

MAA OMWATI INSTITUTE OF MGT. & TECH. HASSANPUR

NOTES MBA 3rd sem INVESTMENT MANAGEMENT

UNIT-I

Investment – Features of Investment – Principles of Investment – Kinds of Investment – Stages in Investment – Investment Vs Speculation – Sources of Investment information.

Introduction

The term ‘investing’ could be associated with different activities, but the common target in these activities is to ‘employ’ the money (funds) during the time period seeking to enhance the investor’s wealth. Funds to be invested come from assets already owned, borrowed money and savings. By foregoing consumption today and investing their savings, investors expect to enhance their future consumption possibilities by increasing their wealth. However, it is always useful to make a distinction between real and financial investments. Real investments usually involve some kind of tangible assets, such as land, machinery, factories, etc. Financial investments involve contracts in paper or electronic form, such as stocks, bonds, etc.

□□ Investment activity involves the use of funds or savings for acquisition of assets & further creation of assets.

□□ Investment is an employment of funds on assets in the aim of earning income or capital appreciation.

Definition of Investment

“Investment analysis is the study of financial securities for the purpose of successful investing.

“An investment is the purchase of goods that are not consumed today but are used in the future to create wealth”.

“An investment is a commitment of funds made in the expectation of some positive rate of return”. Example – equity shares, preference share and debentures etc.

According to oxford dictionary “investment is defined as the action or process of investment money for profit”.

According to keyness “investment is defined as the addition of the value of the capital equipment which has resulted from the productive activity of the period”.

Types of Investment

□□ Real Investment – Purchase of fixed assets

□□ Financial Investment – Purchase of securities

Definition-Economic sense

“Investment means the net additions to the economy’s capital stock which consists of goods and services that are used in the production of other goods and services” (Capital formation)

Investment is the net addition made to the nation’s capital stock that consists of goods and services that are used in the production process. A net addition to the capital stock means an increase in the buildings, equipments or inventories. These capital stocks are used to produce other goods & services

Definition–Financial sense

“Investment is a commitment / employment of funds made in the expectation of some positive rate of return. If the investment is properly undertaken, the return will commensurate with the risk that the investor assumes”.

- Donald E. Fischer and Ronald J. Jordan

Financial investment is the allocation of money to assets that are expected to yield some gain over a period of time.

Characteristics of Investment

- Safety of principal (e.g. gilt edged securities)
- Liquidity (e.g. CPs and CDs)
- Income stability (e.g. Debentures)
- Capital appreciation (e.g. equity)
- Tangibility (e.g. land and buildings)

Investment refers to investing money in financial physical assets and marketing assets. Major investment features are risk, return, safety, liquidity, marketability, concealability, capital growth, purchasing power, stability and the benefits.

Risk

Risk refers to the loss of principal amount of an investment. It is one of the major characteristics of an investment. The risk depends on the following factors:

When investment maturity period is longer; investor will take larger risks. •

Government or Semi-Government bodies issue securities, which have lesser risks. •

In the case of the debt instrument or fixed deposit, the risk of above investment is less due to their secured and • fixed interest payable. For instance, debentures.

In the case of ownership instrument like equity or preference shares, the risk is more due to their unsecured • nature and variability of their return and ownership character.

The risk of degree of variability of returns is more in the case of ownership capital as compared to debt capital. • The tax provisions would influence the return of risk.

Return

Return refers to expected rate of return from an investment. Return is an important characteristic of investment. Return is the major factor which influences the pattern of investment that is made by the investor. Investor always prefers high rate of return for his investment.

Safety

Safety refers to the protection of investor principal amount and expected rate of return. Safety is also one of the essential and crucial elements of investment. Investor prefers his capital's safety. Capital is the certainty of return without loss of money or it will take time to retain it. If investor prefers less-risk securities, he chooses Government bonds. In cases, where investor prefers high rate of returns, investor will choose private securities, whose safety is low.

Liquidity

Liquidity refers to investments ready to be converted into cash. In other words, it is available immediately in the cash form. Liquidity means that investment is easily realisable, saleable or marketable. When the liquidity is high, then the return may be low. For example, UTI units. An investor generally prefers liquidity for his investments and safety of funds through a minimum-risk and maximum-return investment.

Marketability

Marketability refers to buying and selling of securities in market. Marketability means transferability or saleability of an asset. Securities listed in a stock market are more easily

marketable than which are not listed. Public Limited Companies' shares are more easily transferable than those of private limited companies.

Concealability

Concealability is another essential characteristic of the investment. Concealability means investment to be safe from social disorders, government confiscations or unacceptable levels of taxation. Property must be concealable and should leave no record of income received from its use or sale. Gold and precious stones have long been esteemed for these purposes, because they combine high-value with small bulk and are readily transferable.

Capital growth

Capital growth refers to appreciation of investment. Capital growth has today become an important character of investment. Capital appreciation, also known as capital growth, refers to the increase in the value of an investment over time. It tells you how much profit you would pay taxes on, if you sold the investment that day. Investors and their advisers are constantly seeking 'growth stock' in the right industry; bought at the right time.

Purchasing power stability

It refers to the buying capacity of investment in market. Purchasing power stability has become one of the import traits of investment. Investment always involves the commitment of current funds with the objective of receiving greater amounts of future funds. Investment Analysis and Portfolio Management 4/JNU OLE

Stability of income

It refers to constant return from an investment. Another major characteristic feature of the investment is the stability of income. Stability of income must look for different paths just as the security of the principal. Every investor must always consider stability of monetary income and stability of the purchasing power of income.

Tax benefits

Tax benefit is the last characteristic feature of the investment. Planning an investment programme without considering the tax burden may be costly to the investor. There are actually two problems:

One concerned with the amount of income paid by the investment. •

Another is the burden of income tax upon that income. •

Need and Importance of Investments

An investment is an important and useful factor in the context of present day conditions. Some factors are very important, while considering these investments. They are outlined below:

- Longer life expectancy or planning for retirement•
- Increasing rates of taxation•
- High interest rates•
- High rates of inflation•
- Larger incomes•
- Availability of a complex number of investment outlets•

Longer life expectancy

Investment decisions have become more significant as most people in India retire between the ages of 56 to 60. Investment decisions have to be planned to make wise saving decisions. Saving on their own does not increase wealth; the saving must be invested in such a way that the principal and income will be adequate for a greater number of retirement years. Longer life expectancy is one reason for effective savings and further investment activities that help the investment decisions.

Increasing rates of taxation

When tax rate is increased, it will focus on generating savings by the tax payer. When the tax payer invests their income in provident fund, pension fund, Unit Trust of India, Life Insurance, Unit Linked Insurance Plan, National Saving Certificates, Development Bonds, Post Office Cumulative Deposit Schemes, etc., it affects their taxable income.

Interest rates

Interest rate is one of the most important aspects of a sound investment plan. The interest rate differs from one investment to another. There may be changes between degree of risk and safe investments. They may also differ due to different benefit schemes offered by the institutions. A high rate of interest may not be the only factor favouring the outlet for investment. Stability of interest is an important aspect of receiving a high rate of interest.

Inflation

Inflation has become a continuous problem. It affects in terms of rising prices. Several problems are associated and coupled with falling standards of living. Therefore, investor's careful scrutiny of the inflation will make further investment process delayed. Investor ensures to check the safety of the principal amount and security of the investment. Both are crucial from the point of view of the interest gained from the investments.

Income

Income is another important element of the investment. When government provides jobs to the unemployed persons in the country, the ultimate result is ensuring income than saving the extra income. More incomes and more avenues of investment have led to the ability and willingness of working people to save and invest their funds.

Investment channels

The growth and development of the country leading to greater economic prosperity has led to the introduction of a vast area of investment outlets. Investment channels mean an investor is willing to invest in several instruments like corporate stock, provident fund, and life insurance, fixed deposits in the corporate sector and unit trust schemes.

Objectives of Investment

- Maximization of return
- Minimization of risk
- Hedge against inflation (if the investment cannot earn as much as the rise in price level, the 'real' rate of return will be negative)
- Safety
- Liquidity
- Tax Benefit

Return

Rate of return could be defined as the total income the investor receives during the holding period expressed as a percentage of the purchasing price at the beginning of the holding period.

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

-----x 100

Beginning period value

Risk

- Risk of holding securities is related with the probability of 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 the investment management.

Hedge against Inflation

- The rate of return should ensure a cover against the inflation.
- The return thus earned should assure the safety of the principal amount, regular flow of income and be a hedge against inflation

Safety

Investment done with Government assure more safety than with the private party

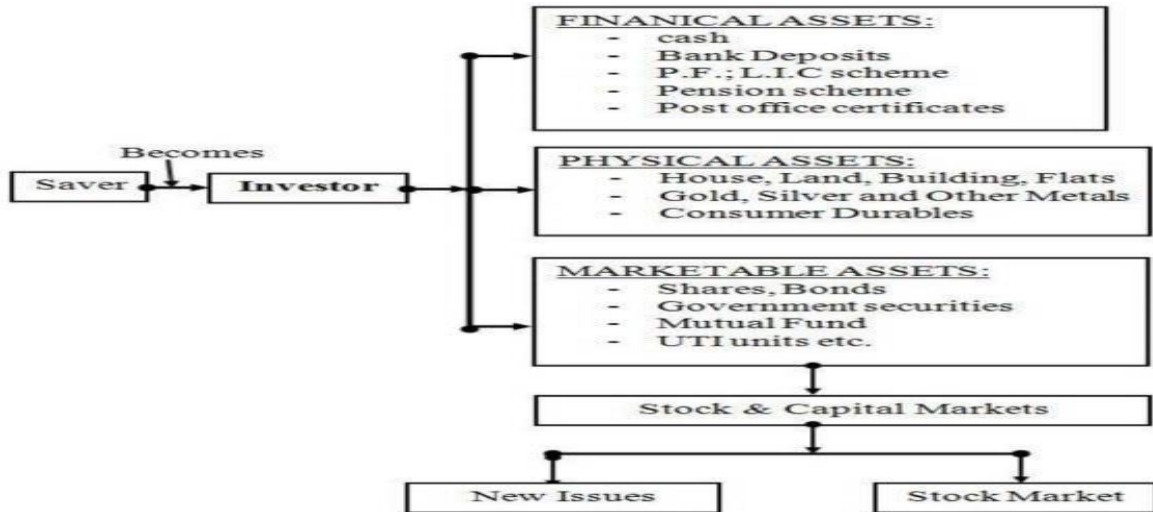
Tax Benefit

Investment may be undertaken to reduce the income tax burden. E.g. Savings bond, Provident Fund, Insurance etc.

Liquidity

- Marketability of the investment provides liquidity to the investment. The liquidity depends upon the marketing and trading facility.
- Stocks are liquid only if they command good market by providing adequate return through dividends and capital appreciation.

Classification of Investment



The classification of investments into various groups is explained in the paragraphs given below:

On the basis of physical investments

Physical investments are as follows:

- House
- Land
- Building
- Gold and silver
- Precious stones

On the basis of financial investment

Financial investments are further classified on the basis of:

- Marketable and transferable investments
- Non-marketable investments
- Security forms of investment / Marketable investments are as follows:
 1. Corporate Bonds / Debentures
 - (a) Convertible
 - (b) Non-convertible.
 2. Public Sector Bonds
 - (a) Taxable
 - (b) Tax Free.
 3. Preference Shares
 4. Equity Shares - New issue, Rights Issue, Bonus Issue

Non-Security Forms of Investment (non-marketable) /Non-marketable investments are as follows:

- Bank deposits•
- Provident and pension funds•
- Insurance certificates•
- Post office deposits•
- National saving certificates•
- Company deposits•
- Private company shares, etc.

Classes of Instruments

Instruments traded can be classified on the following:

1. By ownership or debt nature of instruments.
2. By term period to maturity – **Short term, Medium-term and long-term.**
3. By the issuer's creditworthiness, government securities or private securities or Post Office certificate etc.

INVESTMENT ALTERNATIVES

1. Direct Investment Alternatives

- Fixed principal investments (e.g. Savings a/c, government bonds)
- Variable principal investments (e.g. Preference shares, equity shares)
- Non-security investments (e.g. business ventures)

2. Indirect investment alternatives (e.g. PF, Insurance)

INVESTMENT ALTERNATIVES

- The investment alternatives range from financial securities to non-security investments.
- The financial securities may be negotiable or non-negotiable.
- The negotiable securities are transferable. Non-negotiable is not transferable also called as non-securitized financial investment.
- Deposit schemes offered by post office, banks, public provident fund, national savings scheme are non-securitized financial investments.

NEGOTIABLE SECURITIES

1. Variable income securities

Equity shares, growth shares, income shares, defensive shares, cyclical shares, speculative shares.

2. Fixed income securities

Preference shares, debentures, bonds, government, money market, treasury bills, commercial papers, certificate of deposit.

NON-NEGOTIABLE SECURITIES

- Deposits: it can earn rate of return
- Bank deposits, post office deposits, etc.
- Schemes of LIC.
- Tax benefits from life insurance.
- Mutual funds.

- Real assets.
- Real estate.
- Arts and antiques.

FINANCIAL ASSETS

- Equity shares
- Bonds
- Preference shares
- Non- marketable financial assets
- Money market instruments
- Mutual funds
- Life insurance
- Financial derivatives

EQUITY SHARES

- Represents ownership capital
 - They elect the board of directors and have a right to vote on every resolution placed before the company
 - They enjoy the preemptive right which enables them to maintain their proportional ownership
- Risk: residual claim over income
- Reward: partners in progress
- The amount of capital that a company can issue as per its memorandum represents *authorized capital*
- The amount offered by the company to the investors is called *issued capital*
- The part of issued capital that is subscribed to by the investors is called *subscribed capital / paid up capital*
- *Par / Face / Nominal value* of a share is stated in the memorandum and written on the share script
- Issue of shares at a value above its par value is called *issue at a premium*
- Issue of shares at a value below its par value is called *issue at a discount*
- The price at which the share currently trades in the market is called the *market value*
- Blue chip shares: Shares of large, well established and financially strong companies with impressive record of earnings and dividend
- Growth shares: Shares of companies having fairly strong position in the growing market and having an above average rate of growth and profitability
- Income shares: Shares of companies having fairly stable operations, limited growth opportunities and high dividend payouts
- Cyclical shares: Shares of companies performing as per the business cycles
- Defensive shares: Shares of companies relatively unaffected by the ups and downs in the general economic conditions
- Speculative shares: shares of companies whose prices fluctuate widely because of a lot of speculative trading being done on them
- Equity shares are commonly referred to as common stock or ordinary shares

- Share capital of a company is divided into a number of small units of equal value called shares.
- The “stock” is the aggregate of a member’s fully paid up shares of equal value merged into one fund.
- The ‘stock’ is expressed in terms of money and not “as many” shares.

Sweat Equity: The Sweat Equity has two dimensions:

- Shares issued at a discount to employees and directors.
- Shares issued for consideration other than cash for providing know-how or making available rights or value additions.

Non-Voting Shares

- Non-voting shares carry no voting rights.
- The non-voting shares also can be listed and traded in the stock exchanges.
- The dividend on non-voting shares would have to be 20% higher than the dividend on the voting shares.

Right Shares

- Shares offered to the existing shareholders at a price by the company are called “right shares”.
- If a public company wants to increase its subscribed capital by way of issuing shares after 2 years from its formation date or 1 year from the date of first allotment.....the shares should be offered first to the existing shareholders in proportion to the capital paid up on the shares held by them at the date of such offer. This is called pre-emptive right.

DEBENTURES

- According to Companies Act 1956, “Debenture includes debenture stock, bonds and any other securities of company, whether constituting a charge on the assets of the company or not”
- Debentures are generally issued by the private sector companies as a long-term promissory note for raising loan capital

BONDS

- They are long term debt instruments issued for a fixed time period
- *Bonds* are debt securities issued by the government or PSUs
- *Debentures* are debt securities issued by private sector companies
- They comprise of periodic interest payments over the life of the instrument and the principal repayment at the time of redemption
- Debt securities issued by the central government, state government and quasi government agencies are referred to as *gilt-edged securities*
- *Callable bonds* are the ones that can be called for redemption earlier than their date of maturity. This right to call is available with the company
- *Convertible bonds* are the ones that can be converted into equity shares at a later date either fully or partly. This option is available with the bond holder
- *Coupon rate* is the nominal rate of interest fixed and printed on the bond certificate. It is calculated on the face value and is payable by the company till maturity

PREFERENCE SHARES

- Represents a *hybrid security* that has attributes of both equity shares and debentures.

- They carry a *fixed rate of dividend*. However it is payable only out of distributable profits
- Dividend on preference shares is generally *cumulative*. Dividend skipped in one year has to be paid subsequently before equity dividend can be paid
- Only *redeemable preference shares* can be issued

NON-MARKETABLE SECURITIES

These represent personal transactions between the investor and the issuer.

Bank deposits

- There are various kinds of bank accounts – current, savings and fixed deposit
- While a deposit in a current account does not earn any interest, deposit made in others earn an interest
- Liquidity, convenience and low investment risks are the common features of the bank deposits
- Deposits in scheduled banks are safe because of the regulations of RBI and the guarantee provided by the Deposit Insurance Corporation on deposits up to Rs 1,00,000 per depositor of the bank

Company deposits

- Deposits mobilized by companies are governed by the provisions of section 58A of Companies Act, 1956
- The interest offered on this fixed income deposits is higher than what investors would normally get from the banks
- Manufacturing and trading companies are allowed to pay a maximum interest of 12.5%.
- The rates vary depending on the credit rating of the company offering the deposit

Post Office Monthly Income Scheme

- Meant for investors who want to invest a lump sum amount initially and earn interest on a monthly basis.
- Minimum investment is Rs.1000 in multiples of Rs 1,000
- The maximum deposits in all the accounts taken together should not exceed Rs.4 lakhs in a single account and Rs.8 lakhs in a joint account
- The tenure of the MIS scheme is six years.

MONEY MARKET INSTRUMENTS

- Debt instruments which have a maturity of less than a year at the time of issue are called *money market instruments*
- These are highly liquid instruments

Treasury bills

- Issued by GOI
- They are of two durations – 91 days and 364 days
- Are negotiable instruments and can be rediscounted with GOI
- They are sold on an auction basis every week in certain minimum denominations by the RBI
- They do not carry an explicit interest rate. Instead they are issued at a discount to be redeemed at par. The implicit return is a function of the size of discount and the period of maturity
- They have zero default risk, assured return, are easily available

Certificate of deposits

- Negotiable instruments issued by banks / financial institutions with a maturity ranging from 3 months to 1 year
- These are bank deposits transferable from one party to another
- The principal investors are banks, financial institutions, corporates and mutual funds
- These carry an explicit rate of interest
- Banks normally tailor make their denominations and maturities to suit the needs of the investors

Commercial papers

- Issued in form of promissory notes redeemable at par by the holder on maturity
- Usually has a maturity period of 90 to 180 days
- They are sold at a discount to be redeemed at par
- CPs can be issued by corporates having a minimum net worth of Rs 5 crores and an investment grade from credit rating agencies
- Minimum issue size is Rs 25 lacs

MUTUAL FUNDS

- Also known as an instrument for collective investment
- Investment is done in three broad categories of financial assets i.e. stocks, bonds and cash
- *Depending on the asset mix*, mutual fund schemes are classified as: Equity schemes, hybrid schemes and debt schemes
- *On the basis of flexibility*, Mutual fund schemes may be: Open ended or Close ended
 - *Open ended schemes* are open for subscription & redemption throughout the year
 - *Close ended schemes* are open for subscription only for a specified period and can be redeemed only on a fixed date of redemption
- *On the basis of objective*, mutual funds may be growth funds, income funds, or balanced funds
- NAV of a fund is the cumulative market value of the assets of the fund net of its liabilities

FINANCIAL DERIVATIVES

- *Derivative* is a product whose value is derived from the value of the one or more underlying assets. These underlying assets may be equity, bonds, foreign exchange, commodity or any other asset
- Derivative does not have a value of its own. Rather its value depends on the value of the underlying asset.
- Derivatives initially emerged as hedging devices against fluctuations in commodity prices and commodity linked derivatives remained the sole form of such products. Financial derivatives emerged post 1970 period.
- *Financial derivatives* have various financial instruments as the underlying variables
- Futures and Options are two basic types of derivatives

Futures is a transferable contract between two parties to buy or sell an asset at a certain date in the future at a specified price

- It is a standardized contract with a standard underlying asset, a standard quantity and quality of underlying instrument and a standard timing of settlement
- It may be offset prior to its maturity by entering into an equal and opposite transaction
- It requires margin payments and follow daily movements

Options are of two types:

- *Call option* gives the buyer of the option a right but not an obligation to buy a given quantity of the underlying asset, at a given price, on or before a given future date
- *Put option* gives the buyer of the option a right but not an obligation to sell a given quantity of the underlying asset, at a given price, on or before a given future date

REAL ASSETS

- Real estate
- Precious objects

PROCESS OF INVESTMENT

1. INVESTMENT POLICY

The Government or the investor before proceeding into investment formulates the policy for systematic functioning

- Determination of Investible wealth (parting)
- Determination of portfolio objectives (returns/appreciation)
- Identification of potential investment assets (market analysis)
- Consideration of attributes of investment assets (risk, return)
- Allocation of wealth to asset categories (tentative)

i. Investible fund: The entire investment procedure revolves around the availability of investible funds. The fund may be generated thru savings or borrowings. If the funds are borrowed, the investor has to be extra careful in the selection of investment alternatives. The return should be higher than the interest he pays.

ii. The objectives are framed on the premises of the required rate of return, need for regularity of income, risk perception and the need for liquidity. The risk taker objective is to earn high rate of return in the form of capital appreciation.

iii. Knowledge: The knowledge about the investment alternatives and markets plays a key role in the policy formulation. The investment alternatives range from Security to Real Estate. The risk and return associated with the investment alternatives differ from each other. The investor should be aware of the stock market structure and functions of the brokers

2. INVESTMENT VALUATION:

The valuation helps the investor to determine the return and risk expected from an investment in the common stock, the intrinsic value of the share and price earning ratio.

Future Value: Future value of the securities could be estimated by using a simple statistical technique like trend analysis.

- Valuation of stocks
- Valuation of debentures and bonds
- Valuation of other assets

3. INVESTMENT / SECURITY ANALYSIS

- Economic analysis
- Technical analysis
- Efficient Market Approach

After formulating the investment policy, the securities to be bought have to be scrutinized through the market, industry & company analysis.

Market analysis: The stock market shows the general economic scenario. The growth in gross domestic product and inflation are reflected in the stock prices. The stock prices may be fluctuating in the short run but in the long run they move in trends.

Industry analysis: The industries that contribute to the output of the major segments of the economy vary in their growth rates and their overall contribution to economic activity. Some industries grow faster than the GDP and are expected to continue in their growth.

Company Analysis: The purpose of company analysis is to help the investors to 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 the stock prices and the return of the investors. Appreciation of the stock value is a function of the performance of the company.

4. PORTFOLIO CONSTRUCTION

- Determination of diversification level
- Consideration of investment timing (boom/depression)
- Selection of investment assets
- Allocation of investible wealth
- Evaluation of portfolio for feedback

A Portfolio is a combination of securities. The portfolio is constructed in such a manner to meet the investor's goals and objectives. The investor should decide how best to reach the goals with

the securities available. Towards this end he diversifies his portfolio and allocates funds among the securities.

Diversification - The main objective of diversification is the reduction of risk in the loss of capital and income. There are several ways to diversify the portfolio.

- Debt and equity diversification - Both debt instruments and equity are combined to complement each other
- Industry diversification – Industries growth and their reaction to government policies differ from each other. Hence industry diversification is needed and it reduces risk.
- Company diversification – Securities from different companies are purchased to reduce risk.
- Selection: Based on diversification level, industry and company analyses, the securities have to be selected.

5. PORTFOLIO EVALUATION

The efficient management of portfolio consists of portfolio appraisal and revision

Appraisal: The return and risk performance of the security vary from time and time. The developments in the economy, industry and relevant companies from which the stocks are bought have to be appraised. The appraisal warns the loss and steps can be taken to avoid such losses.

Revision: Revision depends on the results of the appraisal. The low yielding securities with high risk are replaced with high yielding securities with low risk factor. To keep the return at a particular level necessitates the investor to revise the components of the portfolio periodically.

Securities

Security means “a document which represents the investments made by an investor”.

There are two types:

- Creditorship Securities (e.g. Preference, bonds & debentures)
- Ownership Securities (e.g. Equity Shares)

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.	Consider inside information, hearsays and market behavior.
Funds	Uses his own funds and avoids borrowed funds.	Uses borrowed funds to supplement his personal resources.
Safety	He chooses the investment alternative which has high degree of safety. Here safety is primary and	Focuses more on return than the safety.



INVESTMENT VS. GAMBLING

Points of Difference	Investment	Gambling
<i>Planning Horizon</i>	Longer Planning Horizon	Short Planning Horizon
<i>Basis for Decisions</i>	Scientific Analysis of Intrinsic worth of the security	Based on tips and rumors
<i>Nature</i>	Planned activity	Unplanned activity
<i>Risk</i>	Commercial Risk	Artificial Risk
<i>Return Expectation</i>	Risk-return trade-off determines return	Negative returns are expected
<i>Motive</i>	Safety of principal and stability of returns	Entertainment while earning

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 his 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 assets which is not necessarily in order to enjoy a series

of returns. The investor sacrifice 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 investment are speculative by nature. Genuine investments are carefully thought out decisions. On the other hand, speculative investments are not carefully thought-out decisions.

They are based on tips and rumours.

An investment can be distinguished from speculation in three ways–risk, capital gain and time period. Risk has definite financial meaning it is a possibility of incurring a loss in a financial transaction.

Investment involves limited risk while speculation is considered as an investment of funds with high

risk. Speculation involves buying a security at a low price and selling at a high price to make a capital

gain. Investment involves longer-term allocation of funds, whereas speculation involves holding a security for a short-term and trading quickly for earning higher gain. Speculation involves a higher level of risk and a more uncertain expectation of return. Investments are not risk-free but the risk can be calculated. The expected return is consistent with the risk of investment.

	INVESTOR	SPECULATOR	GAMBLER
TYPE OF PERSON	Conservative, Institutions, Most Money Managers (EX Hedge Funds)	A Personality Aggressive, Hedge funds, Fast money	Lottery player, Casino visitor.....
ANALYSIS	Fundamentals/ Valuations Experience	Technical Analysis, Gut, Experience	Luck, Gut, Probabilities
RISK	Margin of Safety, Dividends, Valuations	Above average, leverage increases risk/return,	Most
TIME	Months, to decades	Minutes to months	Quick
LEVERAGE	Normally, no	Yes	Hope not
VEHICLE	Stocks, bonds, real estate	Stocks, options, futures, bitcoins	Lottery, Casinos, Las Vegas, Race track, On line betting...
COLLATERAL	Yes, normally 50%	NO	NO

Different types of investors:

Σ **Conservative** investors often invest in cash. THIS means that they put their money in interest bearing savings accounts, money market accounts, mutual funds, US Treasury bills, and Certificates of Deposit. These are very safe investments that grow over a long period of time. These are also low risk investments.

Σ **Moderate** investors often invest in cash and bonds, and may dabble in the stock market. Moderate investing may be low or moderate risks. Moderate investors often also invest in real estate, providing that it is low risk real estate.

Σ **Aggressive** investors commonly do most of THEIR investing in the stock market, which is higher risk. They also tend to invest in business ventures as well as higher risk real estate. For instance, if an aggressive investor puts his or her money into an older apartment building, then invests more money renovating the property, they are running a risk. They expect to be able to rent the apartments out for more money than the apartments are currently worth or to sell the entire property for a profit on their initial investments. In some cases, this works out just fine, and in other cases, it doesn't. It's a risk.

INVESTMENT INFORMATION

- International affairs.
- National affairs.
- Industry information.
- Company information.
- Stock market information

Unit- II**(12 Periods)**

Investment Risk – Systematic Risk – Unsystematic Risk – Business Risk – Measurement of Risk – Corporate Securities - New Issue Market – Conventional Stock Exchanges – New Stock Exchanges - Listing of Securities.

Introduction

The dictionary meaning of risk is the possibility of loss or injury; risk is the possibility of not getting the expected return. The difference between expected return and actual return is called the risk in investment. Investment situation may be high-risk, medium and low-risk investment.

2.1.1 Elements of Risk

The components of risk are broadly two groups:

Systematic risks •

Unsystematic risks •

Systematic risks

The systematic risks is caused by factors external to the particular company and uncontrollable by the company. The systematic risk affects the market as a whole. It refers to that portion of the total variability of the return caused by common factors affecting the prices of all securities alike through economic, political and social factors.

Unsystematic risks

In case of unsystematic risks, the factors are specific, unique and related to the particular industry or company. It refers to that portion of the total variability of the return caused due to unique factors, relating to that firm or industry, through such factors as management failure, labour strikes, raw material scarcity, etc.

2.1.2 Sources of Risk

Sources of risk are discussed in the paragraphs given below:

Interest rate risk

Interest rate risk is the variation in the single period rates of return caused by the fluctuations in the market interest rate. Most commonly, the interest rate risk affects the debt securities like bonds and debentures.

Market risk

Jack Clark Francis has defined market risk as that portion of total variability of return caused by the alternating forces of bull and bear market. This is a type of systematic risk that affects share market price. Shares move up and down consistently for some period of time.

Purchasing power risk

Another type of systematic risk is the purchasing power risk. It refers to the variation in investor return caused by inflation.

Business risk

Every company operates within a particular operating environment; operating environment comprises both internal environment within the firm and external environment outside the firm.

Business risk is thus a function of the operating conditions faced by a company and is the variability in operating income caused by the operating conditions of the company.

Financial risk

It refers to the variability of the income to the equity capital due to the debt capital. Financial risk in a company is associated with the capital structure of the company. The debt in the capital structure creates fixed payments in the form of interest. This creates more variability in the earning per share available to equity share holders. This variability of return is called financial risk and it is a type of unsystematic risk.

Liquidity risk

While there is almost always a ready market for government bonds, corporate bonds are sometimes entirely different animals. There is a risk that an investor might not be able to sell his or her corporate bonds quickly due to a thin market with few buyers and sellers for the bond. Low interest in a particular bond issue can lead to substantial price volatility and possibly have an adverse impact on a bondholder's total return (upon sale). Much like stocks that trade in a thin market, you may be forced to take a much lower price than expected to sell your position in the bond.

Exchange rate risk

It is the uncertainty of returns to an investor who acquires securities denominated in a currency different from his or her own. The likelihood of incurring this risk is becoming greater as investors buy and sell assets around the world, as opposed to only assets within their own countries. A U.S. investor who buys Japanese stock denominated in yen must consider not only the uncertainty of the return in yen, but also any change in the exchange value of the yen relative to the U.S. dollar. That is, in addition to the foreign firm's business and financial risk and the security's liquidity risk, the investor must consider the additional uncertainty of the return on this Japanese stock, when it is converted from yen to U.S. dollars.

Country risk

It is also called political risk. It is the uncertainty of returns caused by the possibility of a major change in the political or economic environment of a country. The United States is acknowledged to have the smallest country risk in the world, because its political and economic systems are the most stable. During the spring of 2011, prevailing examples include the deadly rebellion in Libya against Muammar Gadhafi; a major uprising in Syria against President Bashar al-Assad; and significant protests in Yemen against President Ali Abdullah Saleh. In addition, there has been a recent deadly earthquake and tsunami in Japan that is disturbing numerous global corporations and the currency markets. Individuals who invest in countries that have unstable political or economic systems must add a country risk premium when determining their required rates of return.

Definition of New Issue:

A new issue is a stock or bond that is being sold to investors for the first time. This new issue can be an Initial Public Offering (IPO) of a company or it can be a new issue floated by an organization that has floated many such issues in the past. The market that deals with these new issues is called the primary market, as opposed to the secondary market that deals with existing shares and bonds.

Function of the New Issue Market:

ROLE / FUNCTIONS OF PRIMARY MARKET

- **ORIGINATION:** It deals with origin of the new issue. The proposal is analyzed in terms of the nature of the security, the size of the issue, timing of the issue and floatation method of issue.
- **UNDERWRITING:** It is a contract that makes the subscription of share predictable and removes the element of uncertainty in the subscription.
- **DISTRIBUTION:** It refers to the sale of securities to the investors. This is carried out with a help of the lead managers & brokers to the issue.

Now, the main function of the New Issue Market, i.e. channeling of investible funds, can be divided, from the operational stand-point, into a triple-service function:

- (a) Origination
- (b) Underwriting
- (c) Distribution

(a) Origination:

Origination refers to the work of investigation and analysis and processing of new proposals. This in turn may be:

- (i) A preliminary investigation undertaken by the sponsors (specialized agencies) of the issue. This involves a/careful study of the technical, economic, financial and/legal aspects of the issuing companies to ensure that/it warrants the backing of the issue house.
- (ii) Services of an advisory nature which go to improve the quality of capital issues. These services include/advice on such aspects of capital issues as: determination of the class of security to be/issued and price of the issue in terms of market conditions; the timing and magnitude of issues; method of flotation; and technique of selling and so on.

(b) Underwriting:

Underwriting entails an agreement whereby a person/organization agrees to take a specified number of shares or debentures or a specified amount of stock offered to the public in the event of the public not subscribing to it, in consideration of a commission the underwriting commission.

(c) Distribution:

The sale of securities to the ultimate investors is referred to as distribution; it is another specialized job, which can be performed by brokers and dealers in securities who maintain regular and direct contact with the ultimate investors. The ability of the New Issue Market to cope with the growing requirements of the expanding corporate sector would depend on this triple-service function.

FINANCIAL MARKET

- Mechanism that allows people to buy and sell financial securities (such as shares & bonds) and items of value at low transaction cost
- Markets work by placing many interested buyers and sellers at one place, thus making it easier for them to find each other

PARTICIPANTS IN FINANCIAL MARKET

- Borrower : Issues a receipt to lender promising to pay back capital
- Individuals – e.g. Bank loans, mortgages
- Companies - for short term or long term cash flows or future business expansion
- Government - for public expenditure, or on behalf of nationalized industries, municipalities or other public sector bodies
- Public corporations- e.g. postal services, railways and utility companies

Lender: Will expect some compensation in form of interest or dividend, in return. Lender could be

- Individuals
- Companies
- Government

Segments of Financial Market

The eight major market segments listed below can help fund-raisers differentiate financial behavior patterns of investors at various socio-economic levels:

- Wealth Market
- Upscale Retired
- Upper Affluent
- Lower Affluent
- Mass Market
- Mid scale Retired
- Lower Market
- Downscale Retired

Types of Financial Market

1. CAPITAL MARKET

- Stock Markets - which provide financing through issue of shares or common stock and enable subsequent trading
- Bond Markets - which provide financing through the issuance of bonds, enable subsequent trading
- Commodity Markets - which facilitate trading of commodities
- Money Markets - which provide short term debt financing and investment
- Derivative Markets – which provide instruments for the management of financial risk
- Insurance Markets - which facilitate redistribution of various risk
- Foreign Exchange Markets - which facilitate trading of foreign exchange

2. PRIMARY MARKET

NEW ISSUE MARKET

Stocks available for the first time are offered through new issue market. The issuer may be a new company or an existing company.

The objectives of a capital issue are given below:

- To start a new company.
- To expand an existing company.
- To diversify the production.
- To meet the regular working capital requirements.
- To capitalize the reserves.

RELATIONSHIP BETWEEN THE PRIMARY & SECONDARY MARKET

The new issue market cannot function without the secondary market. The secondary market or the stock market provides liquidity for the issued securities.

The stock exchanges through their listing requirements, exercise control over the primary market.

The primary market provides a direct link between the prospective investors and the company.

The health of a primary market depends on the secondary market and vice versa.

PARTIES INVOLVED IN NEW ISSUE

1. Managers to the issue: Lead Managers are appointed by the company to manage the public issue programs. Their main duties are

- a. drafting of prospectus
- b. preparing the budget of expenses related to the issue
- c. suggesting the appropriate timings of the public issue
- d. assisting in marketing the public issue successfully
- e. advising the company in the appointment of registrars to the issue, underwriters, brokers, bankers to the issue, advertising agency etc.
- f. directing the various agencies in the issue.

2. Registrar to the issue:

- After the appointment of the lead managers of the issue, in consultation with them, the registrar to the issue is appointed.
- The Registrar normally receives the share application from various collection centers

3. Underwriters:

Underwriting is a contract by means of which a person gives an assurance to the issuer to the effect that the former would subscribe to the securities offered in the event of non-subscription by the person to whom they were offered. The person who assures is called an underwriter. The underwriters do not buy and sell securities. They stand as back-up supporters and underwriting is done for a commission.

Underwriters are divided into 2 categories :

- Financial institutions and banks, &
- Brokers & approved investment companies

Some of the underwriters are financial institutions, commercial banks, merchant bankers, members of the stock exchange, export & import bank of India, State Bank of India etc.

4. Bankers to the issue:

They have the responsibility of collecting the application money along with the application form. The bankers to the issue generally charge a commission besides the brokerage of the issue.

Depending on the size of the issue, more than one banker to the issue is appointed. When the size of the issue is large three or four bankers are appointed as bankers to the issue. The number of collection centers is specified by the central government.

5. Advertising agencies:

Advertising plays a key role in promoting the public issue. The advertising agencies take the responsibility of giving publicity to the issue on the suitable media. The media may be news papers/ magazines/ hoardings/press release or a combination of all

6. Financial Institutions:

Financial institutions generally underwrite the issue and lend term loans to the companies. Hence, normally they go through the draft of prospectus, study the proposed programs for the public issue and approve them.

IDBI, IFCI and ICICI, LIC, GIC and UTI are some of the institutions that underwrite and give financial assistance

METHODS OF FLOATING NEW ISSUES :-

The various methods which are used in the floating of securities in the new issue market are:
Public issues Offer for sale Placement Right issues

- i. Public issues or Initial public offering (IPO) The issuing company directly offers to the general public/institutions a fixed number of securities at a stated price or price band

through a document called prospectus. This is the most common method followed by companies to raise capital through issue of the securities.

- ii. Offer of sale It consists in outright sale of securities through the intermediary of issue houses or share brokers. It consists of two stages: the first stage is a direct sale by the issuing company to the issue house and brokers at an agreed price. In the second stage, the intermediaries resell the above securities to the ultimate investors. The issue houses purchase the securities at a negotiated price and resell at a higher price. The difference in the purchase and sale price is called turn or spread.
- iii. Right Issue When a listed company proposes to issue securities to its existing shareholders, whose names appear in the register of members on record date, in the proportion to their existing holding, through an offer document, such issues are called 'Right Issue'. This mode of raising capital is the best suited when the dilution of controlling interest is not intended.
- iv. Private placement It involves sale of securities to a limited number of sophisticated investors such as financial institutions, mutual funds, venture capital funds, banks, and so on. It refers to sale of equity or equity related instruments of an unlisted company or sale of debentures of a listed or unlisted company.
- v. Preferential Issue An issue of equity by a listed company to selected investors at a price which may or may not be related to the prevailing market price is referred to as preferential allotment in the Indian capital market. In India preferential allotment is given mainly to promoters or friendly investors to ward off the threat of takeover.
- vi. Fixed Price Process The price which has been fixed by the company for its securities before issue is brought to the market. The price at which the securities are offered/allotted is known in advance to the investor. Demand for the securities offered is known only after the closure of the issue. Payment is made at the time of subscription whereas refund is given after allotment.
- vii. Book-Building/Price Band It is a process used for marketing a public offer of equity shares of a company. Book building is a process wherein the issue price of a security is determined by the demand and supply forces in the capital market The Price at which securities will be allotted is not known in advance to the investor. Only an indicative price range is known. (Also called price band and it should not be more than 20% of the floor price).
- viii. Listing of Securities Listing means admission of the securities to dealings on a recognized stock exchange. The securities may be of any public limited company, central or state government, quasi-governmental and other financial institutions/corporations, municipalities etc.

BASIS FOR COMPARISON	IPO	FPO
Meaning	IPO refers to an offer of securities made to the public for subscription by the company for the first time	FPO refers to an offer of securities for subscription to the public by a publicly-traded enterprise
Issuer	Unlisted company	Listed company
Raising Capital	Through the first time from public	Through a subsequent public

BASIS FOR COMPARISON	IPO	FPO
		contribution
Risk	High	Comparatively low
Objective	The main objective is raising capital through public investment	The main objective is subsequent public investment
Predictability	Less predictable	More predictable
Profit	Higher than FPO	Lower than IPO
Types	Equity shares and Preferred shares	Dilutive offering and Non-Dilutive offering

Players in New issue market:

The main agencies involved in the public issue are managers to the issue, registrars to the issue, underwriters, bankers, advertising agencies, Financial institutions and government/statutory agencies.

Managers to the issue: Lead managers are appointed by the company to manage the public issue programmes. Their main duties are (a) drafting of prospectus (b) preparing the budget of expenses related to the issue (c) suggesting the appropriate timings of the public issue (d) assisting in marketing the public issue successfully (e) advising the company in the appointment of registrars to the issue, underwriters, brokers, bankers to the issue, advertising agents etc. and (f) directing the various agencies involved in the public issue. There are many agencies which are performing the role of lead managers to the issue. The merchant banking division of the financial institutions, subsidiary of commercial banks, foreign banks, private sector banks and private agencies are available to act as lead managers.

Registrar to the issue: In consultation with the lead manager, the Registrar to the issue is appointed. Quotations containing the details of the various functions they would be performing and charges for them are called for selection. Among them the most suitable one is selected. It is always ensured that the registrar to the issue has the necessary infrastructure like computer, internet and telephone.

The Registrars to the issue normally receive the share application from various collection centres. They recommend the basis of allotment in consultation with the Regional Stock Exchange for approval. They arrange for the dispatching of the share certificates. They handover the details of the share allocation and other related registers to the company. Usually registrars to the issue retain the issuer records at least for a period of six months from the last date of dispatch of letters of allotment to enable the investors to approach the registrars for redressal of their complaints.

Underwriters: Underwriter is a person/organization who gives an assurance to the issuer to the effect that the former would subscribe to the securities offered in the event of non-subscription by the person to whom they were offered. They stand as back-up supporters and underwriting is

done for a commission. Underwriting provides an insurance against the possibility of inadequate subscription. Some of the underwriters are financial institutions, commercial banks, merchant bankers, members of the stock exchange, Export and Import Bank of India etc. The underwriters are exposed to the risk of non subscription and for such risk exposure they are paid an underwriting commission.

When appointing an underwriter, the financial strength of the prospective underwriter is considered because he has to undertake the agreed non-subscribed portion of the public issue. The other aspects considered are

- a. experience in the primary market
- b. past underwriting performance and default
- c. outstanding underwriting commitment
- d. the network of investor clientele of the underwriter and
- e. his overall reputation.

Bankers to the issue: The responsibility of collecting the application money along with the application form is on bankers to the issue. The bankers charge commission besides the brokerage, if any. Depending upon the size of the public issue more than one banker to the issue is appointed. When the size of the issue is large, three or four banks are appointed as bankers to the issue. The number of collection centres is specified by the central government. The bankers to the issue should have branches in the specified collection centres. In big or metropolitan cities more than one branch of the various bankers to the issue are designated as collecting branch for acceptance of money. To create investment awareness in the minds of the people collecting branches are designated in the different towns of the state where the project is being set up. If the collection centres for application money are located nearby people are likely to invest the money in the company shares.

Advertising agents: Advertising a public issue is very essential for its promotion. Hence, the past track record of the advertising agency is studied carefully. Tentative programmes of each advertising agency along with the estimated cost are called for. After comparing the effectiveness and cost of each programme with the other, a suitable advertising agency is selected in consultation with the lead managers to the issue. The advertising agencies take the responsibility of giving publicity to the issue on the suitable media. The media may be newspapers /magazines/ hoardings/press release or a combination of all.

The financial institutions: The function of underwriting is generally performed by financial institutions. Therefore, normally they go through the draft of prospectus, study the proposed programme for public issue and approve them. IDBI, IFCI, ICICI, LIC, GIC and UTI are the some of the financial institutions that underwrite and give financial assistance. The lead manager sends copy of the draft prospectus to the financial institutions and include their comments, if any in the revised draft.

Regulatory bodies: The various regulatory bodies related with the public issue are:

1. Securities Exchange Board of India
2. Registrar of companies
3. Reserve Bank of India (if the project involves foreign investment)
4. Stock Exchanges where the issue is going to be listed
5. Industrial licensing authorities
6. Pollution control authorities (clearance for the project has to be stated in the prospectus)

Collection centres: There should be at least 20 mandatory collection centres inclusive of the places where stock exchanges are located. If the issue is not exceeding Rs. 10 cr (excluding

premium if any) the mandatory collection centres are the four metropolitan centres viz. Mumbai, Delhi, Calcutta and Chennai and at all such centres where stock exchanges are located in the region in which the registered office of the company is situated.

In addition to the collection branch, authorized collection agents may also be appointed. The names and addresses of such agent should be given in the offer documents. The collection agents are permitted to collect such application money in the form of cheques, draft, stock invests and not in the form of cash. The application money so collected should be deposited in the special share application account with the designated scheduled bank either on the same day or latest by the next working day.

TYPES OF UNDERWRITING

Different types of underwriting are as follows:

1. **Firm underwriting:** Firm underwriting is an underwriting agreement where an underwriter agrees to buy a definite number of shares or debentures in addition to the shares or debentures he has already promised to subscribe under the underwriting agreement. In firm underwriting, the underwriters are liable to take up the agreed number of shares or debentures even if the issue is over subscribed.
2. **Complete underwriting:** when the whole issue of shares or debentures of a company is underwritten, it is called complete underwriting. In such a case the whole issue is underwritten either by an individual/institution agreeing to take the entire risk or by a number of firms or institutions, each agreeing to take the risk to a limited extent.
3. **Partial underwriting.** When only a part of the issue of shares or debentures of a company is underwritten, it is known as partial underwriting. In such a case the part of the issue is underwritten either by an individual/institution or by a number of firms or institutions each agreeing to take the risk to a limited extent.
4. **Syndicate Underwriting:** When the issue is very big and it is impossible to be underwritten by a single underwriter syndicate underwriting comes to rescue. In syndicate underwriting, few underwriting firms form a syndicate and jointly undertake to underwrite the issue. The amount to be underwritten and the ratio is determined in advance among the firms.
5. **Joint Underwriting:** In Joint underwriting, when the issue is too large, the issuer company itself appoint more than one underwriter to reduce the burden from a single underwriter. Each Underwriter underwrites for a specified amount and in a specified ratio. It is different from a syndicate underwriting in a way that in Syndicate underwriting the underwriting firm themselves form a syndicate and represent themselves as single underwriting firm but in Joint underwriting, the issuer company itself appoint a number of firms to underwrite the issue.
6. **Sub-underwriting:** If an underwriter has promised to underwrite an issue and later on it feels that it is beyond his individual capacity, then he may appoint a sub-underwriter to safeguard himself. For example, if an underwriter A has underwritten for an amount of 40 crores, and later on he finds it difficult to underwrite single Handadley he may appoint a sub-underwriter to underwrite 10 crores. In this case, the sub-underwriter is liable to underwriter only and he has no connection with the company. the relationship between underwriter and sub-underwriter is same as an agent and sub-agent.

The importance of underwriting can further be highlighted from the following functions performed by the underwriters:

1. Assurance of Adequate Finance:

Underwriting is an act of undertaking guarantee by an underwriter to buy and pay for the shares or debentures placed before the public in the event of their non-subscription. Thus, through underwriting, an issuing company is assured of procuring the required funds from the issue of shares or debentures.

In the event of non-subscription by the public, underwriters purchase the unsubscribed part of the issue and provide finance to the company.

2. Supplying Valuable Information to Companies:

In addition to the protection of risk of the issuing companies with regard to the success of the issue, the underwriters supply valuable information in regard to capital market conditions, general response of the investors, etc. to the issuing companies. These companies are, usually, benefited from the expert-advice of the underwriters.

3. Distribution of Securities:

After purchasing securities, underwriters distribute the same to the real investors. The underwriters, through agents and others diffuse the issue over a large number of investors scattered in different part of the country. Thus, underwriting helps promoters to retain control over the management of the company.

4. Increase in Goodwill of the Issuing Company:

The underwriting of capital issues by prestigious institutions generates confidence among investors and improves their response to the issues. Investors in advanced countries are influenced more by the prestige of the underwriting agencies than by the prestige of the issuing company. Underwriting, thus, ultimately increases the goodwill of the issuing company.

5. Service to Prospective Investors:

Underwriters provide essential information about the issuing companies to the prospective investors and also advise them about various issues. They encourage people to save more and direct their savings in corporate securities. Thus, investors are also benefited through underwriting.

6. Service to the Society:

The pace of industrialisation of a country depends to a great extent upon the successful flotation of capital issues. By mobilising resources and providing adequate finance, underwriters play a very important role in setting up of new projects, increasing employment, production and per capita income. Thus, it is not only the corporate enterprises but also the society at large which is benefited by underwriting.

Advantages of primary market or the New issue market

1. It provides opportunity for new investors to start new enterprises: Persons with technical know-how may resort to promote new ventures which are profit-oriented. The new issue market gives them an opportunity to materialize their ideas.

2. Existing companies will be in a position to expand their activities: When the existing companies find their products obsolete, they would like to venture into new areas of production for which they require additional capital. The new issue market helps them raise the required funds.

3. Promotion of partnership firm into Public Limited companies or merger of companies or facilitates buy-back of shares: When new ventures are started, a management may wish to have a control on the ownership and for this purpose, they would like to enter into a buy-back arrangement. By this arrangement, the shares will be issued to a group of persons (NRIs) for a specific period after which they will be bought back from out of the profits. This ensures the retention of ownership and prevents any change in management.

Classification of securities in Primary Market:

Securities dealt in the new issue market or primary market are classified as

1. Equity Shares.
2. Preference Shares.
3. Debentures.

1. **Equity shares:** These are shares issued by companies for raising capital. The owners of these shares are shareholders. Normally, the face value of the shares may be Rs.10 or Rs.100. A group of fully paid shares are called stock and these can be transferred. The shareholders are entitled for profit, which are distributed to them in the form of dividend. The share capital will be refunded to them only during the winding up of the company, provided the company has sufficient assets.

2. **Preference shares:** Preference shares are similar to equity shares but are given on a preference basis to certain shareholders like promoters, auditors, etc. There are cumulative, non-cumulative, participating, redeemable, irredeemable, convertible and non-convertible preference shares. Preference shareholders will get the first preference in the distribution of dividend over equity shareholders. The same condition applies in the repayment of capital at the time of winding up.

3. **Debentures:** It is a loan obtained by the company from the public for a fixed interest rate for a fixed period. Those investors who do not want to take any risks will prefer debentures as they have less risk on the repayment compared to shares. There are debentures which have mortgage charge on the assets of the company and these debenture holders are assured of the repayment.

Listing of Securities

Listing means the admission of securities of a company to trading on a stock exchange. Listing is not compulsory under the Companies Act. It becomes necessary when a public limited company desires to issue [shares or debentures](#) to the public. When securities are listed in a [stock exchange](#), the company has to comply with the [requirements of the exchange](#).

Objectives of Listing

The major objectives of listing are

1. To provide ready marketability and liquidity of a company's securities.
2. To provide free negotiability to stocks.
3. To protect shareholders and investors interests.

4. To provide a mechanism for effective control and supervision of trading.

Shares Listing Procedure

According to Regulation 4(2) of **SEBI** (Issue of Capital and Disclosure Requirements) Regulations 2009, no issuer shall make a public issue or rights issue of securities unless they make an application to one or more recognized stock exchanges and had chosen one of them as a designated stock exchange.

In the case of Initial Public offer, it is required for the issuer to make an application for Shares Listing in at least one recognized stock exchange having nationwide trading terminals.

Conditions

The company has to follow specified conditions before Shares listing in stock exchange:

- **Shares of a company** shall be offered to the public through the prospectus, and 25% of securities must be offered.
- Date of opening of subscription, receipt of the application and other details should be mentioned in the prospectus.
- The capital structure of the company should be wide and the securities of the company should be in public interest.
- The requirement for the Minimum issued is Rs. 3 Crores out of which 1.8 Crore must be offered to the public.
- There is a requirement of at least 5 public shareholders in respect of every Rs. 1 Lakh of fresh issue of capital and 10 shareholders for every Rs.1 lakh of the offer of existing capital.
- In the case of excess application money, the company has to pay interest within the range of 4% to 15% in case there is a delay in the refund and delay should not be more than 10 weeks from the date of closure of subscription list.
- The company has paid-up share capital of more than Rs. 5 crores should get itself registered in the recognized stock exchange and compulsorily on the regional stock exchange.
- The auditor or secretary of the company has to declare that share certificate has been stamped for listing so that shares belonging to promoter's quota cannot be sold or transferred for 5 years.
- Letter of allotment, Letter of regret and letter of a right shall be issued.
- Receipts for all securities deposited either by way of registration or split.
- Consolidation and renewal certificates will be issued for a certificate of the division, letter of allotment, transfer, and letter of rights, etc.
- The company has to notify stock exchange regarding the board meeting, change in the composition of a board of directors and the case of the new issue of securities in place of a reissue of forfeited shares.
- Due notice should be given to stock exchange, for closing transfer books for a declaration of dividend, rights issue or bonus issue.
- After the annual general meeting, the annual return is required to be filed.

- The company is required to comply with the conditions imposed by the stock exchange for the listing of security.

Different Types of Listing of Securities

- **Initial Listing**

In case shares of the company are listed for the first time in the stock exchange.

- **Public issue**

The company who has listed its shares on a stock market comes out with a public issue.

- **Right Issue**

The company who has listed its shares in a stock exchange issues shares to its existing shareholders.

- **Bonus Shares**

When a listed company issue bonus shares to its existing shareholders for capitalizing its profits.

- **Listing for merger or amalgamation**

The amalgamated company issues new shares to the shareholders of the merged company, and these new shares are listed.

Procedure for Listing Requirements

Public Company has to submit the following documents to Shares Listing in stock exchange:

- Certified copy of Memorandum & Article of Association;
- Prospectus & agreement with underwriters;
- Details of Capital Structure;
- Copies of an advertisement offering securities during the last 5 years;
- Copies of financial statement & auditor's report for the last 5 years;
- Copy of shares & debentures, letter of allotment and letter of regret;
- Details of the company since incorporation including changes in the capital structure, borrowings, etc.;
- Details of shares or debentures issued for consideration other than cash;
- A statement defining the distribution of shares and other details related to the commission, brokerage, discounts, or terms related to issue of shares;
- Agreement with a financial institution, if any;
- Details of shares forfeited;
- Details of securities about which permission to deal with are applied for;
- A copy of consent from SEBI.

ADVANTAGES OF LISTING

The advantages of listing can be summarized under two heads namely,

1. Advantages to the company management.
2. Advantages to the investors.

ADVANTAGES TO THE COMPANY MANAGEMENT

1. It gives the management and the company a higher status and facilitates expansion programmes.
2. Such companies can raise finance very easily.
3. Listed companies are eligible for certain fiscal advantages such as concessional rate of income tax, benefits of carry forward and set off of losses of the earlier years etc.
4. Such companies are better placed while approaching the SEBI for its consent under any of the provisions of the SEBI Act.
5. Listed companies are treated favorably by the financial institutions and commercial banks when they approach them for short-term and long-term accommodations.

ADVANTAGES TO THE INVESTORS

1. Listing makes the securities more prestigious and enhances their marketability. Hence, the holders of such securities can convert their holdings without any difficulty in times of need.
2. The security prices are regularly published in the financial newspapers and periodicals. Hence, the investors can sell their holdings at the current market price.
3. Such securities generally fetch higher prices.
4. Holders of listed securities are eligible for certain concessions in matters relating to Income Tax, Wealth Tax etc. in their capacity as assesseees.
5. Listed securities enjoy more public confidence. Hence, they have high collateral value. The bankers will readily accept such securities for providing loans and other accommodations.
6. Listed companies should make a fair disclosure of certain information and so the investors are given a reasonable opportunity of judging the merits of the concern.
7. Listed securities ensure safety to the funds of the investors.

DISADVANTAGES OF LISTING

Listing, however, is not free from defects. The procedure of listing has certain definite limitations and disadvantages. Some of the inherent limitations of listing are given below:

1. Listing makes people depend upon share brokers, jobbers etc. Many of them are weak speculators and frequently put their clients into difficulties. They create violent price fluctuations.
2. Securities, which are unable to have a stable value, shall lose their prestige and fall down in the esteem of the investors and bankers.
3. The management is also induced to show keen interest in the price movements for personal gains. They may take advantage of their inside knowledge and indulge in speculation.
4. The free negotiability of securities enables a few interested persons to buy a substantial portion of the securities and thereby capture the management of the company.
5. The company should furnish certain information in detail. Such a detailed disclosure may even injure the prospects of the company.

SECONDARY MARKET

- The market for long-term securities like Bonds, Equities, Stocks and Preferred stocks is divided into Primary and Secondary markets.
- The primary market deals with the new issue securities.
- Outstanding securities are traded in the secondary markets, which is commonly known as stock market or stock exchange market.
- In the secondary market, investors can sell and buy securities.
- Stock markets predominantly deal in the equity shares.
- Debt instruments like bonds debentures are also traded in the stock market.
- Growth of the primary market depends on the secondary market.

History of Stock Exchanges in India

- The origin of stock exchange in India can be traced back to the 19th century.
- After American civil war between 1860-61, 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.
- Securities and Contract Regulation Act 1956, (SCR) gave powers to the Central Govt. to regulate the stock exchanges.
- The stock exchanges in Mumbai, Kolkatta, Chennai, Ahmedabad, Delhi, Hyderabad and Indore were recognized by SCR Act.
- At present, we have 23 stock exchanges in India.

STOCK EXCHANGES IN INDIA:

It is an organized market for the purchase and sale of industrial and financial security. It is also known as Secondary market or stock market

FUNCTIONS OF STOCK EXCHANGES**1. Ensure Liquidity of Capital**

The stock exchanges provide a place where shares and stocks are converted in to cash.

2. Continuous Market for securities:

The stock exchanges provide a ready market for securities.

3. Evaluation of securities:

The investors can evaluate the worth of their holdings from the prices quoted at different exchanges for those securities.

4. Mobilizing surplus savings:

Ready market-The investors do not have any difficulty in investing their savings by purchasing shares, bonds etc., from the exchanges.

5. Helpful in raising New capital:

The new concerns raise the capital for the first time and existing concerns increase their capital

6. Safety in Dealings:

Rules governed by Securities contract(Regulation) Act, 1956

7. Listing of Securities:

Listed securities can purchase in market

8. Platform for public debt:

Stock exchanges for organized markets of government securities

9. Clearing House of Business Information:

The listed companies must provide financial statements, annual reports etc.,

Stock Exchanges in India

1. **Bombay stock Exchange (BSE)**

• It is the oldest stock exchange in Asia

• It has established as The Native share and stock Brokers in 1875

Features of BSE

• Largest stock Exchange in Asia

• Fifth largest stock market in the world

• More than 6, 000 Indian companies are listed in BSE

• It used BOLT (BSE online Trading system) as the stock trading system in the world

OTCEI

• It started in oct 1990

• It uses the model as NASDAQ (National association of security Dealers automated Quotations)

Features of OTCEI

• **Ringless Trading:** Screen based trading

• **National network:** wide network and grater liquidity

• **Totally computerized:** Transparent and quick market

• **Exclusive List of companies:** Exclude other stock exchange companies

• **Two ways of making a public offer:**

• **Direct offer :** offer shares directly to public

• **Indirect offer:** offer shares indirectly to public ie., to sponsors

• **Fast Transfers:** fast settlement called counter receipt

• **Trading Mechanism:** Export and Import Shares. The parties are Investor, counter, settler registered custodian, company and bank

Objectives of OTCEI

• To provide a nation wide investor base to small companies

• To encourage public issues

• To enable small companies to raise capital at low cost

• To offer quick settlement and transparent facilities

• To provide a single trading platform for investors

Benefits of OTCEI

To Investors:

• Easy Accessibility

• Improved Liquidity

• Transparency

- Immediate transfer of shares
- Speedy settlement of Trades

Benefits for Issuing companies:

- Low cost of Issuing shares
- Beneficial for small companies
- Benefit on account of the image Market maker

3.NSE(National Stock Exchange)

NSE was promoted by IDBI, ICICI, IFCI, GIC, LIC, State bank of India, SBI capital markets limited, SHCIL and IL & FS as a joint stock company under the companies Act 1956.

Features of NSE

- India s largest exchange
- Equity capital : 25 crores
- Head quarters in Mumbai and back office in Chennai
- It is a joint stock company and tax paying company
- Strict in disclosure and listing norms

Advantages of NSE

- Wider accessibility
- Screen based trading
- Non disclosure of trading members identity
- Transparent of transactions
- Matching of orders
- Effective settlement of corporate benefit
- Trading in dematerialized form
- SGL (subsidiary General Ledger) facility in debt market

ISE (Inter connected Stock Exchange)

It is a national level stock exchange, providing trading, clearing, settlement, risk management and surveillance support to its trading members.

Aims to address small companies

Features of ISE

- Accountability
- Integrity
- Innovation
- Knowledge

ISE

- It has 841 trading members
- It has floated ISS (Interconnected Securities & services limited)
- Trading members of ISE can access NSE & BSE by registering themselves as sub brokers of ISS

Features of ISE

- Accountability
- Integrity
- Innovation
- Knowledge

Functions of ISE

- Create a single integrated national level solution by high cost services

- , Create markets for listed companies and small capital companies in particular
- , Optimally utilizing the existing infrastructure
- , Provide clear settlements

Advantages of ISE

- , Moderate fees
- , Easy compliance
- , Improved visibility
- , Infrastructure
- , IPO distribution system- Primary market
- , Additional facility
- , Investor Protection
- , Website

Relationship between NSE & OTCEI

- ✓ Ringless No trading floor
- ✓ Screen based trading- computerized
- ✓ Transparency-can check the exact price

2.9 TRADING SYSTEM IN STOCK EXCHANGES

- ✓ , Finding a broker
- ✓ , Opening an account with broker
- ✓ , Placing the order
- ✓ , Making the contact
- ✓ , Preparing contact note
- , Settlement of transaction

1. Finding a broker

The shares are brought through a stock broker who is a licensed member of a recognised stock exchange.

Services

- 1. Provide in formations:** capital structures, earnings, dividend policies and prospects
- 2. Supply investment Literature:** Education to investors, providing financial periodicals, prospectus and reports of companies
- 3. Availability of competent Representatives:** appointing sufficient incharges

2. Opening an account with the broker:

The broker opens an account in the name of the protectiveness client only if the broker is satisfied about the creditworthiness of the investors and his intention to trade in the market.

3. Placing the orders

- a. Market orders-** urgent desire
- b. Limit orders:** Maximum or minimum price at which the investors is willing to buy or sell shares
- c. Stop loss orders:** conditional market order to stop loss
- d. Cancel order:** Execute immediately
- e. Discretionary order:** Execution for the best
- f. Open order:** No time or limit for the execution
- g. Fixed price order:** client specifies the price at which the shares are to be purchased

h. Other orders

↳ **Day orders:** Unless registration

↳ **Good Till cancelled(GTC) Order:** Order remains open until executed or cancelled.

↳ **Not held order:** Gives discretion to the floor brokers

↳ **Participate but do not Initiate (PNI):** The floor brokers is instructed to participate in trading but not to become aggressive

All or None Order (AON): The order wants to be executed by customer

Fill or kill order(FOK): Complete execution

Immediate or cancel(IOC): Part of the order which is not executed will be cancelled

3. Making the contract : Announcement by slip in a box

4. Preparing Contact note: Parties will record all details in contract

5. Settlement of Transaction: Settlement by the payment of buyers

Contracts:

1. **Ready Delivery contracts:** Immediate delivery of contracts and cash payment

2. **Forward Delivery contracts:** carrying over the transactions to the next settlement day

Settlements:

1. Fixed settlement:

It starts on a particular day and ends after five days

2. Rolling settlement:

fifth working day settlement

Trading on margin

It refers to the use of borrowed funds to supplement the investor's own money. Investors will do Partial money settlement by own and part from broker

Advantages

↳ It provides more profit with less investment

↳ Increases buying power

↳ Suitable for experienced traders

Short selling:

It s the practice of selling borrowed securities.

Advantages

↳ Profit and price decline

↳ It became as highly conservative investment strategy

Trades settlement in Stock Market

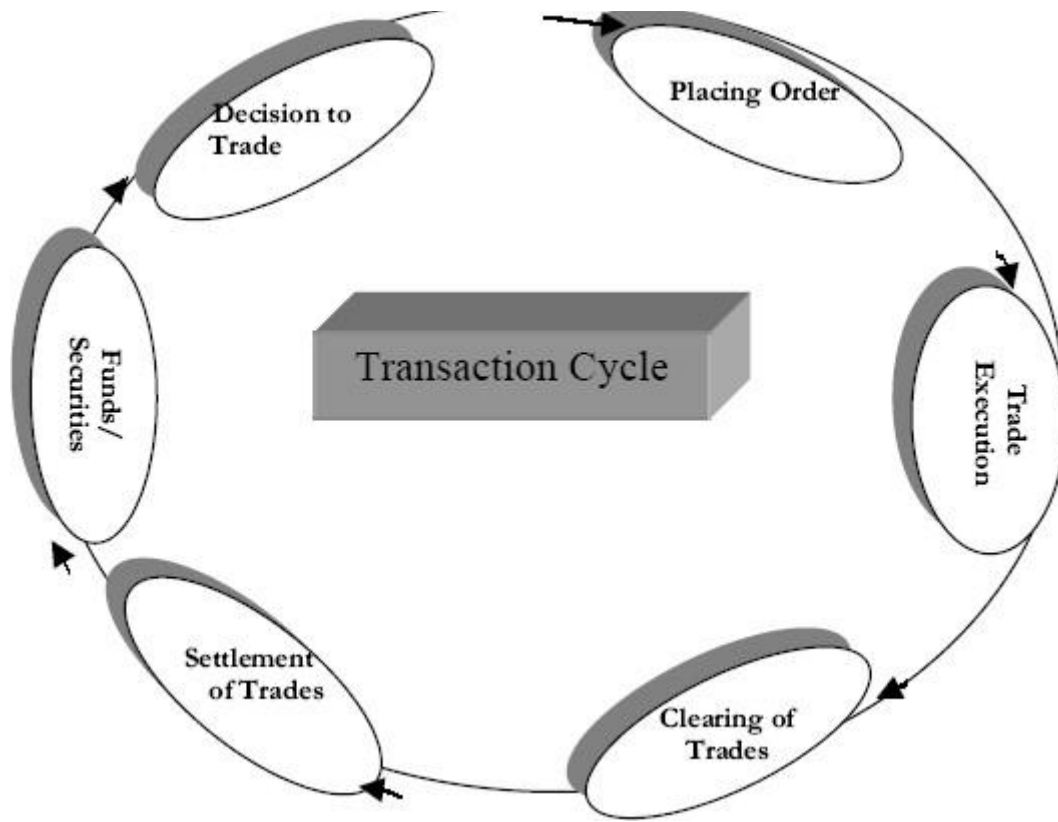
Fixed settlement system: The BSE had a settlement cycle of Monday to Friday and NSE from Wednesday to Tuesday.

Transactions can be carried forward for 15 day period to a maximum of 90 days

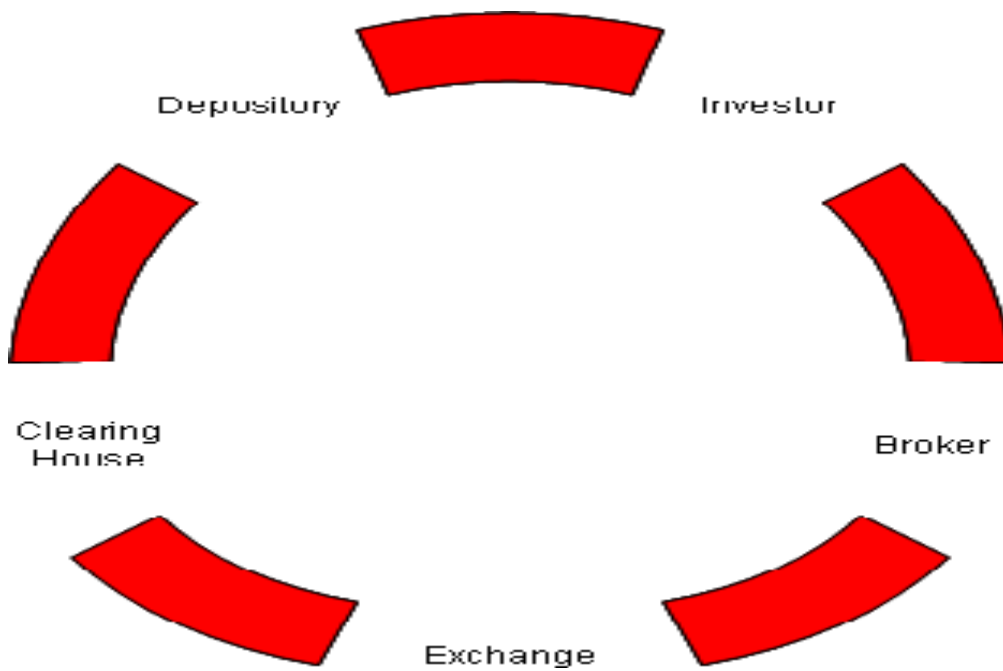
Rolling settlement system: The settlement takes place 'n' day's after the trading day. The shares bought & sold are paid in for 'n' days after the trading day after a particular transaction.

The rolling settlement cycle is noted by, t+n days

Transaction Cycle



Trading & Settlement Process



Market Participants

- Exchange – NSE/BSE
- Depository – National Securities Depository Limited (NSDL)
- Custodian
- Depository Participants
- Clearing Corporation – National Securities Clearing Corporation Ltd (NSCCL)
- Stock Broker: A broker is an intermediary who arranges to buy and sell securities on behalf of clients (the buyer and the seller) also known as CM – Clearing Member
- Sub – Broker
- Investors

Trading at NSE

- The trading on stock exchanges in India used to take place through open outcry
- NSE introduced a nation-wide on-line fully-automated screen based trading system – National Exchange for Automated trading (NEAT)
- Screen Based Trading System (SBTS) electronically matches orders on a strict price/time priority

Order Placement

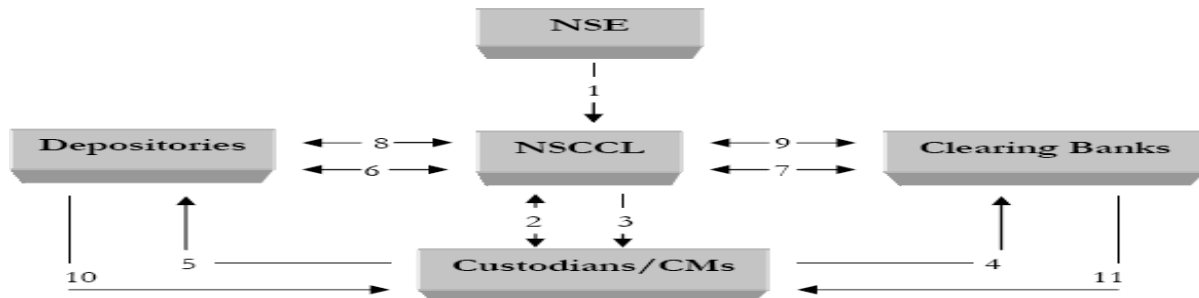
- NSE has main computer which is connected through Very Small Aperture Terminal (VSAT) installed at its office.
- Brokers have terminals installed at their premises which are connected through VSATs / leased lines / modems.
- An investor informs a broker to place an order on his behalf. The broker enters the order through his PC, which runs under Windows NT and sends signal to the Satellite via VSAT / leased line / modem. The signal is directed to mainframe
- The order confirmation message is immediately displayed on the PC of the broker.
- This order matches with the existing passive order (s); otherwise it waits for the active orders to enter the system.
- On order matching, a message is broadcast to the respective member.
- All orders received on the system are sorted with the best priced order getting the first priority for matching i.e. the best buy orders match with the best sell order.
- Similar priced orders are sorted on time priority basis, i.e. the one that came in early gets priority over the later one.
- Orders are matched automatically by the computer keeping the system transparent, objective and fair.
- Where an order does not find a match, it remains in the system and is displayed to the whole market, till a fresh order comes in or the earlier order is cancelled or modified.

Clearing & Settlement

- The clearing and settlement mechanism in Indian securities market has witnessed significant changes and several innovations during the last decade.
- T+2 rolling settlement has now been introduced for all securities. The members receive the funds/securities in accordance with the pay-in/pay-out schedules notified by the respective exchanges.
- The obligations of members are downloaded to members/custodians by the clearing agency
- The members/custodians make available the required securities in their pool accounts with depository participants (DPs) by the prescribed pay-in time for securities.
- The depository transfers the securities from the pool accounts of members/custodians to the settlement account of the clearing agency.

□ The securities are transferred on the pay-out day by the depository from the settlement account of the clearing agency to the pool accounts of members/custodians

Settlement Process in CM segment of NSE



Process

- (1) Trade details from Exchange to NSCCL (real-time and end of day trade file).
- (2) NSCCL notifies the consummated trade details to CMs/custodians who affirm back. Based on the affirmation, NSCCL applies multilateral netting and determines obligations.
- (3) Download of obligation and pay-in advice of funds/securities.
- (4) Instructions to clearing banks to make funds available by pay-in time.
- (5) Instructions to depositories to make securities available by pay-in-time.
- (6) Pay-in of securities (NSCCL advises depository to debit pool account of custodians/CMs and credit its account and depository does it).
- (7) Pay-in of funds (NSCCL advises Clearing Banks to debit account of custodians/CMs and credit its account and clearing bank does it).
- (8) Pay-out of securities (NSCCL advises depository to credit pool account of custodians/CMs and debit its account and depository does it).
- (9) Pay-out of funds (NSCCL advises Clearing Banks to credit account of custodians/CMs and debit its account and clearing bank does it).
- (10) Depository informs custodians/CMs through DPs.
- (11) Clearing Banks inform custodians/CMs.

2.10 SEBI SECURITIES EXCHANGE BOARD OF INDIA

SEBI

In 1988, SEBI was established by the government of India through an executive resolution. In May 1992, SEBI was granted legal status. SEBI is a body corporate having a separate legal existence and perpetual succession.

SEBI is a statutory regulatory body established on the 12th of April, 1992. It monitors and regulates the Indian capital and securities market while ensuring to protect the interests of the investors formulating regulations and guidelines to be adhered to.

Objectives

1. To regulate the activities of stock exchange.
2. To protect the rights of investors and ensuring safety to their investment.
3. To prevent fraudulent and malpractices by having balance between self regulation of business and its statutory regulations.
4. To regulate and develop a code of conduct for intermediaries such as brokers, underwriters, etc.

Management of the Board

- Chairman
- Two members from central government dealing with finance and Law
- One member from Reserve bank of India
- Two other members from central government

Functions of SEBI:

a. Protective functions

- (i) It Checks Price Rigging
- (ii) It Prohibits Insider trading
- (iii) SEBI prohibits fraudulent and Unfair Trade Practices
- (iv) SEBI undertakes steps to educate investors
- (v) SEBI promotes fair practices and code of conduct

b. Developmental functions

- (i) SEBI promotes training of intermediaries of the securities market.
- (ii) SEBI has permitted internet trading through registered stock brokers.
- (iii) SEBI has made underwriting optional to reduce the cost of issue.
- (iv) Even initial public offer of primary market is permitted through stock exchange

c. Regulatory functions

- i) SEBI has framed rules and regulations and a code of conduct to regulate the intermediaries such as merchant bankers, brokers, underwriters, etc.
- (ii) SEBI registers and regulates the working of stock brokers, sub-brokers, share transfer agents, trustees, merchant bankers and all those who are associated with stock exchange in any manner.
- (iii) SEBI registers and regulates the working of mutual funds etc.
- (iv) SEBI regulates takeover of the companies.
- (v) SEBI conducts inquiries and audit of stock exchanges.

Powers of SEBI

- Power to seek information
- Powers of Inspection
- Powers of civil court Exercisable by SEBI
- Powers of SEBI where an enquiry or investigation is ordered
- Power to issue directions
- Power of search and seizure
- Power to order cease and desist
- Power to SEBI under SCRA *Service members Civil Relief Act*

Role of SEBI in regulating the capital market

Reasons

- , Market index act as a barometer for market behavior
- , Market index is used to benchmark portfolio performance
- , Market index is used in derivative instruments like index futures and index options
- , Market index can be used for passive fund management as in case of index funds.
- , To make rules for controlling stock exchanges
- , To provide License to dealers and brokers
- , To stop fraud in capital market
- , To control the merger, acquisition and takeover of the companies
- , To audit the performance of stock market
- , To make new rules on carry forward transactions
- , To create relationship with ICAI(Institute of Chartered Accountants of. India)
- , Introduction of derivative contracts on volatility index
- , To require report of portfolio Management activities
- , To educate the investors
- , To integrate the securities Market
- , To diversify the trading products

β Role of SEBI in secondary market

- , Providing a centralized redressal mechanism
- , Establishing the separate investment awareness division
- , Displaying the names of defaulting companies on the SEBI website
- , Providing helpline facility for investor assistance

Structure of SEBI

SEBI has a corporate framework comprising various departments each managed by a department head. There are about 20+ departments under SEBI. Some of these departments are corporation finance, economic and policy analysis, debt and hybrid securities, enforcement, human resources, investment management, commodity derivatives market regulation, legal affairs, and more.

- The hierarchical structure of SEBI consists of the following members:
- The chairman of SEBI is nominated by the Union Government of India.
- Two officers from the Union Finance Ministry will be a part of this structure.
- One member will be appointed from the Reserve Bank of India.
- Five other members will be nominated by the Union Government of India.

Functions of SEBI

- SEBI is primarily set up to protect the interests of investors in the securities market.

- It promotes the development of the securities market and regulates the business.
- SEBI provides a platform for stockbrokers, sub-brokers, portfolio managers, investment advisers, share transfer agents, bankers, merchant bankers, trustees of trust deeds, registrars, underwriters, and other associated people to register and regulate work.
- It regulates the operations of depositories, participants, custodians of securities, foreign portfolio investors, and credit rating agencies.
- It prohibits inner trades in securities, i.e. fraudulent and unfair trade practices related to the securities market.
- It ensures that investors are educated on the intermediaries of securities markets.
- It monitors substantial acquisitions of shares and take-over of companies.
- SEBI takes care of research and development to ensure the securities market is efficient at all times.

Authority and Power of SEBI

The SEBI has three main powers:

- Quasi-Judicial:** SEBI has the authority to deliver judgements related to fraud and other unethical practices in terms of the securities market. This helps to ensure fairness, transparency, and accountability in the securities market.
- Quasi-Executive:** SEBI is empowered to implement the regulations and judgements made and to take legal action against the violators. It is also authorised to inspect Books of accounts and other documents if it comes across any violation of the regulations.
- Quasi-Legislative:** SEBI reserves the right to frame rules and regulations to protect the interests of the investors. Some of its regulations consist of insider trading regulations, listing obligation, and disclosure requirements. These have been formulated to keep malpractices at bay.

Investor Protection Measures by SEBI

- Investor Protection Measures by SEBI Investor protection legislation is implemented under the Section 11(2) of the SEBI Act. The measures are as follows:
- Stock Exchange and other securities market business regulation.
- Registering and regulating the intermediaries of the business like brokers, transfer agents, bankers, trustees, registrars, portfolio managers, investment consultants, merchant bankers, etc.
- Recording and monitoring the work of custodians, depositors, participants, foreign investors, credit rating agencies, etc.
- Registering investment schemes like Mutual fund & venture capital funds, and regulating their functioning.
- Promotion and controlling of self-regulatory companies.
- Keeping a check on frauds and unfair trading methods related to the securities market.
- Observing and regulating major transactions and take-over of the companies.
- Carry out investor awareness and education programme.
- Train the intermediaries of the business.

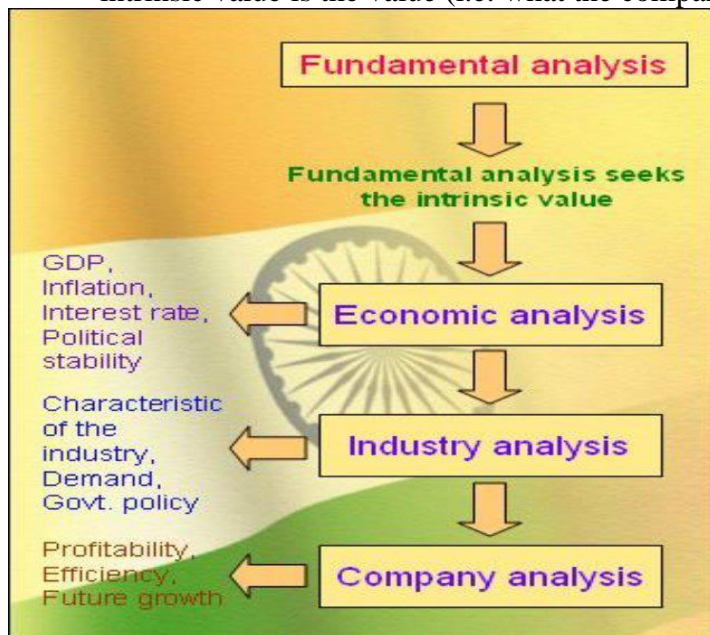
- Inspecting and auditing the security exchanges (SEs) and intermediaries.
- Assessment of fees and other charges.
- Investor Education and Protection Fund(IEPF)

Investor protection measures by SEBI also includes the Government of India established a fund called, Investor Education and Protection Fund(IEPF) under the 1956 Company Act. According to the act, the company which has completed seven years in the business should hand over all the unclaimed fund dividends, matured deposits, and debentures, share application money etc. to the Government through IEPF..

Unit- IV**(12 Periods)**

Fundamental Analysis – Economic Analysis – Industry Analysis – Company Analysis – Technical Analysis – Types of Charts – Indicators – Evaluation.

- Fundamental analysis is used to determine the intrinsic value of the share by examining the underlying forces that affect the well being of the economy, Industry groups and companies.
- Fundamental analysis is to first analyze the economy, then the Industry and finally individual companies. This is called as top down approach.
- The actual value of a security, as opposed to its market price or book value is called intrinsic value. The intrinsic value includes other variables such as brandname, trademarks, and copyrights that are often difficult to calculate and sometimes not accurately reflected in the market price. One way to look at it is that the market capitalization is the price (i.e. what investors are willing to pay for the company and intrinsic value is the value (i.e. what the company is really worth).



- Fundamental analysis is really a logical and systematic approach to estimating the future dividends and share price. It is based on the basic premise that share price is determined by a number of fundamental factors relating to the economy, industry and company. In other words, fundamental analysis means a detailed analysis of the fundamental factors affecting the performance of companies.

3.1.1 Influence of the Economy

Companies are a part of the industrial and business sector, which in turn is a part of the overall economy. Thus, the performance of a company depends on the performance of the economy in the first place. If the economy is in recession or stagnation, ceteris paribus, the performance of companies will be bad in general, with some exceptions, however. On the other hand, if the

economy is booming, incomes are rising and the demand is good, then the industries and the companies in general may be prosperous, with some exceptions however. The following are some effects of the influence of economy on companies:

In the Indian economy, the matters to be considered in the first place are the behaviour of the monsoon and the performance of agriculture. As agriculture is the mainstay of about 60% of the population and contributes nearly 25% of the output of the economy, it is important for the assessment and forecast of industrial performance. If the monsoon is good and agricultural incomes rise, the demand for industrial products and services will be good and industry prospers.

India has a mixed economy, where the public sector plays a vital role. The Government being the biggest investor and spender, the trends in public investment and expenditure would indicate the likely performance of the Indian economy. Concomitant with this, the government budget policy, tax levies and government borrowing programme along with the extent of deficit financing will have a major influence on the performance of the Indian economy, as these influence the demand and incomes of the people. The changes in excise and customs duties, corporate taxes, etc., are all relevant to assess the trends in the economy as they have an impact on the industry and the companies.

The monetary policy and trends in money supply which mainly depend on the government's budget policy, its borrowing from the public and credit from the banks and the RBI, have a major impact on the industrial growth through the cost and availability of credit, the profit margins of the companies, etc. The monetary situation along with the budgetary policy influences the movement in price level (inflation) and interest rates. The tight money position, increasing budget deficits and RBI-creation of currency lead to an inflationary spiral. Although the interest rates in the organised financial system are controlled, this is being changed to a free market economy and the bazaar rates in the unorganised market do reflect the availability of funds in the free markets. So, interest rates in the free markets and the degree of inflation do have a major influence on the economy and the performance of the industries. Although a mild inflation is good for business psychology, higher degrees of inflation, particularly in two digits, will defeat all business planning, lead to cost escalations and squeeze on profit margins. These will adversely affect the performance of industry and companies.

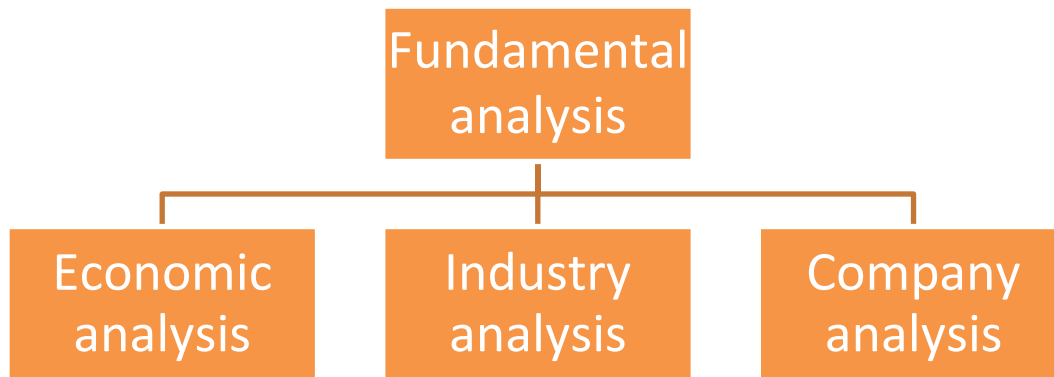
The general business conditions in the form of business cycles or the level of business activities do influence the demand for industrial products and the performance of the industry. In India, there are no business cycles, but outputs do fluctuate depending upon the state of the economy, performance of agriculture, availability of power and other infrastructural outputs, imported inputs and a host of other factors. These factors do influence the costs and profit margins of companies from both demand and supply sides. The business earnings and profits are affected by such changes in business conditions.

The economic and political stability in the form of stable and long-term economic policies and a stable political system with no uncertainty would also be necessary for a good performance of the economy in general and of companies in particular. The Government regulations being all pervasive in India, the government policy has to be known in advance in all its aspects and there should be no uncertainty about the political system as economic and political factors are interlinked. Political uncertainties and adverse changes in government policy do adversely affect industrial growth. Government policy relating to projects,

clearance for foreign collaboration and foreign investment price and distribution controls, and listing requirements on stock exchanges and a host of other matters like import restrictions do affect the performance of companies. The foreign exchange position and the balance of payments situation at any time would also indicate the rigours of government policy with regard to imports, exports, foreign investment and related matters.

All the above factors of the economy influence the corporate performance and the industry in general. In any investment analysis, a broad picture of these factors and a forecast of the growth of the economy and of industry would be necessary to decide, when to invest and what to invest in.

Fundamental analysis thus involves three steps:



3.2 Economic Analysis

The performance of a company depends on the performance of the economy. Let us look at some of the key economic variables that an investor must monitor as part of his fundamental analysis.

Growth rate of national income

The rate of growth of the national economy is an important variable to be considered by an investor. GNP (Gross National Product), NNP (Net National Product) and GDP (Gross Domestic Product) are the different measures of the total income or total economic output as a whole. The estimated growth rate of the economy would be a pointer towards the prosperity of the economy. An economy typically passes through different stages of prosperity known as economic or business cycle.

The four stages of an economic cycle are as follows:

Depression: This is the worst of the four stages. During a depression, demand is low and declining. Inflation is often high and so are interest rates.

Recovery stage: The economy begins to receive after a depression. Demand picks up leading to more investments in the economy. Production, employment and profits are on the increase.

Boom: The phase of the economic cycle is characterised by high demand. Investments and production are maintained at a high-level to satisfy the high demand. Companies generally post higher profits.

Recession: The boom phase gradually slows down. The economy slowly begins to experience a downturn in demand, production employment, etc.; the profits of companies also start to decline. This is the recession stage of the economy.

Inflation

Inflation leads to erosion of purchasing power in the hands of consumers, this will result in lower the demand of products. Inflation prevailing in the economy has considerable impact on the performance of companies. Higher rate of inflation upsets business plans.

Interest rates

Interest rates determine the cost and availability of credit for companies operating in an economy. A low interest rate stimulates investment by making credit available easily and cheaply. On the contrary, higher interest rates result in higher cost of production which may lead to lower profitability and lower demand.

Government revenue, expenditure and deficits

Government is the largest investor and spender of money, the trend in government revenue and expenditure and deficit have a significant impact on the performance of industries and companies' expenditure by the government stimulates the economy by creating jobs and generating demand. The nature of government spending is of greater importance in determining the fortunes of many companies.

Exchange rates

The performance and profitability of industries and companies that are major importers or exporters are considerably affected by the exchange rates of the rupee against major currencies of the world. A depreciation of the rupee improves the competitive position of Indian products in the foreign markets, thereby stimulating exports. However, it would also make import more expensive. A company depending more on imports may find that devaluation of the rupee affects its profitability adversely.

Infrastructure

The development of an economy depends very much on the infrastructure available. The availability of infrastructure facilities, such as power, transportation, and communication systems affects the performance of companies bad infrastructure lead to inefficiencies, lower productivity, wastage and delays.

Monsoon

The Indian economy is essentially an agrarian economy and agriculture forms a very important sector of the Indian economy. The performance of agriculture to a very extent depends on the monsoon; the adequacy of the monsoon determines the success or failure of the agricultural activities in India.

Economic and political stability

A stable political environment is necessary for steady and balanced growth. Stable long-term economic policies are what are needed for industrial growth. Such stable policies emanate only from stable political systems as economic and political factors are interlinked.

3.3 Industry Analysis

An industry ultimately invests money in the securities of one or more specific companies, each company can be characterised as belonging to an industry. The performance of companies would therefore, be influenced by the fortunes of the industry to which it belongs. an industry "as a group of firms producing reasonably similar products which serve the same needs of common set of buyers."

INDUSTRY CLASSIFICATION

1. Classification by reporting Agencies

- , Under Reserve bank of India-industries- 32 groups
- , Under SEBI- 10 groups

- Under Economic times-10 groups
- Under financial express- 19 groups

2. Classification by Business cycle

- Cyclic industries : Related to business cycle and changes
- Defensive industries: Products of having relatively inelastic demand eg., food processing industry
- Cyclical growth industries: Based on technical and economical changes eg., Airlines industry

3. Industry groups:

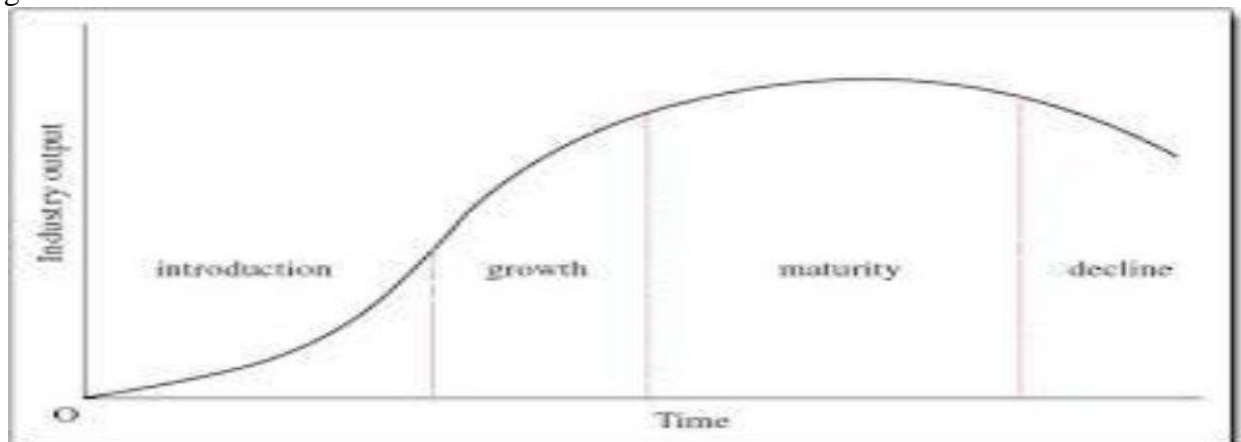
- Small size units:** Small scale industries with a capital of 30 Lac will be listed in OTCEI
- Medium size units:** Industry with a capital of 5 crores will be listed in the regional stock exchanges like cochin, Coimbatore etc.,
- Large scale **units:** Industry with a capital of 10 crores will be listed in BSE & NSE.

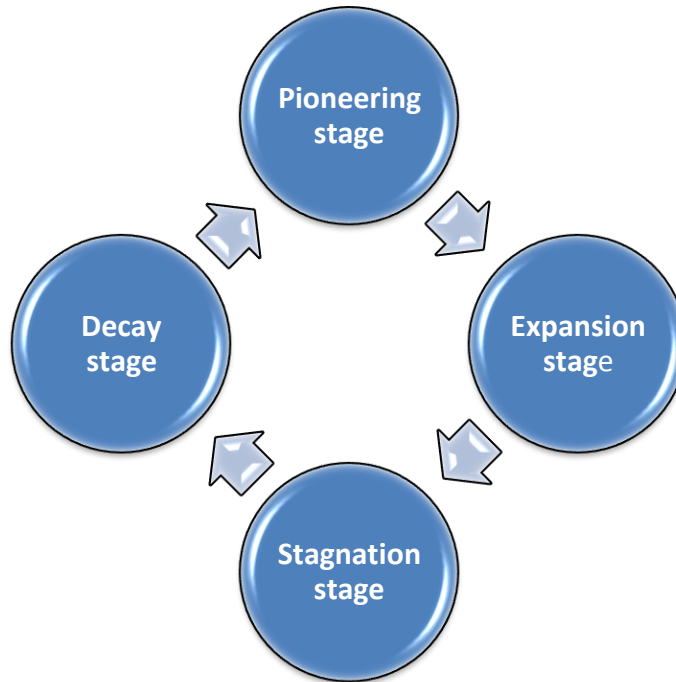
4. Input based Classification

- Chemical based products
- Agro based products
- Forest based products
- Metal based products
- Marine based products

3.3.1 Industry Life Cycle

The industry life cycle theory is generally attributed to Julius Grodinsky. According to the industry life cycle theory, the life of an industry can be segregated into the pioneering stage, the expansion stage, the stagnation stage, and the decay stage. This kind of segregation is extremely useful to an investor, because the profitability of an industry depends upon its stage of growth.





Pioneering stage

This is the first stage in the industrial life cycle of a new industry, where the technology as well as the products are relatively new and have not reached a state of perfection. Pioneering stage is characterised by rapid growth in demand for the output of industry. As a result, there is a greater opportunity for profit. Many firms compete with each other vigorously. Weak firms are eliminated and a lesser number of firms survive the pioneering stage. Example: Leasing industry.

Expansion stage

Once an industry has established itself, it enters the second stage of expansion or growth. These companies continue to become stronger. Each company finds a market for itself and develops its own strategies to sell and maintain its position in the market. The competition among the surviving companies brings about improved products at lower prices. Companies in the expansion stage of an industry are quite attractive for investment purposes.

Stagnation stage

In this stage, the growth of the industry stabilises. The ability of the industry to grow appears to have been lost. Sales may be increasing, but at a slower rate than that experienced by competitive industries or by the overall economy. The transition of an industry from the expansion stages to stagnation stages is very slow. Important reason for this transition is change in social habits and development of improved technology. Example: The black and white television industry in India provides a good example of an industry which passed from the expansion stages to stagnation stage.

Decay stage

Decay stage occurs when the products of the industry are no longer in demand. New products and new technologies have come to the market. Customers have changed their habits, style and liking. As a result, the industry becomes obsolete and gradually ceases to exist.

3.3.2 Industry Characteristics

In an industry analysis, there are a number of key characteristics that should be considered by the analyst.

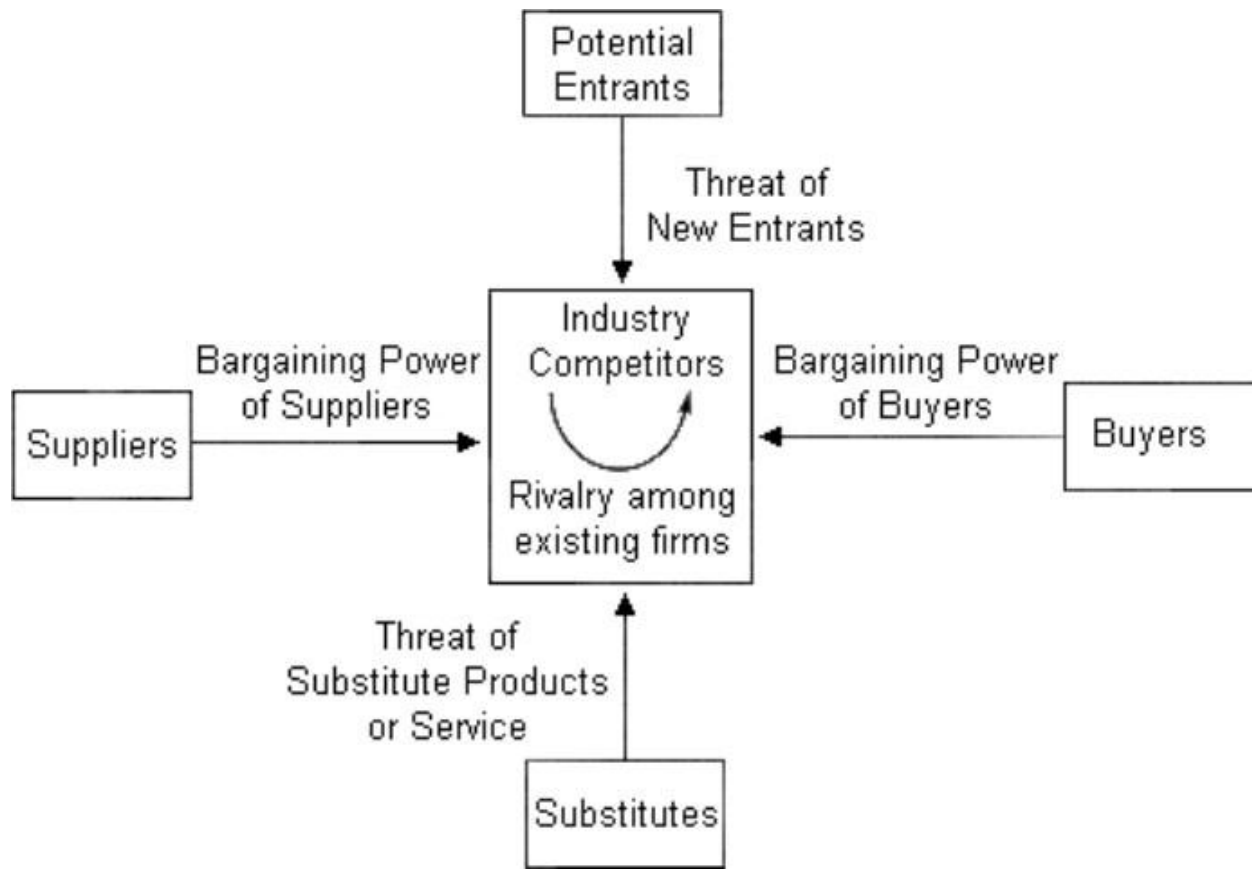
Demand supply gap

The demand for the product usually tends to change at a steady rate, whereas the capacity to produce the product tends to change at irregular intervals, depending upon the installation of additional production capacity. As a result, an industry is likely to experience under-supply and over-supply of capacity at different times. Excess supply reduces the profitability of the industry through a decline in the unit price realisation. On the contrary, insufficient supply tends to improve the profitability through higher unit price realisation.

Competitive conditions in the industry

The level of competition among various companies in an industry is determined by certain competitive forces. These competitive forces are:

- Barriers to entry
- The threat of substitution
- Bargaining power of the suppliers
- The rivalry among competitors



Permanence

Permanence is the phenomenon related to the products and the technology used by the industry. If an analyst feels that the need for a particular industry will vanish in a short period, or that the rapid technological changes would render the products obsolete within short period of time, it would be foolish to invest in such industry.

Labour conditions

In our country, the labour unions are very powerful. If the labour in a particular industry is rebellious and is inclined to resort to strikes frequently, the prospects of that industry cannot become bright.

Attitude of government

The government may encourage certain industries and can assist such industries through favourable legislation. On the contrary, the government may look with disfavour on certain other industries. In India this has been the experience of alcoholic drinks and cigarette industries. A prospective investor should consider the role that the government is likely to play in the industry.

Supply of raw materials

This is also one of the important factors that determines the profitability of an industry. Some industry may have no difficulty in obtaining the major raw materials as they may be indigenously available in plenty. Other industries may have to depend on a few manufactures within the country or on imports from outside the country for their raw material supply.

Cost structure

The cost structure, that is the fixed and variable cost, affect the cost of production and profitability of the firm. The higher the fixed cost component, higher is the sales volume necessary to achieve breakeven point. Conversely, the lower the proportion of fixed cost relative

to variable cost, lower would be the breakeven point. It provides higher margin of safety. So, an analyst would consider favourably an industry that has a lower breakeven point.

3.4 Company Analysis

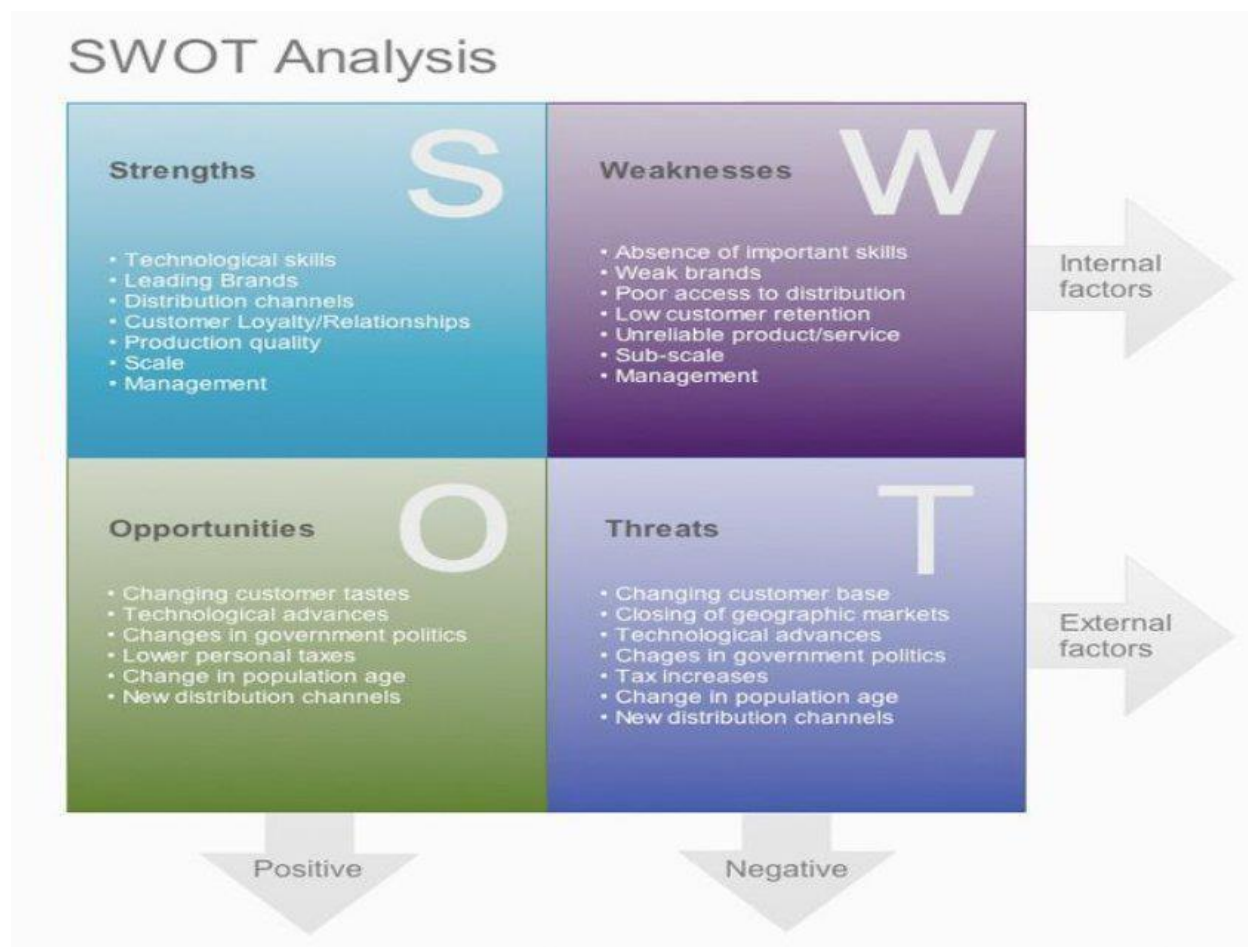
Company analysis is the final stage of fundamental analysis. The economy analysis provides the investor a broad outline of the prospects of growth in the economy, the industry analysis helps the investor to select the industry in which investment would be rewarding. Now, he has to decide the company in which he should invest his money. Company analysis provides answer to this question. In company analysis, the analyst tries to forecast the future earnings of the company, because there is a strong evidence that the earnings have a direct and powerful effect upon share prices. The level, trend and stability of earnings of a company, however depend upon a number of factors concerning the operations of the company.

Financial statements

The financial statements of a company help to assess the profitability and financial health of the company. The two basic financial statements provided by a company are the balance sheet and the profit and loss account. The balance sheet indicates the financial position of the company on a particular date, namely the last day of the accounting year. The profit and loss account, also called income statement, reveals the revenue earned, the cost incurred and the resulting profit and loss of the company for one accounting year.

Analysis of financial statements

Financial ratios are most extensively used to evaluate the financial performance of the company, it also help to assess the whether the financial performance and financial strengths are improving or deteriorating, ratios can be used for comparative analysis either with other firms in the industry through a cross sectional analysis or a time series analysis.



3.5 Technical Analysis

Technical analysis is explained in the paragraphs given below.

Importance of timing in investment

While fundamental analysis and security evaluation explain why share prices fluctuate, how they are determined and what to buy or sell, the technical analysis will help the decision, when to buy and traditional theory of capital market efficiency postulates, that entry into the market at any time leads to the same average return as that of the market. However, in the real world of imperfections, are investors who have burnt their fingers by entering the market at the wrong time. Investment timing is, therefore, crucial as the market is continuously jolted by waves of buying and selling and prices are moving in trends and cycles and are never stable. The stock market is different from other markets, as there is a continuous buying and selling and bid and offer rates as under a system of auctions. The resultant prices, led by the sheer force of the market, may fluctuate either way and may exhibit waves or trends. Entry and exit in the market will, therefore, make all the difference to the spread between buying and selling prices and the profits or losses. Timing of investment is, therefore, of vital importance for trading in the stock market.

Basic tenets of technical analysis

Technical analysis of the market is based on some basic tenets, namely, that all fundamental factors are discounted by the market and are reflected in prices. Secondly, these prices move in trends or waves which can be both, upward or downward depending on the sentiment,

psychology and emotions of operators or traders. Thirdly, the present trends are influenced by the past trends, and the projection of future trends is possible by an analysis of past price trends. Analysis of historical trends confirmed the above principles and the Random Walk Theory explaining the randomness of price changes have been found to be not applicable by the technical analysts in practice.

3.5.1 Basics of Technical Analysis

A technical analysis believes that the share price is determined by the demand and supply forces operating in the market. A technical analysis concentrates on the movement of share prices. By examining past share price movements, future share price can be accurately predicted. The basic premise of technical analysis is that prices move in trends or waves which may be upward or downward. A rationale behind the technical analysis is that share price behaviour repeats itself over time and analysts attempt to derive methods to predict this repetition.

3.5.2 Basic Principles of Technical Analysis

The market value of a security is related to the demand and supply factors operating in the market. There are both rational and irrational factors which surround the supply and demand factors of a security. Security prices behave in a manner that their movement is continuous in a particular direction for some length of time. Trends in stock prices have been seen to change, when there is a shift in the demand and supply factors. The shift in demand and supply can be detected through charts prepared specially to show the market action. Patterns which are projected by charts record price movements and these recorded patterns are used price movements and these recorded patterns are used by analysts to make forecasts about the movement of prices in future.

3.6 Tools of Technical Analysis

Tools of technical analysis are discussed in the paragraphs given below.

3.6.1 Dow Theory

This theory is formulated by Charles H. Dow. Dow who is the editor of the Wall Street Journal in the U.S.A formulated a hypothesis that the stock market does not move on 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 and are known as corrections. These are 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.

3.6.2 Bullish Trend

During the bull market (upward moving market), in the first phase, the price would advance with the revival of confidence in the future of business. During the second phase, price would advance due to improvements in corporate earnings, in the third phase, prices advance due to inflation and speculation. According to Dow Theory, the formulation of higher bottoms and higher tops indicates a bullish trend.

3.6.3 Bearish Trend

The bear market is also characterised by three phases, in the first phase, price begin to fall due to abandonment of hopes. In the second phase, companies start to reporting lower profits and lower dividends, in the final phase, price falls still further due to distress selling. A bearish market would be indicated by the formulation of lower tops and lower bottoms. The theory also makes certain assumptions, which have been referred to as the hypothesis 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 or group of individuals and institutions can exert influence on the major trends of the market.

The second hypothesis states that the averages discount everything. Which means is that the daily prices reflect • the aggregate judgement and emotions of all stock market participants. In arriving at the price of a stock, the market discounts 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.

3.6.4 Chartist Method

As referred to earlier, technical analysis is a study of the market data in terms of factors affecting supply and demand schedules, namely, prices, volume of trading, etc. A study of the historical trends of market behaviour shows the cycles and trends in prices, which may repeat as the present is a reflection of the past and the future of the present. This is the basis for forecasting the future trends, which are used for deciding on the basis of the buy or sell signals. For forecasting, analysts use charts and diagrams to depict the past trends and project the future. However, these methods are rough and ready methods and there are no foolproof methods of forecasting the stock prices. The technical analysis only helps to improve the knowledge of the probabilities of price behaviour (upswing or downswing) and help the investment process.

The technical analysis does not claim 100% chance of success in predictions that are made for investment. In view of the limitations inherent in the technical analysis, this analysis is generally juxtaposed with fundamental analysis of the market and the scripts. It was the past experience that the receipt of information and the actual price absorption of the information would not coincide and there is a time lag between them. As a result, the current price changes would give a clue to the subsequent price changes, if properly analysed and interpreted. In the market analysis, the variables to be taken into account are the breadth of the market, volume of trading, etc. Market breadth is the dispersion of the general price rise or decline, which means daily cumulation of a net number of advancing or declining issues. Breadth analysis focuses on change, rather than level in prices. Breadth of price changes in terms of the number of gainers or losers among the scripts is analysed to know the width of rise or fall in prices.

3.6.5 Charts and Trade Lines

The technical analysis uses charts for analysis of prices. Fitting a trend line for price changes on a daily-basis is the first step in the analysis of charts. These changes may be pointing upwards or downwards or stable over a horizontal one. The movements are such that there are both peaks and troughs in these price changes, peaks showing an upward trend troughs or reactions to the uptrend, viz., line joining the lowest points or troughs pointing up. If this line is pointing downwards, then it is a bearish phase. If the movements are downwards generally, then there will be rallies moving up the prices. These upper peaks, if they are joined, give the trend line as much as the lowest troughs.

The bull phase depicts the rising peaks successively, while the bear phase shows the falling peaks successively. When the share prices are rising or falling, there will be a resistance level

above which the prices may not pierce in the upward direction or a support level, below which the price may not fall. These support lines and resistance lines are clearly noticed, when the prices are moving in a narrow band for some time. When the price pierces the resistance line, this is the first indication of the reversal of the trend in the upward direction. So, also in a bull phase when the price line falls below the support line, a reversal of the trend is indicated. Various configurations of price movements like stable pattern, M and W patterns, head and shoulders, etc., are formed. It is possible that various triangles, flags, pendants, etc., can be described by the price trends. The basic analysis involves the deciphering of the trend, identifying the reversal and fixing up of buy and sell signals in these price movements. The stable price pattern is ideal for genuine investors to enter the market

3.6.6 Criticism of Dow

The Dow Theory is subject to various limitations in actual practice. Dow has developed this theory to depict the general trend of the market, but not with the intention of projecting the future trends or to diagnose the buy and sell signals in the market. These applications of the Dow Theory have come in the light of analytical studies of financial analysts. This theory is criticised on the ground that it is too subjective and based on historical interpretation; it is not infallible as it depends on the interpretative ability of the analyst. The results of this theory do not also give meaningful and conclusive evidence of any action to be taken in terms of buy and sell operations.

APPLIED VALUATION TECHNIQUES:

Although the raw data of the Financial Statement has some useful information, much more can be understood about the value of a stock by applying a variety of tools to the financial data.

1. Earnings per Share EPS
2. Price to Earnings Ratio P/E
3. Projected Earnings Growth PEG
4. Price to Sales P/S
5. Price to Book P/B
6. Dividend Payout Ratio
7. Dividend Yield
8. Book Value per share
9. Return on Equity

Eg.,

Earnings per share=

Earnings available for the common shares

Weighted average common shares outstanding

4.1 TECHNICAL ANALYSIS:

Technical analysis involves a study of market generated data like prices and volumes to determine the future direction of price movement. Martin J. Pring explains as The technical approach to investing is essentially a reflection of the idea that prices move in trends which are determined by the changing attitudes of investors toward a variety of economic, monetary, political and psychological forces. The art of technical analysis-for it is an art-is to identify trend changes at an early stage and to maintain an investment posture until the weight of the evidence indicates that the trend has been reversed.

Basic assumption

The basic premises underlying technical analysis are as follows.

1. The market and / or an individual stock act like a barometer rather than a thermometer. Events are usually discounted in advance with movements as the likely result of informed buyers and sellers at work.
2. Before a stock experiences a mark-up phase, whether it is minor or major, a period of accumulation usually will take place. Accumulation or distribution activity can occur within natural trading trends. The ability to analyse accumulation or distribution within net natural price patterns will be, therefore, a most essential pre-requisite.
3. The third assumption is an observation that deals with the scope and extends of market movements in relation to each other.

4.2 DIFFERENCES BETWEEN TECHNICAL ANALYSIS AND FUNDAMENTAL ANALYSIS

The key differences between technical analysis and fundamental analysis are as follows:

1. Technical analysis mainly seeks to predict short term price movements, whereas fundamental analysis tries to establish long term values.
2. The focus of technical analysis is mainly on internal market data, particularly price and volume data. The focus of fundamental analysis is on fundamental factors relating to the economy, the industry, and the firm.
3. Technical analysis appeals mostly to short-term traders, whereas fundamental analysis appeals primarily to long-term investors.

4.3 CHARTING - A TECHNICAL TOOL

Technical analysts, while defining their own theory about stock price behavior and criticizing the fundamental school, do feel that there is some merit in the fundamental analysis also. But according to them, the method is very tedious and it takes a rather long time for the common man to evaluate stocks through this method. They consider their own techniques and charts as superior to fundamental analysis. Some of their theories, techniques and methods of stock prices are given below:

Concepts Underlying Chart Analysis

The basic concepts underlying chart analysis are: (a) persistence of trends; (b) relationship between volume and trend; and (c) resistance and support levels.

Trends: The key belief of the chartists is that stock prices tend to move in fairly persistent trends. Stock price behavior is characterized by inertia: the price movement continues along a certain path (up, down or sideways) until it meets an opposing force, arising out of an altered supply-demand relationship.

Relationship between volume and trends: Chartists believe that generally volume and trend go hand in hand. When a major upturn begins the volume of trading increases as the price advances and decreases as the price declines. In a major down turn, the opposite happens; the volume of trading increases as the price declines and decreases as the price rallies.

Support and Resistance levels: Chartists assume that it is difficult for the price of a share to rise above a certain level called the resistance level and fall below a certain level called a support level. Why? The explanation for the first claim goes as follows. If investors find that prices fall after their purchases, they continue to hang on to their shares in the hope of a recovery. And when the price rebounds to the level of their purchase price, they tend to sell and heave sigh of relief as they break even.

4.11 EFFICIENT MARKET THEORY

The efficient market hypothesis is a central idea of a modern finance that has profound implications. An understanding of the efficient market hypothesis will help to ask the right questions and save from a lot of confusion that dominates popular thinking in finance. An efficient market is one in which the market price of a security is an unbiased estimate of its Intrinsic value. Note that market efficiency does not imply that the market price equals intrinsic value at every point in time.

A corollary is that investors will also be less likely to discover great bargains and thereby earn extraordinary high rates of return. The requirements for a securities market to be efficient market are;

- (1) Prices must be efficient so that new inventions and better products will cause a firm's securities prices to rise and motivate investors to supply capital to the firm (i.e., buy its stock);
- (2) Information must be discussed freely and quickly across the nations so all investors can react to new information;
- (3) Transactions costs such as sales commissions on securities are ignored;
- (4) Taxes are assumed to have no noticeable effect on investment policy;
- (5) Every investor is allowed to borrow or lend at the same rate; and, finally,
- (6) Investors must be rational and able to recognize efficient assets and that they will want to invest money where it is needed most (i.e., in the assets with relatively high returns).

Forms of Efficient Market Hypothesis

Eugene Fama suggested that it is useful to distinguish three levels of market efficiency. They are

- 1) Weak-form efficiency - Prices reflect all information found in the record of past and volumes;
- 2) Semi-strong form efficiency - Prices reflect not only all information found in the record of past prices and volumes but also all other publicly available information;
- 3) Strongform efficiency - Prices reflect all available information, public as well as private.

Weak form of EMH

The weak form of market holds that present stock market prices reflect all known information with respect to past stock prices, trends, and volumes. This form of theory is just the opposite of the technical analysis because according to it, the sequence of prices occurring historically does not have any value for predicting the future stocks prices. The technical analysts rely completely on charts and past behavior of prices of stocks.

Three types of tests have been commonly employed to empirically verify the weak-form efficient market hypothesis: (a) serial correlation tests; (b) runs tests; and (c) filter rules tests.

Serial Correlation Test: Serial Correlation is said to measure the association of a series of numbers which are separated by some constant time period. One way to test for randomness in stock price changes is to look at their serial correlations. Is the price change in one period correlated with the price change in some other period? If such auto-correlations are negligible, the price changes are considered to be serially independent. Numerous serial correlation studies, employing different stocks, different time-lags, and different time-periods, have been conducted to detect serial correlations

Run Test: Ren Test was also made by Fama to find out if price changes were likely to be followed by further price changes of the same sign. Run Test ignored the absolute values of numbers in the series and took into the research only the positive and negative signs. Given a series of stock price changes, each price (+) if it represents an increase or a minus (-) if it represents a decrease. A run occurs when there is not difference between the sign of two changes. When the sign of change differs, the run ends and a new run begin. To test a series of price changes for independence, the number of runs in that series is compared to see whether it is

statistically different from the number of runs in a purely random series of the same size. Many studies have been carried out, employing the runs test of independence. They did not detect any significant relationship between the returns of security in one period and the returns in prior periods and made a conclusion that the security prices followed a random walk.

Filter Rules Test: The use of charts is essentially a technique for filtering out the important information from the unimportant. Alexander and Fama and Blume took the idea that price and volume data are supposed to tell the entire story we need to know to identify the important action in stock prices. They applied filter rules to see how well price changes pick up both trends and reverses which chartists claim their charts do. If a stock moves up X per cent, buy it and hold it long; if it then reverses itself by the same percentage, sell it and take a short position in it.

Semi-Strong Form of EMH

The semi strong form of the efficient market hypothesis centers on how rapidly and efficiently market prices adjust to new publicly available information. In this state, the market reflects even those forms of information which may be concerning the announcement of a firms most recent earnings forecast and adjustments which will have taken place in the prices of security. The investor in the semi-strong form of the market will find it impossible to earn a return on the portfolio which is based on the publicly available information in excess of the return which may be said to be commensurate with the portfolio risk. Many empirical studies have been made on the semi-strong form of the efficient market hypothesis to study the reaction of security prices to various types of information around the announcement time of the information. Two studies commonly employed to test semi-strong form efficient market are event study and portfolio study.

Event Study examines the market reactions to and the excess market returns around a specific information event like acquisition announcement or stock split. The key steps involved in an event study are as follows:

1. Identify the event to be studied and pinpoint the date on which the event was announced.
2. Collect returns data around the announcement date. In this context two issues have to be resolved: What should be the period for calculating returns weekly, daily, or some other interval? For how many periods should returns be calculated before and after the announcement date?
3. Calculate the excess returns, by period, around the announcement date for each firm in the sample. The excess return is calculated by making adjustment for market performance and risk.
4. Compute the average and the standard error of excess returns across all firms
5. Assess whether the excess returns around the announcement date are different from zero. To determine whether the excess returns around the announcement date are different from zero, estimate the T statistic for each day. The results of event studies are mixed. Most event studies support the semi-strong form efficient market hypothesis. Several event studies, however, have cast their shadow over the validity of the semi strong form efficient markets theory.

Portfolio study: In a portfolio study, a portfolio of stocks having the observable characteristic (low price earnings ratio or whatever) is created and tracked over time see whether it earns superior risk-adjusted returns. Steps involved in a portfolio study are as follows:

1. Define the variable (characteristic) on which firms will be classified. The proposed investment strategy spells out the relevant variable. The variable must be observable, but not necessarily numerical.
2. Classify firms into portfolios based upon the magnitude of the variable. Collect data on the variable for every firm in the defined universe at the beginning of the period and use that information for classifying firms into different portfolios.

3. Compute the returns for each portfolio on the returns for each firm in each portfolio for the testing period and calculate the return for each portfolio, assuming that the stocks included in the portfolio are equally weighted.
4. Calculate the excess returns for each portfolio. The calculation of excess returns earned by a portfolio calls for estimating the portfolio beta and determining the excess returns
5. Assess whether the average excess returns are different across the portfolios. Several statistical tests are available to test whether the average excess returns differ across these portfolios. Some of these tests are parametric and some nonparametric. Many portfolio studies suggest that it is not possible to earn superior risk adjusted returns by trading on some observable characteristics. However, several portfolio studies have documented inefficiencies and anomalies.

Strong-Form of EMH

The strong-form efficient market hypothesis holds that all available information, public or private, is reflected in the stock prices. The strong form is concerned with whether or not certain individuals or groups of individuals possess inside information which can be used to make above average profits. If the strong form of the efficient capital market hypothesis holds, then one day is as good as any other day to buy any stock. This is the most extreme form of the efficient market hypothesis. Most of the research work has indicated that the efficient market hypothesis in the strongest form does not hold good.

Market Efficiency and Anomalies

Anomalies are situations that appear to violate the traditional view of market efficiency, suggesting that it may be possible for careful investors to earn abnormal returns. Some stock market anomalies are

- Low Price-Earnings Ratio: Stock that are selling at price earnings ratios that are low relative to the market
- Low Price-Sales Ratio: Stocks that have price-to-sales ratios that are lower compared with other stocks in the same industry or with the overall market.
- Low Price-to-Book value Ratio: Stocks whose stock prices are less than their respective book values
- High Dividend Yield: Stocks that pay high dividends relative to their respective share prices
- Small companies: Stock of companies whose market capitalization is less than 100 million
- Neglected Stocks: Stocks followed by only a few analysts and/or stocks with low percentages of institutional ownership
- Stocks with High Relative Strength: Stocks whose prices have risen faster relative to the overall market
- January Effect: Stock do better during January than during any other month of the year
- Day of the Week:

Stock of poorer during Monday than during

other days of the week Most of these anomalies appear to revolve around four themes:

1. Markets tend to overreact to news, both good and bad.
2. Value investing is contrarian in nature and is beneficial because markets overreact.
3. The market consistently ignores certain stocks, especially small stocks.

Let's examine what anomalies mean for investors and the concept of market efficiency.

Financial Market Overreaction: One of the most intriguing issues to emerge in the past few years is the notion of market overreaction to new information (both positive and negative). Many practitioners have insisted for years that markets do overreact. Recent statistical evidence for both the market as a whole and individual security has shown errors in security prices that are systematic and therefore predictable. Overreactions are sometimes called reversals. Stocks that perform poorly in a period suddenly reverse direction and start performing well in a subsequent period, and vice versa. Several studies have found that stock returns over longer time horizons (in excess of one year) display significant negative serial correlation.

Profiting from Reversals: Market overreactions or reversals suggest several possible

investment strategies to produce abnormal profits. Some possibilities include buying last year's worst performing stocks, avoiding stocks with high P/E ratios, or buying on bad news. At the risk of oversimplifying, any investment strategy based on market overreaction represents a contrarian approach to invest, buying what appears to be out of favour with most investors.

BA7021 SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT

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SCE DEPARTMENT OF MANAGEMENT SCIENCES

Calendar-Based Anomalies: Are there better times to own stocks than others? Should you avoid stocks on certain days? The evidence seems to suggest that several calendar-based anomalies exist. The two best known, and widely documented, are the weekend effect and the January effect.

Weekend Effect: Studies of daily returns began with the goal of testing whether the markets operate on calendar time or trading time. In other words, are returns for Mondays (i.e., returns over Friday-to-Monday periods) different from the other day of the week returns? The answer to the question turned out to be yes, the trend was called the weekend effect. Monday returns were substantially lower than other daily returns. One study found that Mondays produced a mean return of almost -35 percent. By contrast, the mean annualized returns on Wednesdays was more than +25 per cent.

The January Effect: Stock returns appear to exhibit seasonal return patterns as well. In other words, returns are systematically higher in some months than in others. Initial studies found that returns were higher in January for all stocks (thus this anomaly was dubbed the January effect) whereas later studies found the January effect was more pronounced for small stocks than for large ones. One widely accepted explanation for the January effect is tax-loss selling by the investors at the end of December. Because this selling pressure depresses prices at the end of the year, it would be reasonable to expect a bounce-back in prices during January. Small stocks, the argument goes, are more susceptible to the January effect because their prices are more volatile, and institutional investors (many of whom are tax-exempt) are less likely to invest in shares of small companies.

Calendar-Based Trading Strategies: Both seasonal and day-of-the-week affects are inconsistent with market efficiency because both suggest that historical information can generate abnormal profits. As with all anomalies, however, a more important issue is whether seasonal and/or day-of-the-week effects can create profit opportunities for investors.

Small-Firm Effect: Generally the stocks of small companies substantially outperform stocks of large companies. Of course, history has also shown that small stocks have exhibited more year-to-year variation than large stocks. However, even after correcting for differences in risk, some studies suggest that investors can earn abnormal profits by investing in shares of small companies, exploiting the small-firm effect. Two explanations for the small-firm effect seem plausible to us. The first is that analysts have applied the wrong risk measures to evaluate returns from small stocks. Small stocks may well be riskier than these traditional risk measures indicate.

Performance of Investment Professionals: Investment professionals such as mutual fund managers seem to have a difficult time beating the overall market. In a particular year, some professionals will beat the market, whereas others will not. The key question is whether some professionals can consistently outperform the market. Some evidence suggests that the answer to this question may be yes.

Unit-V

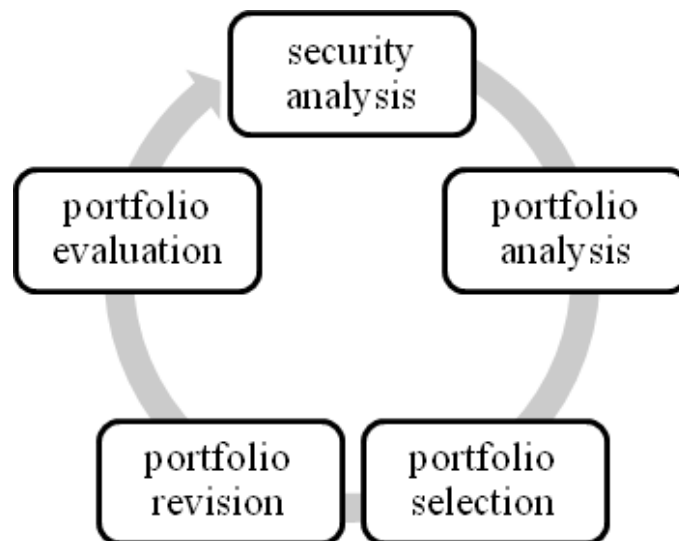
Portfolio Analysis – Portfolio Constructions & Management – Portfolio evaluation & Portfolio – Mutual Funds – Types - Merits and Demerits.

Definition: Portfolio Management, implies tactfully managing an investment portfolio, by selecting the best investment mix in the right proportion and continuously shifting them in the portfolio, to increase the return on investment and maximize the wealth of the investor. Here, portfolio refers to a range of financial products, i.e. stocks, bonds, mutual funds, and so forth, that are held by the investors.

PROCESS OF PORTFOLIO MANAGEMENT:-

Investment process describes how an investor should go about making decisions with regard to what marketable securities to investment in, how extensive the investments should be made. A five step procedure for making these decisions forms the basis of the investment process:

- **Set investment Policy**
- **Perform security analysis**
- **Construct portfolio**
- **Revise the portfolio**
- **Evaluate the performance of the portfolio**



1. Set investment policy: It is a combination of investor's philosophy and planning. It expresses the investor's attitudes toward important of investment management issues. A comprehensive investment policy should address the following issues.

- MISSION STATEMENT
- RISK TOLERANCE
- INVESTMENT OBJECTIVES
- POLICY ASSET MIX (allocation of funds to broad asset classes such as stocks and bonds).
- ACTIVE MANAGEMENT

2. Security Analysis: It involves examining several individual securities (or group of securities) within the broad categories of financial assets. It helps for the selection of securities which are give fair returns in the current and future years.

3. Portfolio construction:-It involves identifying those specific assets in which to invest, as well as determining the portions of the investor's wealth to put into each one. Here the issues of selectivity, timing and diversification need to be addressed by the investor. There two approaches to construct portfolio of securities.

Traditional Approach

Modern Approach :Markowitz Risk-return optimization model
:Sharp optimum portfolio model

4. Portfolio Revision:-It helps for liquidating the unattractive securities and acquiring the new stars from the market. It involves periodic repetition of the previous three steps of the investment policy by setting new investment policy, security analysis afresh, and reallocation of cash for the new portfolio.

Formula Plans are to ease the problem of timing and minimize the emotions involved in investment.

1. To minimize loss but not to increase profits.

2. In formula plans the portfolio investment involve two types

Aggressive Portfolio

Conservative Portfolio

3. Formula plans classified into four types.

Constant Rupee Plan

Constant Ratio Plan

Variable Ratio Plan

Rupee Cost Averaging Plan

5. Portfolio Performance Evaluation:-It involves determining periodically how the portfolio performed, in terms returns earned and the risk experienced by the investor. For this the investor need to select appropriate benchmark.

The following techniques are used for measuring the performance of the portfolio.

Sharpe's Performance Measure

Treynor's Performance Measure

Jensen's Performance Measure

The Treynor Measure

Developed by Jack Treynor, this performance measure evaluates funds on the basis of Treynor's Index. This Index is a ratio of return generated by the fund over and above risk free rate of return (generally taken to be the return on securities backed by the government, as there is no credit risk associated), during a given period and systematic risk associated with it (beta). Symbolically, it can be represented as:

Treynor's Index (**Ti**) = (**Ri** - **Rf**)/**Bi**.

Where, **Ri** represents return on fund, **Rf** is risk free rate of return and **Bi** is beta of the fund.

The Sharpe Measure

In this model, performance of a fund is evaluated on the basis of Sharpe Ratio, which is a ratio of returns generated by the fund over and above risk free rate of return and the total risk associated with it. According to Sharpe, it is the total risk of the fund that the investors are concerned about. So, the model evaluates funds on the basis of reward per unit of total risk. Symbolically, it can be written as:

Sharpe Index (**Si**) = $(R_i - R_f)/S_i$

Where, **Si** is standard deviation of the fund.

While a high and positive Sharpe Ratio shows a superior risk-adjusted performance of a fund, a low and negative Sharpe Ratio is an indication of unfavorable performance.

Comparison of Sharpe and Treynor

Sharpe and Treynor measures are similar in a way, since they both divide the risk premium by a numerical risk measure. The total risk is appropriate when we are evaluating the risk return relationship for well-diversified portfolios. On the other hand, the systematic risk is the relevant measure of risk when we are evaluating less than fully diversified portfolios or individual stocks.

Jenson Model

Jenson's model proposes another risk adjusted performance measure.

This measure was developed by Michael Jenson and is sometimes referred to as

the Differential Return Method. This measure involves evaluation of the returns that the fund has generated vs. the returns actually expected out of the fund given the level of its systematic risk.

The surplus between the two returns is called Alpha, which measures the performance of a fund compared with the actual returns over the period. Required return of a fund at a given level of risk

(**Bi**) can be calculated as:

$$R_i = R_f + B_i (R_m - R_f)$$

Where, **Rm** is average market return during the given period.

Fama Model

The Eugene Fama model is an extension of Jenson model. This model compares the performance, measured in terms of returns, of a fund with the required return commensurate with the total risk associated with it. The difference between these two is taken as a measure of the performance of the fund and is called net selectivity.

Required return can be calculated as:

$$R_i = R_f + S_i/S_m*(R_m - R_f)$$

Where, **Sm** is standard deviation of market returns. The net selectivity is then calculated by subtracting this required return from the actual return of the fund.

SCOPE OF PORTFOLIO MANAGEMENT

- 1) Monitoring the performance of portfolio by incorporating the latest market conditions.
- 2) Identification of the investor's objective, constraints and preferences.
- 3) Making an evaluation of portfolio income (comparison with targets and achievement).
- 4) Making revision in the portfolio.
- 5) Implementation of the strategies in tune with investment objectives.

BENEFITS OF PORTFOLIO MANAGEMENT

- 1) Increased decision making transparency through a more consistent evaluation of all business units and options.
- 2) A consistent approach to risk measurement.
- 3) A systematic way of including different views of risk in decision making process.
- 4) A clear enhancement to the due diligence process.
- 5) Better understanding of value creation among new investment opportunities.
- 6) Consideration of the correlation and diversification effects of the organization's different businesses and investment options.
- 7) Guidance for strategic planning (e.g. identification of where the company needs to move to improve its risk-return position).

8) Consideration of qualitative and non-financial implications. These benefits can easily be recognized across most organizations, regardless of size or industry.

PORTFOLIO MANAGEMENT

MEANING Portfolio management is the art of selecting right investment tools in right proportion to generate optimum returns from the investment made.

OBJECTIVES

- ❖ Capital Growth
- ❖ Security of Principal
Amount Invested
- ❖ Liquidity
- ❖ Marketability of Securities
Invested in
- ❖ Diversification of Risk
- ❖ Consistent Returns
- ❖ Tax Planning

PROCESS

- ❖ Gripping client's investment goals & funds availability
- ❖ Matching investment to goals
- ❖ Recommending investment policy
- ❖ Balancing risk & studying portfolio performance
- ❖ Discussing & Decision making
- ❖ Changing asset allocation at based on portfolio performance

TYPES OF PORTFOLIO MANAGEMENT

Basis of Activity

Basis of Discretion

Active

Passive

Discretionary

Non
Discretionary

IMPORTANCE

- ❖ Best Investment Strategy
- ❖ Risk Minimization
- ❖ Customization

MODERN PORTFOLIO

MPT - Modern Portfolio Theory - represents the mathematical formulation of risk diversification in investing, that aims at selecting a group of investment assets which have collectively lower risk than any single asset on its own. This becomes possible, since various asset types frequently change in value in opposite directions. Actually investing, being a tradeoff between risk and return, presupposes that risky assets have the highest expected returns.

Thus, MPT shows how to choose a portfolio with the maximum possible expected return for the given amount of risk. It also describes how to choose a portfolio with the minimum possible risk for the given expected return. Therefore, Modern Portfolio Theory is viewed as a form of diversification which explains the way of finding the best possible diversification strategy.

MPT ASSUMPTIONS

Modern Portfolio Theory relies on the following assumptions and fundamentals that are the key concepts upon which it has been constructed:

- For buying and selling securities there are no transaction costs. There is no spread between bidding and asking prices. No tax is paid, its only risk that plays a part in determining which securities an investor will buy.
- An investor has a chance to take any position of any size and in any security. The market liquidity is infinite and no one can move the market. So that nothing can stop the investor from taking positions of any size in any security.
- While making investment decisions the investor does not consider taxes and is indifferent towards receiving dividends or capital gains.
- Investors are generally rational and risk adverse. They are completely aware of all the risk contained in investment and actually take positions based on the risk determination demanding a higher return for accepting greater volatility.
- The risk-return relationships are viewed over the same time horizon. Both long term speculator and short term speculator share the same motivations, profit target and time horizon.
- Investors share identical views on risk measurement. All the investors are provided by information and their sale or purchase depends on an identical assessment of the investment and all have the same expectations from the investment. A seller will be motivated to make a sale only because another security has a level of volatility that corresponds to his desired return. A buyer will buy because this security has a level of risk that corresponds to the return he wants.
- Investors seek to control risk only by the diversification of their holdings.
- In the market all assets can be bought and sold including human capital.
- Politics and investor psychology have no influence on market.
- The risk of portfolio depends directly on the instability of returns from the given portfolio.
- An investor gives preference to the increase of utilization.
- An investor either maximizes his return for the minimum risk or maximizes his portfolio return for a given level of risk.
- Analysis is based on a single period model of investment.

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

□□ Expected rate of return of an asset with no risks involved

The asset return depends on the amount paid for the asset today. The price paid must ensure that the market portfolio's risk / return characteristics improve when the asset is added to it. The CAPM is a model that derives the theoretical required expected return (i.e., discount rate) for an asset in a market, given the risk-free rate available to investors and the risk of the market as a whole.

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.

What is Security Market Line ?

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).

The CAPM is usually expressed:

$$E(R_i) = R_f + \beta_i(E(R_m) - R_f)$$

β , Beta, is the measure of asset sensitivity to a movement in the overall market; Beta is usually found via regression on historical data. Betas exceeding one signify more than average "riskiness" in the sense of the asset's contribution to overall portfolio risk; betas below one indicate a lower than average risk contribution.

$(E(R_m) - R_f)$ is the market premium, the expected excess return of the market portfolio's expected return over the risk-free rate.

- Expected return:

$$E(R_p) = \sum_i w_i E(R_i)$$

where R_p is the return on the portfolio, R_i is the return on asset i and w_i is the weighting of component asset i (that is, the proportion of asset " i " in the portfolio).

- Portfolio return variance:

$$\sigma_p^2 = \sum_i w_i^2 \sigma_i^2 + \sum_i \sum_{j \neq i} w_i w_j \sigma_i \sigma_j \rho_{ij}$$

where σ is the (sample) standard deviation of the periodic returns on an asset, and ρ_{ij} is the correlation coefficient between the returns on assets i and j . Alternatively the expression can be written as:

$$\sigma_p^2 = \sum_i \sum_j w_i w_j \sigma_i \sigma_j \rho_{ij}$$

where $\rho_{ij} = 1$ for $i = j$, or

$$\sigma_p^2 = \sum_i \sum_j w_i w_j \sigma_{ij}$$

where $\sigma_{ij} = \sigma_i \sigma_j \rho_{ij}$ is the (sample) covariance of the periodic returns on the two assets, or alternatively denoted as $\sigma(i, j)$, cov_{ij} or $cov(i, j)$.

- Portfolio return volatility (standard deviation):

$$\sigma_p = \sqrt{\sigma_p^2}$$

For a **two asset** portfolio:

- Portfolio return: $E(R_p) = w_A E(R_A) + w_B E(R_B) = w_A E(R_A) + (1 - w_A) E(R_B)$.
- Portfolio variance: $\sigma_p^2 = w_A^2 \sigma_A^2 + w_B^2 \sigma_B^2 + 2w_A w_B \sigma_A \sigma_B \rho_{AB}$

For a **three asset** portfolio:

- Portfolio return: $E(R_p) = w_A E(R_A) + w_B E(R_B) + w_C E(R_C)$
- Portfolio variance: $\sigma_p^2 = w_A^2 \sigma_A^2 + w_B^2 \sigma_B^2 + w_C^2 \sigma_C^2 + 2w_A w_B \sigma_A \sigma_B \rho_{AB} + 2w_A w_C \sigma_A \sigma_C \rho_{AC} + 2w_B w_C \sigma_B \sigma_C \rho_{BC}$

$$R_p = \sum_{i=1}^N x_i (\alpha_i + \beta_i R_m)$$

Portfolio return is the weighted average of the estimated return for each security in the portfolio. The weights are the respective stocks proportions in the portfolio.

A portfolio's alpha value is a weighted average of the alpha values for its component securities using the proportion of the investment in a security as weight.

$$\alpha_p = \sum_{i=1}^N x_i \alpha_i$$

where,

- α_p = value of the alpha for the portfolio
- x_i = proportion of the investment on security i
- α_i = value of alpha for security i
- N = number of securities in the portfolio.

Similarly, a portfolio's beta value is the weighted average of the beta values of its component stocks using relative share of them in the portfolio as weights.

$$\beta_p = \sum_{i=1}^N x_i \beta_i$$

β_p is the portfolio beta.

Example 1: The following details are given for X and Y companies stocks and the Bombay Sensex for a period of one year. Calculate the systematic and unsystematic risk for the companies' stocks. If equal amount of money is allocated for the stocks what would be the portfolio risk?

	X Stock	Y Stock	Sensex
Average return	0.15	0.25	0.06
Variance of return	6.30	5.86	2.25
β	0.71	0.27	
Correlation coefficient	0.424		
Coefficient of determination (r^2)	0.18		

Solution: The coefficient of determination (r^2) gives the percentage of the variation in the security's return that is explained by the variation of the market index return. In the X company stock return, 18 per cent of

variation is explained by the variation of the index and 82 per cent is not explained by the index.

$$\begin{aligned} \text{Explained by the index} &= \text{variance of security return} \times \text{coefficient of determination} \\ &= 6.3 \times 0.18 = 1.134 \end{aligned}$$

$$\begin{aligned} \text{Not explained by the index} &= \text{variance of security return} \times (1 - r^2) \\ &= 6.3 \times (1 - 0.18) \\ &= 6.3 \times 0.82 = 5.166 \end{aligned}$$

According to Sharpe, the variance explained by the index is the systematic risk. The unexplained variance or the residual variance is the unsystematic risk.

Company X

$$\begin{aligned} \text{Systematic risk} &= \beta^2 \times \text{Variance of market index} \\ &= (0.71)^2 \times 2.25 = 1.134 \end{aligned}$$

$$\begin{aligned} \text{Unsystematic risk} &= \text{Total variance of security return} - \text{systematic risk} \\ &= e_i^2 \\ &= 6.3 - 1.134 = 5.166 \end{aligned}$$

$$\begin{aligned} \text{Total risk} &= \beta_i^2 \times \sigma_m^2 + e_i^2 \\ &= 1.134 + 5.166 = 6.3 \end{aligned}$$

Company Y

$$\begin{aligned} \text{Systematic risk} &= \beta_i^2 \times \sigma_m^2 \\ &= (0.27)^2 \times 2.25 = 0.1640 \end{aligned}$$

$$\begin{aligned} \text{Unsystematic risk} &= \text{Total variance of the security return} - \text{systematic risk} \\ &= 5.86 - 0.1640 = 5.696 \end{aligned}$$

$$\begin{aligned} \sigma_p^2 &= \left[\left(\sum_{i=1}^N x_i \beta_i \right)^2 \right] + \left[\sum_{i=1}^N x_i^2 e_i^2 \right] \\ &= [(0.5 \times 0.71 + 0.5 \times 0.27)^2 \times 2.25] + [(0.5)^2 (5.166) + (0.5)^2 (5.696)] \\ &= [(0.355 + 0.135)^2 \times 2.25] + [(1.292 + 1.424)] \\ &= 0.540 + 2.716 = 3.256 \end{aligned}$$

Example 2: Consider a portfolio of four securities with the following characteristics:

Security	Weighting	α_i	β_i	Residual Variance (σ_{ei}^2)
1	0.2	2.0	1.2	320
2	0.3	1.7	0.8	450

3	0.1	-0.8	1.6	270
4	0.4	1.2	1.3	180

Calculate the return and risk of the portfolio under single index model, if the return on market index is 16.4 per cent and the standard deviation of return on market index is 14 per cent.

Solution:

1) Portfolio return under single index model is calculated using the formula:

$$R_p = \alpha_p + \beta_p R_m$$

For applying this formula, α_p and β_p have to be calculated as:

$$\begin{aligned} \alpha_p &= \sum_{i=1}^n w_i \alpha_i \\ &= (0.2)(2.0) + (0.3)(1.7) + (0.1)(-0.8) + (0.4)(1.2) \\ &= 1.31 \end{aligned}$$

$$\begin{aligned} \beta_p &= \sum_{i=1}^n w_i \beta_i \\ &= (0.2)(1.2) + (0.3)(0.8) + (0.1)(1.6) + (0.4)(1.3) \\ &= 1.16 \end{aligned}$$

$$\begin{aligned} R_p &= \alpha_p + \beta_p R_m \\ &= 1.31 + (1.16)(16.4) \\ &= 1.31 + 19.024 \\ &= 20.334 \end{aligned}$$

2) Portfolio risk under single index model is calculated as:

$$\sigma_p^2 = \beta_p^2 \sigma_m^2 + \sum_{i=1}^n w_i^2 \sigma_{ei}^2$$

For applying this, portfolio residual variance needs to be calculated as:

$$\sum_{i=1}^n w_i^2 \sigma_{ei}^2$$

$$\begin{aligned} \text{Thus,} \\ &= (0.2)^2(320) + (0.3)^2(450) + (0.1)^2(270) + (0.4)^2(180) \\ &= 12.8 + 40.5 + 2.7 + 28.8 = 84.8 \end{aligned}$$

Now,

$$\begin{aligned} \sigma_p^2 &= \beta_p^2 \sigma_m^2 + \sum_{i=1}^n w_i^2 \sigma_{ei}^2 \\ &= (1.16)^2(14)^2 + 84.8 \\ &= 263.74 + 84.8 = 348.54 \end{aligned}$$

$$\text{Hence, } \sigma_p = \sqrt{348.54} = 18.67$$

A mutual fund is a professionally managed firm of collective investments that collects money from many investors and puts it in stocks, bonds, short-term money market instruments, and/or other securities. The fund manager, also known as portfolio manager, invests and trades the

fund's underlying securities, realizing capital gains or losses and passing any proceeds to the individual investors.

A mutual fund is a fund exchanged between the public and the capital market Through a corporate body.

The Securities and Exchange Board of India Regulations, 1993 defines a mutual fund as ‘a fund established in the form of a trust by a sponsor, to raise monies by the trustees through the sale of units to the public, under one or more schemes, for investing in securities in accordance with these regulations’.

Thus mutual fund is nothing but a form of collective investment. It is formed by the 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 in to a small fraction called “units” of equal value. Each investor is allocated units in proportion to the size of his investment.

Objectives

Mutual funds came into existence in order to attract the savings of lower and middle income group people and give them the benefit of corporate profits by distributing attractive dividends at the end of the year. Mutual funds cater the different types of customers who are interested in

- (a) fixed income or
- (b) a higher return for investment or
- (c) who is growth oriented.

Mutual Funds Set Up In India

The structure of mutual fund operations in India envisages a three tier establishment namely:

- (I) A *Sponsor* institution to promote the fund
- (II) A team of *Trustees* to oversee the operations and to provide checks for the efficient, profitable and transparent operations of the fund and
- (III) An *Asset Management Company* to actually deal with the funds.

Sponsoring Institution

The Company which sets up the Mutual Fund is called the ‘sponsor’. The SEBI has laid down certain criteria to be met by the sponsor. These criteria mainly deal with adequate experience, good past tract record, net worth etc.

Trustees

Trustees are people with long experience and good integrity in their respective fields. They carry the crucial responsibility of safeguarding the interest of investors. For this purpose, they monitor the operations of the different schemes. They have wide ranging powers and they can even dismiss Asset Management Companies with the approval of the SEBI.

Asset Management Company (AMC)

The AMC actually manages the funds of the various schemes. The AMC employs a large number of professionals to make investments, carry out research and to do agent and investor

servicing. Infact, the success of any Mutual Fund depends upon the efficiency of this AMC. The AMC submits a quarterly report on the functioning of the mutual fund to the trustees who will guide and control the AMC.

Types of Mutual Funds

MUTUAL FUND

- On the basis of execution and operation
 - **Close ended**
 - **Open ended**
- On the basis of yield and investment
 - **Income fund**
 - **Growth fund**
 - **Balance specialized**
 - **Money Taxation**
 - **Fund Fund**
 - **Market Fund Fund**

CLOSE ENDED FUNDS

Close ended funds are funds which have definite period or target amount . Once the period is over and or the target is reached, the door is closed for the investors. They cannot purchase any more units. These units are publicly traded through stock exchange and generally, there is no repurchase facility by the fund. The main objective of this fund is capital appreciation. Thus after the expiry of the fixed period, the entire corpus is disinvested and the proceeds are distributed to the various unit holders in proportion to their holding. Thus the fund ceases to be a fund, after the final distribution. E.g. UTI Master Share, 1986.

OPEN ENDED FUNDS

Open ended funds are those which have no fixed maturity periods. Open ended scheme consists of mutual funds which sell the units to the public. These mutual funds can also repurchase the units. Initial Public Offer (IPO) is open for a period of 30 days and then reopens as an open-ended scheme after a period not exceeding 30 days from the date of closure of the IPO. Investors can buy or repurchase units at net asset value or net value related prices, as decided by the mutual fund. Example: Unit Trust of India's Growth sector funds.

ON THE BASIS OF YIELD AND INVESTMENT

1. INCOME FUND

Income funds are those which generate 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.

- a. The investor is assured of regular income at periodical intervals
- b. The main objective is to declare regular dividends and not capital appreciation.
- c. The investment pattern is towards high and fixed income yielding securities
- d. It is concerned with short run gains only.

2. GROWTH FUND

Growth are those which concentrate mainly on long term gains i.e., capital appreciation. Hence they are termed as "*Nest Eggs*" investments.

- a. It aims at meeting the investors' need for capital appreciation.
- b. The investor's strategy conforms to investing the funds on equities with high growth potential.

c. The Investment tries to get capital appreciation by taking much risks and investing on risk bearing equities and high growth equity shares.

d. The fund declares dividends.

e. It is best suited to salaried and business people.

3. BALANCED FUND

It is a balance between income and growth fund. This is called as “Income –cum growth”. It aims at distributing regular income as well as capital appreciation. Thus the investments are made in high growth equity shares and also the fixed income earning securities.

4. SPECIALISED FUNDS

These are special funds to meet specific needs of specific categories of people like pensioners, widows etc.

5. MONEY MARKET MUTUAL FUNDS

The funds are invested in money market instruments. These funds basically have all the features of open ended funds but they invest in highly liquid and safe securities like commercial paper, bankers’ acceptances, and certificates of deposits treasury bills. These funds are called “money funds” in the U.S.A. The RBI has fixed the minimum amount of investment as Rs.1 Lakh, it is out of the reach of many small investors. However, the private sector funds have been permitted to deal in money market mutual funds. It is best suited to institutional investors like banks and other financial institutions.

6. TAXATION FUNDS

It is a fund which offers tax rebated 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. An investor is entitled to get 20% rebated in Income Tax for investments made under this fund subject to a maximum investment of Rs.10,000 per annum. E.g. Tax Saving Magnum of SBI Capital Market Limited.

7. OTHER CLASSIFICATION

i. Leveraged Funds: Also called as borrowed funds as they are used primarily to increase the size of the value of portfolio of a mutual fund. When the value increases, the earning capacity of the fund also increases.

ii. Dual Funds: It is a fund which gives a single investment opportunity for two different types of investors. It sells income shares and capital. Those investors who seek current investment income can purchase income shares. The capital shares receive all the capital gains earned on those shares and they are not entitled to receive any dividend of any type.

iii. Index Fund: It is a fund based on some broad market index. This is done by holding securities in the same proportion as the index itself. The value of these index linked funds will automatically go up whenever the market index goes up and vice versa.

iv. Bond Funds: The funds have portfolios consisting mainly of fixed income securities like bonds. The main thrust is income rather than capital gains.

v. Aggressive Growth Funds: These funds are capital gains oriented and thus the thrust area of these funds is capital gains. Hence, these funds are generally invested in speculative stocks. They may also use specialized investment techniques like short term trading, option writing etc.,

vi. Off shore Mutual Funds: These funds are meant for nonresident investors.

These funds facilitate flow of funds across different countries, with free and efficient movement of capital for investment and repatriation.

vii. Property Fund: These funds are real estate mutual funds. Its investment also includes shares/bonds of companies involved in real estate and mortgage backed companies.

viii. Fund of Funds: It is a fund that invests in other mutual fund schemes. The concept is prevalent in abroad.

Open-ended Mutual Funds	Close-ended Mutual Funds
The mutual fund continuously offers new units or shares for sale.	This type of mutual fund offers new units or shares to investors only for a limited period.
It has no fixed maturity.	It has fixed maturity period, e.g. 3 to 5 years.
Liquidity provider is the fund itself.	The liquidity provider is the stock market.
They are not listed on stock exchange.	They are listed on the recognized stock exchange for trading.
Transactions are executed at the end of the day.	Transactions are executed in real time.
Shares are bought and sold at the net-asset value (NAV).	Price of shares is determined by demand and supply.
The investors can sell their shares back to the fund.	The fund is not bound to buy its shares back from investors.

RISKS ASSOCIATED WITH MUTUAL FUNDS

Mutual Funds are not free from risks. It is so because basically the mutual funds also invest their funds in the stock market on shares which are volatile in nature and are not risk free. Hence, the following risk are inherent in their dealings :

(i) Market Risks

In general, there are certain risks associated with every kind of investment on shares. They are called market risks. These market risks can be reduced, but cannot be completely eliminated even by a good investment management. The prices of shares are subject to wide price fluctuations depending upon market conditions over which nobody has a control. Moreover, every economy has to pass through a cycle-boom, recession, slump and recovery. The phase of the business cycle affects the market conditions to a larger extent.

(ii) Scheme Risks

There are certain risks inherent in the scheme itself. It all depends upon the nature of the scheme. For instance, in a pure growth scheme, risks are greater. It is obvious because if one expects more returns as in the case of a growth scheme, one has to take more risks.

(iii) Investment Risk

Whether the Mutual Fund makes money in shares or loses depends upon the investment expertise of the Asset Management Company (AMC). If the investment advice goes wrong, the fund has to suffer a lot. The investment expertise of various funds are different and it is reflected on the returns which they offer to investors.

(iv) Business Risk

The corpus of a mutual fund might have been invested in a company's shares. If the business of that company suffers any set back, it cannot declare any dividend. It may even go to the extent of winding up its business. Though the mutual fund can withstand such a risk, its income paying capacity is affected.

(v) Political Risks

Successive Governments bring with them fancy new economic ideologies and policies. It is often said that many economic decisions are politically motivated. Changes in Government bring in the risk of uncertainty which every player in the financial service industry has to face. So mutual funds are no exception to it.

ORGANIZATION OF THE FUND

The structure of mutual fund operations in India envisages a three tier establishment namely :

- (i) A sponsor institution to promote the fund
- (ii) A team of trustees to oversee the operations and to provide checks for the efficient, profitable and transparent operations of the fund and
- (iii) An Asset Management Company (AMC) to actually deal with the funds.

Sponsoring Institution : The company which sets up the Mutual Fund is called the sponsor. The SEBI has laid down certain criteria to be met by the sponsor. These criteria mainly deal with adequate experience, good past track record, net worth etc.

Trustees : Trustees are people with long experience and good integrity in their respective fields. They carry the crucial responsibility of safeguarding the interest of investors. For this purpose, they monitor the operations of the different schemes. They have wide ranging powers and they can even dismiss Asset Management Companies with the approval of the SEBI.

Asset Management Company (AMC) : The AMC actually manages the funds of the various schemes. The AMC employs a large number of professionals to make investments, carry out research and to do agent and investor servicing. In fact, the success of any Mutual Fund depends upon the efficiency of this AMC. The AMC submits a quarterly report on the functioning of the mutual fund to the trustees who will guide and control the AMC

FACILITIES AVAILABLE TO INVESTORS

Mutual funds provide following facilities to the investors :

- (i) Repurchase Facilities

The units of closed ended schemes must be compulsorily listed in recognized stock exchanges. Such units can be sold or bought at market prices. But, units of open ended schemes are not at all listed and hence they have to be bought only from the fund. So, the fund reserves the right to buy back the units from its members. This process of buying back the units from the investors by the fund is called repurchase facility. This is available in both schemes so as to provide liquidity to investors. The price fixed for this purpose is called repurchase price.

(ii) Reissue Facilities

In the case of open ended schemes, units can be bought only from the fund and not in the open market. The units bought from the investors are again reissued to those who are interested in purchasing them. The price fixed for this purpose is called re-issue price.

(iii) Roll Over Facilities

At the time of redemption, the investor is given an option to reinvest his entire investment once again for another term. An investor can overcome an adverse market condition prevailing at the time of redemption by resorting to this roll over facility. This is applicable in the case of close-ended funds.

(iv) Lateral Shifting Facilities

Some mutual funds permit the investors to shift from one scheme to another on the basis of the Net Asset Value with a view to providing total flexibility in their operation. This is done without any discount on the fund and without any additional charges. This is a great privilege given to the investors. This shifting is called 'lateral shifting'.

Advantages of mutual funds

Mutual funds have advantages compared to direct investing in individual securities. These include:

- Increased diversification
- Daily liquidity
- Professional investment management
- Ability to participate in investments that may be available only to larger investors
- Service and convenience
- Government oversight
- Ease of comparison

Disadvantages of mutual funds

Mutual funds have disadvantages as well, which include[

- Fees
- Less control over timing of recognition of gains
- Less predictable income
- No opportunity to customize