareholder on their transfer.

Shareholder will pay no tax on such deemed dividend because of exemption u/s 10 (34).

Distribution on liquidation of company [See 2 (22) (c)]:

Where liquidation is consequent on the compulsory acquisition of an undertaking by the government or by any corporation, owned or controlled by government, the accumulated profits do not include any profits of the company prior to the three successive previous years immediately preceding the previous year in which such acquisition took place. Therefore, such company may distribute accumulated profits earned prior to the three accounting years immediately preceding the year in which such acquisition took place. This will reduce the incidence of tax of the shareholders and the company.

Special Provisions relating to tax on distributed profits of domestic companies

Section 115-O: Tax on distributed profits of domestic companies

i) Notwithstanding anything contained in any other provision of this Act and subject to the provisions of this section, in addition to the income-tax chargeable in respect of the total income of a domestic company for any

assessment year, any amount declared, distributed or paid by such company by way of dividends (whether interim or otherwise) on or after 1/4/2003, whether out of current or accumulated profits shall be charged to additional income tax (here after referred to as tax on distributed profits) at the rate of 12.5% + surcharge @ 10% + Education cess @ 2%= 14.025% (AY 2008-09 15% + surcharge @ 10% + Education cess @ 3%=16.995%).

ii) Notwithstanding that no income-tax is payable by a domestic company on its total income computed in accordance with the provisions of this Act, the tax on distributed profits shall be payable by such company.

iii) The principal officer of the domestic company and the company shall be liable to pay the tax on distributed profits to the credit of central government within 14 days from the date of -a) declaration of any dividend or b) distribution of any dividend or c) payment of any dividend, whichever is earliest.

iv) The tax on distributed profits so paid by the company shall be treated as the final payment of tax in respect of the amount declared, distributed or paid as dividends and no further credit thereof shall be claimed by the company or by any other person in respect of the amount of tax so paid.

v) No deduction under any other provision of the Act shall be allowed to the company or a shareholder in respect of the amount which has been charged to tax or the tax thereon

vi) Notwithstanding anything contained in any this section, no tax on distributed profits shall be chargeable in respect of the total income of an undertaking or enterprise engaged in developing or developing and operating or developing, operating and maintaining a Special Economic Zone for any assessment year on any amount declared, distributed or paid by such developer or enterprise, by way of dividends (whether interim or otherwise) on or after the 1/4/2005 out of its current income either in the

hands of the developer or enterprise or the person receiving such dividend.

Section 115-P: Interest payable for non-payment of tax by domestic companies

If any principal officer of a domestic company and the company does not pay tax on distributed profits, then, he or it shall be deemed to be an assessee in default in respect of the amount of tax payable by him or it and all the provisions of this Act for the collection and recovery of income-tax shall apply.

Section 271-C: Penalty

1) If any person fails to deduct the whole or any part of the tax as required then, such person shall be liable to pay, by way of penalty, a sum equal to the amount of tax which such person failed to deduct or pay as aforesaid.

2) Any penalty imposable shall be imposed by the Joint Commissioner.

Section 276-B: Failure to pay tax to the credit of Central Government

If a person fails to pay to the credit of the Central Government, the tax deducted at source by him as required he shall be punishable with rigorous imprisonment for a term which shall not be less than 3 months but which may extend to years and with fine.

20.4 INTEREST TAXATION

Under the Income-tax Act, different types of interests are levied for various kinds of delays/defaults. In this part, you can gain knowledge about the provisions of section 234A, 234B and 234C dealing with interest levied for (i) delay in filing the return of income; (ii) non-payment or short payment of advance tax; and (iii) non-payment or short payment of individual instalment or instalments of advance tax (i.e., deferment of advance tax).

But, before understanding the provisions of section 234A, 234B and 234C it is important to understand the provisions of Rule 119A which gives the manner of computation of interest under the Income-Tax Act. As per Rule 119A, while calculating the interest payable by the taxpayer or the interest payable by the Central Government to the taxpayer under any provision of the Act, the following rule shall be followed: (a) where interest is to be calculated on annual basis, the period for which such interest is to be calculated shall be rounded off to a whole month or months. For this purpose any fraction of a month shall be ignored and the period so rounded off shall be deemed to be the period in respect of which the interest is to be calculated; (b) where the interest is to be calculated for every month or part of a month comprised in a period, any fraction of a month shall be deemed to be a full month and the interest shall be so calculated; (c) the amount of tax, penalty or other sum in respect of which such interest is to be calculated shall be rounded off to the nearest multiple of one hundred rupees. For this purpose, any fraction of one hundred rupees shall be ignored and the amount so rounded off shall be deemed to be the amount in respect of which the interest is to be calculated.

For example, if we want to compute interest under section 234A on ₹8,489 for 3 months and 10 days, then as per Rule 119A discussed above, while computing the amount liable to interest, any fraction of ₹100 is to be ignored and, hence, we will ignore ₹89 and the balance amount will come to ₹8,400. Interest will be computed on ₹8,400. Further, the period of 10 days will be considered as full month and, hence, interest will be computed for 4 months.

➤ ***Interest for delay in filing the return of income [Section 234A]***

Under section 234A, interest is levied for delay in filing the return of income. In other words, if the taxpayer files the return of income after the due date specified in this regard, interest under section 234A will be levied.

For Example, Mr. Mohan is a doctor. His tax liability for the financial

year 2013-14 amounted to ₹8,400. The due date of filing the return of income in his case is 31st July, 2014. On 5th August, 2014 he paid tax of ₹8,400 and filed his return of income. Then under section 234A Interest is levied for delay in filing the return of income. The due date for filing the return of income in the case of Mr. Mohan is 31st July, 2014 and he has paid the tax and filed the return on 5th August 2014. Hence, he will be liable to pay interest under section 234A on the outstanding tax liability (see provisions relating to rate of interest, period of levy of interest and amount liable to interest). Rate of Interest under section 234A is levied for delay in filing the return of income. Interest is levied at 1% per month or part of a month. The nature of interest is simple interest. In other words, the taxpayer is liable to pay simple interest at 1% per month or part of a month for delay in filing the return of income.

Period of levy of interest under section 234A

Interest under section 234A is levied from the period commencing on the date immediately following the due date of filing the return of income and ending on the date of furnishing the return of income, or in case where no return has been furnished, on the date of completion of the assessment under section 144.

It should be noted that while computing the period of levy of interest, part, that is, fraction of a month is considered as full month. For Example, Mr. Madan is an engineer. The due date of filing the return of income in his case is 31st July, 2014. He filed his return of income on 9th December, 2014. His tax liability for the financial year 2013-14 is ₹8,400 (which is paid on 9th December, 2014). Hence, Mr. Sunil will be liable to pay interest under section 234A. While computing interest, part of the month will be taken as full month. In this case, there is a delay of 4 months and 9 days. Part of the month, that is, 9 days will be considered as full month and hence, interest will be levied for 5 months.

Interest under section 234A is levied on the amount of tax as determined

under section 143(1) and where regular assessment is made, the tax on total income as determined under such regular assessment as reduced by advance tax, tax deducted/collected at source, relief claimed under various sections like sections 90/90A/91 and tax credit claimed under section 115JAA/115JD.

20.5 TAX SAVING IDEAS

These top 10 tax saving schemes would help you to understand as how to invest under section 80C up to ₹1.5 Lakhs. You need not consider all options. Note that, one need not to consider all the options given, but can choose some of these investment options that best suitable oneself based on investment tenure and features indicated here.

➤ **Public Provident Fund**

- ✓ If offers 8.7% interest per annum. Govt. of India would keep updating this every year.
- ✓ Tax free returns at maturity.
- ✓ PPF has lock-in period of 15 years.
- ✓ Investment up to ₹1.5 Lakhs per annum qualifies for IT Rebate under section 80 C of Income Tax Act.
- ✓ Loan facility in PPF account is available from 3rd financial year up to a 5th financial year. The rate of interest charged on loan shall be 2% per annum above the interest paid.
- ✓ Withdrawal permitted from 6th financial year.
- ✓ Non-Resident Indians (NRIs) are not eligible.
- ✓ An individual cannot invest on behalf of a HUF (Hindu Undivided Family) or Association of persons.

- ✓ Minimum investment is ₹500 and maximum is ₹1,50,000
- ✓ You can invest every month, by the 5th of the month and enjoy the interest for the remaining period of the month.
- ✓ PPF offer several good features and this is one of the best investment options to save tax u/s 80C. This is suitable for those who want tax savings and who want to accumulate funds for retirement purpose thereby earning safe and highest returns.

➤ **ELSS Tax Saving Mutual Funds**

- ✓ Offers highest returns (not fixed and not guaranteed) compared to other tax saving options.
- ✓ Lowest lock-in period of 3 years.
- ✓ Investors can opt for dividend option and get regular income even during the lock-in period.
- ✓ Investing in ELSS funds through SIP every month would help you reduce burden of investing a lump sum, take care of market fluctuations and provide higher returns.
- ✓ Since this is an equity mutual fund and investment period is 3+ years, returns / capital gains are tax free.

➤ **Tax Saving Bank Fixed Deposit Schemes**

- ✓ This is one of the old and best investment option to save income tax under section 80C of IT act.
- ✓ Interest rates vary between 8.5% to 9.75% per annum
- ✓ Interest is taxable
- ✓ 5 Year Lock-in period

➤ **Senior Citizen Saving Schemes (SCSS)**

- ✓ It provides assured returns for Senior Citizens. Principal amount is safe as they are backed by Government.
- ✓ Interest rates are at 9.2% per annum.
- ✓ Interest is paid at the end of every quarter. This is one of the best investment option to save tax for Senior Citizens as they would get quarterly interest.
- ✓ The maximum investment limit is ₹15 Lakhs.
- ✓ Interest earned is taxable like any other fixed deposit scheme.

➤ **Rajiv Gandhi Equity Saving Scheme (RGESS)**

- ✓ RGESS offers tax benefits for first time investors who are earning up to ₹12 Lakhs per annum.
- ✓ Maximum investment is ₹50,000. Such amount can be invested in BSE100 stocks or RGESS Mutual funds.
- ✓ 50% of such invested amount qualifies for tax benefit u/s 80C. Means if you invest ₹50,000 in BSE 100 stocks or RGESS Mutual funds for the first time, you would get tax exemption of ₹25,000 for the first time and only one time. Means you can get the maximum tax benefit of ₹7,725 (30% tax bracket).
- ✓ Returns are not guaranteed as investments are made in stocks and RGESS mutual funds.

➤ **Voluntary Provident Fund (VPF)**

- ✓ Voluntary provident fund is the contribution from employee to his provident fund account. This is beyond the employee EPF contribution of 12%. However, there is no bound from employer to contribute to

this VPF.

- ✓ The maximum amount an employee can contribute is 100% of the Basic and DA.
- ✓ This would carry the same rate of interest of the employee Provident Fund (EPF). The current EPF interest rate is 8.5% per annum.
- ✓ Investment in VPF can be withdrawn only during retirement, hence it is one of the best tax saving options to save income tax.
- ✓ Maturity returns are tax free.

➤ **New Pension Scheme (NPS)**

- ✓ This is another top investment option to save tax u/s 80C who are looking to save for retirement.
- ✓ NPS returns vary between 4% to 10%. In 2013, some of the funds opted in this scheme has provided 14% returns.
- ✓ Low cost investment option. The fund management charges are very low at 0.0009% of investment value.
- ✓ You can invest Rs.500 per month or Rs.6,000 per annum. There is no maximum limit for investment in NPS.
- ✓ Investors have the choice to opt for allocation of equity, bonds and gilts.
- ✓ Maturity amount is taxable.
- ✓ One has to do some homework before subscribing to NPS Scheme.

➤ **National Saving Certificate (NSC)**

- ✓ National Saving Certificate is issued by Post offices and principal along

with interest is backed up by the Govt. of India. Hence, these are safe investment options.

- ✓ NSC's are available for 5 and 10 year period
- ✓ NSC's are available for a minimum investment of Rs.500 and in multiples of Rs.1,000 / Rs.5,000 / Rs.10,000
- ✓ There is no maximum limit for investment.
- ✓ Interest rates are 8.5% for the 5 year NSC (VIII) and 8.8% p.a. for 10 years NSC (IX)
- ✓ ₹100 invested in 5 year NSC would fetch ₹151.62 and in 10 years would fetch Rs.234.35
- ✓ Interest is compounded every half year.
- ✓ Interest received is taxable. You need to show this as other income while filing ITR and pay income tax. However, such interest can be claimed again as exemption u/s 80C (within the limit of ₹1.5 Lakhs). Means you would show as other income and exemption u/s 80C and need not pay any tax on such interest.
- ✓ Individuals, Joint and minor, supported by Guardian can invest NSC.

➤ **Unit Linked Investment Plan (ULIP)**

- ✓ After 2010 IRDA guidelines, Insurance companies have reduced ULIP charges.
- ✓ ULIP's provide risk coverage.
- ✓ New ULIP policies have low policy / administration charges.
- ✓ No guaranteed returns. It provides returns of 5% to 11% returns depending on the scheme.

- ✓ Should hold for 10-12 years to see good returns.

➤ **Insurance Plans**

- ✓ An important aspect of an individual is to consider adequate insurance plans for earning member.
- ✓ Term insurance plans come with zero maturity value. These are designed for risk coverage and not for saving purpose.
- ✓ Consider adequate insurance coverage based on 10 / 15 years expenses / income.

20.6 TAX FREE BOND

A tax free bond is a settled wage instrument conveying a coupon rate of interest and is issued for a settled time period. As the name suggests, interest earned from tax-free bonds is excluded from taxation. In simple terms, irrespective of the income slab one need not pay any income tax on the interest income. Some of the public undertakings which raise funds through the issue of tax-free bonds are Indian Railways, Power Finance Corporation, National Highway Authority of India, HUDCO, Rural Electricity Corporation, NTPC and Indian Renewable Energy Development Agency.

In India, the time period of these bonds is not less than 10 years, although it could exceed the limit of 10 years but could not be less than that. They are also listed on stock exchanges to offer an exit route to investors. The bonds are tax free, secured, redeemable and non-convertible in nature.

However, the time duration of tax free-bonds being a long haul, one ought to deliberately put resources into them remembering irregular objectives.

Further, liquidity is less in tax free bonds. As a rule, they are recorded on stock trades to give a left course to investment makers.

Tax Status: The interest income earned is exempt from tax under section 10 (15) (iv) (h) of the Income Tax Act, 1961. There will, however, not be any tax benefit on the amount of investment made in such bonds. Also, there is no applicability of TDS on interest income. TDS applicability will still be there on the application money while applying for them.

As mentioned earlier, tax free bonds are also listed on stock exchanges and traded only through demat accounts. If there is any capital gain on transferring them on exchanges then, that will be taxed. If the holding period is less than 12 months, capital gains on sale of tax free bonds on stock exchanges are taxed as per the tax rate of the investor.

Tax free bonds are hugely popular with high net worth investors because they allow parking a huge lump sum at one place. They are perceived to be relatively safe as they are primarily issued by the government institutions and carry high investment grade ratings. Also, the effective pre-tax yield is high for those in the higher income slab.

20.7 SUMMARY

Dividend means the amount paid or received by a shareholder in proportion to his shareholding in a company, out of the total sum, so distributed. Dividend income is taxable irrespective of the fact whether it is paid in cash or kind or whether it is paid out of taxable income or tax free income by the company. A domestic company is required to deduct tax at source on dividend income which is not subject to dividend tax u/s 115-O.

Number of tax saving ideas are available for the investors. Some of such schemes include Public Provident Fund, ELSS Tax saving Mutual Funds, Tax Saving Bank Fixed Deposit Schemes, etc.

20.8 GLOSSARY

- **Dividend:** It refers to that portion of profit after tax which is distributed among the shareholders of the firm.

- **Tax Free Bond:** It is a settled wage instrument conveying a coupon rate of interest and is issued for a settled time period.

20.9 SELF ASSESSMENT QUESTIONS

1. Mention any four tax saving schemes.

2. What do you mean by Tax free bonds ?

20.10 LESSON END EXERCISES

1. Write a detailed note on taxation of dividend and interest income.

20.11 SUGGESTED READINGS

1. Alexander, G. J., William, S. F., Jeffery, B. V., Fundamentals of Investment, 3rd Edition, Pearson Education.
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3. Jones, Charles, P., Investment Analysis and Portfolio Management, 9th Edition, John Wiley and Sons.
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2. Shashi K. Gupta and Rosy Joshi, Securities Analysis and Portfolio Management (Investment Management), Kalyani Publishers.
3. S. S. Kaptan, Investment Management, Sarup and Sons, New Delhi.
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