



SASURIE COLLEGE OF ENGINEERING

DEPARTMENT OF MASTER OF BUSINESS ADMINISTRATION

REGULATION 2021

II YEAR – III SEMESTER

BA4302

**SECURITY ANALYSIS AND PORTFOLIO
MANAGEMENT**

BA4001 SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT

UNIT I INVESTMENT SETTING Financial and economic meaning of Investment – Characteristics and objectives of Investment – Investment process -Types of Investment – Investment alternatives – Choice and Evaluation – Risk and return concepts - Valuation of bonds and stock.

UNIT II FUNDAMENTAL ANALYSIS Economic Analysis – Economic forecasting and stock Investment Decisions – Forecasting techniques. Industry Analysis : Industry classification, Industry life cycle – Company Analysis Measuring Earnings – Forecasting Earnings – Applied Valuation Techniques – Graham and Dodds investor ratios.

UNIT III TECHNICAL ANALYSIS Fundamental Analysis Vs Technical Analysis -- Dow theory – Charting methods - Chart Patterns Trend – Trend reversals – Market Indicators -Moving Average – Exponential moving Average Oscillators -RSI -ROC - MACD. Efficient Market theory - Forms of market efficiency -weak, semi-strong, strong form - Empirical tests of market efficiency -its application.

UNIT IV PORTFOLIO CONSTRUCTION AND SELECTION Portfolio analysis - Reduction of portfolio risk through diversification – Portfolio risk - Portfolio Selection - Feasible set of portfolios - Efficient set - Markowitz model - Single index model - Construction of optimum portfolio - Multi-index model.

UNIT V 9 Capital Asset Pricing model - Lending and borrowing - CML - SML - Pricing with CAPM - Arbitrage pricing theory– Portfolio Evaluation - Sharpe's index Treynor's index, Jensen's index – Mutual Funds – Portfolio Revision.

Unit 1: Investment Setting

Introduction:

- **Investment** is putting money into something with the expectation of profit. The word originates in the Latin "vestis", meaning garment, and refers to the act of putting things (money or other claims to resources) into others' pockets.
- The term "investment" is used differently in economics and in finance. Economists refer to a real investment (such as a machine or a house), while financial economists refer to a financial asset, such as money that is put into a bank or the market, which may then be used to buy a real asset.

Financial meaning of investment:

- Financial investment involves of funds in various assets, such as *stock, Bond, Real Estate, Mortgages* etc.
- Investment is the employment of funds with the aim of achieving additional income or growth in value.
- It involves the commitment of resources which have been saved or put away from current consumption in the hope some benefits will accrue in future. Investment involves long term commitment of funds and waiting for a *reward in the future*.
- From the point of view of people who invest their funds, they are the supplier of Capital and in their view investment is a commitment of a person's funds to derive future income in the form of interest, dividend, rent, premiums, pension benefits or the appreciation of the value of their principle capital.
- To the financial investor it is not important whether money is invested for a productive use or for the purchase of secondhand instruments such as existing shares and stocks listed on the stock exchange.

- Most investments are considered to be transfers of financial assets from one person to another.

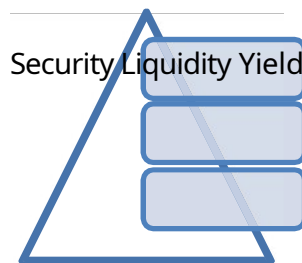
Economic meaning of investment:

- Economic investment means the net addition to the capital stock of the society which consists of goods and services that are used in the production of other goods and services. Addition to the capital stock means an increase in building, plants, equipment and inventories over the amount of goods and services that existed.
- The financial and economic meanings are related to each other because investment is a part of the savings of individuals which flow into the capital market either directly or through institutions, divided into new and secondhand capital financing. Investors, suppliers and investors as users of long-term funds find a meeting place in the market.

Basic Investment Objectives

Investment triangle three compromising objectives

Any investment decision will be influenced by three objectives: security, liquidity and yield. A best investment decision will be one, which has the best possible compromise between these three objectives.



- **Security:**

Central to any investment objective, we have to basically ensure the safety of the principal. One can afford to lose the returns at any given point of time but s/he can ill afford to lose the very principal itself. By identifying the importance of security, we will be able to identify and select the instrument that meets this criterion. For example, when

compared with corporate bonds, we can vouch safe the safety of return of investment in treasury bonds as we have more faith in governments than in corporations. Hence, treasury bonds are highly secured instruments. The safest investments are usually found in the moneymarket and include such securities as Treasurybills (T-bills), certificates ofdeposit(CD), commercial paper or bankers' acceptance slips; or in the fixed income (bond) market in the form of municipal and other government bonds, and in corporate bonds

- **Liquidity:**

Because we may have to convert our investment back to cash or funds to meet our unexpected demands and needs, our investment should be highly liquid. They should be en cashable at short notice, without loss and without any difficulty. If they cannot cometo our rescue, we may have to borrow or raise funds externally at high cost and at unfavorable terms and conditions. Such liquidity can be possible only in the case of investment, which has always-ready market and willing buyers and sellers. Such instruments of investment are called highly liquid investment.

- **Yield:**

Yield is best described as the net return out of any investment. Hence given the level or kind of security and liquidity of the investment, the appropriate yield should encourage the investor to go for the investment. If the yield is low compared to the expectation ofthe investor, s/he may prefer to avoid such investment and keep the funds in the bank account or in worst case, in cash form in lockers. Hence yield is the attraction for any investment and normally deciding the right yield is the key to any investment.

Relationship:

- Thereisatradeoffbetweenrisk(security)andreturn(yield)ontheonehandandliquidity and return (yield) on the other.
- Normally, higher the risk any investment carries, the greater will be the yield, to compensatethe possible loss. That is why,flybynightoperators,offerskyhighreturns totheirinvestors andnaturallyourgullible investorsget carriedawaybysuchreturnsand ultimately lose their investment. Highly secured investment does not carry high coupon, as it is safe and secured.

- When the investment is illiquid, (i.e. one cannot get out of such investment at will and without any loss) the returns will be higher, as no normal investor would prefer such investment.
- These three points security, liquidity and yield in any investment make an excellent triangle in our investment decision-making. Ideally, with given three points of any triangle, one can say the center of the triangle is fixed. In our investment decision too, this center the best meeting point for S, L and Y is important for our consideration.
- However, if any one or two of these three points are disturbed security, liquidity and yield in any investment the center of the triangle would be disturbed and one may have to revisit the investment decision either to continue the investment or exit the investment.
- All these points security, liquidity and yield are highly dynamic in any market and they are always subject to change and hence our investor has to periodically watch his/her investment and make appropriate decisions at the right time.
- If an investor fails to monitor her/his investment, in the worst circumstances, s/he may lose the very investment.
- Thus, we will return to our original statement - A best investment decision will be one, which has the best possible compromise between these three objectives security, liquidity and yield.

Secondary Objectives:

Tax Minimization:

An investor may pursue certain investments in order to adopt tax minimization as part of his or her investment strategy. A highly-paid executive, for example, may want to seek investments with favorable tax treatment in order to lessen his or her overall income tax

burden. Making contributions to an IRA or other tax-sheltered retirement plan, such as a 401(k), can be an effective tax minimization strategy.

Marketability / Liquidity:

Many of the investments we have discussed are reasonably illiquid, which means they cannot be immediately sold and easily converted into cash. Achieving a degree of liquidity, however, requires the sacrifice of a certain level of income or potential for capital gains.

Common stock is often considered the most liquid of investments, since it can usually be sold within a day or two of the decision to sell. Bonds can also be fairly marketable, but some bonds are highly illiquid, or non-tradable, possessing a fixed term. Similarly, money market instruments may only be redeemable at the precise date at which the fixed term ends. If an investor seeks liquidity, money market assets and non-tradable bonds aren't likely to be held

CHARACTERISTICS OF GOOD INVESTMENT

a. Objective fulfillment

- An investment should fulfill the objective of the savers. Every individual has a definite objective in making an investment. When the investment objective is contrasted with the uncertainty involved with investments, the fulfillment of the objectives through the chosen investment avenue could become complex.

b. Safety

- The first and foremost concern of any ordinary investor is that his investment should be safe. That is he should get back the principal at the end of the maturity period of the investment. There is no absolute safety in any investment, except probably with investment in government securities or such instruments where the repayment of interest and principal is guaranteed by the government.

c. Return

- The return from any investment is expectedly consistent with the extent of risk assumed by the investor. Risk and return go together. Higher the risk, higher the chances of getting higher return. An investment in a low risk - high safety investment such as investment in government securities will obviously get the investor only low returns.

d. Liquidity

- Given a choice, investors would prefer a liquid investment than a higher return investment. Because the investment climate and market conditions may change or investor may be confronted by an urgent unforeseen commitment for which he might need funds, and if he can dispose of his investment without suffering unduly in terms of loss of returns, he would prefer the liquid investment.

e. Hedge against inflation

- The purchasing power of money deteriorates heavily in a country which is not efficient or not well endowed, in relation to another country. Investors, who save for the long term, look for hedge against inflation so that their investments are not unduly eroded; rather they look for a capital gain which neutralizes the erosion in purchasing power and still gives a return.

f. Concealability

- If not from the taxman, investors would like to keep their investments rather confidential from their own kith and kin so that the investments made for their old age/ uncertain future does not become a hunting ground for their own lives. Safeguarding of financial instruments representing the investments may be easier than investment made in real estate. Moreover, the real estate may be prone to encroachment and other such hazards.

h. Tax shield

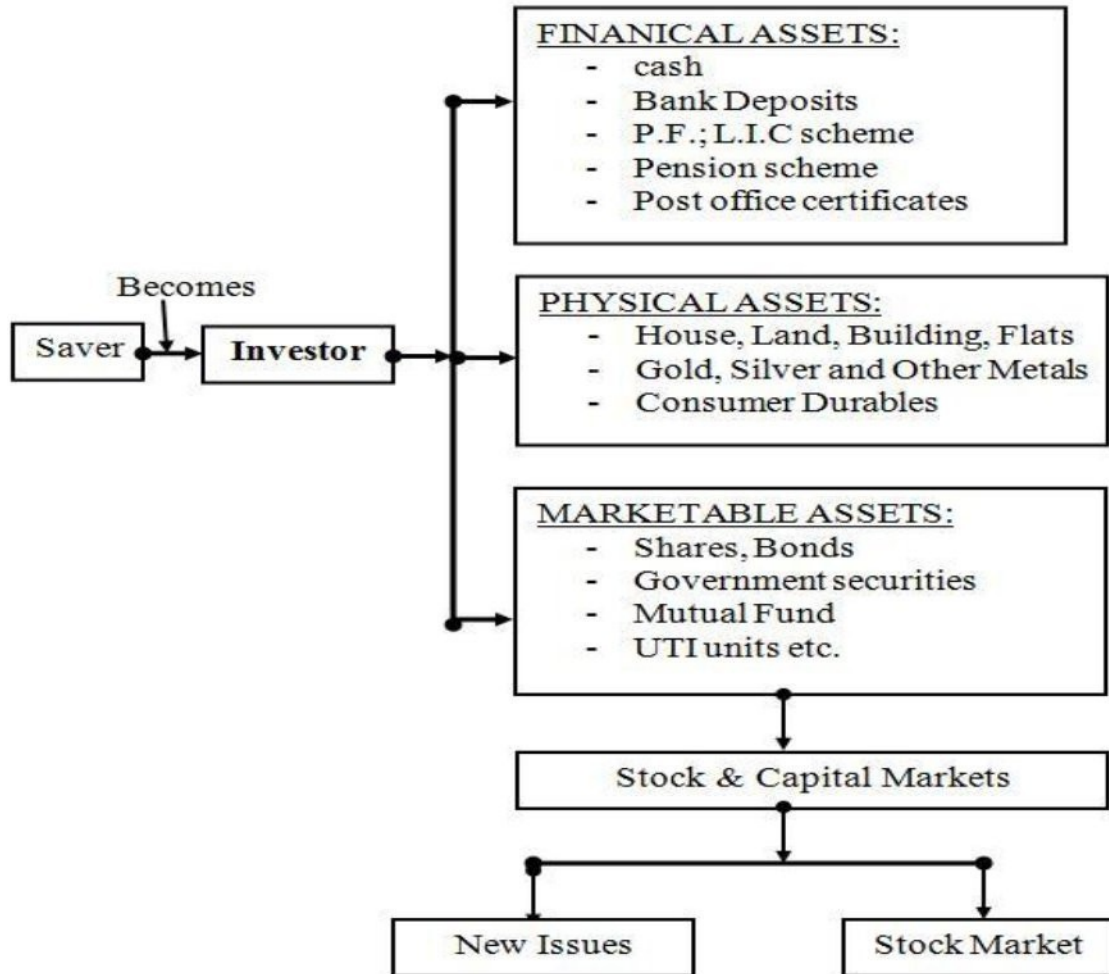
- Investment decisions are highly influenced by the tax system in the country. Investors look for front-end tax incentives while making an investment and also rear-end tax reliefs while reaping the benefit of their investments. As against tax incentives and reliefs, if investors were to pay taxes on the income earned from investments, they look for higher

return in such investments so that their after-tax income is comparable to the pre-tax equivalent level with some other income which is free of tax, but is more risky.

Different types of investors:

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

Types of investment: or various investment alternatives /avenues



Non-marketable Financial Assets:

A good portion of financial assets is represented by non-marketable financial assets. A distinguishing feature of these assets is that they represent personal transactions between the investor and the issuer. For example, when you open a savings bank account at a bank you deal with the bank personally. In contrast when you buy equity shares in the stock market you do not know who the seller is and you do not care. These can be classified into the following broad categories:

- Post office deposits
- Company deposits
- Provident fund deposits
- **Bank deposits**

Equity Shares:

- Equities are a type of security that represents the ownership in a company. Equities are traded (bought and sold) in stock markets. Alternatively, they can be purchased via the Initial Public Offering (IPO) route, i.e. directly from the company. Investing in equities is a good long-term investment option as the returns on equities over a long time horizon are generally higher than most other investment avenues. However, along with the possibility of greater returns comes greater risk. Equity shares are classified into the following broad categories by stock market analysts:
 - Blue chip shares
 - Growth shares
 - Income shares
 - Cyclical shares
 - Speculative shares

Bonds:

Bond is a debt instrument issued for a period of more than one year with the purpose of raising capital by borrowing.

It is certificates acknowledging the money lent by a bondholder to the company. It states its maturity date, interest rate, and par value.

The Federal government, states, cities, corporations, and many other types of institutions sell bonds. When an investor buys a bond, he/she becomes a creditor of the issuer. However, the buyer does not gain any kind of ownership right to the issuer, unlike in the case of equities. On the hand, a bondholder has a greater claim on an issuer's income than a shareholder in the case of financial distress (this is true for all creditors). The yield from a bond is made up of three components: coupon interest, capital gains and interest on interest (if a bond pays no coupon interest, the only yield will be capital gains). A bond might be sold at a premium or below par (the amount paid out at maturity), but the market price will approach par value as the bond approaches maturity. A riskier bond has to provide a higher payout to compensate for that additional risk. Some bonds are tax-exempt, and these are typically issued by municipal,

county or state governments, whose interest payments are not subject to federal income tax, and sometimes also state or local income tax.

Bonds may be classified into the following categories:

- Government securities
- Government of India relief bonds
- Government agency securities
- PSU bonds
- Debentures of private sector companies
- Preference shares

Money Market Instruments:

Debt instruments which have a maturity of less than one year at the time of issue are called money market instruments. The important money market instruments are:

- Treasury bills
- Commercial paper
- Certificates of deposits

Mutual Funds:

Instead of directly buying equity shares and/or fixed income instruments, you can participate in various schemes floated by mutual funds which, in turn, invest in equity shares and fixed income securities.

A mutual fund is made up of money that is pooled together by a large number of investors who give their money to a fund manager to invest in a large portfolio of stocks and / or bonds

Mutual fund is a kind of trust that manages the pool of money collected from various investors and it is managed by a team of professional fund managers (usually called an Asset Management Company) for a small fee. The investments by the Mutual Funds are made in equities, bonds, debentures, call money etc., depending on the terms of each scheme floated by the Fund. The current value of such investments is now a day is calculated almost on daily basis and the same is

reflected in the Net Asset Value (NAV) declared by the funds from time to time. This NAV keeps on changing with the changes in the equity and bond market. Therefore, the investments in Mutual Funds is not risk free, but a good managed Fund can give you regular and higher returns than when you can get from fixed deposits of a bank etc.

There are three broad types of mutual fund schemes:

- Equity schemes
- Debt schemes
- Balanced schemes

Life Insurance:

In a broad sense, life insurance may be viewed as an investment. **Life insurance** is a contract between the policyholder and the insurer, where the insurer promises to pay a designated beneficiary a sum of money (the "benefits") upon the death of the insured person. Depending on the contract, other events such as terminal illness or critical illness may also trigger payment. In return, the policyholder agrees to pay a stipulated amount (the "premium") at regular intervals or in lump sums. The important types of insurance policies in India are:

- Endowment assurance policy
- Money back policy
- Whole life policy
- Term assurance policy

Real Estate:

For the bulk of the investors the most important asset in their portfolio is a residential house. In addition to a residential house, the more affluent investors are likely to be interested in the following types of real estate:

- Agricultural land
- Semi-urban land

- Time share in a holiday resort

Precious Objects:

Precious objects are items that are generally small in size but highly valuable in monetary terms. Some important precious objects are:

Gold and silver

Precious stones

Art objects

Financial Derivative:

A financial derivative is an instrument whose value is derived from the value of an underlying asset. It may be viewed as a side bet on the asset. The most important financial derivatives from the point of view of investors are:

- Options
- Futures

Non-financial Instruments Real

estate

- With the ever-increasing cost of land, real estate has come up as a profitable investment proposition.

Gold

- The 'yellow metal' is a preferred investment option, particularly when markets are volatile. Today, beyond physical gold, a number of products which derive their value from the price of gold are available for investment. These include gold futures and gold exchange traded funds.

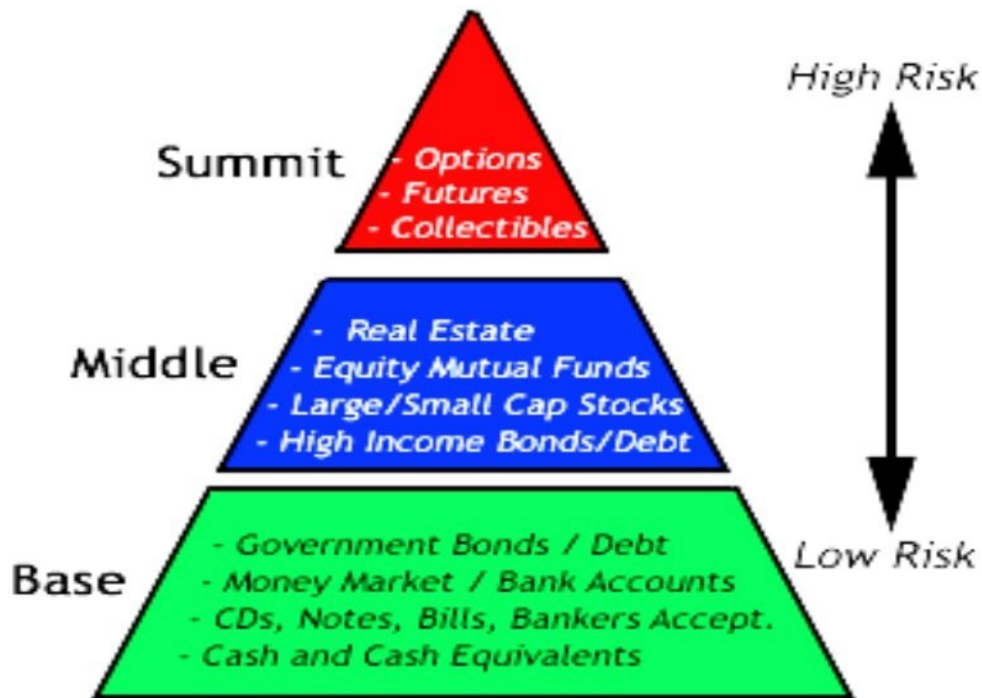
Investment Risk and Return Characteristics

The chart below provides some examples of common types of investments classified according to their potential return and investment risk.

Potential Return	Investment Risk (Volatility)	Examples of Common Investments
High	High	<ul style="list-style-type: none"> • Aggressive growth funds • Emerging markets mutual funds • Foreign company stocks • Global, international, sector, and precious metal mutual funds • Penny stocks • Small cap stocks and funds • Variable annuities invested in aggressive growth sub-accounts
Moderate	Moderate	<ul style="list-style-type: none"> • Convertible bonds • High-yield (junk) bond funds • Large-cap stocks and funds • S&P 500 & Wilshire 5000 stock index funds • Variable annuities invested in large-cap stock sub-accounts
L	Low	<ul style="list-style-type: none"> • Fixed annuities • Government agency securities (e.g., Ginnie Maes) • High quality short- and intermediate-term municipal and corporate bonds and bond funds • Money market mutual funds • Treasury bills and notes • U.S. savings bonds (Series I and EE) • Variable annuities invested in high-quality bond sub-accounts

Investment Risk Pyramid

After deciding on how much risk is acceptable in your portfolio by acknowledging your time horizon and bankroll, you can use the risk pyramid approach for balancing your assets.



This pyramid can be thought of as an asset allocation tool that investors can use to diversify their portfolio investments according to the risk profile of each security. The pyramid, representing the investor's portfolio, has three distinct tiers:

Base of the Pyramid The foundation of the pyramid represents the strongest portion, which supports everything above it. This area should be comprised of investments that are low in risk and have foreseeable returns. It is the largest area and composes the bulk of your assets.

Middle Portion This area should be made up of medium-risk investments that offer a stable return while still allowing for capital appreciation. Although more risky than the assets creating the base, these investments should still be relatively safe.

Summit Reserved specifically for high-risk investments, this is the smallest area of the pyramid (portfolio) and should be made up of money you can lose without any serious repercussions. Furthermore, money in the summit should be fairly disposable so that you don't have to sell prematurely in instances where there are capital losses.

1.10 TYPES OF RISKS:

Personal Risks

This category of risk deals with the personal level of investing. The investor is likely to have more control over this type of risk compared to others.

Timing risk is the risk of buying the right security at the wrong time. It also refers to selling the right security at the wrong time. For example, there is the chance that a few days after you sell a stock it will go up several dollars in value. There is no surefire way to time the market.

Tenure risk is the risk of losing money while holding onto a security. During the period of holding, markets may go down, inflation may worsen, or a company may go bankrupt. There is always the possibility of loss on the company-wide level, too.

Company Risks

There are two common risks on the company-wide level. The first, **financial risk** is the danger that a corporation will not be able to repay its debts. This has a great effect on its bonds, which finance the company's assets. The more assets financed by debts (i.e., bonds and money market instruments), the greater the risk. Studying financial risk involves looking at a company's management, its leadership style, and its credit history.

Management risk is the risk that a company's management may run the company so poorly that it is unable to grow in value or pay dividends to its shareholders. This greatly affects the value of its stock and the attractiveness of all the securities it issues to investors.

Market Risks

Fluctuation in the market as a whole may be caused by the following risks:

Market risk is the chance that the entire market will decline, thus affecting the prices and values of securities. Market risk, in turn, is influenced by outside factors such as embargoes and interest rate changes. See Political risk below.

Liquidity risk is the risk that an investment, when converted to cash, will experience loss in its value. When you want to sell the stock you are currently holding, there is nobody there to buy your stock, meaning that there is no volume in that stock.

Interest rate risk is the risk that interest rates will rise, resulting in a current investment's loss of value. A bondholder, for example, may hold a bond earning 6% interest and then see rates on that type of bond climb to 7%.

Inflation risk is the danger that the dollars one invests will buy less in the future because prices of consumer goods rise. When the rate of inflation rises, investments have less purchasing power. This is especially true with investments that earn fixed rates of return. As long as they are held at constant rates, they are threatened by inflation. Inflation risk is tied to interest rate risk, because interest rates often rise to compensate for inflation. **Return of investment (ROI) is less than the market inflation rate.**

e.g. **Return of investment (ROI) : 5%; Market Inflation rate (IR) : 8.5%**

Exchange rate risk is the chance that a nation's currency will lose value when exchanged for foreign currencies.

Reinvestment risk is the danger that reinvested money will fetch returns lower than those earned before reinvestment. Individuals with dividend-reinvestment plans are a group subject to this risk. Bondholders are another.

National And International Risks

National and world events can profoundly affect investment markets.

Economic risk is the danger that the economy as a whole will perform poorly. When the whole economy experiences a downturn, it affects stock prices, the job market, and the prices of consumer products.

Industry risk is the chance that a specific industry will perform poorly. When problems plague one industry, they affect the individual businesses involved as well as the securities issued by

those businesses. They may also cross over into other industries. For example, after a national downturn in auto sales, the steel industry may suffer financially.

Tax risk is the danger that rising taxes will make investing less attractive. In general, nations with relatively low tax rates, such as the United States, are popular places for entrepreneurial activities. Businesses that are taxed heavily have less money available for research, expansion, and even dividend payments. Taxes are also levied on capital gains, dividends and interest. Investors continually seek investments that provide the greatest net after-tax returns.

Political risk is the danger that government legislation will have an adverse affect on investment. This can be in the form of high taxes, prohibitive licensing, or the appointment of individuals whose policies interfere with investment growth. Political risks include wars, changes in government leadership, and politically motivated embargoes.

Investors and speculators:

Investors:

The investors buy the securities with a view to invest their savings in profitable income earning securities. They generally retain these securities for a considerable length of time. They are assured of a profit in cash. They are also called genuine investors.

Speculators:

The speculators buy securities with a hope to sell them at a profit in future. They do not retain their holdings for a longer period. They buy these securities with the object of selling them and not to retain them. They are interested only in price differentials. They are not genuine investors.

Differences between investors and speculators:

S.No	Investors	Speculators
1	An investor is interested in safety of his investment	A speculator is interested in appreciation of capital and earning profits quickly

2	Seeks income from his investment	Seeks profit from sale and purchase of securities
3	Makes payment and takes delivery of the securities on purchasing. Receives payment and delivers these securities on sales.	He neither delivers nor takes the delivery of the securities on sale or purchase.
5	Retains holding for longer period i.e. commitment is for longer period of time	Triesto sell these securities quickly i.e. his commitment is for shorter period.
6	Risk is low	Risk is high
7	Stable income	Earnings of profit is uncertain
8	His income depends on the earnings of the enterprise	The profit earned by him depends on the fluctuation/change in the market price of securities.

Speculation:

Speculation refers to the buying and selling of securities in the hope of making a profit from expected change in the price of securities. Those who engage in such activity are known as speculators.

A speculator may buy securities in expectation of rise in price. If his expectation comes true, he sells the securities for a higher price and makes a profit. Similarly a speculator may expect a price to fall and sell securities at the current high price to buy again when prices decline. He will make a profit if prices decline as expected. The benefits of speculation are:

1. It leads to smooth change and prevents wide fluctuations in security prices at different times and places
2. Speculative activity and the resulting effect in the prices of securities provided a guidance to the public about the market situation.

Differences between speculation and gambling:

S.No	Speculation	Gambling
1	It is based on knowledge and foresight	It is based on chance of events happening.
2	It is a lawful activity	It is an illegal activity
3	It performs economic functions	It has no benefits to offer to the economy
4	Speculators bear the risk of loss on the basis of logical reasoning	Gamblers bear the risk of loss on the basis of blind and reckless expectation.

UNIT II

SECURITIES MARKETS

Financial Market- SegmentsTypes - - Participants in financial MarketRegulatory Environment,PrimaryMarketMethodsoffloatingnewissues,BookbuildingRoleofprimary marketRegulationof primary market,Stock exchanges in IndiaBSE,OTCEI, NSE, ISE,and Regulations of stock exchangesTrading system in stock exchangesSEBI.

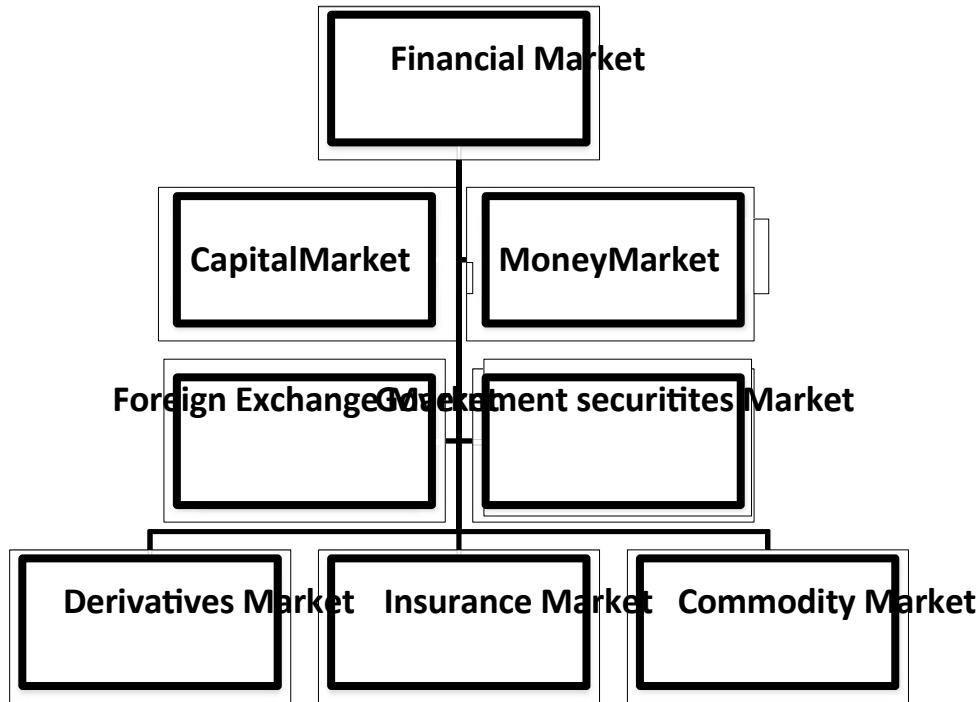
FINANCIAL MARKETS

- In economics, a **financial market** is a mechanism that allows people to buy and sell (trade) financial securities (such as stocks and bonds), commodities (such as precious metals or agricultural goods), and other fungible items of value at low transaction costs and at prices that reflect the efficient-market hypothesis. Financial markets can be domestic or they can be international.
- In finance, financial markets facilitate:
 - The raising of capital (in the capital markets)
 - The transfer of risk (in the derivatives markets)
 - International trade (in the currency markets)

-And are used to match those who *want* capital to those who *have* it.

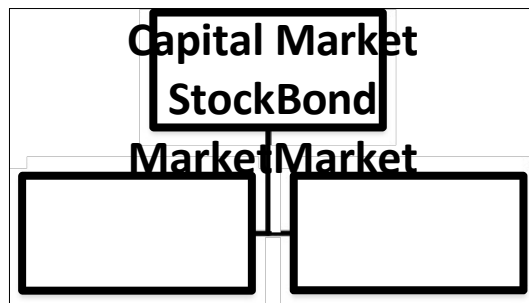
TYPES OF FINANCIAL MARKETS

The financial markets can be divided into different subtypes:



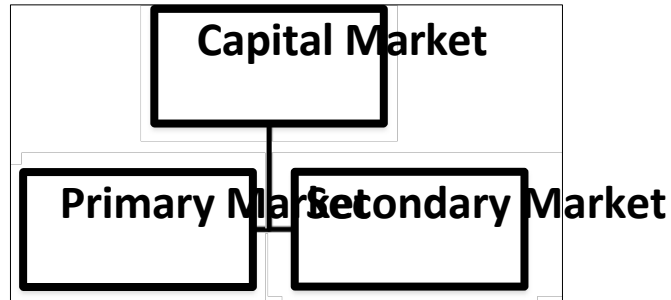
(A) Capital Market:

- The capital market deals in long term funds (shares and debentures). Companies raise their capital through the issue of shares and debentures.
- **Capital** markets which consist of:



- ✓ **Stock markets**, which provide financing through the issuance of shares or common stock, and enable the subsequent trading thereof.
- ✓ **Bond markets**, which provide financing through the issuance of **bonds**, and enable the subsequent trading thereof.

Another classification of capital market is as follows:



Primary Market:

- Primary market refers to the sale of shares, directly by the company at the time of promotion and the investors directly buy the shares from the company through application.
- Newly formed (issued) securities are bought or sold in primary markets.
- The share price will be mostly at par.

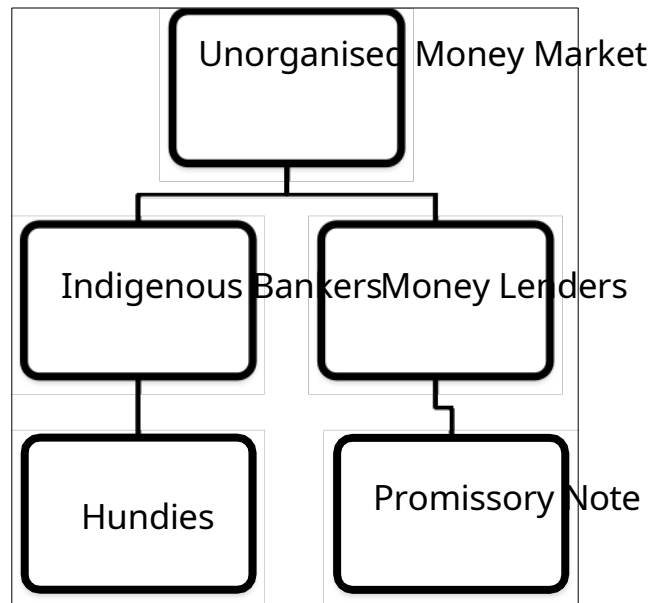
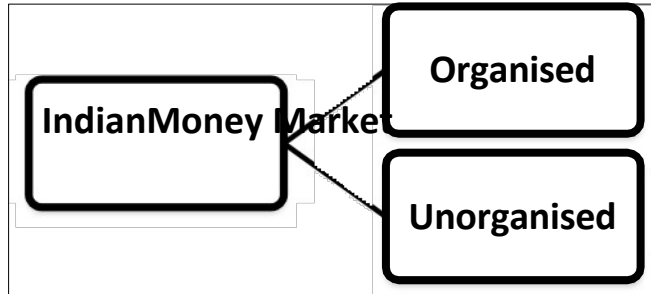
Secondary Market:

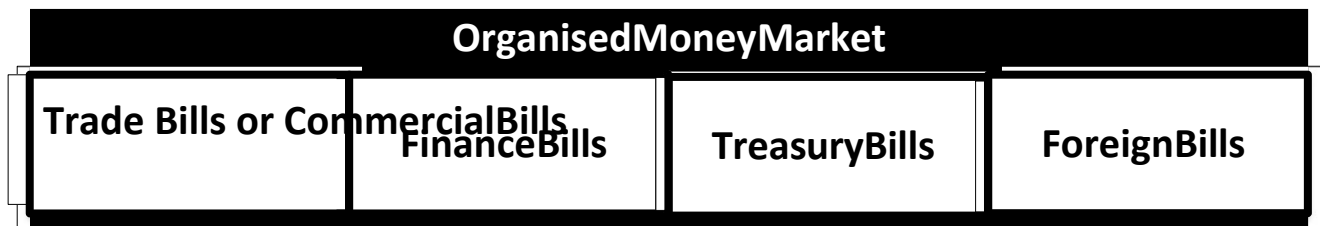
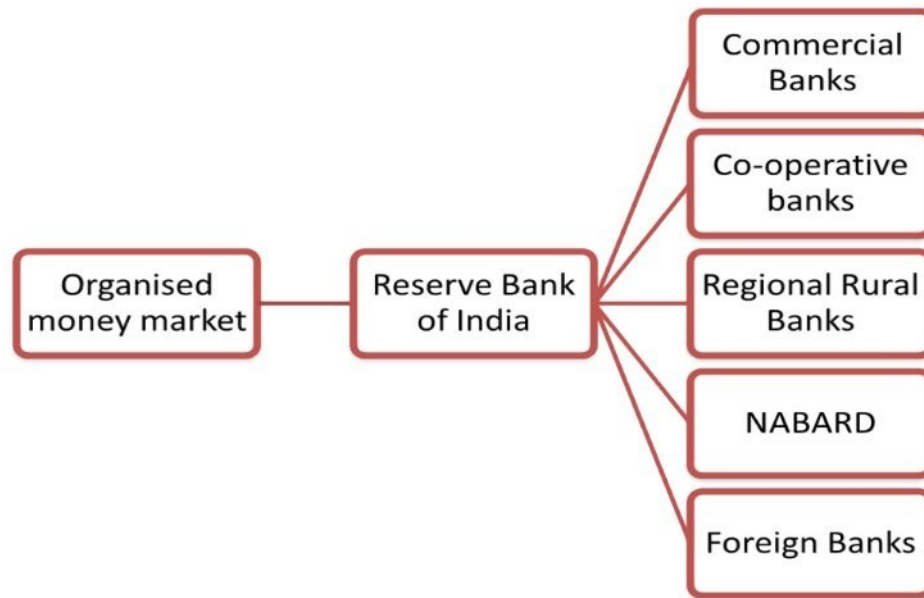
- Secondary markets allow investors to sell securities that they hold or buy existing securities.
- Here sale and purchase of securities will take place through the recognized stock exchanges.
- Only authorized persons are allowed to deal in these securities in the secondary market, who are known as brokers.
- Only listed securities will be traded in the stock exchanges.

(B) Money markets:

- Money market deals in short-term funds which provide short-term debt financing and investment.
- In fact there is no fixed place as money market.

- The term money market refers to a collective name given to all the institutions which are dealing in short term funds.
- Money market provides working capital.





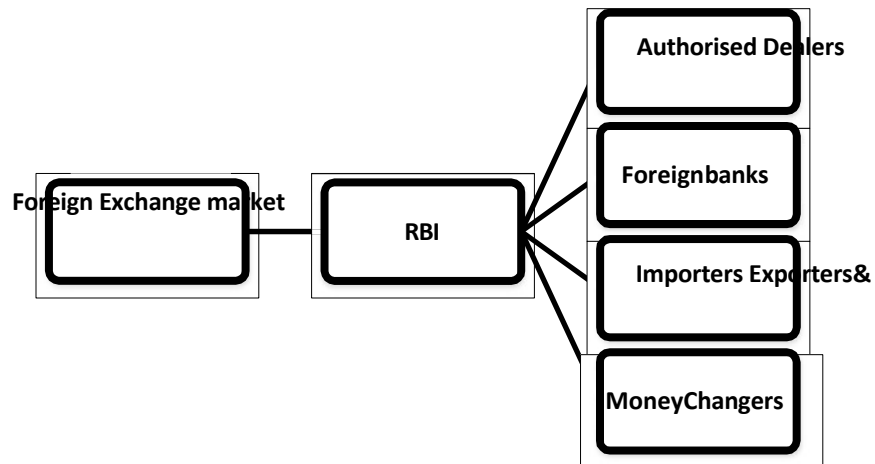
(C) Commodity Market & Derivative market & Insurance Market:

- **Commodity markets**, which facilitate the trading of commodities
- **Derivatives markets**, which provide instruments for the management of **financial risk**.
 - **Futures markets**, which provide **standardized forward contracts** for trading products at some future date; see also **forward market**.
- **Insurance markets**, which facilitate the redistribution of various risks.

(D) Foreign exchange markets

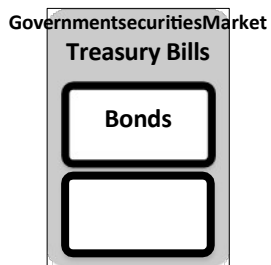
- **Foreign exchange markets**, which facilitate the trading of **foreign exchange**. **Foreign exchange** is bought and sold and the different forms of foreign currency are dealt. In India, foreign exchange is held by Reserve Bank of India which is the exchange control

authority. We have then Foreign Exchange Regulation Act which is now renamed as Foreign Exchange Management Act (FEMA) to deal with Foreign exchange.



(E) Government Securities Market:

It can be divided as follows:



When government is in need of funds to meet its budgetary deficits, it goes for the issue of treasury bills and bonds.

Treasury bills and bonds:

Treasury bills are issued for raising short term funds and mainly to meet revenue expenditure. Bonds are issued for raising long term loans and these are repayable over a period of 15 or 20 years. Normally they are subscribed by financial institutions as these

securities carry attractive interest rates and they can be sold easily in the market. It is for this reason; they are called as liquid assets.

The main functions of financial market are:

- 1) To facilitate creation and allocation of credit and liquidity.
- 2) To serve as intermediaries for mobilization of savings
- 3) To assist process of balanced economic growth;
- 4) To provide financial convenience

Financial market functions:

Financial markets serve six basic functions. These functions are briefly listed below:

- *Borrowing and Lending:* Financial markets permit the transfer of funds (purchasing power) from one agent to another for either investment or consumption purposes.
- *Price Determination:* Financial markets provide vehicles by which prices are set both for newly issued financial assets and for the existing stock of financial assets.
- *Information Aggregation and Coordination:* Financial markets act as collectors and aggregators of information about financial asset values and the flow of funds from lenders to borrowers.
- *Risk Sharing:* Financial markets allow a transfer of risk from those who undertake investments to those who provide funds for those investments.
- *Liquidity:* Financial markets provide the holders of financial assets with a chance to resell or liquidate these assets.
- *Efficiency:* Financial markets reduce transaction costs and information costs.

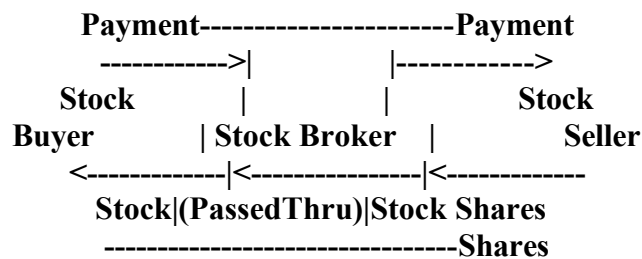
PARTICIPANTS IN FINANCIAL MARKET:

In the financial markets, there is a flow of funds from one group of parties (funds-surplus units) known as investors to another group (funds-deficit units) which require funds. However, often these groups do not have direct link. The link is provided by market intermediaries such as brokers, mutual funds, leasing and finance companies, etc. In all, there is a very large number of players and participants in the financial market.

Brokers:

A broker is a commissioned agent of a buyer (or seller) who facilitates trade by locating a seller (or buyer) to complete the desired transaction. A broker does not take a position in the assets he or she trades -- that is, the broker does not maintain inventories in these assets. The profits of brokers are determined by the commissions they charge to the users of their services (the buyers, the sellers, or both). Examples of brokers include real estate brokers and stock brokers.

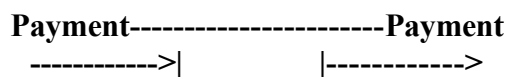
Diagrammatic Illustration of a Stock Broker:

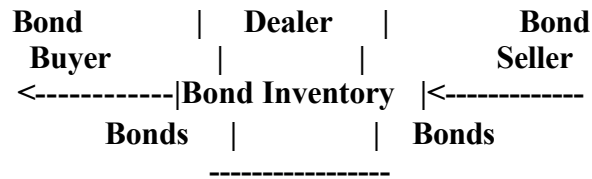


Dealers:

Like brokers, dealers facilitate trade by matching buyers with sellers of assets; they do not engage in asset transformation. Unlike brokers, however, a dealer can and does "take positions" (i.e., maintain inventories) in the assets he or she trades that permit the dealer to sell out of inventory rather than always having to locate sellers to match every offer to buy. Also, unlike brokers, dealers do not receive sales commissions. Rather, dealers make profits by buying assets at relatively low prices and reselling them at relatively high prices (buy low - sell high). The price at which a dealer offers to sell an asset (the "asked price") minus the price at which a dealer offers to buy an asset (the "bid price") is called the *bid-ask spread* and represents the dealer's profit margin on the asset exchange. Real-world examples of dealers include car dealers, dealers in U.S. government bonds, and NASDAQ stock dealers.

Diagrammatic Illustration of a Bond Dealer:





Investment Banks:

An *investment bank* assists in the initial sale of newly issued securities (i.e., in IPOs = Initial Public Offerings) by engaging in a number of different activities:

- *Advice*: Advising corporations on whether they should issue bonds or stock, and, for bond issues, on the particular types of payment schedules these securities should offer;
- *Underwriting*: Guaranteeing corporations a price on the securities they offer, either individually or by having several different investment banks form a syndicate to underwrite the issue jointly;
- *Sales Assistance*: Assisting in the sale of these securities to the public.

Some of the best-known U.S. investments banking firms are Morgan Stanley, Merrill Lynch, Salomon Brothers, First Boston Corporation, and Goldman Sachs.

Financial Intermediaries:

Unlike brokers, dealers, and investment banks, *financial intermediaries* are financial institutions that engage in financial asset transformation. That is, financial intermediaries purchase one kind of financial asset from borrowers -- generally some kind of long-term loan contract whose terms are adapted to the specific circumstances of the borrower (e.g., a mortgage) -- and sell a different kind of financial asset to savers, generally some kind of relatively liquid claim against the financial intermediary (e.g., a deposit account). In addition, unlike brokers and dealers, financial intermediaries typically hold financial assets as part of an investment portfolio rather than as an inventory for resale. In addition to making profits on their investment portfolios, financial intermediaries make profits by charging relatively high interest rates to borrowers and paying relatively low interest rates to savers.

Types of financial intermediaries include: *Depository Institutions* (commercial banks, savings and loan associations, mutual savings banks, credit unions); *Contractual Savings Institutions* (life insurance companies, fire and casualty insurance companies, pension funds, government retirement funds); and *Investment Intermediaries* (finance companies, stock and bond mutual funds, money market mutual funds).

These can be grouped as follows :

The individuals: These are net savers and purchase the securities issued by corporates. Individuals provide funds by subscribing to these security or by making other investments.

The Firms or corporates: The corporates are net borrowers. They require funds for different projects from time to time. They offer different types of securities to suit the risk preferences of investors. Sometimes, the corporates invest excess funds, as individuals do. The funds raised by issue of securities are invested in real assets like plant and machinery. The income generated by these real assets is distributed as interest or dividends to the investors who own the securities.

Government: Government may borrow funds to take care of the budget deficit or as a measure of controlling the liquidity, etc. Government may require funds for long terms (which are raised by issue of Government loans) or for short-terms (for maintaining liquidity) in the money market. Government makes initial investments in public sector enterprises by subscribing to the, the corporates invest excess funds, as individuals do. The funds raised by issue of securities are invested in real assets like plant and machinery. The income generated by these real assets is distributed as interest or dividends to the investors who own the securities.

Government: Government may borrow funds to take care of the budget deficit or as a measure of controlling the liquidity, etc. Government may require funds for long terms (which are raised by issue of Government loans) or for short-terms (for maintaining liquidity) in the money market. Government makes initial investments in public sector enterprises by subscribing to the

shares, however, these investments (shares) may be sold to public through the process of disinvestments.

Regulators: Financial system is regulated by different government agencies. The relationships among other participants, the trading mechanism and the overall flow of funds are managed, supervised and controlled by these statutory agencies. In India, two basic agencies regulating the financial market are the Reserve Bank of India (RBI) and Securities and Exchange Board of India (SEBI). Reserve Bank of India, being the Central Bank, has the primary responsibility of maintaining liquidity in the money market. It undertakes the sale and purchase of T-Bills on behalf of the Government of India. SEBI has a primary responsibility of regulating and supervising the capital market. It has issued a number of Guidelines and Rules for the control and supervision of capital market and investors protection. Besides, there is an array of legislations and government departments also to regulate the operations in the financial system.

Market Intermediaries: There are a number of market intermediaries known as financial intermediaries or merchant bankers, operating in financial system. These are also known as investment managers or investment bankers. The objective of these intermediaries is to smoothen the process of investment and to establish a link between the investors and the users of funds. Corporations and Governments do not market their securities directly to the investors. Instead, they hire the services of the market intermediaries to represent them to the investors. Investors, particularly small investors, find it difficult to make direct investment. A small investor desiring to invest may not find a willing and desirable borrower. He may not be able to diversify across borrower to reduce risk. He may not be equipped to assess and monitor the credit risk of borrowers. Market intermediaries help investors to select investments by providing investment consultancy, market analysis and credit rating of investment instruments. In order to operate in secondary market, the investors have to transact through share brokers. Mutual funds and investment companies pool the funds (savings) of investors and invest the corpus in different investment alternatives. Some of the market intermediaries are:

- Lead Managers
- Bankers to the Issue
- Registrar and Share Transfer Agents
- Depositories
- Clearing Corporations

- Share brokers
- Credit Rating Agencies
- Underwriters
- Custodians
- Portfolio Managers
- Mutual Funds
- Investment Companies

These market intermediaries provide different types of financial services to the investors. They provide expertise to the securities issuers. They are constantly operating in the financial market. Small investors in particular and other investors too, rely on them. It is in their (market intermediaries) own interest to behave rationally, maintain integrity and to protect and maintain reputation, otherwise the investors would not be trusting them next time. In principle, these intermediaries bring efficiency to corporate fund raising by developing expertise in pricing new issues and marketing them to the investors.

REGULATORY ENVIRONMENT:

Financial system is regulated by different government agencies. The relationships among other participants, the trading mechanism and the overall flow of funds are managed, supervised and controlled by these statutory agencies. In India, two basic agencies regulating the financial market are the Reserve Bank of India (RBI) and Securities and Exchange Board of India (SEBI). Reserve Bank of India, being the Central Bank, has the primary responsibility of maintaining liquidity in the money market. It undertakes the sale and purchase of T-Bills on behalf of the Government of India. SEBI has a primary responsibility of regulating and supervising the capital market. It has issued a number of Guidelines and Rules for the control and supervision of capital market and investors protection. Besides, there is an array of legislations and government departments also to regulate the operations in the financial system.

METHODS OF FLOATING NEW ISSUES:

Methods of Marketing Securities

Following are the various methods being adopted by corporate entities for marketing the securities in the New Issue Market:

1. Pure Prospectus Method

2. Offer for Sale Method
3. Private Placement Method
4. Initial public Offers (IPOs) Method
5. Rights Issue Method
6. Bonus Issue Method
7. Book-building Method
8. Stock Option Method and
9. Bought-out Deals Method

Pure prospectus Method Meaning

The method whereby a corporate enterprise mops up capital funds from the general public by means of an issue of a prospectus is called Pure Prospectus Method. It is the most popular method of making public issue of securities by corporate enterprises.

Features

Exclusive subscription: Under this method, the new issues of a company are offered for exclusive subscription of the general public.

Issue Price: Direct offer is made by the issuing company to the general public to subscribe to the securities as a stated price.

Underwriting: Public issue through the pure prospectus method is usually underwritten. This is to safeguard the interest of the issuer in the event of an unsatisfactory response from the public.

Prospectus: A document that contains information relating to the various aspects of the issuing company, besides other details of the issue is called a Prospectus. The document is circulated to the public. The general details include the company's name and address of its registered office, the names and addresses of the company's promoters, manager, managing director, directors, company secretary, legal adviser, auditors, bankers, brokers, etc.

Advantages

The pure prospectus method offers the following advantages to the issuer and the investors alike:

Benefits to investors: The pure prospectus method of marketing the securities serves as an excellent mode of disclosure of all the information pertaining to the issue. Besides, it also facilitates satisfactory compliance with the legal requirements of transparency, etc.

Benefits to issuers: The pure prospectus method is the most popular method among the larger issuers. In addition, it provides for wide diffusion of ownership of securities contributing to reduction in the concentration of economic and social power.

Drawbacks

The raising of capital through the pure prospectus method is fraught with a number of drawbacks as specified below:

High issue costs: A major drawback of this method is that it is an expensive mode of raising funds from the capital market. Costs of various hues are incurred in mobilizing capital.

Time Consuming: The issue of securities through prospectus takes more time, as it requires the due compliance with various formalities before an issue could take place.

Offer for Sale Method Meaning

Where the marketing of securities takes place through intermediaries, such as issue houses, stockholders and others, it is a case of Offer for sale Method.

Features

Under this method, the sale of securities takes place in two stages. Accordingly, in the first stage, the issuer company makes an en-block sale of securities to intermediaries such as the issue houses and share brokers of an agreed price. Under the second stage, the securities are re-sold to ultimate investors at a market-related price.

The issue is also underwritten to ensure total subscription of the issue. The biggest advantage of this method is that it saves the issuing company the hassles involved in selling the shares to the public directly through prospectus.

Private Placement Method

Meaning

A method of marketing of securities whereby the issuer makes the offer of sale of individuals and institutions privately without the issue of a prospectus is known as Private Placement Method.

Features

Under this method, securities are offered directly to large buyers with the help of share brokers. This method works in a manner similar to the Offer for Sale Method whereby securities are first sold to intermediaries such as issues houses, etc.

Advantages

Private placement of securities offers the following advantages:

1. Less expensive as various types of costs associated with the issue are borne by the issue houses and other intermediaries.
2. Placement of securities suits the requirements of small companies.
3. The method is also resorted to when the stock market is dull and the public response to the issue is doubtful.

Disadvantages

The major weaknesses of the private placement of securities are as follows:

1. Concentration of securities in a few hands.
2. Creating artificial scarcity for these securities thus jacking up the price temporarily and misleading general public.

3. Depriving the common investor of an opportunity to subscribe to the issue, thus affecting their confidence levels.

Initial Public Offer (IPO) Method

The public issue made by a corporate entity for the first time in its life is called Initial public Offer (IPO). Under this method of marketing, securities are issued to successful applicants on the basis of the orders placed by them, through their brokers.

When a company whose stock is not publicly traded wants to offer that stock to the general public, it takes the form of initial public offer. The job of selling the stock is entrusted to a popular intermediary, the underwriter. The underwriters charge a fee for their services.

Stocks are issued to the underwriter after the issue of prospectus which provides details of financial and business information as regards the issuer.

The issuer and the underwriting syndicate jointly determine the price of a new issue. IPO stock at the release price is usually not available to most of the public. Good relationship between the broker and the investor is a pre-requisite for the stock being acquired.

Full disclosure of all material information in connection with the offering of new securities must be made as part of the new offerings. A statement and preliminary prospectus (also known as a red herring) containing the following information is to be filled with the Registrar of Companies:

1. A description of the issuer's business.
2. The names and addresses of the Key company officers, with salary and a 5 year business history on each.
3. The amount of ownership of the key officers
4. Any legal proceedings that the company is involved in

The essential steps involved in this method of marketing of securities are as follows:

1. **Order:** Broker receives order from the client and places order on behalf of the client with the issuer.
2. **Share Allocation:** The issuer finalizes share allocation and informs the broker regarding the same.

3. **The Client:**The broker advises the successful clients of the share allocation.Clients then submit the application forms for shares and make payment to the issuer through the broker.
4. **Primary issue account:**The issuer opens a separate escrow account (primary issue account) for the primary market issue.The clearing house of the exchange debits the primary issue account of the broker and credits the issuers account.
5. **Certificates:**Certificates are then delivered to investors.Otherwise depository account may be credited.

Rights issue Method

Where the shares of an existing company are offered to its existing shareholders.It takes the form of rights issue.Under this method, the existing company issues shares to its existing shareholder in proportion in the number of shares already held by them.

The relevant guidelines issued by the SEBI in this regard are as follows:

1. Shall be issued only by listed companies.
2. Announcement regarding rights issue once made, shall not be withdrawn and where withdrawn, no security shall be eligible for listing upto 12 months.
3. Underwriting as to rights issue is optional and appointment of Registrar is compulsory.
4. Appointment of category I Merchant Bankers holding a certificate of registration issued by SEBI shall be compulsory.
5. Rights share shall be issued only in respect of fully paid share.
6. Letter of Offer shall contain disclosures as per SEBI requirements.
7. Issue shall be kept open for a minimum period of 30 days and for a maximum period of 60 days.
8. A No complaints Certificate is to be filed by the Legal Merchant Banker with the SEBI after 21 days from the date of issue of the document.
9. Obligatory for a company where increase in subscribed capital is necessary after two years of its formation or after one year of its first issue of shares, whichever is earlier (this requirement may be dispensed with by a special resolution).

Advantages

Rights issue offers the following advantages

1. **Economy:** Rights issue constitutes the most economical method of raising fresh capital, as it involves no underwriting and brokerage costs.
2. **Easy:** The issue management procedures connected with the rights issue are easier as only a limited number of applications are to be handled.
3. **Advantage to shareholders:** Issue of rights shares does not involve any dilution of ownership of existing shareholders.

Drawbacks

The method suffers from the following limitations:

1. **Restrictive:** The facility of rights issue is available only to existing companies and not to new companies.
2. **Against society:** the issue of rights shares runs counter to the overall societal consideration of diffusion of share ownership for promoting dispersal of wealth and economic power.

Bonus Issues Method

Where the accumulated reserves and surplus of profits of a company are converted into paid up capital, it takes the form of issue of bonus shares. It merely implied capitalization of existing reserves and surplus of a company.

Issue under Section 205 (3) of the companies Act, such shares is governed by the guidelines issued by the SEBI (applicable of listed companies only) as follows:

SEBI Guidelines

Following are the guidelines pertaining to the issue of bonus shares by a listed corporate enterprise:

1. **Reservation:** In respect of FCDs and PCDs, bonus shares must be reserved in proportion to such convertible part of FCDs and PCDs. The shares so reserved may be issued at the

time of conversion(s) of such debentures on the same terms on which the bonus issues were made.

2. **Reserves:**the bonus issue shall be made out of free reserves built out of the genuine profits or share premium collected in cash only.
3. **Dividend mode:**the declaration of bonus issue, in lieu of dividend, is not made.
4. **Fully paid:**The bonus issue is not made unless the partly paid shares, if any are made fully paid-up.
5. **No default:**The Company has not defaulted in payment of interest or principal in respect of fixed deposits and interest on existing debentures or principal on redemption thereof and has sufficient reason to believe that it has not defaulted in respect of the payment of statutory dues of the employees such as contribution to provident fund, gratuity, bonus, etc.
6. **Implementation:**A company that announces its bonus issue after the approval of the Board of Directors must implement the proposal within a period of 6 months from the date of such approval and shall not have the option of changing the decision.
7. **The articles:**The articles of Association of the company shall contain a provision for capitalization of reserves, etc. if there is no such provision in the articles, the company shall pass a resolution at its general body meeting making provision in the Articles of Association for capitalization.
8. **Resolution:**consequent to the issue of bonus shares if the subscribed and paid-up capital exceeds the authorized share capital, the company at its general body meeting for increasing the authorized capital shall pass a resolution.

Book-building Method

A method of marketing the shares of a company whereby the quantum and the price of the securities to be issued will be decided on the basis of the bids received from the prospective shareholders by the lead merchant bankers is known as book-building method.

The option of book-building is available to all body corporate, which are otherwise eligible to make an issue of capital of the public. The initial minimum size of issue through book-building route was fixed at Rs.100 crores.

The book-building process involves the following steps:

1. **Appointment of book-runners:**the first step in the book-building is the appointment by the issuer company, of the book-runner, chosen from one of the lead merchant bankers.The book-runner in the forms a syndicate for the book building.A syndicate member should be a member of National Stock Exchange (NSE) or Over-the-Counter Exchange of India (OTCEI).Offers of bids are to be made by investors to the syndicate members, who register the demands of investors.
2. **Drafting prospectus:**The draft prospectus containing all the information except the information regarding the price at which the securities are offered is to be filed with SEBI as per the prevailing SEBI guidelines.The offer of securities through this process must separately be disclosed in the prospectus, under the caption placement portion category.
3. **Circulating draft prospectus:**A copy of the draft prospectus filed with SEBI is to be circulated by the book-runner to the prospective institutional buyers who are eligible for firm allotment and also to the intermediaries who are eligible to act as underwriters.
4. **Maintain offer records:**The book-runner maintain a record to the offers received. Details such as the name and the number of securities ordered together with the price at which each institutional buyer or underwriter is willing to subscribe to securities under the placement portion must find place in the record.SEBI has the right to inspect such records.
5. **Intimation about aggregate orders:**The underwriters and the institutional investors shall give intimation on the aggregate of the offers received to the book-runner.
6. **Bid analysis:**The bid analysis is carried out by the book-runner immediately after the closure of the bid offer date.An appropriate final price is arrived at after a careful evaluation of demands at various prices and the quantity.
7. **Mandatory underwriting:**Where it has been decided to make offers of shares to public under the category of Net offer of the Public, it is incumbent that the entire portion offered to the public is fully underwritten.
8. **Filing with ROC:**A copy of the prospectus ascertified by the SEBI shall be filed with the Registrar of Companies within two days of the receipt of the acknowledgement card from the SEBI.

9. **Bank accounts:** The issuer company has to open two separate accounts for collection of application money, one for the private placement portion and the other for the public subscription.
10. **Collection of completed applications:** The book-runner collects from the institutional buyers and the underwriters the application forms along with the application money to the extent of the securities proposed to be allotted to them or subscribed by them.
11. **Allotment of securities:** Allotment for the private placement portion may be made on the second day from the closure of the issue. The issuer company, however, has the option to choose one date for both the placement portion and the public portion.
12. **Payment schedule and listing:** The book-runner may require the underwriters to the net offer to the public to pay in advance all moneys required to be paid in respect of their underwriting commitment by the eleventh day of the closure of the issue.
13. **Under-subscription:** In the case of under-subscription in the net offer to the public category, any spillover to the extent of under-subscription is to be permitted from the placement portion category subject to the condition that preference is given to the individual investors.

Advantages of book-building

Book building process is of immense use in the following ways:

1. Reduction in the duration between allotment and listing
2. Reliable allotment procedure
3. Quick listing in stock exchanges possible
4. No price manipulation as the price is determined on the basis of the bids received.

Stock Option or employees Stock Option Scheme (ESOP)

A method of marketing the securities of a company whereby its employees are encouraged to take up shares and subscribe to it is known as stock option. It is a voluntary scheme on the part of the company to encourage employee participation in the company. The scheme also offers an incentive to the employees to stay in the company.

SEBI Guidelines

Company whose securities are listed on any stock exchange can introduce the scheme of employees stock option. The offer can be made subject to the conditions specified below:

1. **Issue at discount:** Issue of stock options at a discount to the market price would be regarded as another form of employee compensation and would be treated as such in the financial statements of the company regardless the quantum of discount on the exercise price of the option.
2. **Approval:** The issue of ESOPs is subject to the approval by the shareholders through a special resolution.
3. **Maximum limit:** There would be no restriction on the maximum number of shares to be issued to a single employee.
4. **Minimum period:** A minimum period of one year between grant of options and its vesting has been prescribed. After one year, the company would determine the period during which the option can be exercised.
5. **Superintendence:** The operation of the ESOP Scheme would have to be under the superintendence and direction of a Compensation Committee of the Board of Directors in which there would be a majority of independent directors.
6. **Eligibility:** ESOP scheme is open to all permanent employees and to the directors of the company but not to promoters and large shareholders.
7. **Directors report:** The Directors report shall make a disclosure of the following:
 - a. Total number of shares as approved the shareholders
 - b. The pricing formula adopted
 - c. Details as to options granted, options vested, options exercised and options forfeited, extinguishments or modification of options, money realized by exercise of options, total number of options in force, employee-wise details of options granted to senior managerial personnel and to any other employee who received a grant in any one year of options amounting to 5 percent or more of options granted during that year.
 - d. Fully diluted EPS computed in accordance with the IAS
8. **IPO:** SEBI's stipulations prohibiting initial public offerings by companies having outstanding options should not apply to ESOP.

Stock Option Norms for Software Companies

The relevant guidelines issued by the SEBI as regards employees stock option for software companies are as follows:

1. **Minimum issue:** A minimum issue of 10 percent of its paid-up capital can be made by a software company which has already floated American Depository Receipts (ADRs) and Global Depository Receipts (GDRs) or a company which is proposing to float these is entitled to issue ADR/GDR linked stock options to its employees.
2. **Mode of Issue:** Listed stock options can be issued in foreign currency convertible bonds and ordinary shares (through depository receipt mechanism) to the employees of subsidiaries of Info Tech Companies.
3. **Permanent employees:** Indian IT companies can issue ADR/GDR linked stock options to permanent employees, including Indian and overseas directors, of their subsidiary companies incorporated in India or outside.
4. **Pricing:** The pricing provisions of SEBI's preferential allotment guidelines would not cover the scheme. The purpose is to enable the companies to issue stock options to its employees at a discount to the market price which serves as another form of compensation.
5. **Approval:** Shareholders approval through a special resolution is necessary for issuing the ESOPs. A minimum period of one year between grant of option and its vesting has been prescribed. After one year, the company would determine the period in which option can be exercised.

Bought-out Deals

Meaning

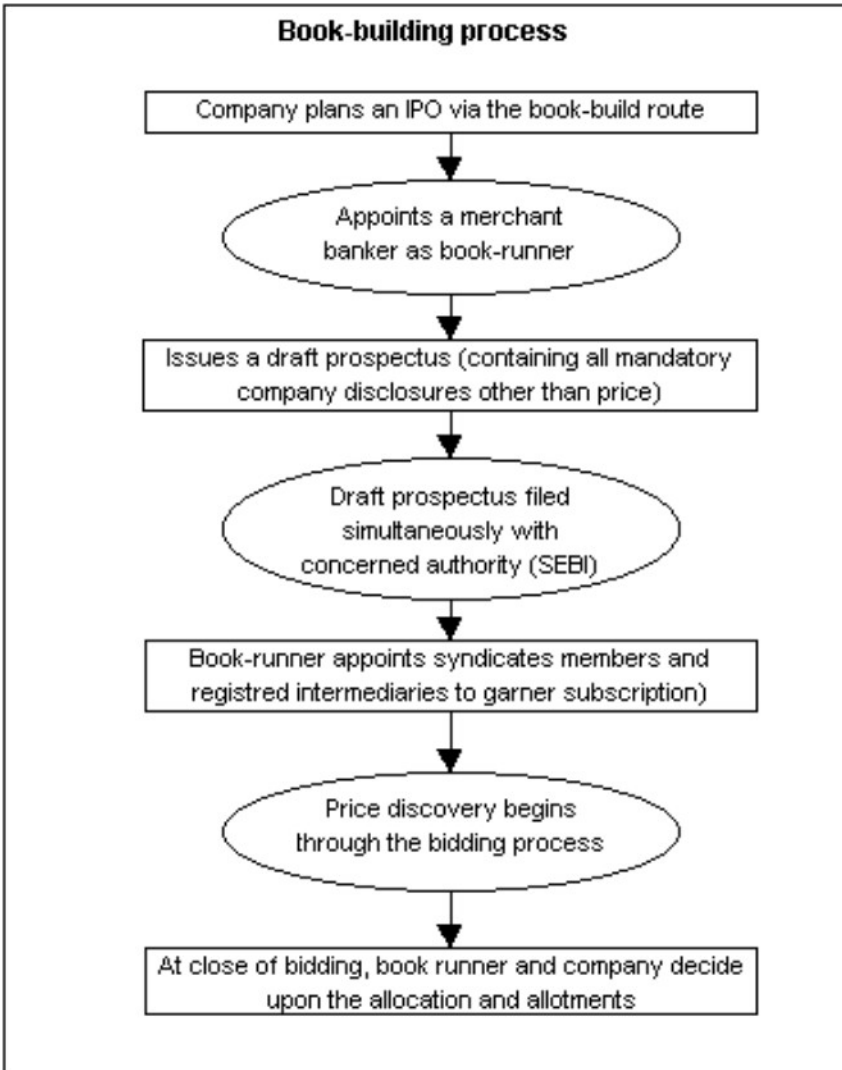
A method for marketing of securities of a body corporate whereby the promoters of an unlisted company make an outright sale of a chunk of equity shares to a single sponsor or the lead sponsor is known as bought-out deals.

Features

1. **Parties:** There are three parties involved in the bought-out deals. They are promoters of the company, sponsors and co-sponsors who are generally merchant bankers and investors.
2. **Outright Sale:** Under this arrangement, there is an outright sale of a chunk of equity shares to a single sponsor or the lead sponsor.
3. **Syndicate:** Sponsor forms a syndicate with other merchant bankers for meeting the resource requirements and for distributing the risk.
4. **Sale price:** The sale price is finalized through negotiations between the issuing company and the purchaser, the sale being influenced by such factors as project evaluation, promoter's image and reputation, current market sentiments, prospects of off-loading these shares at a future date, etc.
5. **Listing:** The investor-sponsor makes a profit, when at a future date, the shares get listed and higher prices prevail. Listing generally takes place at a time when the company is performing well in terms of higher profits and larger cash generations from projects.
6. **OTCEI:** Sale of these shares at Over-the-Counter Exchange of India (OTCEI) or at a recognized stock exchange, the time of listing these securities and off-loading them simultaneously are being generally decided in advance.

BOOK BUILDING PROCESS

Book Building is basically a capital issuance process used in Initial Public Offer (IPO) which aids price and demand discovery. It is a process used for marketing a public offer of equity shares of a company. It is a mechanism where, during the period for which the book for the IPO is open, bids are collected from investors at various prices, which are above or equal to the floor price. The process aims at tapping both wholesale and retail investors. The offer/issue price is then determined after the bid closing date based on certain evaluation criteria.



The Process:

- ✓ The Issuer who is planning an IPO nominates a lead merchant banker as a 'book runner'.
- ✓ The Issuer specifies the number of securities to be issued and the price band for orders.
- ✓ The Issuer also appoints syndicate members with whom orders can be placed by the investors.

- ✓ Investors place their order with a syndicate member who inputs the orders into the 'electronic book'. This process is called 'bidding' and is similar to open auction.
- ✓ A Book should remain open for a minimum of 5 days.
- ✓ Bids cannot be entered less than the floor price.
- ✓ Bids can be revised by the bidder before the issue closes.
- ✓ On the close of the book building period the 'book runner evaluates the bids on the basis of the evaluation criteria which may include -
 - Price Aggression
 - Investor quality
 - Earliness of bids, etc.
- ✓ The book runner the company concludes the final price at which it is willing to issue the stock and allocation of securities.
- ✓ Generally, the numbers of shares are fixed; the issue size gets frozen based on the price per share discovered through the book building process.
- ✓ Allocation of securities is made to the successful bidders.
- ✓ Book Building is a good concept and represents a capital market which is in the process of maturing.

Book-building is all about letting the company know the price at which you are willing to buy the stock and getting an allotment at a price that a majority of the investors are willing to pay. The price discovery is made depending on the demand for the stock.

2.6 Regulations of primary Market

- ✓ Entry Barriers for unlisted companies modified as dividend payment in immediately preceding 3 years

- ✓ A listed company required to meet entry form if post issue net worth is higher than pre issue net worth
- ✓ Full payment before making a public/ rights issue
- ✓ The promoters contribution for public issues made uniform at 20% irrespective of the issue size
- ✓ Written consent from shareholders for promoters contribution
- ✓ Appointment of Registrar
- ✓ Promoters and their background - Promoters details
- ✓ The SEBI rules and regulations 1993 have been amended for the relationship between issuer and Registrar
- ✓ SEBI allowed debt instruments to the stock exchanges
- ✓ Only body corporate to be allowed to function as Merchant bankers - only on entity
- ✓ NBFCs such as Accepting deposits, leasing, bill discounting etc., will not be allowed to be undertaken by a Merchant banker.

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 into 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 Natives 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 (BSEonline Trading system) as the stock trading system in the world

OTCEI

- ✓ It started in oct 1990
- ✓ It usesthemodelasNASDAQ(NationalassociationofsecurityDealersautomated Quotations)

Features of OTCEI

Ringless Trading:Screenbasedtrading

National network:wide network and grater liquidity

Totallycomputerized: Transparentand quick market

Exclusive List of companies: Exclude other stock exchangecompanies

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

TradingMechanism:ExportandImportShares.ThepartiesareInvestor,counter,settlerregistered 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

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 taxpaying 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 subbrokers 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

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 information:** 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 in charges

2. **Opening an account with the broker:**

The broker opens an account in the name of the protective 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 investor 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 is the practice of selling borrowed securities.

Advantages

- ✓ Profit and price decline
- ✓ It became as highly conservative investment strategy

SEBI SECURITIES EXCHANGE BOARD OF INDIA

- ✓ 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.

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.

Roles

- ✓ 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
- **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

Unit 3

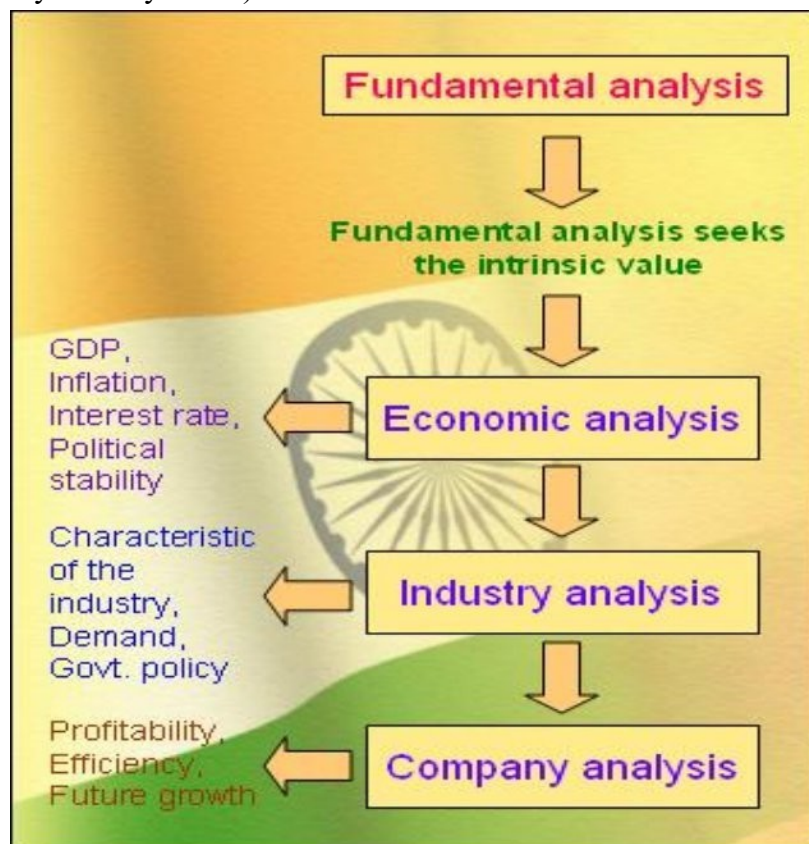
FUNDAMENTAL ANALYSIS

FUNDAMENTAL ANALYSIS:

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 brand name, 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).



The top down approach of fundamental analysis

- At the economy level, fundamental analysis focuses on economic data (such as GDP, Foreign exchange and Inflation etc.) to assess the present and future growth of the

economy.

- At the industry level, fundamental analysis examines the supply and demand forces for the products offered.
- At the company level, fundamental analysis examines the financial data (such as balance sheet, income statement and cash flow statement etc.), management, business concept and competition.

ECONOMIC ANALYSIS:

Economic analysis occupies the first place in the financial analysis top-down approach. When the economy is having sustainable growth, then the industry group (Sectors) and companies will get benefit and grow faster. The analysis of macroeconomic environment is essential to understand the behavior of the stock prices. The commonly analysed macro economic factors are as follows.

Gross domestic product (GDP): GDP indicates the rate of growth of the economy. GDP represents the value of all the goods and services produced by a country in one year. The higher the growth rate is more favourable to the share market.

Savings and investment: The economic growth results in substantial amount of domestic savings. Stock market is a channel through which the savings of the investors are made available to the industries. The savings and investment pattern of the public affect stock market.

Inflation: Along with the growth of GDP, if the inflation rate also increases, then the real rate of growth would be very little. The decreasing inflation is good for corporate sector.

Interest rates: The interest rate affects the cost of financing to the firms. A decrease in interest rate implies lower cost of finance for firms and more profitability.

Budget: Budget is the annual financial statement of the government, which deals with expected revenues and expenditures. A deficit budget may lead to high rate of inflation and adversely affect the cost of production. Surplus budget may result in deflation. Hence, balanced budget is highly favourable to the stock market.

The tax structure: The tax structure which provides incentives for savings and investments. **The**

balance of payment: The balance of payment is the systematic record of all money transfer between India and the rest of the world. The difference between receipts and payments may be surplus or deficit. If the deficit increases, the rupee may depreciate against other currencies. This would affect the industries, which are dealing with foreign exchange.

Monsoon and agriculture: India is primarily an agricultural country. The importance of agriculture in Indian economy is evident. Agriculture is directly and indirectly linked with

the industries. For example, Sugar, Textile and Food processing industries depend upon agriculture for raw material. Fertilizer and Tractor industries are supplying input to the agriculture. A good monsoon leads better harvesting; this in turn improves the performance of Indian economy.

Infrastructure: Infrastructure facilities are essential for growth of Industrial and agricultural sector. Infrastructure facilities include transport, energy, banking and communication. In India even though Infrastructure facilities have been developed, still they are not adequate.

Demographic factors: The demographic data provides details about the population by age, occupation, literacy and geographic location. This is needed to forecast the demand for the consumer goods.

Political stability: A stable political system would also be necessary for a good performance of the economy. Political uncertainties and adverse change in government policy affect the industrial growth.

ECONOMIC FORECASTING:

The common techniques used are **analysis of key economic indicators, diffusion index, surveys and econometric model building**. These techniques help him to decide the right time to invest and the type of security he has to purchase i.e. stocks or bonds or some combination of stocks and bonds.

ECONOMIC INDICATORS

The economic indicators are statistics about the economy that indicate the present status, progress or slow down of the economy. They are capital investment, business profits, money supply, GNP, interest rate, unemployment rate, etc. The economic indicators are grouped into leading, coincidental and lagging indicators. The indicators are selected on the following criteria

- Economic significance
- Statistical adequacy
- Timing
- Conformity

The leading indicators:

The leading indicators indicate what is going to happen in the economy. It helps the investor to predict the path of the economy. The popular leading indicators are the fiscal policy, monetary policy, productivity, rainfall, capital investment and the stock indices. The fiscal policy shows what the government aims at and the fiscal deficit or surplus has an effect on the economy.

The coincidental indicators:

The coincidental indicators indicate what the economy is. The coincidental indicators are gross national product, industrial production, interest rates and reserve funds. GDP is the aggregate amount of goods and services produced in the national economy. The gap between the budgeted GDP and the actual GDP attained indicates the present situation. If there is a large gap between the actual growth and potential growth, the economy is slowing down. Low corporate profits and industrial production show that the economy is hit by recession.

The lagging indicators:

The changes that are occurring in the leading and coincidental indicators are reflected in the lagging indicators. Lagging indicators are identified as unemployment rate, consumer price index and flow of foreign funds. These leading, coincidental and lagging indicators provide an insight into the economy's current and future position.

DIFFUSION INDEX

Diffusion index is a composite or consensus index. The diffusion index consists of leading, coincidental and lagging indicators. This type of index has been constructed by the National Bureau of Economic Research in USA. But the diffusion index is complex in nature to calculate and the irregular movements that occur in individual indicators cannot be completely eliminated.

ECONOMETRIC MODEL BUILDING

For model building several economic variables are taken into consideration. The assumptions underlying the analysis are specified. The relationship between the independent and dependent variables is given mathematically. While using the model, the analyst has to think clearly all the inter-relationship between the variables. When these inter-relationships are specified, he can forecast not only the direction but also the magnitude. But his prediction depends on his understanding of economic theory and the assumptions on which the model had been built. The models mostly use simultaneous equations.

Factors affecting Economic Forecasting

- ✓ GDP (Gross Domestic Product)
- ✓ Inflation
- ✓ Interest rates
- ✓ Government revenue, expenditure and deficits
- ✓ Exchange rates
- ✓ Infrastructure
- ✓ Monsoon

- ✓ Economic and political stability

STOCK INVESTMENT DECISION

Look for a stable company : financially strong

Look for a company that can grow and prosper: Profit and success

Look for a company that has good management and corporate structure: Right people in right direction

FORECASTING TECHNIQUES

1. Anticipatory surveys:

a. Expert Opinion Delphi Technique:

A systematic forecasting method that involves structured interaction among a group of experts on a subject

b. Cross-Impact Analysis:

Analysis of high importance and high probability

c. Multiple scenario: building of pictures of alternative futures.

2. Trend Analysis method: based on time series

a. **Trend Extrapolation:** analyze and fit time series data (Linear, quadratic or S-shaped growth curves)

b. **Trend correlation:** It also known as barometric or indicator approach.

Leading Indicators: To know the economic direction in advance eg., rainfall

Coincidental Indicators: Economic factors reaching approximately at the same time as the economy eg., GNP, Interest rates

Lagging Indicators: Economic factors reaching their peaks or troughs after the economy has already reached its own.

eg., Unemployment and inventory debtors.

3. Diffusion Indexes: It is an indicator of spread of an expansion.

a. **Composite or consensus Index:** It combines several indicators into one single measure .

Eg: Diffusion Index:

No of members in the set in the same direction / Total no of members in the set

b. Component Evaluation Index: It measures the breadth of the movement within a particular series.

4. Monetary Indicators: Deals with money supply, corporate profits, interest rates and stock prices sprinkle observed.

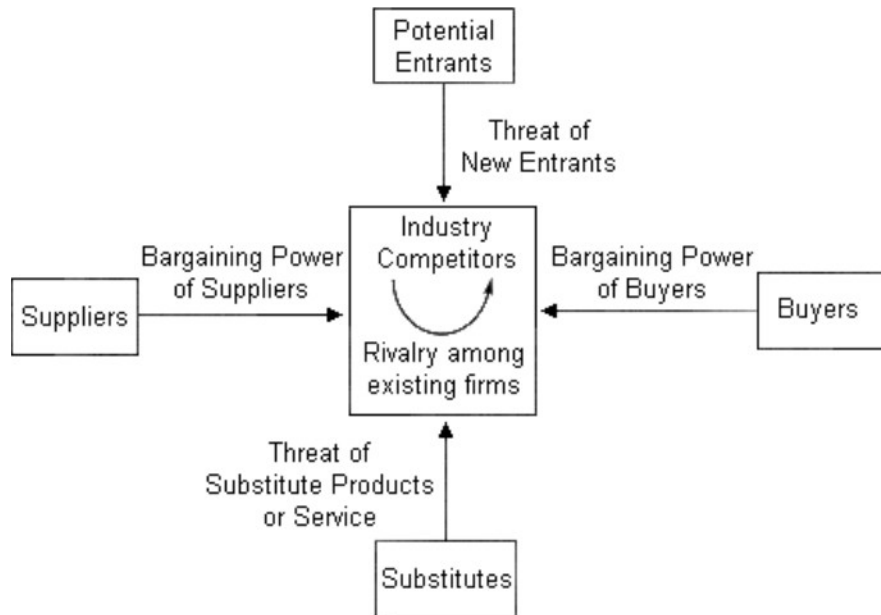
5. Econometric Model: It explains past economic activity by deriving mathematical equation. Eg., Disposable Income Inventories.

6. Opportunistic model:

- a. **Hypothesis of total demand:** Deals with environmental decisions as war or peace
- b. **Test of consistency and comparison:** Measure the internal consistency and comparing with other projections.

INDUSTRY OR SECTOR ANALYSIS

The second step in the fundamental analysis of securities is Industry analysis. An industry or sector is a group of firms that have similar technological structure of production and produce similar products. These industries are classified according to their reactions to the different phases of the business cycle. They are classified into growth, cyclical, defensive and cyclical growth industry. A market assessment tool designed to provide a business with an idea of the complexity of a particular industry. Industry analysis involves reviewing the economic, political and market factors that influence the way the industry develops. Major factors can include the power wielded by suppliers and buyers, the condition of competitors and the likelihood of new market entrants. The industry analysis should take into account the following factors.



Characteristics of the industry: When the demand for industrial products is seasonal, their problems may spoil the growth prospects. If it is consumer product, the scale of production and width of the market will determine the selling and advertisement cost. The nature of industry is also an important factor for determining the scale of operation and profitability.

Demand and market: If the industry is to have good prospects of profitability, the demand for the product should not be controlled by the government.

Government policy: The government policy is announced in the Industrial policy resolution and subsequent announcements by the government from time to time. The government policy with regard to granting of clearances, installed capacity, price, distribution of the product and reservation of the products for small industry etc are also factors to be considered for industrial analysis.

Labour and other industrial problems: The industry has to use labour of different categories and expertise. The productivity of labour as much as the capital efficiency would determine the progress of the industry. If there is a labour problem that industry should be neglected by the investor. Similarly when the industries have the problems of marketing, investors have to be careful when investing in such companies.

Management: In case of new industries, investors have to carefully assess the project reports and the assessment of financial institutions in this regard. The capabilities of management will depend upon tax planning, innovation of technology, modernisation etc. A good management will also insure that their shares are well distributed and liquidity of shares is assured.

Future prospects: It is essential to have an overall picture of the industry and to study their problems and prospects. After a study of the past, the future prospects of the industry are to be assessed.

When the economy expands, the performance of the industries will be better. Similarly when the economy contracts reverse will happen in the Industry. Each Industry is different from the other. Cement Industry is entirely different from Software Industry or Textile Industry in its products and process.

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

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

3. Industry groups:

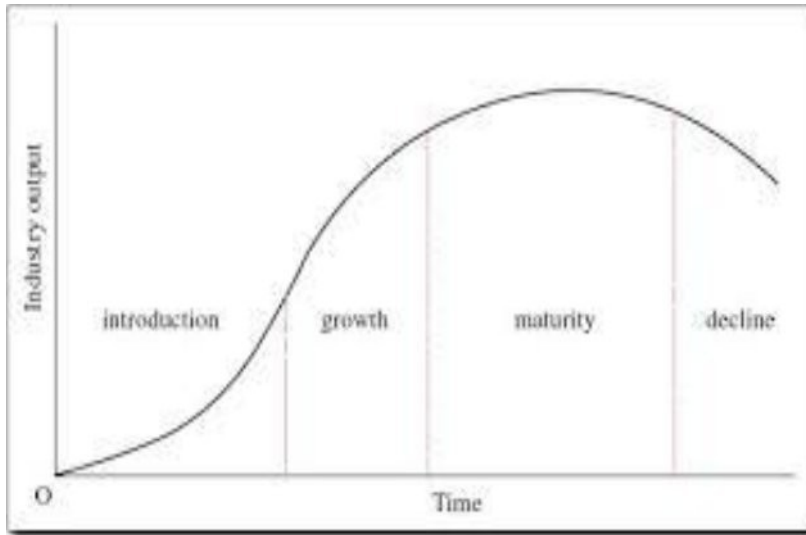
- a. **Small size units:** Small scale industries with a capital of 30 Lac will be listed in OTCEI
- b. **Medium size units:** Industry with a capital of 5 crores will be listed in the regional stock exchanges like cochin, Coimbatore etc.,
- c. **Large scale units:** Industry with a capital of 10 crores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

INDUSTRY LIFE CYCLE

1. **Pioneering/ Introduction stage:** Introduction of new product
2. **Expansion/Growth stage:** overcoming the problem to improve financially and competitively
3. **Stagnation/Maturity stage:** stagnation to have a new life cycle
4. **Decay/Decline stage:** decline death signals and implement proactively



Industry forecasting Methods

1. **Market profile:** no of establishments, geographical locations, value of sales etc.,
2. **Cumulative methods:** based on statistical measurements.
 - a. **Surveys:** Carried by researchers, consultants
 - b. **Correlation and regression analysis:** Demand measurements
3. **Time series:**
 - a. **Trend (T):** Result of basic development in population, capital formation and technology
 - b. **Cycle (C):** Helps in intermediate range forecasting (wave like movement of sales)
 - c. **Seasons (S):** Sales movement within a year
 - d. **Erratic Events:** Unpredictable events as strikes, riots, floods etc.,

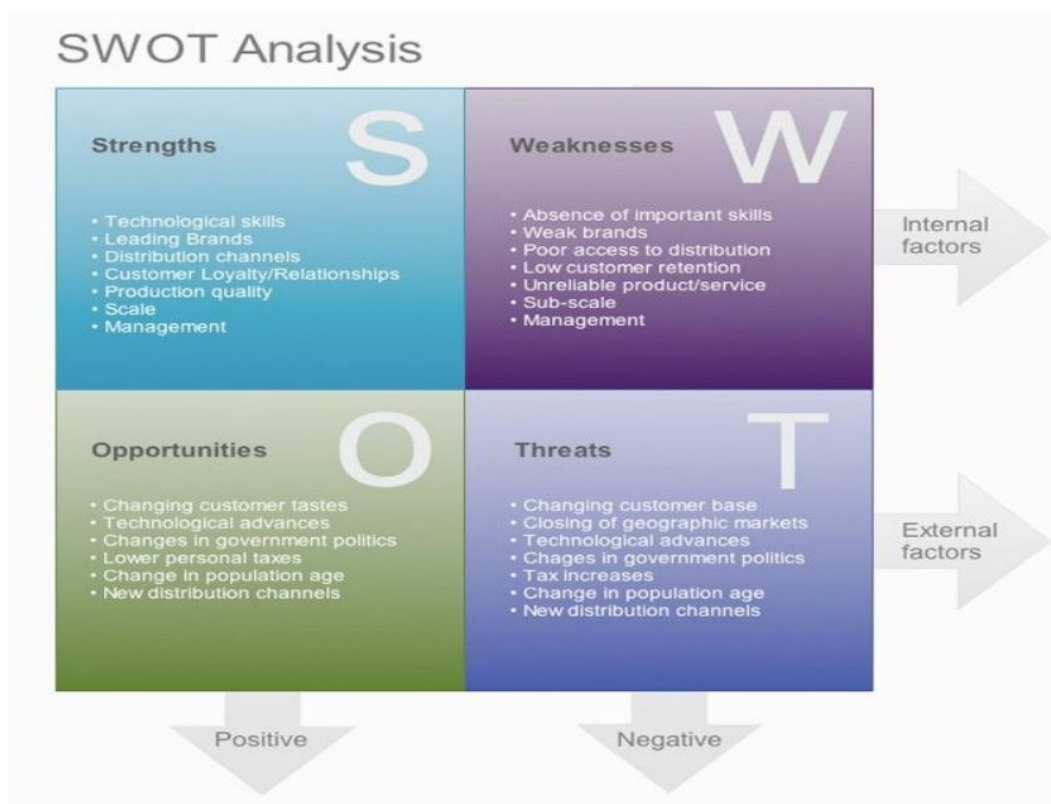
COMPANY OR CORPORATE ANALYSIS

Company analysis is a study of variables that influence the future of a firm both qualitatively and quantitatively. It is a method of assessing the competitive position of a firm, its earning and profitability, the efficiency with which it operates its financial position and its future with respect to earning of its shareholders.

The fundamental nature of the analysis is that each share of a company has an intrinsic value which is dependent on the company's financial performance. If the market value of a share is lower than intrinsic value as evaluated by fundamental analysis, then the share is supposed to be undervalued. The basic approach is analysed through the financial statements of an organisation. The company or corporate analysis is to be carried out to get answer for the following two questions.

How has the company performed in comparison with the similar company in the same Industry?
How has the company performed in comparison to the early years?

Before making investment decision, the business plan of the company, management, annual report, financial statements, cash flow and ratios are to be examined for better returns.



Measuring Earnings:

- a. **Internal Information:** Relating to enterprise
- b. **External Information:** Out side the company

Financial Indicators:-

Analyze the financial position of the company.

Tools:

a. Income statement

It gives past records of the firm that forms a base for making predictions of the firm.

b. Balance sheet

It shows the assets and liabilities of a firm along with shareholder equity

c. Statement of Cash flows

It shows how a company's cash balance changed from one year to the next

d. Ratio Analysis

It makes intra firm and inter firm comparisons.

1. Profitability Ratios:

a. Return on Investment:

Earnings before interest and taxes

Total Assets

b. Leverage Ratios:

Debt Equity Ratio = $\frac{\text{Total Debt}}{\text{Equity}}$

Equity

c. ROE Analysis

$$\text{ROE} = \text{PBT} * \text{PAT} * \text{NS} * \text{TA}$$

$$\frac{\text{NS}}{\text{PBT}} * \frac{\text{TA}}{\text{NW}}$$

Non Financial Indicators:

1. Business of the company
2. Top Management
3. Product range
4. Diversification
5. Foreign collaboration
6. Availability of cost of inputs
7. Research and development
8. Governmental regulations
9. Pattern of shareholding and listing

Forecasting Earnings

1. **Identification of variables:**
 - a. **Operations and Earnings**

Operating cycle of a firm starts with cash converted into inventory

$$\text{ROI} = \frac{\text{EBIT}}{\text{Investment}}$$

Investment

b. Financing&Earnings

Debt financing: Provide leverage to common share holders

Equity financing: Equal shares

2. Selectinga Forecasting method:

a. **Traditional method**

Earnings model: Analysis EAt &EBT

Market share: Consists of tracking historical record and net income

Projected Financial statements: Projection of earnings

b. **Modern methods:**

✓ **Regression analysis**

Its the measure of the average relationship between two or more variable in terms of the original units of the data

✓ **Correlation analysis**

Its to reduce the range of uncertainty of our prediction

✓ **Trend analysis**

Itrefersto collectinginformation andattemptingto spota pattern

✓ **Decision trees**

It used to forecast earnings as security values.

APPLIED VALUATION TECHNIQUES:

Although the raw data of the Financial Statement has some useful information, much more canbe 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. **DividendPayout Ratio**
7. **Dividend Yield**
8. **Book Valueper share**
9. **Return on Equity**

1. Earnings per Share

The overall earnings of a company is not in itself a useful indicator of a stock's worth. Low earnings coupled with low outstanding shares can be more valuable than high earnings with a high number of outstanding shares. Earnings per share is much more useful information than earnings by itself. Earnings per share (EPS) is calculated by dividing the net earnings by the number of outstanding shares.

$$\text{EPS} = \text{Net Earnings} / \text{Outstanding Shares}$$

For example: ABC company had net earnings of \$1 million and 100,000 outstanding shares for an EPS of 10 ($1,000,000 / 100,000 = 10$). This information is useful for comparing two companies in a certain industry but should not be the deciding factor when choosing stocks.

2. Price to Earnings Ratio

The Price to Earnings Ratio (P/E) shows the relationship between stock price and company earnings. It is calculated by dividing the share price by the Earnings per Share.

$$\text{P/E} = \text{Stock Price} / \text{EPS}$$

In our example above of ABC company the EPS is 10 so if it has a price per share of \$50 the P/E is 5 ($50 / 10 = 5$). The P/E tells you how many investors are willing to pay for that particular company's earnings. P/E's can be read in a variety of ways. A high P/E could mean that the company is overpriced or it could mean that investors expect the company to continue to grow and generate profits. A low P/E could mean that investors are wary of the company or it could indicate a company that most investors have overlooked.

Either way, further analysis is needed to determine the true value of a particular stock.

3. Projected Earnings Growth Rate-PEG Ratio

A ratio used to determine a stock's value while taking into account earnings growth. The calculation is as follows:

$$\text{PEG Ratio} = \frac{\text{Price/Earnings Ratio}}{\text{Annual EPS Growth}}$$

PEG is a widely used indicator of a stock's potential value. It is favoured by many over the price/earnings ratio because it also accounts for growth. Similar to the P/E ratio, a lower PEG means that the stock is more undervalued.

4. Price to Sales Ratio

When a company has no earnings, there are other tools available to help investors judge its worth. New companies in particular often have no earnings, but that does not mean they are bad investments. The Price to Sales ratio (P/S) is a useful tool for judging new companies. It is calculated by dividing the market cap (stock price times number of outstanding shares) by total revenues. An alternate method is to divide current share price by sales per share. P/S indicates the value the market places on sales. The lower the P/S the better the value.

$$PSR = \frac{\text{Share Price}}{\text{Revenue Per Share}}$$

5. Price to Book Ratio

Book value is determined by subtracting liabilities from assets. The value of a growing company will always be more than book value because of the potential for future revenue. The price to book ratio (P/B) is the value the market places on the book value of the company. It is calculated by dividing the current price per share by the book value per share (book value / number of outstanding shares). It is also known as the "price-equity ratio".

$$P/B = \text{Share Price} / \text{Book Value per Share}$$

$$P/B \text{ Ratio} = \frac{\text{Stock Price}}{\text{Total Assets - Intangible Assets and Liabilities}}$$

6. Dividend Yield

Some investors are looking for stocks that can maximize dividend income. Dividend yield is useful for determining the percentage return a company pays in the form of dividends. It is calculated by dividing the annual dividend per share by the stock's price per share. Usually it is the older, well-established companies that pay a higher percentage, and these companies also usually have a more consistent dividend history than younger companies. Dividend yield is calculated as follows:

$$= \frac{\text{Annual Dividends Per Share}}{\text{Price Per Share}}$$

7. Dividend payout ratio

Dividend payout ratio is the fraction of net income a firm pays to its stockholders in dividends:

$$\text{Dividend payout ratio} = \frac{\text{Dividends}}{\text{Net Income for the same period}}$$

The part of the earnings not paid to investors is left for investment to provide for future earnings growth. Investors seeking high current income and limited capital growth prefer companies with high Dividend payout ratio. However investors seeking capital growth may prefer lower payout ratio because capital gains are taxed at a lower rate. High growth firms in early life generally have low or zero payout ratios. As they mature, they tend to return more of the earnings back to investors. Note that dividend payout ratio is calculated as EPS/DPS.

Calculated as:

$$= \frac{\text{Yearly Dividend per Share}}{\text{Earnings per Share}}$$

or equivalently:

$$= \frac{\text{Dividends}}{\text{Net Income}}$$

The payout ratio provides an idea of how well earnings support the dividend payments. More mature companies tend to have a higher payout ratio. In the U.K. there is a similar ratio, which is known as dividend cover. It is calculated as earnings per share divided by dividends per share.

8. Return on Equity

Return on equity (ROE) is a measure of how much, in earnings a company generates in a time period compared to its shareholders' equity. It is typically calculated on a full-year basis (either the last fiscal year or the last four quarters).

Expanded Definition

When capital is tied up in a business, the owners of the capital want to see a good return on that capital. Looking at profit by itself is meaningless. I mean, if a company earns \$1 million in net

income, that's okay. But it's great if the capital invested to earn that is only \$2.5 million (40% return) and terrible if the capital invested is \$25 million (4% return).

Return on investment measures how profitable the company is for the owner of the investment. In this case, **return on equity** measures how profitable the company is for the equity owners, a.k.a. the shareholders.

$$ROE = \frac{\text{Net Income}}{\text{Average Shareholders Equity}}$$

The "average" is taken over the time period being calculated and is equal to "the sum of the beginning equity balance and the ending equity balance, divided by two."

9. Book Value per Share

A measure used by owners of common shares in a firm to determine the level of safety associated with each individual share after all debts are paid accordingly.

$$\text{Book Value Per Share} = \frac{\text{Total Shareholder Equity} - \text{Preferred Equity}}{\text{Total Outstanding Shares}}$$

Should the company decide to dissolve, the book value per common indicates the dollar value remaining for common shareholders after all assets are liquidated and all debtors are paid. In simple terms it would be the amount of money that a holder of a common share would get if a company were to liquidate.

3.13 Graham and Dodds Investor ratios:

Eg.,

Earnings per share =

Earnings available for the common shares

Weighted average common shares outstanding

UNIT IV

TECHNICAL ANALYSIS

Fundamental Analysis Vs Technical Analysis
Charting methods
Market Indicators. Trend
Trend reversals
Patterns - Moving Average
Exponential moving Average
Oscillators
Market Indicators
Efficient Market theory.

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 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.

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.

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 uptrend 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 onto 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 a 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 an efficient market are;

- (1) Prices must be efficient so that new inventions and better products will cause a firm's securities price 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 prices 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) Strong form 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: Run 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 (+) indicates an increase or a minus (-) if it represents a decrease. A run occurs when there is no difference between the sign of two changes. When the sign of change differs, the run ends and a new run begins. 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 firm's 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 and 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:** Stocks 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 than those of 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:** Stocks 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:** Stocks do better during January than during any other month of the year
- Day of the Week:**

Stocks are 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 not 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 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.

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 percent.

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 effects 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. 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 MANAGEMENT

Portfolio analysis Portfolio Selection Capital Asset Pricing model Portfolio Revision
Portfolio Evaluation Mutual Funds.

PORTFOLIO ANALYSIS

Security analysis related to the analysis of individual securities within the framework of return and risk. Whereas, Portfolio analysis makes an analysis of securities in the combined form.

The portfolio analysis considers the determination of future risk and return in holding various blends of individual securities. Portfolio expected return is a weighted average of the expected return of individual securities but portfolio variance can be something less than a weighted average of security variances.

Returns

The expected return of a portfolio depends on the expected return of each of the security contained in the portfolio. It also seems logical that the amounts invested in each security should be important. Indeed, this is the case. The example of a portfolio with three securities shown in Table-1A illustrates this point. The expected holding period value-relative for the portfolio is clearly:

Rs.23, 100

-----= 1.155

Rs.20, 000

giving an expected holding period return of 15.50%.

Risk

The probability of loss is the essence of risk. A useful measure of risk takes into account both the probability of various possible bad outcomes and their associated magnitudes. Instead of measuring the probability of a number of different possible outcomes, the measure of risk should somehow estimate the extent to which the actual outcome is likely to diverge from the expected. Two measures used for this purpose are the mean absolute deviation and the standard deviation.

Efficient Frontier and Portfolio Selection

The portfolio is selected by the introduction of a borrowing and lending line making the efficient frontier a straight line. Illustration 7 shows a risk-free security of 6% with a standard deviation of 6.90. The graph represents a portfolio return and risk and the best portfolio is the corner portfolio of 9.

The corner which is beyond 9 and to its left, i.e. from 10 to 17 can be introduced to a greater efficiency and made efficient by selecting 9 with an addition of the fact of lending. The choice of portfolio which are on the right side of 9 i.e. from 1 to 8 are seen to show borrowing and are in some way dominated by 9. It is the stage in which the maximum benefit can be derived after using the formula

$(R_p - R_f) / \beta_p$.

risk. In the selection of a portfolio, both negative and positive betas should be considered. While assessing a portfolio on beta, the negative beta should be preferred to positive beta. The presence of negative beta in a portfolio is efficient. Also, there is reduced or eliminated amount of risk when the negative betas are present.

Although betas help in selecting stock, care should be taken to select the

stock with the beta approach because selection of portfolio with beta is followed only when the following assumptions are considered:

- (a) The market movement in positive and negative directions has to be carefully analyzed and
- (b) The past historical considerations of beta must be analyzed for future prediction of beta.
- (a) the sensitivity of the security to inflation;
- (b) economic events as Market Index causes systematic change and
- (c) Risk and return with portfolio.

The fundamental factors are the following:

- (a) the earning of a firm;
- (b) the movements of the market;
- (c) continuous valuation of stock;
- (d) survey of stock, whether it represents large or small firms, old and established and new firms;
- (e) growth of firms historically and
- (f) The capital structure of the firm.

5.3. CAPITAL ASSET PRICING MODEL (CAPM)

The capital asset pricing model (CAPM) is used in finance to determine a theoretically appropriate rate of return of an asset, if that asset is to be added to an already well-diversified portfolio, given that asset's non-diversifiable risk. The CAPM formula takes into account the asset's sensitivity to non-diversifiable risk (also known as systematic risk or market risk), referred to as beta ($\hat{\alpha}$) in the financial industry, as well as the expected return of the market and the expected return of a theoretical risk-free asset. The model was introduced by Jack Treynor, William Sharpe, John Lintner and Jan Mossin independently, building on the earlier work of Harry Markowitz on diversification and modern portfolio theory.

Formula

The CAPM is a model for pricing an individual security or a portfolio. The security market line (SML) and its relation to expected return and systematic risk (beta) show how the market must price individual securities in relation to their security risk class. It enables to calculate the reward-to-risk ratio for any security in relation to the overall market. Therefore, when the expected rate of return for any security is deflated by its beta coefficient, the reward-to-risk ratio for any individual security in the market is equal to the market reward-to-risk ratio, thus:

Individual security = Market securities (portfolio)

Reward-to-risk ratio = Reward-to-risk ratio

The market reward-to-risk ratio is effectively the market risk premium and by rearranging the above equation and solving for $E(R_i)$, the Capital Asset Pricing Model (CAPM) is obtained.

Where:

$E(R_i)$ is the expected return on the capital asset is the risk-free rate of interest

(the *beta coefficient*) the sensitivity of the asset return to market returns, or also ,
 is the expected return of the market
 is sometimes known as the *market premium* or *risk premium* (the difference between the expected market rate of return and the risk-free rate of return).

Asset pricing

Once the expected return, $E(R_i)$, is calculated using CAPM, the future cash flows of the asset can be discounted to their present value using this rate ($E(R_i)$), to establish the correct price for the asset.

In theory, therefore, an asset is correctly priced when its observed price is the same as its value calculated using the CAPM derived discount rate. If the observed price is higher than the valuation, then the asset is overvalued

Asset-specific required return

The CAPM returns the asset-appropriate required return or discount rate - i.e. the rate at which future cash flows produced by the asset should be discounted given that asset's relative risk. Betas exceeding one signify more than average "risk"; betas below one indicate lower than average. Thus a more risky stock will have a higher beta and will be discounted at a higher rate; less sensitive stocks will have lower betas and be discounted at a lower rate.

5.5. PERFORMANCE EVALUATION

In order to determine the risk-adjusted returns of investment portfolios, several eminent authors have worked since 1960s to develop composite performance indices to evaluate a portfolio by comparing alternative portfolios within a particular risk class. The most important and widely used measures of performance are:

- Ø The Treynor Measure
- Ø The Sharpe Measure
- Ø Jensen Model
- Ø Fama Model

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), b during a given period and systematic risk associated with it (beta). Symbolically, it can be represented as:

$$\text{Treynor's Index (Ti)} = (\text{Ri} - \text{Rf})/\text{Bi}$$

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:

$$\text{Sharpe Index (Si)} = (\text{Ri} - \text{Rf}) / \text{Si}$$

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:

$$\text{Ri} = \text{Rf} + \text{Bi} (\text{Rm} - \text{Rf})$$

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:

$$\text{Ri} = \text{Rf} + \text{Si} / \text{Sm} * (\text{Rm} - \text{Rf})$$

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.

5.6 MUTUAL FUNDS:

A **mutual fund** is a professionally managed type of collective investment that pools money from many investors to buy stocks, bonds, short-term money market instruments, and/or other securities.

Overview

In the United States, a mutual fund is registered with the Securities and Exchange Commission (SEC) and is overseen by a board of directors (if organized as a corporation) or a board of trustees (if organized as a trust). The board is charged with ensuring that the fund is managed in the best interests of the fund's investors and with hiring the fund manager and other service providers to the fund. The fund manager, also known as the fund sponsor or fund management company, trades (buys and sells) the fund's investments in accordance with the fund's investment objective. A fund manager must be a registered investment advisor. Funds that are managed by the same fund manager and that have the same brand name are known as a "fund family" or "fund complex".

The Investment Company Act of 1940 (the 1940 Act) established three types of registered investment companies or RICs in the United States: open-end funds, unit investment trusts (UITs); and closed-end funds. Recently, exchange-traded funds (ETFs), which are open-end funds or unit investment trusts that trade on an exchange, have gained in popularity. While the term "mutual fund" may refer to all three types of registered investment companies, it is more commonly used to refer exclusively to the open-end type.

Hedge funds are not considered a type of mutual fund. While they are another type of commingled investment scheme, they are not governed by the Investment Company Act of 1940 and are not required to register with the Securities and Exchange Commission (though many hedge fund managers now must register as investment advisors).

Mutual funds are not taxed on their income as long as they comply with certain requirements established in the Internal Revenue Code. Specifically, they must diversify their investments, limit ownership of voting securities, distribute most of their income to their investors annually, and earn most of the income by investing in securities and currencies.^[2] Mutual funds pass taxable income onto their investors. The type of income they earn is unchanged as it passes

through to the shareholders. For example, mutual fund distributions of dividend income are reported as dividend income by the investor. There is an exception: net losses incurred by a mutual fund are not distributed or passed through to fund investors.

Outside of the United States, *mutual fund* is used as a generic term for various types of collective investment vehicles available to the general public, such as unit trusts, open-ended investment companies (OEICs, pronounced "oyks"), unitized insurance funds, UCITS (Undertakings for Collective Investment in Transferable Securities, pronounced "YOU-sits") and SICAVs (*société d'investissement à capital variable*, pronounced "SEE-cavs").

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^[1]

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

Leading mutual fund complexes

At the end of 2009, the top 10 mutual fund complexes in the United States were:^[14]

1. Fidelity Investments

2. Vanguard Group
3. Capital Research & Management (American Funds)
4. JP Morgan Chase & Co.
5. BlackRock Funds
6. PIMCO Funds
7. Franklin Templeton Investments
8. Federated Investors
9. Bank of New York Mellon
10. Goldman Sachs & Co.

Types of mutual funds

There are three basic types of registered investment companies defined in the Investment Company Act of 1940: open-end funds, unit investment trusts (UITs); and closed-end funds. Exchange-traded funds (ETFs) are open-end funds or unit investment trusts that trade on an exchange.

Open-end funds

Open-end mutual funds must be willing to buy back their shares from their investors at the end of every business day at the net asset value computed that day. Most open-end funds also sell shares to the public every business day; these shares are also priced at net asset value. A professional investment manager oversees the portfolio, buying and selling securities as appropriate. The total investment in the fund will vary based on share purchases, redemptions and fluctuation in market valuation. Closed-end funds

Closed-end funds^[15] generally issue shares to the public only once, when they are created through an initial public offering. Their shares are then listed for trading on a stock exchange. Investors who no longer wish to invest in the fund cannot sell their shares back to the fund (as they can with an open-end fund). Instead, they must sell their shares to another investor in the market; the price they receive may be significantly different from net asset value. It may be at a "premium" to net asset value (meaning that it is higher than net asset value) or, more commonly, at a "discount" to net asset value (meaning that it is lower than net asset value). A professional investment manager oversees the portfolio, buying and selling securities as appropriate.

Unit investment trusts

Unit investment trusts or UITs issue shares to the public only once, when they are created. Investors can redeem shares directly with the fund (as with an open-end fund) or they may also be able to sell their shares in the market. Unit investment trusts do not have a professional investment manager. Their portfolio of securities is established at the creation of the UIT and does not change. UITs generally have a limited life span, established at creation.

Exchange-traded funds

A relatively recent innovation, the exchange-traded fund or ETF is often structured as an open-end investment company, though ETFs may also be structured as unit investment trusts, partnerships, investments trust, grantor trusts or bonds (as an exchange-traded note). ETFs combine characteristics of both closed-end funds and open-end funds. Like closed-end funds, ETFs are traded throughout the day on a stock exchange at a price determined by the market. However, as with open-end funds, investors normally receive a price that is close to net asset value. To keep the market price close to net asset value, ETFs issue and redeem large blocks of their shares with institutional investors.

Money market funds

Money market funds invest in money market instruments, which are fixed income securities with a very short time to maturity and high credit quality. Investors often use money market funds as a substitute for bank savings accounts, though money market funds are not government insured, unlike bank savings accounts.

Money market funds strive to maintain a \$1.00 per share net asset value, meaning that investors earn interest income from the fund but do not experience capital gains or losses. If a fund fails to maintain that \$1.00 per share because its securities have declined in value, it is said to "break the buck". Only two money market funds have ever broken the buck: Community Banker's U.S. Government Money Market Fund in 1994 and the Reserve Primary Fund in 2008.

At the end of 2009, money market funds accounted for 30% of the assets in all U.S. mutual funds

Bond funds

Bond funds invest in fixed income securities. Bond funds can be subclassified according to the specific types of bonds owned (such as high-yield or junk bonds, investment-grade corporate

bonds, government bonds or municipal bonds) or by the maturity of the bonds held (short-, intermediate- or long-term). Bond funds may invest in primarily U.S. securities (domestic or U.S. funds), in both U.S. and foreign securities (global or world funds), or primarily foreign securities (international funds).

At the end of 2009, bond funds accounted for 20% of the assets in all U.S. mutual funds.^[18]

Stock or equity funds

Stock or equity funds invest in common stocks. Stock funds may invest in primarily U.S. securities (domestic or U.S. funds), in both U.S. and foreign securities (global or world funds), or primarily foreign securities (international funds). They may focus on a specific industry or sector.

A stock fund may be subclassified along two dimensions: (1) market capitalization and (2) investment style (i.e., growth vs. blend/core vs. value). The two dimensions are often displayed in a grid known as a "style box."

Market capitalization or market cap is the value of a company's stock and equals the number of shares outstanding times the market price of the stock. Market capitalizations are divided into the following categories:

- Micro cap
- Small cap
- Mid cap
- Large cap

While the specific definitions of each category vary with market conditions, large cap stocks generally have market capitalizations of at least \$10 billion, small cap stocks have market capitalizations below \$2 billion, and micro cap stocks have market capitalizations below \$300 million. Funds are also classified in these categories based on the market cap of the stock that it holds.

Stock funds are also subclassified according to their investment style: growth, value or blend (or core). Growth funds seek to invest in stocks of fast-growing companies. Value funds seek to