**SRINIVASAN COLLEGE OF ARTS & SCIENCE**

**PERAMBALUR**

**DEPARTMENT OF COMMERCE**

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**SUBJECT : INVESTMENT MANAGEMENT**

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**SYLLABUS FOR INVESTMENT MANAGEMENT**

**Unit - I**

Investment –Objective of investment-Investment Vs Speculation- Investment process-

Sources of Investments

**Unit - II**

Risk- Systematic and Unsystematic risk - risk and return, Capital and Revenue returns.

(Theory Only)

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**Unit - IV**

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**Unit - I**

Investment –Objective of investment-Investment Vs Speculation- Investment process-

Sources of Investments.

### Meaning of investment

Investment is an activity that is engaged in by people who have savings, i.e. investments are made from savings, or in other words, people invest their savings .But all savers are not investor’s .investment is an activity which is different from saving. Let us see what is meant by investment.

It may mean many things to many persons. If one person has advanced some money to another, he may consider his loan as an investment. He expect to get back the money along with interest at a future date .another person may have purchased on kilogram of gold for the purpose of price appreciation and may consider it as an investment.

In all these cases it can be seen that investment involves employment of funds with the main aim of achieving additional income or growth in the values. The essential quality of an investment is that it involves something for reward. Investment involves the commitment of resources which have been saved in the hope that some benefits will accrue in future.

Thus investment may be defined as “a commitment of funds made in the expectation of some positive rate of return “since the return is expected to realize in future, there is a possibility that the return actually realized is lower than the return expected to be realized. This possibility of variation in the actual return is known as investment risk. Thus every investment involves return and risk.

F. Amling defines investment as “purchase of financial assets that produces a yield that is proportionate to the risk assumed over some future investment period.”

According to Sharpe, ”investment is sacrifice of certain present value for some uncertain future values”.

**Speculation**

Speculation is the practice of engaging in risky financial transactions in an attempt to profit from short or medium term fluctuations in the market value of a tradable good such as a financial instrument, rather than attempting to profit from the underlying financial attributes embodied in the instrument such as capital gains, interest, or dividends. Many speculators pay little attention to the fundamental value of a security and instead focus purely on price movements. Speculation can in principle involve any tradable good or financial instrument. Speculators are particularly common in the markets for stocks, bonds, commodity futures, currencies, fine art, collectibles, real estate, and derivatives.

## Difference between Investment and Speculation

1. **Investment** is all about value creation (e.g. manufacturing products and providing services) while **speculation** is concerned about price movement. In the latter, you profit purely from price differences. The price movement is mostly influenced by the psychology of the market.
2. **Investment** is has lower risk but need more capital to generate more value while **speculation** is challenging, has higher risk but requires less capital. This explains why most people are speculating because its entry requirement (capital) is lower.
3. **Investment** is about getting what market offers you while **speculation** is about trying to get more by doing more in believing that you can beat the market.
4. **Investment** is about doing least since you let the companies or industries work for you by owning a piece of their businesses while **speculation** is about doing the most (unconsciously) and it is more involving because you keep chasing the price movement. You need to keep buying and selling to generate profit.
5. **Investment** is over long term while **speculation** is of shorter term. For the former, the success rate is highest by maximizing the holding period of a position while for the latter; the success rate will peak if the position is kept open for the shortest time possible. This also explains why people like to speculate because it provides “shortcuts” to wealth.
6. **Investment** is about simplicity while **speculation** is about complexity (timing market, predicting market direction, stock picking…). That’s why most people fail when speculating. It gives a false sense of simplicity.
7. **Investment** = growing system (like a living organic creature) while **speculation** = zero- sum game (one person’s gain is another person’s loss). The former will grow over time while the latter remains constant or shrinking over time.

## Investment objectives

Investment is made because it serves some objective for an investor. Depending on the life stage and risk appetite of the investor, there are three main objectives of investment: safety, growth and income. Every investor invests with a specific objective in mind, and each investment has its own unique set of benefits and risks. Let us understand these objectives in detail.

### Safety

While no investment option is completely safe, there are products that are preferred by investors who are risk averse. Some individuals invest with an objective of keeping their money safe, irrespective of the rate of return they receive on their capital. Such near-safe products include fixed deposits, savings accounts, government bonds, etc.

### Growth

While safety is an important objective for many investors, a majority of them invest to receive capital gains, which means that they want the invested amount to grow.There are several options in the market that offer this benefit. These include stocks, mutual funds, gold, property, commodities, etc. It is important to note that capital gains attract taxes, the percentage of which varies according to the number of years of investment.

### Income

Some individuals invest with the objective of generating a second source of income. Consequently, they invest in products that offer returns regularly like bank fixed deposits, corporate and government bonds, etc.

### Other objectives

While the aforementioned objectives are the most common ones among investors today, some other objectives include:

### Tax exemptions

some people invest their money in various financial products solely for reducing their tax liability. Some products offer tax exemptions while many offer tax benefits on long-term profits.

### Liquidity

Many investment options are not liquid. This means they cannot be sold and converted into cash instantly. However, some people prefer investing in options that can be used during emergencies. Such liquid instruments include stock, money market instruments and exchange-traded funds, to name a few.

### Investment decision process

Investing has been an activity confined to the rich and business class in the past. But today, we find that investment has become a house hold word and is very popular with people from all walks of life .India appears to be slowly but surely closing in some of the top savers among countries in the global peaking order. savings in Indians touched a new high of 31percent of the GDP during2011-2012.chain leads the pack of savers with the saving figure at close to 49 percent of GDP followed by other emerging market economies like Bangladesh 36 percent, Bhutan 48 percent of their GDP. The escalating cost due to inflation are decreasing the value of saved money with each passing year .consider the cost buying a home ,of getting admitted in a hospital or paying for the higher education of a child. One’s life’s savings could vanish in a blink. Knowledgeable investing requires the investing to be aware of his needs the amount of money he can invest and the investment options available to him .These will relate to the investment decision process. A typical investment decision goes through a five step procedure which is known as investment process these steps are:

1. Defining the investment objective
2. Analyzing securities
3. Construct a portfolio
4. Evaluate the performance of portfolio
5. Review the portfolio

### Defining the investment objective

Investment objective may vary from person to person .it should be stated in terms of both risk and return .In other words ,the objective of an investor is to make money accepting the fact of risks that likely to happen .The typical objectives of investor include the current income ,capital appreciation, and safety of principal. More over constrains arising due to liquidity, the time horizon, tax and other special circumstances, if any must also be considered this steps of investment process also identifies the potential financial assets that may be included in the portfolio based on the investment objectives.

### Analyzing securities

The second steps of analyzing securities enable the investor to distinguish between underpriced and overpriced stock. Return can be maximized by investing in stocks which are currently underpriced but have the potential to increase .it might be useful to remember the golden principle of investment; buy low sell high. There are two approaches used for analyzing securities ;technical analysis and fundamental analysis.

### Construct a portfolio

The actual construction of portfolio can be divided into three sub parts.

a) How to allocate the portfolio across different asset classes such as equities, fixed income securities and real assets

b) The assets selection decision, this is the step where the stocks make up the equity component, the bonds that make up the fixed income component.

c) The final component is execution, where the portfolio is actually put together, where investors have to trade off transaction cost against transaction speed.

### Evaluate the performance of portfolio

The performance evaluation of the portfolio is to be done in terms of risk and return. Evaluation measures are to be developed. CAGR (Compounded Annual Growth Rate) may be one criteria. Hindustan Unilever gave a CAGR of 21 percent in returns to the shareholders for the last 13 years.

### Review the portfolio

It involves the periodic repetition of the above steps. The investment objective of an investor may change overtime and the current portfolio may no longer be optimal for him. so the investor may form a new portfolio by selling certain securities and purchasing others that are not held in the current portfolio.

**Types of Investments**

### Nonnegotiable securities

Deposits earn fixed rate of return. Even though bank deposits resemble fixed income securities they are not negotiable instruments. Some of the deposits are dealt subsequently.

### Bank deposits

It is the simplest investment avenue open for the investors. He has to open an account and deposit the money. Traditionally the banks offered current account, Saving account and fixed deposits account. Current account does not offer any interest rate. The drawback of having large amount in saving accounts is that the return is just 4 percent. The saving account is more liquid and convenient to handle. The fixed account carries high interest rate and the money is locked up for a fixed period. With increasing competition among the banks, the banks have handled the plain saving account with the fixed account to cater to the needs of the small savers.

### Post office deposits

Post office also offers fixed deposit facility and monthly income scheme. Monthly income scheme is a popular scheme for the retired. an interest rate of 9 percent is paid monthly .the term of the scheme is 6 years, at the end of which a bonus of 10 percent is paid .the annualized yield to maturity works out to be 15.01 per annum. after three years,

Premature closure is allowed without any penalty .if the closure is one year, a penalty of 5 percent is charged.

### NBFC deposits

In recent years there has been a significant increase in the importance of non- banking financial companies in the process of financial intermediation. The NBFC come under the purview of the RBI. The Act in January 1997, made registration compulsory for the NBFCs

1. Period the period ranges from few months to five years.
2. Maximum limit the limit for acceptance of deposit has been on the credit rating of the company.
3. Interest NBFCs have been debarred from offering an interest rate exceeding 16% per annum and a brokerage fee over 2% on public deposit. The interest rate differs according to maturity period.

### Tax sheltered saving scheme

The important tax sheltered saving scheme is

### Public Provident Fund Scheme(PPF)

PPF earn an interest rate of 8.5% per annum compounded annually which is exempted from the income tax under sec80 C. The individuals and Hindu undivided families can participate in this scheme. There is a lock in period of 15years.PPF is not indented for those who are liquidity and short term returns. at the time of maturity no tax is to be given.

### National saving scheme(NSS)

This scheme helps in deferring the tax payment. Individuals and HUF are eligible to open NSS account in the designated post office.

### National saving certificate

This scheme is offered by the post office. These certificate come in the denomination of Rs.500,1000,5000 and 10000.the contribution and the interest for the first five years are covered by sec 88.the interest is cumulative at the rate of 8.5%per annum and payable biannually is covered by sec 80 L.

### Life insurance

Life insurance is a contract for payment of a sum of money to the person assured on the happening of event insured against. Usually the contract provides for the payment of an amount on the date of maturity or at a specified date or if unfortunate death occurs. The major advantage of life insurance is given below;

1. Protection saving through life insurance guarantees full protection against risk of death of the saver. The full assured sum is paid, whereas in other schemes only the amount saved is paid.
2. Easy payments for the salaried people the salary saving schemes are introduced. Further there is an installment facility method of payment through monthly, quarterly, half yearly or yearly mode.
3. Liquidity loans can be raised on the security of the policy
4. Tax relief tax relief in income tax and wealth tax is available for amounts paid by way of premium for life insurance subject to the tax rates in force.

### Type of life insurance policy

1. **Endowment policy**;

The objective of this policy is to provide an assured sum, both in the event of the policy holders’ death or at the expiry of the policy.

### Term policy:

In a term policy investor pays a small premium to insure his life for a comparatively higher value. The objective behind the scheme is not to get any amount on the expiry of the policy but simply to ensure the financial future of the investor’s dependents.

### Whole life policy

It is a low cost insurance plan where the sum assured is payable on the death of the life insured and premium are payable throughout life.

### Money back policy

The insurance company pays the sum assured at periodical intervals to the policy holder plus the entire sum assured to the beneficiaries in case of the policy holders demise before maturity.

### ULIPs:

Unit Linked Insurance Policies are a combination of mutual fund and life insurance. Investments in ULIPs have two component-one part is used as a premium for life insurance while the other part acts s the investment fund.

The investment component works exactly like mutual fund money is invested in stocks, bonds; government securities etc., an investor receive money in return.

### Mutual fund

Investing directly in equity shares, and debt instruments may be difficult task for a large number of customers because they want to know more about the company, promoter, prospects, competition for the product etc.in such a case, investor can go for investing in financial assets indirectly through mutual fund. A mutual fund is a trust that pools the savings of a number of investors who share a common financial goal. Each scheme of a mutual fund can have different character and objectives.

### Types of return

* + Capital appreciation: an increase in the value of the units of the fund is known as capital appreciation
  + Dividend distribution: the profit earned by the fund is distributed among unit holders in the form of dividends.

### Type of mutual funds

* **Open ended schemes:**

In this scheme there is an uninterrupted entry and exist into the funds. The open ended scheme has no maturity period and they are not listed in the stock exchanges. The open ended fund provides liquidity to the investors since repurchase available.

### Closed ended funds:

The closed ended funds have a fixed maturity period. The first time investments are made when the close ended scheme is kept open for a limited period. Once closed, the units are listed on a stock exchange .investors can buy and sell their units only through stock exchanges.

Other classification

* + **Growth scheme**: aims to provide capital appreciation over medium to long term. Generally these funds invest their money in equities.
  + **Income scheme**: aims to provide a regular return to its unit holders. Mostly these funds deploy their funds in fixed income securities.
  + **Balanced scheme**: a combination of steady return as well as reasonable growth. The fund of this scheme is invested in equities and debt instruments.
  + **Money market scheme**: this type of fund invests its money to money market instruments.
  + **Tax saving scheme**: this type of scheme offers tax rebates to investors.
  + **Index scheme**: Here investment is made on the equities of the Stock index.

### Real estate

The real estate market offers a high return to the investors. The word real estate means land and buildings. There is a normal notion that the price of the real estate has increased by more than 12% over the past ten years. Real estate investments cannot be enchased quickly. Liquidity is a problem. Real estate investment involves high transaction cost. The asset must be managed, i.e. painting, repair, maintenance etc.

### Commodities

Commodities have emerged as an alternative investment option now a days and investors make use of this option to hedge against spiraling inflation-commodities may be broadly divided into three. Metals, petroleum products and agricultural commodities

Metals can be divided in to precious metals and other metals. Gold and silver are the most preferred once for beating inflation.

### Gold

Off all the precious metals gold is the most popular as an investment. Investors generally buy gold as a hedge against economic, political, social fiat currency crisis. Gold prices are soaring to the new highs in recent years comparing to the previous decades because whenever the signs of an economic crisis arises in the world markets may find shelter in gold as safest asset class for investors all around the world.

### Silver

Yellow metal is treated as safe haven .but silver is used abundantly for industrial applications. Investment in silver has given investor, super returns than what gold has given.

### DEBENTURES/BONDS

A Bond is a loan given by the buyer to the issuer of the instrument. Companies, financial institutions, or even the government can issue bonds. Over and above the scheduled interest payments as and when applicable, the holder of a bond is entitled to receive the par value of the instrument at the specified maturity date.

### EQUITY SHARE

Equity, also called shares or scrip, is the basic building blocks of a company. A company’s ownership is determined on the basis of its shareholding. Shares are, by far, the most glamorous financial instruments for investment for the simple reason that, over the long term, they offer the highest returns. Predictably, they’re also the riskiest investment option.

**Unit - II**

Risk- Systematic and Unsystematic risk - risk and return, Capital and Revenue returns.

(Theory Only)

# Concept of risk and return

Any rational investor, before investing his or her investable wealth in the stock, analysis the risk associated with the particular stock. The actual return he receives from a stock may vary from his expected return and is expressed in the variability of return.

### Risk

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

|  |  |
| --- | --- |
| 1.Buying government securities | low risk |
| 2. Buying shares of an existing Profit making company | Medium risk |
| 3. Buying shares of a new company | High risk |

### Types of risk Systematic risk:

The systematic risk is caused by factors external to the particular company and uncontrollable by the company. The systematic risk affects the market as a whole.

### Unsystematic risk:

In case of unsystematic risk the factors are specific, unique and related to the particular industry or company.

### Sources of risk

* **Interest rate risk:**

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

### Market risk:

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

### Purchasing power risk

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

* **Business risk**: Every company operates with in a particular operating environment, operating environment comprises both internal environment within the firm and external environment outside the firm. Business risk is thus a function of the operating conditions faced by a company and is the variability in operating income caused by the operating conditions of the company.

### Financial risk

It refers to the variability of the income to the equity capital due to the debt capital. Financial risk in a company is associated with the capital structure of the company. The debt in the capital structure creates fixed payments in the form of interest this creates more variability in the earning per share available to equity share holders

This variability of return is called financial risk and it is a type of unsystematic risk.

### Return

The major objective of an investment is to earn and maximize the return. Return on investment may be because of income, capital appreciation or a positive hedge against inflation .income is either interest on bonds or debenture, dividend on equity, etc

**Rate of return**: The rate of return on an investment for a period is calculated as follows:

Rate of return =annual income + (ending price –beginning price)

Beginning price

Ex: Ajay brought a share of a co. for Rs.140 from the market on 1/6/2012.the co. paid dividend of Rs.8 per share .later ajay sold the share at Rs.160 on 1/6/2013.

The rate of return= 8+ (160-140)x100 = 20percent 140

**Investment Analysis**

Investment analysis is the analysis of tradable financial instruments called securities. These can be classified into debt securities, equities, or some hybrid of the two. More broadly, futures contracts and tradable credit derivatives are sometimes included. Security analysis is typically divided into fundamental analysis, which relies upon the examination of fundamental business factors such as financial statements, and technical analysis, which focuses upon price trends and momentum. Another form of security analysis is technical analysis which uses graphs and diagrams for price prediction securities. Simply the process of analyzing return and risks of financial securities may term as investment analysis.

**Fundamental analysis**

Fundamental analysis is really a logical and systematic approach to estimating the future dividends and share price it is based on the basic premise that share price is determined by a number of fundamental factors relating to the economy, industry and company. In other words fundamental analysis means a detailed analysis of the fundamental factors affecting the performance of companies. Each share is assumed to have an economic worth based on its present and future earning capacity .this is called its intrinsic value or fundamental value. the purpose of fundamental analysis is to evaluate the present and future earning capacity of a share based on the economy, industry and company fundamentals and thereby assess the intrinsic value of the share .the investor can compare the intrinsic value of the share with the prevailing market price to arrive at an investment decision. if the market price of the share is lower than its intrinsic value, the investor would decide to buy the share as it is under priced. The price of such share is expected to move up in the future to match with its intrinsic value.

On the contrary, when the market price of a share is higher than its intrinsic value, it is perceived to be overpriced. The market price of such a share is expected to come down in future and hence, the investor should decide to sell such a share. Fundamental analysis thus provides an analytical framework for rational investment decision making. This analytical framework is known as EIC framework, or economy –industry –company analysis.

**Fundamental analysis thus involves three steps:**

1. Economic analysis
2. Industry analysis
3. Company analysis

## Economy analysis

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

### Growth rate of national income

The rate of growth of the national economy is an important variable to be considered by an investor.GNP (gross national product), NNP (net national product), GDP (gross domestic product)are the different measures of the total income or total economic output as a whole.

The estimated growth rate of the economy would be a pointer towards the prosperity of the economy. An economy typically passes through different stages of prosperity known as economic or business cycle. The four stages of an economic cycle are

* 1. **Depression:** is the worst of the four stages. During a depression, demand is low and declining. Inflation is often high and so are interest rates.
  2. **Recovery stage**: The economy begins to receive after a depression. Demand picks up leading to more investments in the economy. Production, employment and profits are on the increase.
  3. **Boom:** The phase of the economic cycle is characterized by high demand. Investments and production are maintained at a high level to satisfy the high demand. Companies generally post higher profits.
  4. **Recession:** The boom phase gradually slow down .the economy slowly begin to experience a downturn in demand, production employment etc, the profits of companies are also start to decline. This is the recession stage of the economy.

### Inflation

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

### Interest rates

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

### Government revenue, expenditure and deficits

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

### Exchange rates

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

### Infrastructure

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

### Monsoon

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

### Economic and political stability

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

# Industry analysis

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

### Industry life cycle

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

### Pioneering stage

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

### Expansion stage

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

### Stagnation stage

In this stage the growth of the industry stabilizes. The ability of the industry to grow appears to have been lost. Sales may be increasing but at a slower rate than that experienced by competitive industries or by the overall economy. The transition of an industry from the expansion stages to stagnation stages is very slow. Important reason for this transition is change in social habits and development of improved technology.

Ex: the black and white television industry in India provides s a good example of an industry which passed from the expansion stages to stagnation stage.

### Decay stage

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

### Industry characteristics

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

### Demand supply gap

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

### Competitive conditions in the industry

The level of competition among various companies in an industry is determined by certain competitive forces. These competitive forces are: barriers to entry, the threat of substitution, bargaining power of the suppliers and the rivalry among competitors.

### Permanence

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

### Labour conditions

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

### Attitude of government

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

### Supply of raw materials

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

### Cost structure

The cost structure that is the fixed and variable cost, affect the cost of production and profitability of the firm. The higher the fixed cost component, higher is the sales volume necessary to achieve breakeven point. conversely, the lower the proportion of fixed cost relative to variable cost ,lower would be the breakeven point provides higher margin of safety an analyst would consider favorably an industry that has a lower breakeven point.

# Company analysis

Company analysis is the final stage of fundamental analysis. The economy analysis provides the investor a broad outline of the prospects of growth in the economy, the industry analysis helps the investor to select the industry in which investment would be rewarding. Now he has to decide the company in which he should invest his money. Company analysis provides answer to this question.

In company analysis, the analyst tries to forecast the future earnings of the company because there is a strong evidence that the earnings have a direct and powerful effect upon share prices. The level, trend and stability of earnings of a company, however depend upon a number of factors concerning the operations of the company.

**Financial statements**

The financial statements of a company help to assess the profitability and financial health of the company. The two basic financial statements provided by a company are the balance sheet and the profit and loss account. The balance sheet indicates the financial position of the company on a particular date, namely the last day of the accounting year.

The profit and loss account, also called income statement, reveals the revenue earned, the cost incurred and the resulting profit and loss of the company for one accounting year.

**Analysis of financial statements**

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

### Other variables

The future prospects of the company would also depend upon the number of other factors.

Some of which is given below:

1. Company’s market share
2. Capacity utilization
3. Modernization and expansion plans
4. Order book position
5. Availability of raw material

# Technical analysis

A technical analysis believes that the share prices are determined by the demand and supply forces operating in the market. a technical analysis concentrate on the movement of share prices . He climes that by examining past share price movements future share price can be accurately predicted.

The basic premise of technical analysis is that prices move in trends or waves which may be upward or downward

A rational behind the technical analysis is that share price behavior repeat itself over time and analyst attempt to drive methods to predict this repetition.

Technical Analysis can be defined as an art and science of forecasting future prices based on an examination of the past price movements. Technical analysis is not astrology for predicting prices. Technical analysis is based on analyzing current demand-supply of commodities, stocks, indices, futures or any tradable instrument. Technical analysis involve putting stock information like prices, volumes and open interest on a chart and applying various patterns and indicators to it in order to assess the future price movements. The time frame in which technical analysis is applied may range from intraday (1-minute, 5-minutes, 10-minutes, 15-minutes, 30-minutes or hourly), daily, weekly or monthly price data too many years.

There are essentially two methods of analyzing investment opportunities in the security market viz fundamental analysis and technical analysis. You can use fundamental information like ﬁnancial and non-ﬁnancial aspects of the company or technical information which ignores fundamentals and focuses on actual price movements.

### The basis of Technical Analysis

What makes Technical Analysis an effective tool to analyze price behavior is explained by following theories given by Charles Dow:

* Price discounts everything
* Price movements are not totally random
* What is more important than why

### Price discounts everything

“Each price represents a momentary consensus of value of all market participants – large commercial interests and small speculators, fundamental researchers, technicians and gamblers- at the moment of transaction” – Dr Alexander Elder

Technical analysts believe that the current price fully sect all the possible material information which could affect the price. The market price resects the sum knowledge of all participants, including traders, investors, portfolio managers, buy-side analysts, sell-side analysts, market strategist, technical analysts, fundamental analysts and many others. It would be folly to disagree with the price set by such an impressive array of people with impeccable credentials. Technical analysis looks at the price and what it has done in the past and assumes it will perform similarly in future under similar circumstances. Technical analysis looks at the price and assumes that it will perform in the same way as done in the past under similar circumstances in future.

### Price movements are not totally random

Technical analysis is a trend following system. Most technicians acknowledge that hundreds of years of price charts have shown us one basic truth – prices move in trends. If prices were always random, it would be extremely difficult to make money using technical analysis. A technician believes that it is possible to identify a trend, invest or trade based on the trend and make money as the trend unfolds. Because technical analysis can be applied to many different time frames, it is possible to spot both short-term and long-term trends.

### “What” is more important than “Why?”

It is said that “A technical analyst knows the price of everything, but the value of nothing”. Technical analysts are mainly concerned with two things:

1. The current price
2. The history of the price movement

Technical analysis represents a direct approach. The price is the ﬁnal result of the ﬁght between the forces of supply and demand for any tradable instrument. The objective of analysis is to forecast the direction of the future price. Fundamentalists are concerned with why the price is what it is. For technicians, the why portion of the equation is too broad and many times the fundamental reasons given are highly suspect. Technicians believe it is best to concentrate on what and never mind why. Why did the price go up? It is simple, more buyers (demand) than sellers (supply). The principles of technical analysis are universally applicable. The principles of support, resistance, trend, trading range and other aspects can be applied to any chart. Technical analysis can be used for any time horizon; for any marketable instrument like stocks, futures and commodities, ﬁxed- income securities, forex, etc

### Technical Analysis: The basic assumptions

The ﬁeld of technical analysis is based on three assumptions:

1. The market discounts everything.
2. Price moves in trends.
3. History tends to repeat itself.

### The market discounts everything

Technical analysis is criticized for considering only prices and ignoring the fundamental analysis of the company, economy etc. Technical analysis assumes that, at any given time, a stock’s price reﬂects everything that has or could affect the company - including fundamental factors. The market is driven by mass psychology and pulses with the ﬂow of human emotions. Emotions may respond rapidly to extreme events, but normally change gradually over time. It is believed that the company’s fundamentals, along with broader economic factors and market psychology, are all priced into the stock, removing the need to actually consider these factors separately. This only leaves the analysis of price movement, which technical theory views as a product of the supply and demand for a particular stock in the market.

### Price moves in trends

“Trade with the trend” is the basic logic behind technical analysis. Once a trend has been established, the future price movement is more likely to be in the same direction as the trend than to be against it. Technical analysts frame strategies based on this assumption only.

### History tends to repeat itself

People have been using charts and patterns for several decades to demonstrate patterns in price movements that often repeat themselves. The repetitive nature of price movements is attributed to market psychology; in other words, market participants tend to provide a consistent reaction to similar market stimuli over time. Technical analysis uses chart patterns to analyze market movements and understand trends.

### Strengths of Technical Analysis Not Just for stocks

Technical analysis has universal applicability. It can be applied to any ﬁnancial instrument - stocks, futures and commodities, ﬁ xed-income securities, forex, etc

### Focus on price

Fundamental developments are followed by price movements. By focusing only on price action, technicians focus on the future. The price pattern is considered as a leading indicator and generally leads the economy by 6 to 9 months. To track the market, it makes sense to look directly at the price movements. More often than not, change is a subtle beast. Even though the market is prone to sudden unexpected reactions, hints usually develop before signiﬁcant movements. You should refer to periods of accumulation as evidence of an impending advance and periods of distribution as evidence of an impending decline.

### Supply, demand, and price action

Technicians make use of high, low and closing prices to analyze the price action of a stock. A good analysis can be made only when all the above information is present separately. These will not be able to tell much. However, taken together, the open, high, low and close reﬂect forces of supply and demand.

### Support and resistance

Charting is a technique used in analysis of support and resistance level. These are trading range in which the prices move for an extended period of time, saying that forces of demand and supply are deadlocked. When prices move out of the trading range, it signals that either supply or demand has started to get the upper hand. If prices move above the upper band of the trading range, then demand is winning. If prices move below the lower band, then supply is winning.

### Pictorial price history

A price chart offers most valuable information that facilitates reading historical account of a security’s price movement over a period of time. Charts are much easier to read than a table of numbers. On most stock charts, volume bars are displayed at the bottom. With this historical picture, it is easy to identify the following:

* Market reactions before and after important events
* Past and present volatility
* Historical volume or trading levels
* Relative strength of the stock versus the index.

### Assist with entry point

Technical analysis helps in tracking a proper entry point. Fundamental analysis is used to decide what to buy and technical analysis is used to decide when to buy. Timings in this context play a very important role in performance. Technical analysis can help spot demand (support) and supply (resistance) levels as well as breakouts. Checking out for a breakout above resistance or buying near support levels can improve returns. First of all you should analyze stock’s price history. If a stock selected by you was great for the last three years has traded ﬂ at for those three years, it would appear that market has a different opinion. If a stock has already advanced signiﬁcantly, it may be prudent to wait for a pullback. Or, if the stock is trending lower, it might pay to wait for buying interest and a trend reversal.

### Weaknesses of Technical Analysis Analyst bias

Technical analysis is not hard core science. It is subjective in nature and your personal biases can be reﬂected in the analysis. It is important to be aware of these biases when analyzing a chart. If the analyst is a perpetual bull, then a bullish bias will overshadow the analysis. On the other hand, if the analyst is a disgruntled eternal bear, then the analysis will probably have a bearish tilt.

### Open to interpretation

Technical analysis is a combination of science and art and is always open to interpretation. Even though there are standards, many times two technicians will look at the same chart and paint two different scenarios or see different patterns. Both will be able to come up with logical support and resistance levels as well as key breaks to justify their position. Is the cup half-empty or half-full? It is in the eye of the beholder.

### Too late

You can criticize the technical analysis for being too late. By the time the trend is identiﬁed, a substantial move has already taken place. After such a large move, the reward to risk ratio is not great. Lateness is a particular criticism of Dow Theory.

### Always another level

Technical analysts always wait for another new level. Even after a new trend has been identiﬁed, there is always another “important” level close at hand. Technicians have been accused of sitting on the fence and never taking an unqualiﬁed stance. Even if they are bullish, there is always some indicator or some level that will qualify their opinion.

# Portfolio analysis

**Portfolio** is a group of financial assets such as shares, stocks, bonds, debt instruments, mutual funds, cash equivalents, etc. A portfolio is planned to stabilize the risk of non-performance of various pools of investment. Portfolio Management guides the investor in a method of selecting the best available securities that will provide the expected rate of return for any given degree of risk and also to mitigate (reduce) the risks. It is a strategic decision which is addressed by the top-level managers.

## Modern Portfolio Theory

**Modern portfolio theory** (**MPT**) is a theory of finance that attempts to maximize portfolio expected return for a given amount of portfolio risk, or equivalently minimize risk for a given level of expected return, by carefully choosing the proportions of various assets. MPT is a mathematical formulation of the concept of diversification in investing, with the aim of selecting a collection of investment assets that has collectively lower risk than any individual asset. This is possible, intuitively speaking, because different types of assets often change in value in opposite ways. For example, to the extent prices in the stock market move differently from prices in the bond market, a collection of both types of assets can in theory face lower overall risk than either individually. But diversification lowers risk even if assets' returns are not negatively correlated—indeed, even if they are positively correlated.

More technically, MPT models an asset's return as a normally distributed function (or more generally as an elliptically distributed random variable), defines risk as the standard deviation of return, and models a portfolio as a weighted combination of assets, so that the return of a portfolio is the weighted combination of the assets' returns. By combining different assets whose returns are not perfectly positively correlated, MPT seeks to reduce the total variance of the portfolio return. MPT also assumes that investors are rational and markets are efficient.

MPT was developed in the 1950s through the early 1970s and was considered an important advance in the mathematical modeling of finance. Since then, some theoretical and practical criticisms have been leveled against it. These include evidence that financial returns do not follow a Gaussian distribution or indeed any symmetric distribution, and that correlations between asset classes are not fixed but can vary depending on external events (especially in crises). Further, there remains evidence that investors are not rational and markets may not be efficient. Finally, the low volatility anomaly conflicts with CAPM's trade-off assumption of higher risk for higher return. It states that a portfolio consisting of low volatility equities (like blue chip stocks) reaps higher risk-adjusted returns than a portfolio with high volatility equities (like illiquid penny stocks). A study conducted by Myron Scholes, Michael Jenson, and Fischer Black in 1972 suggests that the relationship between return and beta might be flat or even negatively correlated.

**Unit - III**

Bank deposits- Post office saving schemes- Gold and silver- Real estate- Equity shares and Debts-Government Securities- Mutual Funds- Life Insurance and Tax savings Investments.

**Demand Deposits**

Deposits in banks can be broadly classified into two categories:

Demand Deposits and Time Deposits.

Demand deposits are those which are repayable by the banks ‘on demand’ by the depositor. These deposits have no time restrictions by the banks – no minimum maximum periods are stipulated. Customers may deposit any amounts in the accounts at any time and also withdraw such amounts at any time without giving notice to the banks. Savings Bank accounts (SB Accounts) and Current Accounts (CAs) fall in this category. Time Deposits are withdrawable only at the end of agreed maturity period of such deposits. Fixed Deposits (FDs) and Recurring Deposits (RDs) fall in this category.

1. Savings Accounts Savings deposits, which are also demand deposits, are subject to restrictions on the number of withdrawals as well as on the amounts of withdrawals during any specified period. Further, minimum balances maintained in the accounts are also prescribed in order to offset the cost of maintaining and servicing such deposits. Savings deposits are deposits on which interest is paid at a fixed rate set by the banks (Ranges from 4.0 % to 7% p.a. presently in different banks).
2. Savings account funds are considered one of the most liquid investments .Savings accounts are generally for money that investors don't intend to use for daily expenses. Due to low interest rate, SB accounts should not be used for long-term holding periods. Their main advantages are liquidity and superior rates compared to Current accounts. These accounts provide cheque facility. Most of the banks have rules for the maximum number of withdrawals in a period and the maximum amount of withdrawal. Under RBI directions, now banks are required to open ‘no frill’ accounts (accounts which do not have any minimum balance requirements). Although Public Sector Banks still pay only 4% rate of interest, some private banks like Kotak Bank and Yes Bank pay between 6% and 7% on such deposits. Interest earned up to Rs 10,000 in a financial year on Saving Bank accounts is exempted from income tax. Banks as a rule do not give overdraft facility in a saving account.
3. Features of Saving Account: The main features of saving account in a bank are as follows:
4. The main objective of saving account is to promote savings.¬ There is no restriction on the number and amount of deposits. However, in India,¬ mandatory PAN (Permanent Account Number) details are required to be furnished for undertaking cash transactions exceeding Rs.50,000. Withdrawals are allowed subject to certain restrictions.¬ The money can be withdrawn either by cheque or withdrawal slip issued by the¬ respective bank. The rate of interest payable on saving accounts is now determined by the banks¬ themselves. At present it is between 4% to 7 % p.a. Saving account is of continuing nature. There is no maximum period of holding.¬ A minimum amount has to be kept in the saving account to keep it functioning.¬ This amount is determined by banks themselves. Banks charge a penalty (or fee) for not maintaining the minimum balances in savings account. No loan facility is provided against saving account.¬ Electronic clearing System (ECS) or E-Banking are available to pay electricity bill,¬ telephone bill and other routine household expenses. Generally, equated monthly installments (EMI) for housing loan, personal loan, car¬ loan, etc., are paid (routed) through saving bank account. Nomination facility is available is case of savings accounts,¬ Standing Instructions can be given to the bank to carry out specific instructions at¬ specified intervals without reference to the customers every time.
5. E.g. Transfer to a Fixed Deposit, Transfer to a Recurring Deposit, Make recurring payments like LIC premium, Installments etc. Internet Banking for accessing accounts through online is also available¬ Anywhere Banking - This facility entitles the account holder to withdraw or¬ deposit cash up to a limit of Rs.50,000 across all branches of the same bank. Deposit Insurance and Credit Guarantee Corporation insures the insures all bank¬ deposits, such as saving, fixed, current, recurring deposits for up to the limit of Rs. 100,000 of each depositor in a bank Interest calculations on savings account balances: Banks calculate interest on a daily balance method – i.e. Interest is calculated for each day based on the closing balance held at the end of the day and paid at quarterly or at half yearly intervals.
6. Eligibility for opening a savings account: Any Resident Indian above the age of 18 years can open savings accounts if the depositor wants to operate the account by himself/herself. However RBI has also permitted banks to open SB accounts of school/college students in their own names but no overdraft facility is to be permitted in such accounts.
7. B. Current Accounts A Current account is always a Demand Deposit and the bank is obliged to pay the money on demand by the customer. The Current accounts bear no interest and they account for the smallest fraction among the current, saving and term deposits. They provide the convenient operation facility to the individual / firm. The cost to maintain the accounts is high. Therefore, banks ask the customers to keep a minimum balance in such accounts. a. Users of Current Accounts: Current Account is primarily meant for businessmen, firms, companies, and public enterprises etc. Which undertake numerous banking transactions every day. Current Accounts are cheque operated accounts, and so meant neither for the purpose of earning interest nor for the purpose of savings. In a Current Account, a customer can deposit any amount of money any number of times. He can also withdraw any amount as many times as he wants, as long as he has funds to his credit. Generally, a higher minimum balance as compared to Savings Account is required to be maintained in Current account. As per RBI directives banks are not allowed to pay any interest on the balances maintained in Current accounts. Because of the large number of transactions in the account and volatile nature of balances maintained, banks usually levy certain service charges for operating a Current account. Current Account can be opened by an individual who has attained majority, two or more individuals in their joint names, sole proprietorship concerns, partnership concerns, Hindu Undivided Family (HUF), Limited Companies, Clubs, Societies, Trusts, Executors and Administrators, Others - Government and semi Government bodies, local authorities etc.
8. b. The Features of current Accounts: It is a non-interest bearing bank account.¬ It needs a higher minimum balance to be maintained as compared to the savings¬ account. Penalty is charged if minimum balance is not maintained in the current account.¬ It charges interest on the short-term funds borrowed from the bank.¬ It is of a continuing nature as there is no fixed period to hold a current account.¬ It does not promote saving habits amongst its account holders.¬ The main objective of current account is to enable the businessmen to conduct their¬ business transactions smoothly. There is no restriction on the number and amount of deposits.¬ There is also no restriction on the number and amount of withdrawals made, as¬ long as the current account holder has funds in his bank account.
9. 2.2. Term Deposits: The account which is opened for a particular fixed period (time) by depositing particular amount (money) is known as Fixed (Term) Deposit Account. The term 'fixed deposit' means that the deposit has been made for a fixed period and is repayable only after the specific period is over. A. Types of Term Deposits: There are three types of Term Deposits available: a. Fixed deposits: A fixed rate of interest is paid at fixed, regular (monthly/quarterly/half yearly) intervals and the principal amount is returned at the end of the maturity period. The interest may be paid in cash to the depositor or may be credited to his savings account, as instructed by him. 43 b. Re-investment deposits: Interest is compounded quarterly and paid on maturity, along with the principal amount of the deposit. In case of the Flexi or Sweep Deposits, savings account amount beyond a fixed limit is automatically converted into termdeposits. For example, a customer may decide that any amount in his savings accounts in excess of Rs 50,000 be automatically transferred to a fixed deposit account. If the balance in his account rises to Rs 80,000, then Rs 30,000 will be transferred to a fixed deposit account. This amount will be transferred back to his savings account if he needs to withdraw.

B. Features of Fixed Deposit Account: The main features of fixed deposit account are as follows: The main purpose of fixed deposit account is to enable the individuals to earn a higher¬ rate of interest on their surplus funds (extra money). The amount can be deposited only once. For further such deposits, separate accounts¬ need to be opened. The period of fixed deposits range between 15 days to 10 years.¬ A high interest rate is paid on fixed deposits. The rate of interest may vary as per¬ amount, period and from bank to bank. Withdrawals before maturity are not allowed. However, in case of emergency, banks¬ allow to close the fixed deposit account prior to maturity date. In such cases, the bank deducts 1% (deduction percentage may vary) from the interest payable as on that date on the basis of the period for which the deposit was actually transferred. For example, a Fixed Deposit receipt is issued for 3 years at the interest rate of 9%. If after one year, the depositor wants pre mature encashment, bank will pay interest at 44 8% only, because interest payable on one year deposit was 9%. Out of 9%, one percent penalty will be deducted. The depositor is given a fixed deposit receipt at the time the deposit is made. He shall¬ have to produce it at the time of maturity. The deposit can be renewed for a further period also at the time of maturity.

1. Advantages of Fixed Deposit: Fixed deposits with the banks are nearly 100% safe as all banks are governed by the RBI's rules and regulations. So, bank deposits are among the safest modes of investment. One can get loans up to 75- 90% of the deposit amount from banks against fixed deposit receipts. Though the interest charged will be slightly more than the interest earned by the deposit. In case of loss of a fixed deposit receipt, an indemnity bond has to be executed by the depositor for obtaining a duplicate one.
2. Factors Affecting the Rate of Interest: The rates are decided by the banks themselves for various period based on the general conditions of liquidity prevailing in the economy. Policies of RBI: In order to achieve optimum credit control and flow of funds within¬ the country, RBI imposes several norms and restrictions on the banks. According to RBI, the Cash Reserve Ratio and Repo Rate vary, and eventually the interest rates on banking instruments, including fixed deposits, changes. Recession: Recession can be simply defined as unemployment crossing a certain¬ threshold or benchmark within a country. During recession, there is economic slowdown and the purchasing power of people is attenuated significantly. As a result, RBI is forced to release funds in the market. It achieves this by reducing the cash reserve ratio of banks. Thus, the fixed deposits rate of interest decrease. Inflation: In contrast to recession, inflation occurs when prices of goods become¬ dearer. At such times, lenders (i.e. banks) are gripped by the fear of rupee devaluation and reduction of purchasing power over lent amount. Thus to compensate for the interest losses of lent loans, banks offer higher interest rates on term deposits. Current State of the Economy: Economic conditions play a vital role in deciding the¬ return rates of various financial instruments. Whenever the country is developing, its 45 economy is growing and the credit demand is high. At such times, banks make FDs attractive to compensate the rising credit demand.
3. Other Deposit Scheme A. Recurring Deposit A Recurring deposit is a type of Term Deposit in which a specified fixed amount is deposited at regular intervals for a fixed term and the repayment of principal and accumulated interest is made at the end of the term. Recurring deposit (RD) account is generally opened for a purpose to be served at a future date. RD is generally opened to finance pre-planned future purposes like expenses of daughter wedding, purchase of costly items like land, luxury car, refrigerator or air conditioner, etc. B. Features of Recurring Deposit Account: The main features of recurring deposit account are as follows: The main objective of recurring deposit account is to develop regular savings habit¬ among the public. In India, minimum amount that can be deposited is Rs.10 at regular intervals.¬ The period of deposit is minimum six months and maximum ten years.¬ The rate of interest is higher than other accounts.¬ 46 No withdrawals are allowed. However, the bank may allow closing the account before¬ the maturity period. The bank provides the loan facility. The loan can be given up to 75% of the amount¬ standing to the credit of the account holder. C. Advantages of Recurring Deposits: Recurring Bank Account provides: Compulsion to save¬ Higher rates of interest as compared to Term Deposits¬ Liquidity to have access those savings any time (through loans or refunds after¬ deducting some penalty) Helps to create a huge corpus fund for future needs like child’s education or marriage¬ or buying a car without loans or even saving for a comfortable living in retired life. These deposits are usually targeted at persons who are salaried or receive other¬ regular income Nomination facility is also available.¬ 2.4. Types of Account Holders Banks’ customers can be classified into different categories depending upon their constitution. Types of Bank Customers: Individuals¬ Hindu Undivided Family (HUF)¬ Proprietorship Firm¬ Partnership Firm¬ Limited Company– Private / Public¬ Official Liquidator¬ Clubs / Associations¬ Trusts¬ Corporate / Institutional Clients¬ Following are the special types of customers of a Bank: 47 Minors¬ Lunatics¬ Drunkards¬ Married women¬ Illiterate Person¬ Partnership Firm¬ Trustees¬ Executors¬ Administrators etc.¬ A. Partnership account Partnership firm is an organization in which two or more individuals who acts as co-owners. The partnership firm is not an a separate entity distinct from each of the partners because Section 4 of the Indian Partnership Act 1932, defines partnership as a relationship subsisting between persons who have agreed to share the profits of a business carried on by all or any of them acting for all. While opening an account the partnership letter should be signed by all the partners. The purpose of the business names address of persons and other details should be clearly mentioned in the account opening form. The partnership letter and the deed should contain the instructions pertaining to opening a bank account and its operations. In case of any dispute among partners, if any, any partner must gives notice of stoppage of operations, and then the account would only be operative by all partners jointly. Death of the partner dissolves the partnership firm. In order to determine the liability of deceased partner the banker should close the account. Hence, bank should ensure the partnership deed is taken while opening the Bank account and stop operations of the account when one of the partners gives notice of stoppage of operations or on the death of a partner.
4. Minor A person under the age of 18 yrs is a minor. If a court appoints a guardian and the minor is below 18 yrs the minority extends up to 21 yrs. As per section 11 of the Indian Contract Act a minor is not competent to contract but section 26 of the Negotiable Instrument Act allows a minor to draw, endorse, deliver and negotiate a negotiable instrument. So, a banker can open an account in a minor’s name. The 48 banker will be safe if the account runs with credit balance. The minor can be a partner but cannot be held liable for the liabilities of the partnership.

**Some of the major differences between equity shares and debentures are as follows:**

In many respects a debenture is like a share. It can be purchased or sold in the stock-market. Like shares, the market value of a debenture can be used by the holders as collateral security to temporary loans. There are however, important points of difference between a debenture-holder and a share- holder.

**These are explained below:**

**(a) Status:**

A debenture-holder is a creditor of the company, but a shareholder is a part-owner of the company. Thus, a debenture is a ‘creditor ship security’ as against a share which is an ‘ownership security’.

**(b) Return on investment:**

A debenture-holder gets the interest payment regardless of the amount of profit or loss at the stipulated time but the shareholder does not receive any dividend unless the company makes a profit. Even when the company has made a profit, the payment of dividend normally depends upon the discretion of the directors.

**(c) Terms of repayment:**

A debenture-holder is entitled to repayment of principal amount at the expiry of a definite period, but, expects in case of redeemable preference shares, the share capital cannot be repaid without legal formalities.

**(d) Order of repayment:**

In case of winding up, the amount of debenture- holders must be repaid before any amount is paid to preference or equity shareholders.

**(e) Conditions of issue:**

There are no restrictions regarding the terms of issue of debentures but shares can be issued at a discount only subject to certain conditions contained in the companies Act.

**(f) Income:**

Dividend is the income of the shareholders. Dividend is always payable out of profits. Interest is the income of debenture-holders. It is payable whether the company makes a profit or not. In case of insufficient profit, the interest is payable out of capital.

**(g) Security:**

Shareholders have no charge over the assets of the company. But  
generally, debenture holders are having a charge either on all assets or specific assets of the company.

**(h) Voice in the Management:**

Shareholders are having a right to vote and right to attend meetings. They have a voice in the management. But as Sec. 117 of the Act, debenture-holders have no right to vote and attend general meeting.

**The difference between Equity shares and Debentures is given below in tabular form:**

|  |  |  |
| --- | --- | --- |
| Basic | Shares | Debentures |
| 1. Status | Shares are ownership securities. The holders of shares are the owners of a company. | Debentures are creditor ship securities. Debenture holders are creditors of a company. |
| 2. Return on Investment | Dividend is paid on shares by the company. The rate of dividend is not fixed. | Interest is paid on debentures at a fixed rate. |
| 3.Repayment | Equity shares capital is not to be returned back except in the case of liquidation. | The amount of debentures is paid back to debenture-holders after a fixed time. |
| 4. Right to Participate | Shareholders have a right to participate in the affairs of the company. | Debenture holders can’t participate in the affairs of the company. |
| 5. Liquidation | Equity shares get the refund only when all liabilities have been paid off. | Debenture holders get payment in priority as compared to all the creditors. |
| 6. Security | Shareholders being owners, have to bear maximum risk. | Debentures are usually secured by a fixed or floating charge. |

**List of Top 5 Government Bonds to Invest in India!**

**1. Central Government Bonds:**

If you spend more than you earn, how do you sustain? You will borrow. This is precisely the purpose of Bonds issued by the Central Government. Before the beginning of every financial year, the Central Government announces its Financial Budget- Its anticipated expenditures and sources of revenue.

To the extent this revenue falls short of the expenditure, the government borrows money by issuing Bonds. These bonds have maturities ranging from more than one year to about thirty years. Since their maturity dates are specified in advance, these bonds are also known as Dated Securities.

These securities usually have fixed rate coupons (although some floating rate coupons too have been issued) and pay interest semi-annually. These dated securities are issued by an auction process and the securities can be held electronically i.e. in demat mode. The minimum investment in these securities is Rs. 10,000 and in multiples of Rs. 10,000 thereafter.

The dated securities are issued by the Reserve Bank of India (RBI) on behalf of the Government through auction process. The RBI releases a semiannual auction calendar specifying the quantum to be borrowed, the auction dates and the terms of the securities to be issued. The Public Debt Office (PDO) of the RBI manages this auction and also facilitates servicing of the debt i.e. payment of periodic interest and repayment at maturity.

These securities are perceived to be free of risk of default since they have sovereign credit profile. These securities are the most highly traded and therefore liquid in the secondary market.

**2. State Government Bonds:**

The State Governments also issue bonds for exactly the same reason as the Central Government does to fund its deficit. These bonds are also known as State Development Loans. They are issued by an auction process and usually have a maturity of around ten years. The issuance and servicing of these bonds too is managed by the RBI. The minimum investment in these Bonds is Rs. 10,000 and in multiples of Rs. 10,000 thereafter.

Although these securities are not specifically guaranteed by the Central Government, they are considered virtually default risk-free.

**3. Treasury Bills:**

Treasury Bills (T Bills) are short term instruments issued by the Central Government with maturities less than one year. Their purpose remains the same as Dated Securities, but they are intended more to meeting the short term funding needs of the Central Government. Currently, the Central Government issues T Bills of 91 -day, 182-day and 364-day maturity. Since T Bills have a maturity of less than one year, they are considered to be a money market instrument.

As opposed to dated securities, T Bills do not carry any interest. Instead, they are issued at a discount to their face value and redeemed at face value. Such a security is known as a Zero Coupon Security.

Like dated securities, the T Bills are also issued by an auction process which is managed by the RBI. The RBI announces its auction calendar for T Bills usually on a quarterly basis. The auction calendar specifies the date of the auction, the tenure of the T Bills and their face value. Thus the 91-day, 182-day and 364-day treasury bills are commonly referred to as the Auction Treasury Bills (ATBs).

Although the 14 days T-Bills are discontinued, they are still in use in a special way. Unlike the auctioned T-Bills the 14-day T-Bills are referred to as Intermediate Treasury Bills (ITBs) and the surplus cash balances of the state governments are automatically invested in these 14-day intermediate T Bills which earn the states a yield of 5%. These Bills can also be rediscounted by the states at a penal interest of 0.5%.

The T-Bills too are perceived to be free of default risk since they have a sovereign status. Further, they are highly liquid i.e. they can be sold without much delay.

**4. Cash Management Bills:**

Cash Management Bills (CMB) are a short term instrument issued by the Government of India and are meant to specifically meet temporary cash flow mismatches of the Government.

These instruments have a maturity of less than 91 days. Further, they are non-standardized instruments and are issued at a discount to par value (in the nature of zero coupon securities).

The CMBs have a generic character of Treasury Bills

**Some of the key features of these bills are as follows:**

The tenure, notified amount and date of issue of Cash Management Bills depend upon temporary cash requirement of the Government (subject to a maximum tenure of 91 days)

II. The CMBs are issued at discount to the face value through auctions, as in the case of the Treasury Bills

III. The announcement of auction of CMBs is made by the Reserve Bank of India through separate press releases issued one day prior to the date of auction.

IV. The settlement of the auction is on T+1 basis

V. The Non-Competitive Bidding Scheme for Treasury Bills is not extended to the CMBs

VI. The CMBs are tradable and qualify for ready forward facility (underlying for repo)

VII. Investment in Cash Management Bills is treated as an eligible investment in Government Securities by banks for SLR purpose.

**5. Municipal Bonds:**

This category comprises of funds raised from capital markets by local administrations or statutory undertakings providing civic and infrastructure services. These bonds are most commonly used to finance large infrastructure projects like toll roads, bridges, dams, et cetera.

Since these public assets generate a more or less stable cash flow over a very long period, the bonds issued to finance these assets are usually long term. An attractive feature of these bonds is that they are generally issued as tax-free.

Municipal Bonds have played a significant role in the development of infrastructure assets in several countries, especially the United States and Canada.

**Generally, these bonds can be of two types:**

**i. General Obligation Bonds:**

These Bonds are typically secured by some form of tax revenue. These bonds are used for financing the general municipal functions and not any specific revenue-generating projects.

**ii. Revenue Bonds:**

These are bonds issued to finance specific projects and ventures. The revenue generated by the project operations are then used to repay the debt obligation.

The market for municipal bonds in India is in a very nascent stage but nevertheless shows huge potential given the anticipated spending on infrastructure in the future. It presents an opportunity for the municipal bodies to raise finance without depending on their respective State Governments. Some of the municipal corporations that have tapped the capital markets for their finances are Ahmedabad Municipal Corporation, Nagpur Municipal Corporation and Vishakhapatnam Municipal Corporation.

**Corporate Debt- Public Sector Undertaking (PSU) Bonds and Private Sector Bonds:**

Bonds issued by corporates are broadly classified into those issued by Public Sector Undertakings and those by Private Sector Undertakings. The reason for this classification is the perceived low risk in the case of PSU Bonds because of their sovereign holdings.

It is only a perceived risk-free security since the Government may not necessarily have a contractual obligation to guarantee PSU Debt. A private corporate, howsoever stable it may be, will still have a risk premium over a comparable Public Sector Undertaking.

Corporate Bonds, unlike Government Bonds, are issued for several different maturity periods and structures. Corporates, especially private corporates, have been coming out with several innovative and complex structures such as embedded call and put options, convertibles, floaters, et cetera.

Corporate Bonds are now actively traded in the secondary market. The most common platforms for trading of these corporate bonds are the Stock Exchanges. Moreover, trades that happen over the counter are supposed to be reported by the market participants on the FIMMDA reporting platform or the reporting platform of the NSE or BSE within the stipulated time period.

**Special Securities:**

The Central Government also issues, from time to time, special securities to entities like Oil Marketing Companies, Fertilizer Companies, the Food Corporation of India, etc. as compensation to these companies in lieu of cash subsidies. These securities are usually longer term securities carrying coupon with a premium over the yield of the dated securities of comparable maturity.

These securities are, however, not eligible SLR securities but are approved securities and are eligible as collateral for market repo transactions. The beneficiary oil marketing companies may divest these securities in the secondary market to banks, insurance companies / Primary Dealers, etc., for raising cash.

**Securitized Debt Instruments- Single Loan and Pools; Asset Backed and Mortgage Backed:**

Securitized Debt Instruments represent a fairly recent development in the world of Fixed Income Securities. In simple terms, securitization is a process by which illiquid assets are converted into liquid securities. One asset gives birth to several others.

**The securitization process involves the following general steps:**

a. The holder (known as Originator or Sponsor) of the assets to be securitized (called as underlying assets) creates a Special Purpose Vehicle (SPV) to hold the title to the assets.

b. The sponsor then sells the underlying assets to the SPV. The assets may be existing or potential (future)

c. The SPV then uses the underlying asset(s) as collateral to create and issue securities to investors.

d. The proceeds from the issue of securities are then used to pay off the sponsor for the sale of the underlying asset.

This whole process effectively converts illiquid assets into marketable liquid securities.

**INTRODUCTION TO LIFE INSURANCE**

**1.1 DEFINITION OF LIFE INSURANCE**

In the first of an excellent series of textbooks produced by the U.S. Life Office Management Association Inc. (LOMA), life insurance is defined as follows:

"Life insurance provides a sum of money if the person who is insured dies whilst the policy is in effect."

Anybody who has some knowledge about life insurance will be tempted to say "Yes, BUT.....". In other words, surely this is too brief an explanation for a financial service that provides a very sophisticated range of savings and investment products, as well as mere compensation for death. "Yes, but ....." let us remember the objectives of these Study Notes, and this Quality Assurance Scheme. The more we think about this, the more appropriate the above definition becomes, as a starting point.

The definition captures the original, basic, intention of life insurance: i.e. to provide for one's family and perhaps others in the event of death, especially premature death. Originally, policies were for short periods of time, covering temporary risk situations, such as sea voyages. As life insurance became more established, it was realized what a useful tool it was for a number of situations, which would include:

(a) Temporary needs/threats: the original purpose of life insurance remains an important element in life insurance and estate planning, as things like children's education etc. occupy responsible people's thoughts.

(b) Savings: providing for one's family and oneself, as a long-term exercise, becomes more and more relevant as society evolves from a tribal, clan, family orientated community to relatively affluent individual independence.

(c) Investment: the accumulation of wealth and safeguarding it from the ravages of inflation become realistic goals as living standards rise.

(d) Retirement: provision for one's own later years becomes increasingly necessary, especially in a changing cultural and social environment.

So our purpose, as we begin this study, is not so much to remember certain facts, but rather to understand something of the fundamentals of long term (life) insurance, and to appreciate its role in a modern society.

Needs for Life Insurance

Whilst 1.1 above outlines the developing appreciation of the many uses of life insurance, the modern scene tends to look upon available life insurance products from the perspective of meeting various needs. These we may think of as:

(a) Personal needs:

(i) dependants living expenses;

(ii) final (end of life) expenses;

(iii) educational funds;

(iv) retirement income;

(v) mortgage repayment fund;

(vi) emergencies fund;

(vii) disability income.

(b) Business needs:

(i) key persons;

(ii) business owners;

(iii) partnerships;

(iv) employee benefits.

**1.2 PRINCIPLES OF LIFE INSURANCE**

In the Core Subject for this Quality Assurance Scheme "Principles and Practice of Insurance", the principles of insurance were studied in detail. By way of reminder, but not detailed comment at this stage, these principles are:

(a) Insurable Interest: the legal right to insure;

(b) Utmost Good Faith: the requirement to reveal material information;

(c) Proximate Cause: determining the effective reason for a loss;

(d) Indemnity: providing an exact financial compensation;

(e) Contribution: insurers sharing an indemnity payment;

f) Subrogation: the insurer taking over rights against third parties.

**.2.1 Insurable Interest**

In simple terms, insurable interest is that relationship with the subject matter (a person, in the case of life insurance) which is recognized at law and gives rise to a legal right to insure that person. This is a general law concept that has applied for centuries and is obviously based on common sense. If you have no relationship with a given person, why should you have the right to insure him and thus profit from his death? Some particular points to be noted with this principle are:

(a) Insurable interest in oneself: we all have an insurable interest in our own lives. From the law concept that husband and wife are one person, it follows that there is also an insurable interest in one's spouse.

(b) Insurable interest in others: to have an insurable interest in other people, the law requires some financial involvement which could be at risk by the other person dying. Some examples which may be reasonably common are:

(i) debtors: if a person owes you money, you may insure him for the amount of the loan, plus reasonable interest;

(ii) business partners: especially where personal services are involved, such as musicians, lawyers, medical practitioners etc;

(iii) contract relationships: if another person's services have been engaged under contract (booking a singer for a concert, professional sportsperson etc.), that person's death may cause the other contract party to suffer financially. That potential loss is insurable.

Note: This heading would include a common life insurance product known as Key Person Insurance, where an employer insures an important employee, in case of loss to the company from the employee's death.

(c) A parent or guardian of a minor (person aged under 18) is given an insurable interest in that young person. Apart from one’s spouse, only the relationships mentioned (parent/guardian of a minor) constitute insurable interest arising from blood or family connection.

(d) When is the interest needed? : this is a key question, and very important consequences flow from its answer. The answer is that insurable interest is only needed when the contract begins, and becomes irrelevant thereafter. What could be the (quite legal) consequences of this? Some examples are:

(i) Divorce: a spouse, who insures his/her spouse and then becomes divorced, can keep the policy in force and be perfectly entitled to collect the benefit in due time.

(ii) Debts: it is legally possible to insure your debtor, have the debt repaid, keep the policy in force, and be "paid again" in due time.

(iii) Assignment: it is quite legal to transfer a properly arranged life insurance to a third party, provided this was not intended at the outset.

**1.2.1a Beneficiary Designation**

This will be discussed in rather more detail in 4.4, but in the context of insurable interest we may say that:

(a) in most cases the beneficiary, as one nominated by the policyowner to receive the benefit under the policy, does not need an insurable interest;

(b) the exception is where the insurance is being arranged on the life of someone other than the applicant. This relates to what becomes known as a third party policy. In such cases the beneficiary does need insurable interest.

**Duty of Disclosure**

This concerns another important insurance principle, that of utmost good faith. Simply expressed, utmost good faith requires the disclosure of all material facts, whether they are requested by the insurer or not. A material fact is one that would influence the judgement of a prudent underwriter in deciding whether to insure a particular risk, or the terms on which to insure it. Some points to note:

(a) What to disclose: clearly, the insurer wishes to know all important facts, but you cannot be expected to disclose what you reasonably cannot be expected to know. Some medical conditions, for example, may be easily recognizable to qualified doctors, but the average layman cannot be expected to self-diagnose and reveal such things.

(b) Non-medical application: if the insurance is arranged without a physical examination ofthe applicant, the insurer will normally have great difficulty in alleging that anything not covered by questions on the application or personal physician's form is material.

(c) Medical application: if the insurance is arranged with a physical examination of the applicant, the insurer cannot hold against the applicant any omissions or mis-diagnosing by the medically qualified person concerned.

(d) Medical tests: the insurer is entitled to supplement information supplied verbally with reasonable medical examinations or tests.

(e) Breach of the duty: technically, this constitutes a breach of utmost good faith, which normally renders the contract voidable by the insurer. If fraud is involved, this situation remains true in Macau and the insurer might well void the contract. But with most policies in Macau regard has to be taken of the Incontestability Clause (see 4.2), which means that the policy cannot be contested after it has been in force for a specified period (unless there is proof of fraud).

**1.2.3 Other Insurance Principles**

(a) Indemnity: this means an exact financial compensation for the loss sustained and is very important in most Non-life insurance policies. As far as life insurance is concerned, however,

(i) it is immediately obvious that the policy proceeds in no way pretend to (or can) represent an exact financial compensation. That is why life insurances are called benefit policies, not indemnities;

Note: Every life insurance claim is a “total loss”, in the sense that the full sum insured is payable. The actual payment, however, may be more than the sum insured in some cases, e.g. where policy dividends (or bonuses) apply, or where death is from an accident and accidental death benefits have been added to the policy.

(b) Indemnity corollaries: a corollary is a sub-principle and indemnity has two corollaries, Contribution and Subrogation. To remind or inform you:

(i) Contribution: in most Non-life Insurance classes, if by some chance a person has more than one policy covering the loss (called, helpfully, double insurance in marine insurance) he does not get paid twice. Each policy contributes to (shares) the loss rateably. If he has more than one policy not by chance, it could well be an indication of intended fraud!

In life insurance, the policies do not represent indemnities, so it is quite normal for a person to have more than one life policy and each must pay in full upon the insured event happening.

(ii) Subrogation: this relates to the right of the insurer who provides an indemnity to take over any remedies the insured possesses against third parties, to seek to recover his payment to the insured. This does not apply to life insurances.

If, for example, a third party negligently smashes a person's car (which has comprehensive cover), the person's motor insurer must pay but can attempt to recover his payment from the third party. In that same accident if an innocent victim in the car is killed, his life insurer must pay, but the life insurer has no right of recovery from the third party.

(c) Proximate cause: this principle is concerned with the discovery of the dominant effective cause that produced the loss being claimed for under the insurance. The principle does apply to every class of business, but it is likely to have rather less significance with life insurance. The application of proximate cause is very much concerned with different kinds of perils (causes of loss):

(i) Insured Perils: are those which are covered by the policy. Non-life policies may specify the perils which are covered, and one of those must be the proximate cause of the loss. In life insurance, the cause of death is probably not critical.

(ii) Excepted (or Excluded) Perils: in non-life insurances all policies will carry some exclusions. If one of these is involved with a claim, the insurer is not liable. Life insurance policies will seldom have exclusions (but see Note 1 below).

(iii) Uninsured Perils: these are causes of loss which are not included but are also not excluded, for example water damage with a fire insurance. If property is damaged by water (e.g. by rain) with no other cause involved, the damage is not covered. But if the water damage is proximately caused by an insured peril (say fireman fighting a fire with water hoses), the water damage is covered. Such complexities are unlikely to arise with life insurance claims.

Note: 1 Suicide is an exception to the general statement that life policies seldom have exclusions, so proximate cause will be important in determining whether death arose from suicide or not. However, even here the principle does not have full impact, because suicide is only excluded for a limited time period with life policies (see 4.12).

2 We may conclude that the principles of insurance, especially those concerned with claims, have less application in life insurance.

**Unit - IV**

Time Value of Money - Meaning- Current Money Vs Future Money- Present Value Interest Factor (PVIF) - Present Value Interest Factor Annuity (PVIFA) Future Value -Interest Factor Annuity (FVIFA)

Time Value of Money is a important concept in financial management. The Time Value of Money (TVM) includes the concepts of future value and discounted value. It is mandatory for a financial professional to know and operate the specific techniques of TVM. Within the present article we present the basic notions and illustrate their application in the field of investment projects. The case studies presented are valuable for an efficient financial management. Key words: time value of money, present value, future value J.E.L. classification: G21; G32; M21

Introduction

The concept of Time Value of Money (TVM) has a large applicability in the financial management of companies, in banking, on the capital market and in day to day life. Damodaran sed: ,,There are three reasons why a dollar tomorrow is worth less than a dollar today: Individuals prefer present consumption to future consumption. To induce people to give up♣ present consumption you have to offer them more in the future. When there is monetary inflation, the value of currency decreases over time. The greater♣ the inflation, the greater the difference in value between a dollar today and a dollar tomorrow. If there is any uncertainty (risk) associated with the cash flow in the future, the less that♣ cash flow will be valued”. (Damodaran, 2010)

But why is TVM concept necessary in banking? People with spare funds and the desire to invest them could decide to directly lend them to♣ borrowers in exchange for periodic repayments of the principal and interests. However, this would involve resources and costs for both the lender and the borrower:

(1) On the one hand, it is extremely difficult for the lender to have an accurate picturs of the borrower’s situation in terms of guarantee, so lender would have to monitor the borrower so as to assess the security of the investment;

(2) On the other hand, the borrower might want a larger loan than the lender is able to provide or perhaps needs the money for a longer period of time than the lender can afford. (Paniego, Muñoz MLM, 2015 p

4) The concept of TVM is used in financial management and within the selections methods of investment projects.

2. The concept of Time Value of Money The TVM is the concept according to which a sum of money owned in the present has a greater value than the value of the same sum received at a moment in the future. Thus, it is taken into account the opportunity of the one presently owning the sum of money to invest it and to obtain future gains such as interest or profit.

The techniques used in order to make possible comparing and “Ovidius” University Annals, Economic Sciences Series Volume XVII, Issue 2 /2017 593 calculating the time value of money include: Compounding, Discounting, Capitalization, Indexing. Within the present paper we shall focus on the first two techniques. ,,In fact, most of Time Value of Money formulas are closely related.

When introducing TVM formulas, the author can classify them under different conditions and link their relationships to organize them”. (Chen J. K, 2009, p 77) Compounding represents the conversion of a current (today) amount of money into a future (a future year) amount of money, through the compounding factor or the compounded interest factor. The formula is: Vn = Vo × (1 + k)n , where: Vo = the initial invested capital (the present day sum of money); k = the profitability rate requested / expected by the investor; n = the time interval existing between the present moment and the future moment for which the future value of the capital is estimated Vn = the value of the capital estimated for a certain future moment; (1+k)n = represents the compounding factor.

Future Value is the value at some future time of a present amount of money, or a series of payments, evaluated at a given interest rate”. (Kuhlemeyer, 2008) ,,

Discounting is the technique that calculates the present value of a future sum of money (that can be received or paid). Discounting requires computing the discounted (present) value of the amount of money (cash flows) that are going to be received at future moments in time. ( ) n0 n k1 1 VV + ×= ( ) n0 n k1 1 VV + ×= Present Value is the current value of a future amount of money, or a series of payments, evaluated at a given interest rate”. (Kuhlemeyer, 2008)

3. Applying discounting in the selection methods of investment projects The evaluation of investment projects of companies is an important part of the efficient financial management and presumes taking the following mandatory steps:

1. Quantifying the costs of the investment project is the initial deciding step, with important effects over the next steps and over the final selection decision.

2. Estimating the cash flows (CF) that will result following the implementation of the investment project.

3. Determining the cost of capital or the discount rate

4. Discounting the cash flow generated by the exploitation of the investment.

5. Comparing the present value of the estimated cash flows with the prior computed costs of the project.

If the present discounted value of cash flows of the respective project is larger than the implementation costs, then the project may be accepted as being profitable. Otherwise, the project is not to be implemented. In order to select the profitable investment projects we can use the payback period (PP) method or the NPV (net present value) method. Case study 1. A model of determining the discounted payback period In a company it is sought to increase productivity by acquiring a new technological line.

There are two options to make this investment and the incoming and outgoing flows are synthesized in “Ovidius” University Annals, Economic Sciences Series Volume XVII, Issue 2 /2017 594 Figure no. 1. Investment options \ - thousands of lei - Year Discounted cash-flow Option A Option B Initial cost -3500000 -3500000 1 1500000 1475000 2 1800000 1680000 3 2000000 1500000 4 1150000 +930000 1450000 + 930000 Source: own calculations The negative value represents the costs of the initial investment and the flows in year 4 are cumulated with the residual value of the company at the time, 930000 thousands of lei. In the following lines we shall answer the question: “Which of the two projects should be chosen using the project selection method PP?” For the purpose of determining the PP of the investments there must be determined the cumulated discounted cash-flows for the two options. (Figure 2) Figure no. 2. Cumulated discounted CF -thousands of leiYear Cumulated cash-flow Opt. A Opt. B Initial costs -3500000 -3500000 1 -2000000 -2025000 2 - 200000 - 345000 3 1800000 1155000 4 3880000 3535000 Source: own calculations Substantiating the decision in financial management is realized after computing the payback period for each project:

Project A: The 3500000 thousands of lei initially invested are paid back in two years plus a period of t1 days that we shall determine. In the third year we recuperate 1800000 thousands of lei. We calculate the daily cash flow for year 3. 45,4795 of thousands lei / day 365 0000002 CF /3 zi = The 200000 thousands of lei that remain at the end of year 2, will be recuperated in: days 37days 5,36 /45,4795 000200 1 = = ≈ lei day lei t For project A it results a payback period of: PBP = 2 years & 37 days.

Project B: After 2 years, the initial investment is not fully covered. Again, we calculate the daily cash flow for year 3: 58,1094 of thousands lei / day 365 0005001 CF /3 zi = The 345.000 thousands of lei that remain unpaid at the end of year

“Ovidius” University Annals, Economic Sciences Series Volume XVII, Issue 2 /2017 595 95,83 zile 84 zile 58,1094 lei/ zi 000345 lei t 2 = = ≈ PBP = 2 years and 84 days. We choise project A for implementation.

Project A is the one that proves again as being more effective for the company.

Case study 2. Model of determining the NPV of the investment The financial flows generated by implementing an investment project are produced at different moments in time. In order to determine the profitability of an investment, we must compare the financial flows, at the same moment, a process realized taking into account the TVM. This may be accomplished through the discounting procedure by which all the generated flows of the investment are mathematically translated to the initial moment of implementation of the project.

The method used in selecting the profitable project is the Net Present Value (NPV). If we have several projects that have positive NVP, we will implement the one with the greater net present value. If the NVPs are close, we will choose the project requiring a smaller initial investment. For the calculation of NVP we have the formula: NPV = Net discounted cash flows - initial investment and n n n i i i netpresent k CF k CF k CF k CF V )1( ........ )1()1()1( 2 2 1 1 1 + ++ + + + = + = ∑= Thus, the NVP method does not offer decision makers any certain information regarding the order of acceptance for financing various analyzed investment projects, it only answers the question:

“Are the projects acceptable?”.

We must decide, by using the NPV method, if the following project is profitable taking into account the data: Initial investment costs = 100000 EUR; Cash flow in the next 4 years: Year 1: 60000 EUR; Year 2: 80000 EUR; Year 3: 80000 EUR; Year 4: 100000 EUR. Discount rate: 12%. We discount the estimated cash flows and we compare them with the prior computed costs of the investment. (Fig 3) Figure no. 3. Net present value -EURYear Cash flow Discounted rate (1+k)i Discounted cash flow 1 60000 0.8928 53568 2 80000 0.7972 63776 3 80000 0.7118 56944 4 100000 0.6355 63550 TOTAL: 237838 Initial investment: 100000 Source: own calculations NPV = 237838 EUR - 100000 EUR = 137838 EUR > 0, the project is profitable and may be implemented. “Ovidius” University Annals, Economic Sciences Series Volume XVII, Issue 2 /2017 596 4. Conclusions TVM concept stands at the basis of the profitability analyses in financial management.

As the PP represents the period at the end of which the initial investment equals that of the total cash flow generated by the investment project, we may say that this method is connected to the notion of investment liquidity. The investment liquidity is greater as the payback period is shorter. Discounting, as a financial technique, allows the comparison of the revenue obtained at different moments in time with the initial costs necessary for the implementation of an investment. This technique is useful in determining the profitable projects, as it was presented in the case study no

2. Damodaran said: ,,Present value remains one of the simplest and most powerful techniques in finance, providing a wide range of applications in both personal and business decisions. Cash flow can be moved back to present value terms by discounting and moved forward by compounding. The discount rate at which the discounting and compounding are done reflect three factors: (1) the preference for current consumption, (2) expected inflation and (3) the uncertainty associated with the cash flows being discounted”. (Damodaran, 2016).

**Present value**

In economics and finance, present value, also known as present discounted value, is the value of an expected income stream determined as of the date of valuation.

**Current value :**

Current [value](https://dictionary.cambridge.org/dictionary/english/value) [accounting](https://dictionary.cambridge.org/dictionary/english/accounting) can [yield](https://dictionary.cambridge.org/dictionary/english/yield) [results](https://dictionary.cambridge.org/dictionary/english/result) tha are [materially](https://dictionary.cambridge.org/dictionary/english/materially) different from [traditional](https://dictionary.cambridge.org/dictionary/english/traditional) [accounting](https://dictionary.cambridge.org/dictionary/english/accounting) [based](https://dictionary.cambridge.org/dictionary/english/based) on [historic](https://dictionary.cambridge.org/dictionary/english/historic) [costs](https://dictionary.cambridge.org/dictionary/english/cost).

# Present Value Interest Factor of an Annuity (PVIFA)

## What Is the Present Value Interest Factor of an Annuity?

The present value interest factor of an [annuity](https://www.investopedia.com/terms/a/annuity.asp) is a factor that can be used to calculate the [present value](https://www.investopedia.com/terms/p/presentvalue.asp) of a series of annuities. The initial deposit earns interest at the periodic rate (r), which perfectly finances a series of (n) consecutive dollar withdrawals and may be written as the following formula:

* PVIFA = (1 - (1 + r)^-n) / r

PVIFA is also a variable used when calculating the present value of an [ordinary annuity](https://www.investopedia.com/terms/o/ordinaryannuity.asp).

#### Present Value Interest Factor of Annuity (PVIFA)

## Understanding Present Value Interest Factor of Annuity

The calculation of PVIFA is based on the concept of the [time value of money](https://www.investopedia.com/terms/t/timevalueofmoney.asp). This idea stipulates that the value of currency received today is worth more than the value of currency received at a future date. This is because the currency received today may be invested and can be used to generate interest.

### Present Value Interest Factor of an Annuity, With Tables

The most common values of both n and r can be found in a PVIFA table, which immediately shows the value of PVIFA. This table is a particularly useful tool for comparing different scenarios with variable n and r values. The rate is displayed across the table's top row, while the first column shows the number of periods.

The cell in the PVIFA table that corresponds to the appropriate row and column indicates the present value factor. This factor is multiplied against the dollar amount in question to arrive at the present value. The major drawback of a present value interest factor table is the necessity to round calculated figures, which sacrifices precision.

# Future Value of an Annuity

## What Is the Future Value of an Annuity?

The future value of an annuity is the value of a group of recurring payments at a certain date in the future, assuming a particular rate of return, or [discount rate](https://www.investopedia.com/terms/d/discountrate.asp). The higher the discount rate, the greater the annuity's future value.

### KEY TAKEAWAYS

* The future value of an annuity is a way of calculating how much money a series of payments will be worth at a certain point in the future.
* By contrast, the present value of an annuity measures how much money will be required to produce a series of future payments.
* In an ordinary annuity, payments are made at the end of each agreed-upon period. In an annuity due, payments are made at the beginning of each period.

## Understanding the Future Value of an Annuity

Because of the [time value of money](https://www.investopedia.com/terms/t/timevalueofmoney.asp), money received or paid out today is worth more than the same amount of money will be in the future. That's because the money can be invested and allowed to grow over time. By the same logic, a lump sum of $5,000 today is worth more than a series of five $1,000 annuity payments spread out over five years.

 Ordinary annuities are more common, but an annuity due will result in a higher future value, all else being equal.

## Example of the Future Value of an Annuity

The formula for the future value of an [ordinary annuity](https://www.investopedia.com/terms/o/ordinaryannuity.asp) is as follows. (An ordinary annuity pays interest at the end of a particular period, rather than at the beginning, as is the case with an [annuity due](https://www.investopedia.com/terms/a/annuitydue.asp). Ordinary annuities are the more common type.)

**where:**P=Future value of an annuity streamPMT=Dollar amount of each annuity payment*r*=Interest rate (also known as discount rate)*n*=Number of periods in which payments will be made​﻿

For example, assume someone decides to invest $125,000 per year for the next five years in an annuity they expect to compound at 8% per year. The expected future value of this payment stream using the above formula is:

With an annuity due, where payments are made at the beginning of each period, the formula is slightly different. To find the future value of an annuity due, simply multiply the formula above by a factor of (1 + r).

**Unit - V**

Primary Market Vs Secondary Market- Fundamental Analysis- Economic Analysis- Industry Analysis- Company Analysis.

**The main components of capital market are:**

**1. Primary Market**

**2. Secondary Market**

Primary market refers to the market where securities are created, while the secondary market is one in which they are traded among investors.

Knowing how the primary and secondary markets work is key to understanding how stocks trade.

**Primary market- (NEW ISSUE MARKET)**

The primary market is the part of the capital market that deals with issuing of new securities. Primary markets create long term instruments through which corporate entities raise funds from the capital market.

In a primary market, companies, governments or public sector institutions can raise funds through bond issues and corporations can raise capital through the sale of new stock through an initial public offering (IPO).

The process of selling new shares to investors is called underwriting.

In secondary market companies get no additional capital as securities are bought and sold between investors only so directly there is no capital formation but secondary market indirectly contributes in capital formation by providing liquidity to securities of the company.

If there is no secondary market then investors could get back their investment only after redemption period is over or when company gets dissolved which means investment will be blocked for a long period of time but with the presence of secondary market, the investors can convert their securities into cash whenever they want and it also gives chance to investors to make profit as securities are bought and sold at market price which is generally more than the original price of the securities.

This liquidity offered by secondary market encourages even those investors to invest in securities who want to invest for small period of time as there is option of selling securities at their convenience.

**Investment Analysis**

Investment analysis is theanalysisoftradable financial instruments called securities. These can be classified into debt securities, equities, or some hybrid of the two. More broadly, futures contracts and tradable credit derivatives are sometimes included. Security analysis is typically divided into fundamental analysis, which relies upon the examination of fundamental business factors such as financial statements, and technical analysis, which focuses upon price trends and momentum. Another form of security analysis is technical analysis which uses graphs and diagrams for price prediction securities. Simply the process of analyzing return and risks of financial securities may term as investment analysis.

**Fundamental analysis**

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

Each share is assumed to have an economic worth based on its present and future earning capacity .this is called its intrinsic value or fundamental value. the purpose of fundamental analysis is to evaluate the present and future earning capacity of a share based on the economy, industry and company fundamentals and thereby assess the intrinsic value of the share .the investor can compare the intrinsic value of the share with the prevailing market price to arrive at an investment decision. if the market price of the share is lower than its intrinsic value, the investor would decide to buy the share as it is under priced. The price of such share is expected to move up in the future to match with its intrinsic value.

On the contrary, when the market price of a share is higher than its intrinsic value, it is perceived to be overpriced. The market price of such a share is expected to come down in future and hence, the investor should decide to sell such a share. Fundamental analysis thus provides an analytical framework for rational investment decision making. This analytical framework is known as EIC framework, or economy –industry –company analysis.

Fundamental analysis thus involves three steps:

1. Economic analysis
2. Industry analysis
3. Company analysis

## Economy analysis

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

### Growth rate of national income

The rate of growth of the national economy is an important variable to be considered by an investor.GNP (gross national product), NNP (net national product), GDP (gross domestic product)are the different measures of the total income or total economic output as a whole.

The estimated growth rate of the economy would be a pointer towards the prosperity of the economy. An economy typically passes through different stages of prosperity known as economic or business cycle. The four stages of an economic cycle are

* 1. **Depression:** is the worst of the four stages. During a depression, demand is low and declining. Inflation is often high and so are interest rates.
  2. **Recovery stage**: The economy begins to receive after a depression. Demand picks up leading to more investments in the economy. Production, employment and profits are on the increase.
  3. **Boom:** The phase of the economic cycle is characterized by high demand. Investments and production are maintained at a high level to satisfy the high demand. Companies generally post higher profits.
  4. **Recession:** The boom phase gradually slow down .the economy slowly begin to experience a downturn in demand, production employment etc, the profits of companies are also start to decline. This is the recession stage of the economy.

### Inflation

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

### Interest rates

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

### Government revenue, expenditure and deficits

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

### Exchange rates

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

### Infrastructure

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

### Monsoon

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

### Economic and political stability

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

# Industry analysis

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

### Industry life cycle

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

### Pioneering stage

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

### Expansion stage

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

### Stagnation stage

In this stage the growth of the industry stabilizes. The ability of the industry to grow appears to have been lost. Sales may be increasing but at a slower rate than that experienced by competitive industries or by the overall economy. The transition of an industry from the expansion stages to stagnation stages is very slow. Important reason for this transition is change in social habits and development of improved technology.

Ex: the black and white television industry in India provides s a good example of an industry which passed from the expansion stages to stagnation stage.

### Decay stage

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

### Industry characteristics

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

### Demand supply gap

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

### Competitive conditions in the industry

The level of competition among various companies in an industry is determined by certain competitive forces. These competitive forces are: barriers to entry, the threat of substitution, bargaining power of the suppliers and the rivalry among competitors.

### Permanence

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

### Labour conditions

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

### Attitude of government

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

### Supply of raw materials

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

### Cost structure

The cost structure that is the fixed and variable cost, affect the cost of production and profitability of the firm. The higher the fixed cost component, higher is the sales volume necessary to achieve breakeven point. conversely, the lower the proportion of fixed cost relative to variable cost ,lower would be the breakeven point provides higher margin of safety an analyst would consider favorably an industry that has a lower breakeven point.

# Company analysis

Company analysis is the final stage of fundamental analysis. The economy analysis provides the investor a broad outline of the prospects of growth in the economy, the industry analysis helps the investor to select the industry in which investment would be rewarding. Now he has to decide the company in which he should invest his money. Company analysis provides answer to this question.

In company analysis, the analyst tries to forecast the future earnings of the company because there is a strong evidence that the earnings have a direct and powerful effect upon share prices. The level, trend and stability of earnings of a company, however depend upon a number of factors concerning the operations of the company.

**Financial statements**

The financial statements of a company help to assess the profitability and financial health of the company. The two basic financial statements provided by a company are the balance sheet and the profit and loss account. The balance sheet indicates the financial position of the company on a particular date, namely the last day of the accounting year.

The profit and loss account, also called income statement, reveals the revenue earned, the cost incurred and the resulting profit and loss of the company for one accounting year.

**Analysis of financial statements**

Financial ratios are most extensively used to evaluate the financial performance of the company, it also help to assess the whether the financial performance and financial strengths are improving or deteriorating, ratios can be used for comparative analysis

either with other firms in the industry through a cross sectional analysis or a time series analysis.

### Other variables

The future prospects of the company would also depend upon the number of other factors

.some of which is given below:

1. Company’s market share
2. Capacity utilization
3. Modernisation and expansion plans
4. Order book position
5. Availability of raw material

# Technical analysis

A technical analysis believes that the share prices are determined by the demand and supply forces operating in the market. a technical analysis concentrate on the movement of share prices . He climes that by examining past share price movements future share price can be accurately predicted.

The basic premise of technical analysis is that prices move in trends or waves which may be upward or downward

A rational behind the technical analysis is that share price behavior repeat itself over time and analyst attempt to drive methods to predict this repetition.

Technical Analysis can be deﬁned as an art and science of forecasting future prices based on an examination of the past price movements. Technical analysis is not astrology for predicting prices. Technical analysis is based on analyzing current demand-supply of commodities, stocks, indices, futures or any tradable instrument. Technical analysis involve putting stock information like prices, volumes and open interest on a chart and applying various patterns and indicators to it in order to assess the future price movements. The time frame in which technical analysis is applied may range from intraday (1-minute, 5-minutes, 10-minutes, 15-minutes, 30-minutes or hourly), daily, weekly or monthly price data too many years.

There are essentially two methods of analyzing investment opportunities in the security market viz fundamental analysis and technical analysis. You can use fundamental information like ﬁnancial and non-ﬁnancial aspects of the company or technical information which ignores fundamentals and focuses on actual price movements.

### The basis of Technical Analysis

What makes Technical Analysis an effective tool to analyze price behavior is explained by following theories given by Charles Dow:

* Price discounts everything
* Price movements are not totally random
* What is more important than why

### Price discounts everything

“Each price represents a momentary consensus of value of all market participants – large commercial interests and small speculators, fundamental researchers, technicians and gamblers- at the moment of transaction” – Dr Alexander Elder

Technical analysts believe that the current price fully reﬂects all the possible material information which could affect the price. The market price reﬂects the sum knowledge of all participants, including traders, investors, portfolio managers, buy-side analysts, sell-side analysts, market strategist, technical analysts, fundamental analysts and many others. It would be folly to disagree with the price set by such an impressive array of people with impeccable credentials. Technical analysis looks at the price and what it has done in the past and assumes it will perform similarly in future under similar circumstances. Technical analysis looks at the price and assumes that it will perform in the same way as done in the past under similar circumstances in future.

### Price movements are not totally random

Technical analysis is a trend following system. Most technicians acknowledge that hundreds of years of price charts have shown us one basic truth – prices move in trends. If prices were always random, it would be extremely difficult to make money using technical analysis. A technician believes that it is possible to identify a trend, invest or trade based on the trend and make money as the trend unfolds. Because technical analysis can be applied to many different time frames, it is possible to spot both short-term and long-term trends.

### “What” is more important than “Why?”

It is said that “A technical analyst knows the price of everything, but the value of nothing”. Technical analysts are mainly concerned with two things:

1. The current price
2. The history of the price movement

Technical analysis represents a direct approach. The price is the ﬁnal result of the ﬁght between the forces of supply and demand for any tradable instrument. The objective of analysis is to forecast the direction of the future price. Fundamentalists are concerned with why the price is what it is. For technicians, the why portion of the equation is too broad and many times the fundamental reasons given are highly suspect. Technicians believe it is best to concentrate on what and never mind why. Why did the price go up? It is simple, more buyers (demand) than sellers (supply). The principles of technical analysis are universally applicable. The principles of support, resistance, trend, trading range and other aspects can be applied to any chart. Technical analysis can be used for any time horizon; for any marketable instrument like stocks, futures and commodities, ﬁxed- income securities, forex, etc

### Technical Analysis: The basic assumptions

The ﬁeld of technical analysis is based on three assumptions:

1. The market discounts everything.
2. Price moves in trends.
3. History tends to repeat itself.

### The market discounts everything

Technical analysis is criticized for considering only prices and ignoring the fundamental analysis of the company, economy etc. Technical analysis assumes that, at any given time, a stock’s price reﬂects everything that has or could affect the company - including fundamental factors. The market is driven by mass psychology and pulses with the ﬂow of human emotions. Emotions may respond rapidly to extreme events, but normally change gradually over time. It is believed that the company’s fundamentals, along with broader economic factors and market psychology, are all priced into the stock, removing the need to actually consider these factors separately. This only leaves the analysis of price movement, which technical theory views as a product of the supply and demand for a particular stock in the market.

### Price moves in trends

“Trade with the trend” is the basic logic behind technical analysis. Once a trend has been established, the future price movement is more likely to be in the same direction as the trend than to be against it. Technical analysts frame strategies based on this assumption only.

### History tends to repeat itself

People have been using charts and patterns for several decades to demonstrate patterns in price movements that often repeat themselves. The repetitive nature of price movements is attributed to market psychology; in other words, market participants tend to provide a consistent reaction to similar market stimuli over time. Technical analysis uses chart patterns to analyze market movements and understand trends.

### Strengths of Technical Analysis Not Just for stocks

Technical analysis has universal applicability. It can be applied to any ﬁnancial instrument - stocks, futures and commodities, ﬁ xed-income securities, forex, etc

### Focus on price

Fundamental developments are followed by price movements. By focusing only on price action, technicians focus on the future. The price pattern is considered as a leading indicator and generally leads the economy by 6 to 9 months. To track the market, it makes sense to look directly at the price movements. More often than not, change is a subtle beast. Even though the market is prone to sudden unexpected reactions, hints usually develop before signiﬁcant movements. You should refer to periods of accumulation as evidence of an impending advance and periods of distribution as evidence of an impending decline.

### Supply, demand, and price action

Technicians make use of high, low and closing prices to analyze the price action of a stock. A good analysis can be made only when all the above information is present Separately, these will not be able to tell much. However, taken together, the open, high, low and close reﬂect forces of supply and demand.

### Support and resistance

Charting is a technique used in analysis of support and resistance level. These are trading range in which the prices move for an extended period of time, saying that forces of demand and supply are deadlocked. When prices move out of the trading range, it signals that either supply or demand has started to get the upper hand. If prices move above the upper band of the trading range, then demand is winning. If prices move below the lower band, then supply is winning.

### Pictorial price history

A price chart offers most valuable information that facilitates reading historical account of a security’s price movement over a period of time. Charts are much easier to read than a table of numbers. On most stock charts, volume bars are displayed at the bottom. With this historical picture, it is easy to identify the following:

* Market reactions before and after important events
* Past and present volatility
* Historical volume or trading levels
* Relative strength of the stock versus the index.

### Assist with entry point

Technical analysis helps in tracking a proper entry point. Fundamental analysis is used to decide what to buy and technical analysis is used to decide when to buy. Timings in this context play a very important role in performance. Technical analysis can help spot demand (support) and supply (resistance) levels as well as breakouts. Checking out for a breakout above resistance or buying near support levels can improve returns. First of all you should analyze stock’s price history. If a stock selected by you was great for the last three years has traded ﬂ at for those three years, it would appear that market has a different opinion. If a stock has already advanced signiﬁcantly, it may be prudent to wait for a pullback. Or, if the stock is trending lower, it might pay to wait for buying interest and a trend reversal.

### Weaknesses of Technical Analysis Analyst bias

Technical analysis is not hard core science. It is subjective in nature and your personal biases can be reﬂected in the analysis. It is important to be aware of these biases when analyzing a chart. If the analyst is a perpetual bull, then a bullish bias will overshadow the analysis. On the other hand, if the analyst is a disgruntled eternal bear, then the analysis will probably have a bearish tilt.

### Open to interpretation

Technical analysis is a combination of science and art and is always open to interpretation. Even though there are standards, many times two technicians will look at the same chart and paint two different scenarios or see different patterns. Both will be able to come up with logical support and resistance levels as well as key breaks to justify their position. Is the cup half-empty or half-full? It is in the eye of the beholder.

### Too late

You can criticize the technical analysis for being too late. By the time the trend is identiﬁed, a substantial move has already taken place. After such a large move, the reward to risk ratio is not great. Lateness is a particular criticism of Dow Theory.

### Always another level

Technical analysts always wait for another new level. Even after a new trend has been identiﬁed, there is always another “important” level close at hand. Technicians have been accused of sitting on the fence and never taking an unqualiﬁed stance. Even if they are bullish, there is always some indicator or some level that will qualify their opinion.