Paper-3

Financial, Tresury & Forex Management

Theory Book

"The world is only for him who has burning desire in him"

Compiled By- C.A. Hardik Patel

Please bring to my notice any mistake or errors in this compilation. I am also open for any suggestions for improving this compilation. You can reach me at: ca.hkpatel@yahoo.com

Financial Management

Management of funds is an important aspect of **financial management**.

Meaning:

By Financial Management we mean-

- Efficient use of economic resources namely capital funds.
- According to Phillippatus, "Financial management is concerned with the managerial decisions that result in the acquisition and financing of short term and long term credits for the firm".
- Here it deals with the situations that require selection of specific assets (or combination of assets), the selection of specific problem of size and growth of an enterprise.
- Here the analysis deals with the expected inflows and outflows of funds and their effect on managerial objectives.
- So the analysis simply states two main aspects of **financial management** like procurement of funds and an effective use of funds to achieve business objectives.

Procurement of funds:

- As funds can be obtained from different sources so procurement of funds is considered as an important problem of business concerns.
- Funds procured from different sources have different characteristics in terms of risk, cost and control.
- Funds issued by the issue of equity shares are the best from risk point of view for the company as there is no question of repayment of equity capital except when the company is under liquidation.
- From the cost point of view equity capital is most expensive source of funds as dividend expectations of shareholders are normally higher than prevalent interest rates.
- Financial management constitutes risk, cost and control. The cost of funds should be at minimum for a proper balancing of risk and control.
- In the Globalised competitive scenario mobilization of funds plays a very significant role.
- Funds can be raised either through domestic market or from abroad. Foreign Direct Investment (FDI) as well as Foreign Institutional Investors (FII) is two major sources of raising funds. The mechanism of procurement of funds has to be modified in the light of requirements of foreigninvestors

Utilization of Funds:

1. Effective utilization of funds as an important aspect of financial management avoids the situations where funds are either kept idle or proper uses are not being made.
2. Funds procured involve a certain cost and risk.
3. If the funds are not used properly then running business will be too difficult.
4. In case of dividend decisions we also consider this. So it is crucial to employ the funds properly and profitably.

Scope In Financial Management

- A sound financial management is essential in all types of organizations whether it may be profit or non-profit.
- Financial management is essential in a planned Economy as well as in a capitalist set-up as it involves efficient use of the resources.
- From time to time it is seen that many firms have been liquidated not because their technology was obsolete or because their products were not in demand or their Labour was not skilled and motivated but there was a complete mismanagement of financial affairs.
- Even in a boom period, when a company make high profits there is also a fear of liquidation because of bad financial management.
- Financial management optimizes the output from the given input of funds.
- In the country like India where resources are scarce and the demand for funds are many, the need of proper financial management is required.
- In case of newly started companies with a high growth rate it is more important to have sound financial management since finance alone guarantees their survival.
- Financial management is very important in case of non-profit organizations, which do not pay adequate attentions to financial management.
- How ever a sound system of financial management has to be cultivated among bureaucrats, administrators, engineers, educationalists and public at a large.

Financial Management In India

- In the country like India there is a changing scenario of financial management.
- As the economy is opening up and global participation is increasing very fast, the opportunities have no limits.
- Presently financial management passes through an era of experimentation as a larger part of finance activities are carried out.

Highlights Context:

- Interest rates are free from regulations.
- Rupee is fully convertible in current account.
- Optimum debt equity mix is possible.
- Maintaining share prices are also crucial. In liberalized scenario the capital market is an important avenue of funds for business.
- Ensuring management control is vital especially in the light of foreign participation.

Financial Management Objectives

1) Profit Maximization:

- Objective of financial management is same as the objective of a company that is to earn profit.
- But profit maximization cannot the sole objective of a company. It is a limited objective.
- If profits are given undue Importance then problems may arise as discussed below.

- The term profit is vague and it involves much more contradictions.
- Profit maximization has to be attempted with a realization of risks involved. A positive relationship exists between risk and profits. So both risk and profit objectives should be balanced.
- Profit Maximization does not take into account the time pattern of returns.
- Profit maximization fails to take into account the social considerations

2) Wealth Maximization:

- It is commonly agreed that the objective of a firm is to maximize value or wealth.
- Value of a firm is represented by the market price of the company's common stock.

The market price of a firm's stock represents the focal judgement of all market participants as to what the value of the particular firm is.

- It takes in to account present and prospective future earnings per share, the timing and risk of these earning, the dividend policy of the firm and many other factors that bear upon the market price of the stock. Market price acts as the performance index or report card of the firm's progress.

- Prices in the share markets are largely affected by many factors like general economic outlook, outlook of particular company, technical factors and even mass psychology.

- Normally this value is a function of two factors as given below,
- The anticipated rate of earnings per share of the company
- The capitalization rate.
- The likely rate of earnings per shares (EPS) depends upon the assessment as to how profitably a company is growing to operate in the future.
  The capitalization rate reflects the liking of the investors for the company.

Methods of Financial Management:

- In the field of financing there are various methods to procure funds. Funds may be obtained from long-term sources as well as from short-term sources.
- Long-term funds may be availed by owners that are shareholders, lenders by issuing debentures, from financial institutions, banks and public at large.
- Short-term funds may be availed from commercial banks, public deposits, etc. Financial leverage or trading on equity is an important method by which a finance manager may increase the return to common shareholders.
- At the time of evaluating capital expenditure projects methods like average rate of return, pay back, internal rate of returns, net present value and profitability index are used.
- A firm can increase its profitability without affecting its liquidity by an efficient utilization of the current resources at the disposal of the firm.

- A firm can increase its profitability without affecting its liquidity by an efficient management of working capital.
- Similarly for the evaluation of a firm's performance there are different methods.
- Ratio analysis is a popular technique to evaluate different aspects of a firm.
- An investor takes in to account various ratios to know weather investment in a particular company will be profitable or not.
- These ratios enable him to judge the profitability, solvency, liquidity and growth aspect of the firm.

LIQUIDITY:

- Is defined as ability of the business to meet short-term obligations.
- It shows the quickness with which a business/company can convert its assets into cash to pay what it owes in the near future.
- It measures a company's ability to meet expected as well as unexpected requirements of cash to expand its assets, reduce its liabilities and cover up any operating losses.
- Liquidity is assessed through the use of ratio analysis. liquidity ratio provides an insight into the present cash solvency of a firm and its ability to remain solvent in the event of calamities.
- Liquidity of receivables is assessed through Average collection period(ACP) it tells us the average number of days receivables are outstanding i.e., the average time a bill takes to convert into cash.
- The ratio, reveals the following:
- Too low an ACP may suggest excessively restricted credit policy of a company.
- Too high an ACP may indicate too liberal a credit policy. A large number of receivables may remain due and outstanding, resulting in less profits and more chances of bad debts.

PROFITABILITY:

- It becomes essential for a company to examine profit per unit of sale then it is done by estimating profitability per rupee sales. It is used to measure of comparison and standard of performance.
- Profitability to sales ratio reflects the company's ability to generate profits per unit of sales.

FINANCIAL DISTRESS AND INSOLVENCY:

- In managing business risk, the firm has to cope with the variability of the demand for its products, their prices, etc.
- It has also to keep a tab on fixed costs.
- As regards financial risk, high proportion of debt in the capital structure entails a high level of interest payments.
- If cash inflow is inadequate, the firm will face difficulties in payment of interest and repayment of principal.
- If the situation continues long enough, a time will come when the firm would face pressure from creditors.
- Failure of sales can also cause difficulties in carrying out production operations.
- The firm would find itself in a tight spot.
- Investors would not invest further. Creditors would recall their loans. Capital market would heavily discount its securities.
- Thus, the firm would find itself in a situation called distress.
- When the sale proceeds is inadequate to meet outside liabilities, the firm is said to have failed or become bankrupt or (after due processes of law are gone through) insolvent.

FUNCTIONS OF FINANCIAL EXECUTIVE:

- Forecasting of cash flow
- Raising funds
- Managing the flow of internal funds
- To facilitate cost control
- To facilitate pricing of product lines and services
- Forecasting profits
- Measuring required return
- Managing assets
- Managing funds

FINANCIAL SECTOR REFORMS IN INDIA:

Following key areas of reforms:

- Reforms of structure of financial systems
- Policies and regulations to deal with insolvency and liquidity of financial intermediaries
- The development of markets for short and long term financial instruments
- The role of institutional elements in development of financial systems
- The link between financial sector and the real sectors, particularly in the case of restructuring financial and industrial institutions or enterprises
- The dynamics of financial systems management in terms of stabilization and adjustment, and
- Access to international markets.

The financial sector reforms in India seek to achieve the following:

- Suitable modifications in the policy framework
- Improvement in the financial health and competitive capabilities
- Building financial infrastructure
- Upgradation of the level of managerial competence and the quality of human resource of banks by reviewing to recruitment, training, and placement.

"Fight one more round. When your arms are so tired that you can hardly lift your hands to come on guard, fight one more round. When your nose is bleeding and your eyes are black and you are so tired that you wish your opponent would crack you one on the jaw and put you to sleep, fight one more round ? remembering that the man who always fights one more round is never whipped."

Capital Budgeting

Capital expenditure means "Making a large outlay of money today in anticipation of benefits (cash inflows) which would flow across the life of the investment"

The basic feature of capital budgeting decision is:

1) Current funds are exchanged for future benefits **(Large outlay)**
2) There is an investment in long term activities; and **(Irreversible)**
3) The future benefits will occur to the firm over series of years. **(future impact)**

Need for CAPITAL INVESTMENT

1) Wear and tear of old equipments.
2) Obsolescence (No longer needed)
3) Variation in product demand necessitating change in volume of production.
4) Product improvement requiring capital addition.
5) Learning curve effect.
6) Expansion.
7) Change of plant site.
8) Diversification
9) Productivity improvement

IMPORTANCE OF CAPITAL BUDGETING

1) Long-term implication.
2) Involvement of large amount of funds
3) Irreversible decisions
4) Risk and uncertainty
5) Difficult to make

Factors influencing investment decision

1) Management outlook.
2) Competitor's strategy.
3) Opportunities
4) Market forecast
5) Fiscal incentives
6) Cash flow budget
7) Non economic factors

TYPES OF CAPITAL INVESTMENT DECISIONS

(A)On the basis of firm's existence:
(i) Replacement and Modernisation decisions:
(ii) Expansion decisions:
(iii) Diversification decisions:

(B)On the basis of decision situation:
(i) Mutually exclusive decisions:
(ii) Accept-reject decisions:
(iii) Contingent decisions:

Procedure of Capital Budgeting

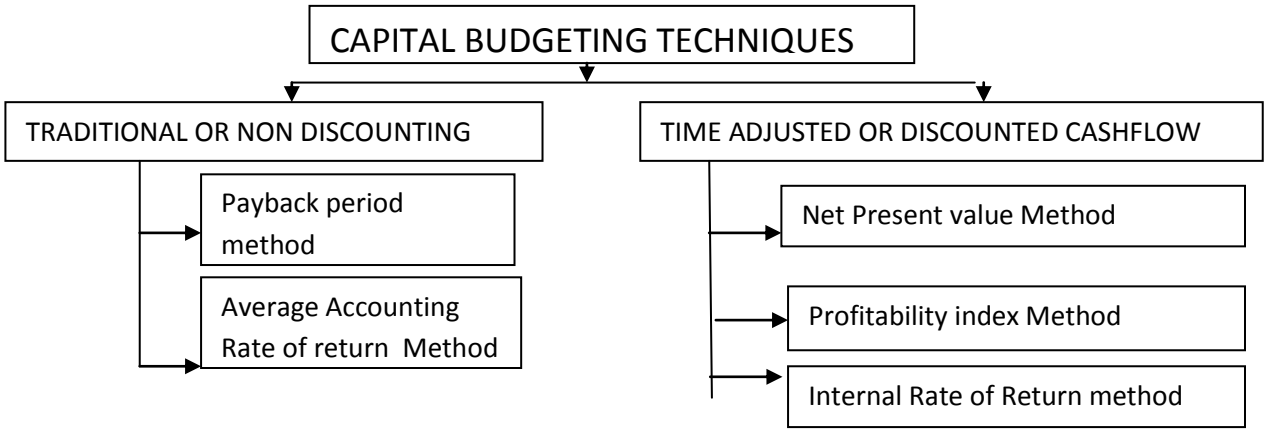
1) Identification of potential opportunities
2) Establishing the criteria
3) Screening and co-ordination
4) Evaluating investment proposals
5) Budgeting capital expenditure
6) Controlling project in process
7) Follow up and performance report

The principle of time value of money

A rupee received today is greater than a rupee received tomorrow because money has time value of money. I.e. *Earlier is better. Because of.....*

1) Opportunity Cost: money received today can be reinvested to earn additional Interest and return.
2) Inflation: Inflation decrease purchasing power of money, as price of goods and Services ↑, purchasing power ↓**.**
3) Risk: future is always uncertain and unpredictable; therefore money received now is certain whereas money received in future is less certain.

PROJECT EVALUATION TECHNIQUES



(A) Non Discounting cash flow method

1) The payback period method:

This technique estimates the time required by the project to recover the firms initial outlay, through cash inflows.

Payback period: cost of project or initial investment
Annual cash inflow

Imp points: Cash inflow for project should be estimated on an after tax basis. (i.e annual profit after tax but before depreciation).

Decision rule: Accept the project if payback period calculated for it is less than the maximum set by the management, reject the project if it is otherwise.

Payback period shows breakeven point where cash inflow are equal to cash outflows.

2) Average Accounting (Book) Rate of Return (ARR): The accounting rate of return of an investment measures the average annual net income of the project (incremental income) as a percentage of the investment.

ARR in original investment:
= Average Net earnings after depreciation and taxes
Original investment (average investment)

Decision Rule: Accept the proposal if ARR > minimum rate of return (cut off rate)
Reject the proposal if ARR < Minimum rate of return (cut off rate)

(B)Discounted Cash Flow Methods

(1) Net Present Value Method:

The net present value technique is a discounted cash flow method that considers the time value of money in evaluating capital investments.

The discount rate or desired rate of return on an investment is the rate of return the firm would have earned by investing the same funds in the best available alternative investment that has the same risk.

Net present value = Present value of net cash Inflow - Total net initial investment

The steps to calculating net present value are (1) Determine the net cash inflow in each year of the investment, (2) select the desired rate of return, (3) Find the discount factor for each year based on the desired rate of return selected, (4) Determine the present values of the netcash flows by multiplying the cash flows by the discount factors, (5) Total the amounts for all years in the life of the project, and (6) Subtract the total net initial investment.

Decision Rule: If NPV > Zero : Accept the project, NPV < Zero: Reject the project
NPV = Zero: Firm is indifferent to accept or reject the project.

(2) Profitability index (PI) or desirability Factor

PI is defined as the rate of present value of the future cash benefits at the required rate of return to the initial cash outflow of the investment.

PI: Sum of discounted cash inflows
Initial cash outlay/Total discounted cash outflow (as the case may be)

CAPITAL RATIONING **(2010 -Jun, 2007-Jun, 2000-Dec)**

Generally, firms fix up maximum amount that can be invested in capital projects, during a given period of time, say a year. The firm then attempts to select a combination of investment proposals that will be within the specific limits providing maximum profitability and rank them in descending order according to their rate of return; such a situation is of capital rationing.

A firm should accept all investment projects with positive NPV, with an objective to maximise the wealth of shareholders. However, there may be resource constraints due to which a firm may have to select from among various projects. Thus there may arise a situation of capital rationing where there may be internal or external constraints on procurement of necessary funds to invest in all investment proposals with positive NPVs.

3) INTERNAL RATE OF RETURN (IRR)

The IRR refers to the rate which equates the present value of cash inflows and present value of cash outflows. In other words, it is the rate at which NPV of investment is Zero. If NPV is positive, a higher discount rate may be used to bring it down to equalise the discount cash inflows and vice versa. That is why IRR is defined as the break even financing rate for the project.

$$IRR = \text{lower rate} + \left[\frac{\text{PVCIF at lower rate} - \text{PVCOF}}{\text{PVCIF at lower rate} - \text{PVCIF at higher Rate}}\right] \times \text{Difference in Rate}$$

Decision Rule: if IRR > Cost of capital (cut off rate) = Accept
IRR ≤ Cost of capital (cut off rate) = Reject

*****Modified Internal Rate of Return (MIRR)**

there are several limitations attached with the concept of the conventional Internal Rate of Return. The MIRR addresses some of these deficiencies e.g, it eliminates multiple IRR rates; it addresses the reinvestment rate issue and produces results which are consistent with the Net Present Value method.

Under this method , all cash flows , apart from the initial investment , are brought to the terminal value using an appropriate discount rate(usually the Cost of Capital). This results in a single stream of cash inflow in the terminal year. The MIRR is obtained by assuming a single outflow in the zeroth year and the terminal cash in flow as mentioned above. The discount rate which equates the present value of the terminal cash in flow to the zeroth year outflow is called the MIRR.

RISK ANALYSIS IN CAPITAL BUDGETING DECISION:

"In a world of certainty, the risk element is zero. In a real world, certainty element is zero!!"

Risk: An expression of the possibility that the actual outcome will differ from expected outcome.

Risk Analysis: Risk analysis gives management better information about the possible outcomes that may occur so that management can use their judgement and experience to accept an investment or reject it. Since risk analysis is costly, it should be used relatively in costly and important projects.

Risk and uncertainty are quite inherent in capital budgeting decision. This is so because investment decision and capital budgeting's are action of today which bear fruits in future which is unforeseen.

It is necessary to allow discounting factor to cover risk. One way to compare risk in alternative proposal is the use of standard deviation. Lower SD indicates lower risk. However wherever returns are expressed in revenue terms the co-efficient of variation gives better measurement for risk evaluation.

Probability: it is chance of occurrence or non occurrence of an outcome. Probability is an expression of individual assessment of an outcome of a given course of action.

Probability Distribution: it indicates a range of possible outcomes, the chance of occurance of each of which is assigned a numerical value.

Expected Value: is the simple average of all possible value after taking into the account the probability of occurrence.

Standard deviation= SD is a standardised unit of deviation from mean.

Higher the SD... Higher the Risk

How to compute: 1) Compute EV
2) Compute Deviation (d) from expected value. (EV- original value)
3) compute- deviation square di^2
- Probability = $pi \times di^2$
- Summation: $\sum pidi^2$
- Determine square root of summation.

Decision: SD= Risk, Ev= Return.
Same return (Ev) - Choose lower risk project.
Same Risk (SD) - Choose higher return.
Different return, Different risk – depend upon risk preference of investors.

Risk Adjusted Discount rate: (RADR)

The discounts rate in capital budgeting represents the expected rate of return. Project with higher risk are generally accepted to provide higher return. All projects should not be discounted at the same rate, namely the co's cost of capital.

Hence, the cut-off discount rate should be adjusted upward or downward to take care of the additional risk element. This is referred to as risk adjusted discount rate. A project will be accepted if it yields a positive NPV using RADR.

Higher the risk in a project, higher would have to be the adjustment in cut off rate and vice versa.

RADR: Cost of capital + premium for risk.

RADR are used in investment and budgeting decisions to cover time value of money and the risk.

Certainity Equivavalent Factor(CEF):

CEF is the ratio of assured cashflow to uncertain cashflow.

Under this approach, the cashflow expected in a project are converted into risk less equivalent amount. The adjustment factor used is called CEF. This varies between 0 to 1. Here decion maker specifies the sum he must be assured of receiving to make him indifferent between a 'certain sum' and the expected value of 'risky sum'.

"Under CE approach, the assured (certain) cashflow are discounted at risk free rate to arrive at NPV."

CEF: CEF Certain cash flow **CCF= UCF X CEF**
UCF Uncertain cash flow

Method of computation under CE approach;
1) Convert uncertain cash flow to certain cash flow by multiplying with CEF.
2) Discount CCF at risk free rate to arrive NPV, if NPV positive project can expected.

RADR & CEF:

Under RADR approach, we adjust the discount rate to take care of projects with higher risk. That is, we use a higher discount rate. Under CEF method, we make downward adjustment of project cashflow and use the risk free rate to arrive at NPV.

Decision Tree:

In a capital budgeting exercise, the decision amker has to identify and evaluate the various alternative course of action leading to the investment decision. A decision tree captures these alternatives in the form of a diagram and useful for clarifying the range of alternative course of action, assessing possible outcomes. i.e multiplicity of choices and outcomes.

"A decision tree is a graphical device that shows a sequence of strategic decisions and expected consequences under each possible set of circumstances."

There are two stages in preparing a decision tree. The first step is drawing the decision tree itself, in a manner that reflects all the choices and outcomes. The second step is to incorporate probabilities, relevant values and derive expected monetary value.

Remember: 1) Draw from left to right: but evaluate from right to left.
2) Sum up probable values at chance node: pick the best in decision node.

Self Examination Questions

Objective Type Questions

1. A capital budgeting technique which does not require the computation of cost of capital for decision making purposes is,
   (a) Net Present Value method (b) Internal Rate of Return method
   (c) Modified Internal Rate of Return method (d) Pay back
2. If two alternative proposals are such that the acceptance of one shall exclude the possibility of the acceptance of another then such decision making will lead to,
   (a) Mutually exclusive decisions (b) Accept reject decisions (c) Contingent decisions (d) None of the above
3. In case a company considers a discounting factor higher than the cost of capital for arriving at present values, the present values of cash inflows will be
   (a) Less than those computed on the basis of cost of capital (b) More than those computed on the basis of cost of capital
   (c) Equal to those computed on the basis of the cost of capital (d) None of the above
4. The pay back technique is specially useful during times
   (a) When the value of money is turbulent (b) When there is no inflation
   (c) When the economy is growing at a steady rate coupled with minimal inflation. (d) None of the above
5. While evaluating capital investment proposals, time value of money is used in which of the following techniques,
   (a) Payback method (b) Accounting rate of return (c) Net present value (d) None of the above
6. IRR would favour project proposals which have,
   (a) Heavy cash inflows in the early stages of the project. (b) Evenly distributed cash inflows throughout the project.
   (c) Heavy cash inflows at the later stages of the project (d) None of the above.
7. The re investment assumption in the case of the IRR technique assumes that,
   (a) Cash flows can be re invested at the projects IRR (b) Cash flows can be re invested at the weighted cost of capital
   (c) Cash flows can be re invested at the marginal cost of capital (d) None of the above
8. Multiple IRRs are obtained when,
   (a) Cash flows in the early stages of the project exceed cash flows during the later stages.
   (b) Cash flows reverse their signs during the project (c) Cash flows are un even (d) None of the above.
9. Depreciation is included as a cost in which of the following techniques,
   (a) Accounting rate of return (b) Net present value
   (c) Internal rate of return (d) None of the above
10. Management is considering a Rs 1,00,000 investment in a project with a 5 year life and no residual value . If the total income from the project is expected to be Rs 60,000 and recognition is given to the effect of straight line depreciation on the investment, the average rate of return is :
   (a) 12% (b) 24% (c) 60% (d) 75%
11. Assume cash outflow equals Rs 1,20,000 followed by cash inflows of Rs 25,000 per year for 8 years and a cost of capital of 11%. What is the Net present value?
   (a) (Rs 38,214) (b) Rs 9,653 (c) Rs 8,653 (d) Rs 38,214
12. What is the Internal rate of return for a project having cash flows of Rs 40,000 per year for 10 years and a cost of Rs 2,26,009?
   (a) 8% (b) 9% (c) 10% (c) 12%
13. While evaluating investments, the release of working capital at the end of the projects life should be considered as,
   (a) Cash in flow (b) Cash out flow (c) Having no effect upon the capital budgeting decision (d) None of the above.
14. Capital rationing refers to a situation where,
   (a) Funds are restricted and the management has to choose from amongst available alternative investments.
   (b) Funds are unlimited and the management has to decide how to allocate them to suitable projects.
   (c) Very few feasible investment proposals are available with the management.
   (d) None of the above
15. Capital budgeting is done for
   (a) Evaluating short term investment decisions. (b) Evaluating medium term investment decisions.
   (c) Evaluating long term investment decisions. (d) None of the above

Answers to Objective Type Questions

1. (d); **2.** (a); **3.** (a) ; **4.** (a); **5.** (c) ; **6.** (a); **7.** (a); **8.** (b); **9.** (a);
10. (b); **11.** (c); **12.** (d); **13.** (a); **14.** (a); **15.** (c).

Capital Structure

MEANING: Capital structure of a firm is a reflection of the overall investment and financing strategy of the firm.

- Capital structure can be of various kinds as described below:
  - **Horizontal capital structure:** the firm has *zero debt components* in the structure mix. Expansion of the firm takes through equity or retained earnings only.
  - **Vertical capital structure:** the base of the structure is formed by a *small amount of equity share capital*. This base serves as the foundation on which the *super structure of preference share capital and debt* is built.
  - **Pyramid shaped capital structure:** this has a large proportion consisting of equity capita; and retained earnings.
  - **Inverted pyramid shaped capital structure:** this has a small component of equity capital, reasonable level of retained earnings but an ever-increasing component of debt.

SIGNIFICANCE OF CAPITAL STRUCTURE:

- Reflects the firm's strategy
- Indicator of the risk profile of the firm
- Acts as a tax management tool
- Helps to brighten the image of the firm.

FACTORS INFLUENCING CAPITAL STRUCTURE:

- Corporate strategy
- Nature of the industry
- Current and past capital structure

CAPITAL STR. V/S FINANCIAL STR.:

1. CS relates to long-term capital deployment for creation of long-term assets. FS involves creation both long term and short term assets.
2. CS is the core element of the financial structure. CS can exist without the current liabilities and in such cases; CS shall be equal to the financial structure.
3. FS of a firm is considered to be a balanced one if the amount of current liabilities is less than the capital structure net outside debt because in such cases the long-term capital is considered sufficient to pay current liabilities in case of sudden loss of current assets.
4. Components of the CS may be used to build up the level of current assets but the current liabilities should not be used to finance acquisition of fixed assets.

PLANNING AND DESIGNING OF CAPITAL STRUCTURE:

- Attributes of a well planned capital structure
- Designing a capital structure
- Design should be functional
- Design should be flexible
- Design should be confirming statutory guidelines

DETERMINANTS OF CAPITAL STRUCTURE:

- Minimization of risk
- Maximization of profit
- Nature of the project
- Control of the firm

COST OF CAPITAL:

Factors determining cost of capital:

- **General economic conditions:** fluctuations in interest rates occur as a result of changes in the demand supply equilibrium of ingestible funds.
- **Risk profile of the project:** a project considered risky would attract capital at a higher cost than a project in the same industry having lesser risk.

COST OF DEBT:

- Concerned essentially with the long-term debt of the firm.
- The long-term debt has been used to finance long-term projects.
- We denote cost of debt by the symbol k (d). It is calculated in different ways depending upon whether the debt is a rolling or a term debt redeemable at the expiry of the term.

COST OF PREFERENCE SHARE CAPITAL:

- The preference dividend is akin to the interest payment and redemption of preference capital is equivalent to redemption of debt.
- Its inclusion in the share capital component is primarily done to bring down the borrowings of the firm in the balance sheet.
- Cost of preference share capital is arrived at by equating the aggregate of present value of the periodic dividend payments and the redemption amount.

COST OF CAPITAL

- **"Cost of Capital"** is the minimum return expected by the contributors of capital. The contributors may be equity share holders, debenture holders and preference share holders who invest in equity shares, debentures and preference shares respectively of a company.
- Simply the company has to earn a minimum amount (return) on the money contributed by outsiders (Investment)

  (i.e) return of Investment (ROI) = $\frac{\text{Return}}{\text{Investment}} \text{x} 100$
- The ROI is a charge on the company in real sense and so it is treated as "Cost". It is usually represented as % on the capital contributed.
- The company usually uses cost of capital as a ***hurdle rate (or) interest rate (or) discount rate*** in order to take a decision regarding investment in a project (or) Business.
- There are various sources available for raising capital and these various sources have varied levels of risk and return. If there is only one source of finance then the cost of that source of finance will be the cost of capital. But the availability of finance from a single source is not unlimited (i.e. limited) and not practical too.
- So, the combined cost of all the sources of finance which the company uses is the cost of capital of the company. (Don't add up all the costs its is wrong).
- The combined cost can be arrived by making ***WEIGHTED AVERAGE OF SPECIFIC COST OF CAPITAL***. Specific cost in the sense cost of each source.

(i) Cost of debentures:

- The cost of debentures is denoted by K_d.
- K_d is usually the interest rate that the company has to pay on the capital raised in the form of debentures.
  i.e. K_d = Interest rate
- Advantage of raising debentures (or) debt capital - *Interest is deductible expenditure for tax purpose*
- **The net cost of debentures to the company will be interest (-) interest x tax rate = interest (1 – tax rate)**
  - $\therefore$ Kd = Interest (1 - tax rate)
- Usually expenses will be incurred by the company in raising capital and these expenses are termed as flotation (or) floating costs.
- **If there are floatation costs then cost of debt will be as follows:**

  $\text{Kd} = \frac{\text{Intereste (1 - Tax rate)}}{\text{Net sale proceeds}}$ (Net sale proceeds = capital raised (-) Flotation costs)
- Debentures are redeemable at par, at premium, at discount. If they are redeemed at premium then that premium should be apportioned over the maturity period of debenture.
- So, the **cost of redeemable debentures** is
  - $\text{Kd} = \frac{\text{Intereste (1 - Tax rate)} + \frac{\text{RV-NSP}}{\text{N}}}{\frac{\text{RV + NSP}}{2}}$
- Rv = Redeemable value; NSP = Net sale proceeds
- N = Maturity period

(ii) Cost of Preference Shares:

Dividend payable on preference shares is not a charge on profit and hence not deductible for tax purposes:

- Kp = preference dividend
- The preference dividend is inclusive of dividend distribution tax.
- **If there are flotation costs, then**
  - $\text{Kp} = \frac{\text{Pref. dividend}}{\text{Net sale proceeds}}$
- **The cost of redeemable preference shares**
  - $\text{Kp} = \frac{\text{Pref. dividend} + \frac{\text{RV - NSP}}{\text{N}}}{\frac{\text{RV + NSP}}{2}}$
- RV = Redeemable value of preference share
- NSP = Net sale proceeds
-

(iii) Cost of loans:

- K_L = Interest (1 – Tax rate)

(iv) Cost of equity:

- In the case of preference shares and debt (debentures & loan), the rate of return payable by the company is available on the face of it. But in the case of equity shares, it is not available.
- Though there is no compulsion on payment of dividend (or) return to equity share holders, but if the company fails to give them return, they will shift their investment elsewhere. The return may be in the form of dividends (or) capital appreciations.

There are various methods (or) approaches available in order to arrive at cost of equity. They are as follows:

- ***Computation of Cost of Equity (Ke) under various approaches:***

Price Approach

- ***1. Dividend price Approach***

- $K_e = \frac{\text{Dividend per share (DPS)}}{\text{Market price per share (MPS)}} x100$ (or) $= \frac{\text{Total dividend}}{\text{Market value of equity}} x100$

2. Earnings Price Approach

- $K_e = \frac{\text{Earnings per share (EPS)}}{\text{MPS}} x100$ (or) $= \frac{\text{Total earnings}}{\text{MV of equity}} x100$

Growth Approach

1. Gordon's Dividend Growth Approach

- $K_e = \frac{D_1}{P_0} + g$
- D_1 = Expected dividend per share i.e. $D_0(1+g)$
- P_0 = Market price of share

2. Earnings Growth Approach

$K_e = \frac{EPS}{P_0} + g$

- D_0= Dividend paid by the company.
- g = growth rate

- ***Computation of growth rate***
- The earnings after paying dividends will be treated as Reserves and transferred to balance sheet which will be used as capital to generate earnings. So, growth rate is the rate of return on retained earnings.
  - g = Retention ratio x Return on Investment (ROI)

- $\text{Dividend Payout ratio} = \frac{\text{Dividend per share (DPS)}}{\text{Earnings per share (EPS)}} x100$

- Dividend payout ratio means so much of the earnings paid as dividend and the balance of earnings is treated as retained earnings. So,
- Retention Ratio = 1 – Dividend payout ratio

$= 1 - \frac{DPS}{EPS} x100$

$= \frac{EPS - DPS}{EPS} x100 = \frac{\text{Retained earnings}}{\text{Total earnings}} x100$

- ***3.Realized yield approach***

- $K_e = \frac{D + P_E - P_B}{P_B}$
- D = Dividend
- P_E = Price at end
- P_B = Price at beginning
- $P_E - P_B$ = Capital appreciation.

4.Capital assets Pricing model (CAPM)

$K_e = R_f + \sigma(R_M - R_F)$

R_F = Risk free rate
σ = Beta
R_M = Market return
$(R_M - R_F)$ = risk premium

Beta (σ)

- Beta is the measure of risk. When an investor invests in a company he will expect a minimum return i.e., the return paid by a bank where he takes no risk i.e., risk free rate (R_f) plus premium for taking risk.
- The premium is 'σ' times the market return more than Risk free rate of return
- = R_f + premium for taking risk
- = $R_f + \sigma (R_m - R_f)$

(V). Cost of Reserves

- Reserves are created out of profits and are shareholders funds. So, the cost of reserves is nothing but cost of equity except that there are no flotation costs.
- Kr = Ke (except flotation cost)

Weighted average cost of capital (WACC)

- WACC (or) overall cost of capital K_o is the weighted average of each cost of specific source.
  - $K_o = W_E \times K_E + W_D \times K_D + W_P \times K_P$
- W_E = weight of equity W_D = weight of Debt weights are the proportions i.e. simply $W_E = \frac{\text{Equity Capital}}{\text{Total Capital}}$
- The proportions (or) weights may be Book value weights (or) market value weights. But the latter are more appropriate then the former.

DIVIDEND POLICY

THE POLICY:

- This determines what portion of earnings will be paid out to stockholders and what will be retained in the business to finance long-term growth.
- Dividend constitutes the cash flow that accrues to equity holders whereas retained earnings are one of the most significant sources of funds for financing the corporate growth.

FORMS OF DIVIDEND:

- The most common type of dividend is in the form of cash
- Public companies usually pay cash dividend, sometimes a regular cash dividend and sometimes an extra cash dividend
- Paying a cash dividend reduces the corporate cash and retained earnings.
- It is also paid in the form of shares of stock and this is referred as stock dividend or bonus shares.

STABLE DIVIDEND POLICY THEORY:

The stability could take three forms:

- Keep dividends at a stable rupee amount but allow its payout ratio to fluctuate, or
- Maintain stable payout ratio and let the rupee dividend fluctuate, or
- Set low regular dividend and then supplement it with year-end "extras" in years when earnings are high. As earnings of the firm increase the customary dividend will not be altered but a year-end "extras" will be declared.

RESIDUAL THEORY OF DIVIDEND POLICY:

- Dividend policy is strictly a financing decision; the payment of cash dividend is a passive residual.
- The amount of dividend payout will fluctuate from period to period in keeping with fluctuations in the amount of acceptable investment opportunities available to the firm.
- If the firm unable to find out profitable investment opportunities, payout will be 100%.
- The theory implies that investors prefer to have the firm retain and reinvest earnings rather than pay them out in dividends if the return on re-invested earnings exceeds the rate of return the investors could themselves obtain on other investments of comparable risks.

IRRELEVANCE OF DIVIDEND:

- Investors are indifferent to dividends and capital gains and so dividends have no effect on the wealth of shareholders.
- They argue that the value of the firm is determined by the earning power of firms assets or its investment policy.
- The manner is which earnings are divided into dividends and retained earnings does not affect this value.

DETERMINANTS OF DIVIDEND POLICY:

- Legal: dividends must be paid out of firm's earnings/ current earnings
- Financial: a firm can pay dividend only to the extent that it has cash to disburse
- Economic constraints
- Nature of business conducted by a company
- Existence of the company: length of existence of the company.
- Type of company Organisation: pvt. Or public
- Financial needs of the company.
- Market conditions
- Financial arrangements
- Change in government policies

LEGAL ASPECTS OF DIVIDENDS:

1. Dividends to be paid only out of profits:
   - It is necessary for a company to declare and pay dividend only out of profits for that year arrived at after providing for depreciation in accordance with the provisions of section 205(2) of the act.
   - A dividend could be declared out of profits of the company for any previous financial year or years arrived after providing for depreciation in accordance with those provisions and remaining undistributed.
   - The dividend can also be declared out of moneys provided by the central govt. or a state govt. for the payment of dividend in pursuance of guarantee given by that govt.
   - The company is required to transfer to the reserves such percentage of its profits for that year not exceeding 10% in addition to providing for depreciation as required under section 205(2A) of the Act.
2. Unpaid dividend to be transferred to special dividend account:
   - Dividends are to be paid within 30 days from the date of the declaration
   - If they are not paid the company is required to transfer the unpaid dividend to unpaid account within 7 days of the expiry of the period of 30 days.
   - The company is required to open this account in any scheduled bank as required under section 205-A of the Companies Act, 1956
3. Dividend is to be paid only to registered shareholders or to their order or their bankers

TRANSFER OF UNPAID/UNCLAIMED DIVIDEND TO INVESTOR EDUCATION AND PROTECTION FUND:

1. Any money transferred to the unpaid dividend account of a company in pursuance of section 205A(5) which remains unpaid or unclaimed for a period of 7 years from the date of such transfer to unpaid dividend account, shall be transferred by the company to the investor education and protection fund established under sub-section (1) of section 205C

2. Sub-section (1A) of section 205 stipulates that the board of directors may declare interim dividend and the amount of dividend including interim dividend is to be such deposited in a separate bank account within 5 days from the date of depreciation.
3. Failure to do so, every director of the company, shall, if knowingly a party to the default, be punishable with simple imprisonment for a term which may extend to 3 years and shall also liable to a fine of rupees for everyday during which such default continues and
4. The company shall be liable to pay simple interest at a rate of 18% p.a. during the period for which such default continues.

Dividend: The divisable profit distributed amongst the shareholders of the company in proportion to their share in a manner as prescribed.

Dividend Rate: Dividend is expressed as a % of face value. DR= DPS/ FV x 100
Dividend Yield: Dividend is expressed as % of market price DY= DPS/ P0 x 100
Dividend Payout: Expressed as a % of Earning. Payout: DPS/EPS x 100

Decision for Dividend Payout

Nature of Firm	*Relationship*	*Optimum Payout*
Growth Co.	**Ke < R**	**0 %**
Declining Co.	**Ke > R**	**100%**
Normal Co.	**Ke = R**	**Indifference**

1. **Prof. James E. Walters**

$$P0 = \frac{D + [R/Ke \times (E - D)}{Rc}$$

Where,
P0= Market price of a Share
D= Dividend per share (DPS=EPS X Payout ratio)
R= Rate of Return by Company on its Retained earning
Ke= Expected rate of return for shareholders
E= Earning per share (EPS)

Conclusion:
1) Optimum payout ratio for growth firm is NIL
2) Optimum payout ratio for Normal firm is irrrlevant
3) Optimum payout ratio for declining firm is 100%

2. **Gordon's Model**

$$Po = \frac{E1\ (1 - b)}{Ke - br} = \frac{D1}{Ke - g}$$

Where,
Po= Market price
(1-b)= Payout ratio
b= Retention ratio
Ke= Expected ROR for shareholders
r= Rate of earning by the company on its retained earnings
br= Growth (i.e.g)
D1=D0 x (1 + g) & D0= last year dividend

3. **Modigliani and Miller Approach (MM)**

$$Po = \frac{D1 + P1}{1 + Ke}$$

Where,
Po= Market price
Ke= Cost of equity
D1=Dividend after end of period 1
P1=Market price after end of period 1

Additional no. of shares to be issued

$$\Delta N = \frac{I - (E - ND1)}{P1}$$

Where,
∆N = Change in no of shares outstanding
I= Total Investment required in Capital Budget
E= Total earning during period
ND1=Total Dividend

4. **John Lintners Model**
Dt = C.R. EPS + (1 – C) Dt-1

Where,
Dt= dividend per share for the year "t"
C=Adjustment rate
R=Target Payout Rate
EPSt=EPS for the year "t"
Dt-1=Dividend per share for the year "t-1" **(i.e dividend for the last year)**

ELEMENTS:

1. **It is part of management science**
   - Organization and control of Forex
   - Budgeting for Forex
   - Utilization of Forex
2. **It refers to generation of Forex**
   - From international trade transactions
3. **It pertains to use of Forex**
   - Identification of suppliers of goods and services
   - Negotiation of terms and conditions of the transaction
4. **It covers storage of Forex**
   - Deposits in foreign currency bank accounts
   - Forex reserves-gold, special drawing rights of IMF and foreign currencies.
   - Foreign exchange reserves

FOREX MANAGER SKILLS:

1. Awareness of historical development of world trade
2. Ability to forecast future trends
3. Comparative analysis skills
4. In-depth knowledge of forex market
5. Knowledge of interest rates
6. Willingness to undertake risks
7. Hedging strategies

Foreign Exchange Market

- Is the market where the currency of one country is exchanged for the currency of another country
- The market is an over the counter market
- There is no single market place or an organized exchange (like a stock exchange) where traders meet and exchange currencies.
- The dealers sit in their dealing room of major commercial banks around the world and communicate with each other through telephones, computer terminals and swift mechanism.

Foreign Exchange Rates:

- Is the price of one country's money in terms of other country's money
- When Indian rupee depreciates against the US dollar, it indicates that demand for latter is more than it's supply.
- When the supply of US dollar is more than it's demand, it declaims in value against the Indian rupee.

Factors Affecting Foreign:

1. Fundamental factors:
   - All such events that affect the basic economic and fiscal policies of the concerned government.
   - These are basic economic policies followed by the government in relation to inflation, balance of payment position, unemployment, capacity utilization, trends in import and export, etc.
2. Political and psychological factors
3. Technical factors
   - Capital movement
   - Relative inflation rates
   - Exchange rate policy and intervention
   - Interest rates

   Speculation:
   - The anticipation of the market participants many times is the prime reason for exchange rate movements.
   - Those speculators anticipate the events even before the actual data is out and position themselves accordingly to take advantage when the actual data confirms the anticipations.

Determination of Foreign Exchange Rates:

1. Balance of Payments
   a. If payments by a country for its imports of goods and services, two possibilities arises
   b. Foreign currency payments exceed receipts and there is a deficit. This puts the home currency of the country under downward pressure against foreign currencies.
2. Demand and Supply
3. Purchasing power parity
4. Interest rate-again relating to foreign trade
5. Relative income levels
6. Market expectations – developments regarding political and economic matters. Of a count

INTER-RELATIONSHIP OF VARIABLES AFFECTING EXCHANGE RATES:

- Interest rates, inflation rates, forward margins, exchange rates and expectations across nations are inter- related.

Exchange rates quotes:

There are two major ways of offering exchange rate quotes.

1. Direct quote
2. Indirect quote

Spot Exchange Rates:

- Is a rate at which currencies are being traded for delivery on the same day?
- Is for a currency is the current rate at which one currency can be immediately converted into another currency.
- These rates are set by the demand and supply forces in the foreign exchange market.
- The direct quote indicates the number of units of the domestic currency required to buy one unit of foreign currency.
- An indirect quote indicates the number of units of foreign currency that can be exchange for one unit of the domestic currency.
- An indirect quote is the inverse of a direct quote.
- Indirect quote = $\frac{1}{\text{Direct quote}}$

Types of Spot Rates:

1. **Ask price:**
   - Is the rate at which the foreign exchange dealer asks it's customer to pay in local currency exchange of the foreign currency.
   - Is the rate at which the foreign currency can be purchased from the dealer.
2. **Bid rate:**
   - Is the rate at which the dealer is ready to buy the foreign currency in exchange for the domestic currency.
   - Is the rate at which the dealer is ready to pay in domestic currency in exchange for the foreign currency and they are ready to pay for buying it.
   - Normally, the direct ask price is greater than the direct bid price and the difference between the two is known as the ask-bid spread.
   - The bid spread is usually stated as a percentage cost of transacting in the foreign exchange market and may be computed as follows:
   - % Spread = $\frac{\text{Ask price-Bid price}}{\text{Ask price}}$

Cross rates:

-The exchange rate between two currencies calculated on the basis of the rate of these two currencies in terms of a third currency.

Forward Rate: -Forward rate is a price quotation to deliver the currency in future.

- The exchange rate is determined at the time of concluding the contract, but payment and delivery are not required till maturity.
- Forward rate may be higher than the spot rate if the market participants expect the currency to appreciate v-s-v the other currency, say US dollar. The currency, in such case is called trading at a forward premium.
- If the forward rate is lower than the spot rate, the participants expect the currency to depreciate v-s-v the US dollar. The currency in such case is said to be 'trading at forward discount'.
- Forward premium/discount is generally calculated as percentage per annum.
- = $\frac{\text{(Forward rate-Spot rate)}}{\text{Spot rate}}$ **12/n. *100**

Where 'n' indicates the number of months till maturity of the forward contract.

Risks in Foreign Exchange Market:

1. Objective:

- Control of foreign exchange risk can be effective if a firm is able to manage the fundamental relationship among inflation, foreign exchange rates and interest rate.
- The objective in exposure management is two fold the minimization of exchange losses as a result of currency movements and the minimization of protection costs.

2. General Protection Measures:

a) Invoicing policies:

- Invoices to third parties abroad should be denominated in the relatively stronger currency. On the other hand, while importing goods. Etc. from third parties a firm should try to negotiate payments in the weaker currency.
- Respective bargaining strengths and the need for good customer relations have a bearing on the invoicing decision.

b) Transfer pricing:

- It is a mechanism by which profits are transferred through an adjustment of prices on intra-firm transactions
- It can be applied to transactions between the parent firm and its subsidiaries or between strong currency and weak currency subsidiaries.

c) Leading and lagging and extension of trade credit:

Leading: it implies speeding up collections on receivables if the foreign currency in which they are invoiced is expected to appreciate.
Lagging: it implies delaying payments of payables invoiced in a foreign currency that is expected to depreciate.

There are three elements in this calculation:

-Cash cost/benefits represented by the interest rate differential between the lead and log countries
- An expected cash gain/loss to be realized on the altered transactional exposure in the said countries, and
- An expected translation gain/loss on the altered translation exposure.

d) Netting:
- All transactions-gross receipts and payments among the parent firm and subsidiaries should be adjusted and only net amounts should be transferred.
- This reduces costs of remittance of funds, and increases control of intra-firm settlement.
- It also produces savings in the form of lower float and lower exchange costs.

e) Matching:
- It is a process whereby cash inflows in a foreign currency are matched with cash outflows in the same currency with regard, to as far as possible, amount and maturation.
- When there are cash inflows in one foreign currency and cash outflows in another foreign currency, the two could still be matched, provided they are positively correlated.

3. SPECIFIC PROTECTION MEASURES:

1. Transaction Exposure (TE):
- It occurs when a value of a future transaction, through known with certainty, is denominated in some currency other than the domestic currency.
- In such cases, the monetary value is fixed in terms of foreign currency at the time of agreement, which is complete at a later date.
- EX: an Indian exporter is to receive payment in euros in 90 days time for an export made today. His receipt in euros is fixed and certain but as far as the re. Value is concerned; it is uncertain and will depend upon the exchange rate prevailing at the time of receipt.
- All fixed money value transactions such as receivables; payables, fixed price sale and purchase contracts etc. are subject to transaction exposure.
- TE refers to the potential change in the value of a foreign currency denominated transaction due to changes in the exchange rate.
- It covers rate risk, credit risk and liquidity risk.

2. Translation Exposure:
- This is also called the accounting exposure.
- It refers to and deals with the probability that the firm may suffer a decrease in assets value due to devaluation of a foreign currency even if no foreign exchange transaction has occurred during the year.
- This exposure needs to be measured so that the financial statement i.e. the balance sheet and the income statement reflect the change in value of assets and liabilities.
- This occurs when the firm's foreign balances are expressed in terms of the domestic currency.
- Two related decisions involved in translation exposure management:
  (a) Managing balance sheet items to minimize the net exposure
  (b) Deciding how to hedge against this exposure
- It results in exchange rate losses and gains that are reflected in the firm's accounting record and are not realized
  and hence have no impact on the taxable income.

3. Economic Exposure:
- It refers to the probability that the change in foreign exchange rate will affect the value of the firm.
- The risk contained in economic exposure requires a determination of the effect of changes in exchange rates on each of the expected future cash flows.
- The translation and the transaction losses are one-time events, whereas the economic loss is a continuous one.

<u>Managing Foreign Exchange Rate Risk:</u>
- Firms that import and export often need to make commitments to buy or sell the goods for delivery at the time, with the payment to be made in foreign currency.
- As soon as, a firm enters into a transaction that exposes it to the cash flows in a foreign currency, it is exposed to exchange rate risk.
- The options available to a firm for hedging against exchange risk are subject to the following:
  (a) Shareholders composition
  (b) Diversification across countries-different business in different countries
  (c) Cost of hedging risk

Exchange Rate Forecasting:

- The exchange rates among countries are affected by a large number of factors like rate of inflation, growth prospectus, political stability and economic policies.
- The % change between the current and the forecasted exchange rates may be calculated to find out appreciation or depreciation in the currency.
- A positive % change represents currency appreciation whereas a negative % change shows depreciation.
- The exchange rate may be fixed or floating.
- The market forces of demand and supply determine the floating exchange rates. These are not influenced by the government intervention.
- Fixed exchange rates, on the other hand, are decided by the regulating agencies.

The Floating Exchange Rates may be forecast with the help of various methods.

- **Fundamental Analysis:** this studies the relationship between macro economic variables (such as inflation rates, national income growth and changes in money supply)
- **Technical Analysis:** this uses past prices and volume movements to project future currency exchange rates.
- The reliability of the forecasts may be found out on the basis of forecasting error, which is calculated by root square error.
- The root square error is computed with the help of the following formula:

$$= \frac{(FV-RV)^2}{RV}$$

Where '**FV'** is the forecasted value and '**RV'** is the realized value.

Mechanics of Forex Trading:

- It is basically concerned with various forex operations including purchase and sale of currencies of different countries in order to meet payments and receipts requirements as a result of foreign trade.
- Forex trading is done either in

  Retail market – the traveler and tourists exchange one currency for another in the form of currency notes or traveler Cheques. Here the total turnover and average transaction size are very small.

  Wholesale Market or Inter Bank Market- is a market with huge turnover. The major participants of this market include commercial banks, corporation and central banks.

CAPITAL ACCOUNT CONVERTIBILITY:

- IT REFERS TO AN ECONOMIC TOOL EXPECTED TO ENGENDER MORE EFFICIENT CAPITAL FLOWS AND CATALYSE GROWTH IMPULSES AND ENABLE THE SOCIETY TO ACHIEVE A STABLE BALANCE BETWEEN Its INTERNAL AND EXTERNAL PRICES.
- The basic objective of capital account convertibility is to:
  - Deepen and integrate financial markets
  - Raise the access to global savings
  - Discipline domestic policy markers and
  - Allow greater freedom to individual decision-making
- A more open capital account will facilitate higher availability of larger capital stock, supplemental domestic resources thereby leading to higher growth and reducing the cost of capital and also facilitating access to the international financial market.

FOREIGN EXCHANGE MARKETS IN INDIA:

- The forex market in India is regulated by **reserve bank of India**.
- Participants in this market are the **authorised moneychangers** and **authorised dealers**.

Authorised Moneychangers:

- In order to provide facilities for encashment of foreign currency to visitors from abroad, especially foreign tourists, reserve bank has granted licenses to certain established firms, hotels and other organisations permitting them to deal in foreign currency notes, coins and travelers Cheques subject to directions issued to them from time to time.
- **These firms and organisations are fall into two categories:**
  i. **Full-fledged money changers**- who are authorised to undertake both purchase and sale transactions with the public and
  ii. **Restricted money changers**- who are authorised only to purchase foreign currency notes, coins and travelers Cheques, subject to the condition that all such collections are surrendered by them in turn to an authorised dealer in foreign exchange/full fledged money changer.

Authorised Dealers:

- Authorizations in the form of licenses to deal in foreign exchange are granted to banks, which are well equipped to undertake foreign exchange transactions in India.
- Authorizations have also been granted to certain financial institutions to undertake specific types of foreign exchange transactions incidental to their main business.

Derivatives

What are Derivatives?

The term "**Derivative**" indicates that it has no independent value, i.e. its value is entirely "derived" from the value of the underlying asset. The underlying asset can be securities, commodities, bullion, currency, live stock or anything else. In other words, Derivative means a forward, future, option or any other hybrid contract of pre determined fixed duration, linked for the purpose of contract fulfillment to the value of a specified real or financial asset or to an index of securities.

Derivatives has been included in the definition of Securities. The term Derivative has been defined in Securities Contracts (Regulations) Act, as:-

A Derivative includes: -

a. *a security derived from a debt instrument, share, loan, whether secured or unsecured, risk instrument or contract for differences or any other form of security;*
b. *a contract which derives its value from the prices, or index of prices, of underlying securities;*

- ***What is a Futures Contract?***

Futures Contract means a legally binding agreement to buy or sell the underlying security on a future date. Future contracts are the organized/standardized contracts in terms of quantity, quality (in case of commodities), delivery time and place for settlement on any date in future. The contract expires on a pre-specified date which is called the expiry date of the contract. On expiry, futures can be settled by delivery of the underlying asset or cash. Cash settlement enables the settlement of obligations arising out of the future/option contract in cash.

- ***What is an Option contract?***

Options Contract is a type of Derivatives Contract which gives the buyer/holder of the contract the right (but not the obligation) to buy/sell the underlying asset at a predetermined price within or at end of a specified period. The buyer / holder of the option purchase the right from the seller/writer for a consideration which is called the premium. The seller/writer of an option is obligated to settle the option as per the terms of the contract when the buyer/holder exercises his right. The underlying asset could include securities, an index of prices of securities etc.

Under Securities Contracts (Regulations) Act, 1956 options defined as "option in securities" means a contract for the purchase or sale of a right to buy or sell, or a right to buy and sell, securities in future, and includes *a teji, a mandi, a teji mandi, a galli*, a put, a call or a put and call in securities;

An Option to buy is called ***Call option*** and option to sell is called ***Put option.*** Further, if an option that is exercisable on or before the expiry date is called ***American option*** and one that is exercisable only on expiry date, is called ***European option.*** The price at which the option is to be exercised is called ***Strike price or Exercise price***.

- ***What are Index Futures and Index Option Contracts?***

Futures contract based on an index i.e. **the underlying asset is the index**, are known as Index Futures Contracts. For example, futures contract on NIFTY Index and BSE-30 Index. These contracts derive their value from the value of the underlying index.
Similarly, the options contracts, which are based on some index, are known as Index options contract. However, unlike Index Futures, the buyer of Index Option Contracts has only the right but not the obligation to buy / sell the underlying index on expiry. Index Option Contracts are generally European Style options i.e. they can be exercised / assigned only on the expiry date.
An index, in turn derives its value from the prices of securities that constitute the index and is created to represent the sentiments of the market as a whole or of a particular sector of the economy. Indices that represent the whole market are broad based indices and those that represent a particular sector are sectoral indices.

In the beginning futures and options were permitted only on S&P Nifty and BSE Sensex. Subsequently, sectoral indices were also permitted for derivatives trading subject to fulfilling the eligibility criteria. Derivative contracts may be permitted on an index if 80% of the index constituents are individually eligible for derivatives trading. However, no single ineligible stock in the index shall have a weightage of more than 5% in the index. The index is required to fulfill the eligibility criteria even after derivatives trading on the index has begun. If the index does not fulfill the criteria for 3 consecutive months, then derivative contracts on such index would be discontinued.
By its very nature, index cannot be delivered on maturity of the Index futures or Index option contracts therefore, these contracts are essentially cash settled on Expiry.

- ***What is the structure of Derivative Markets in India?***

Derivative trading in India takes can place either on a separate and independent Derivative Exchange or on a separate segment of an existing Stock Exchange. Derivative Exchange/Segment function as a Self-Regulatory Organisation (SRO) and SEBI acts as the oversight regulator. The clearing & settlement of all trades on the Derivative Exchange/Segment would have to be through a Clearing Corporation/House, which is independent in governance and membership from the Derivative Exchange/Segment.

- ***What is the regulatory framework of Derivatives markets in India?***

  With the amendment in the definition of 'securities' under SC(R)A (to include derivative contracts in the definition of securities), derivatives trading takes place under the provisions of the Securities Contracts (Regulation) Act, 1956 and the Securities and Exchange Board of India Act, 1992.

  Dr. L.C Gupta Committee constituted by SEBI had laid down the regulatory framework for derivative trading in India. SEBI has also framed suggestive bye-law for Derivative Exchanges/Segments and their Clearing Corporation/House which lay's down the provisions for trading and settlement of derivative contracts. The Rules, Bye-laws & Regulations of the Derivative Segment of the Exchanges and their Clearing Corporation/House have to be framed in line with the suggestive Bye-laws. SEBI has also laid the eligibility conditions for Derivative Exchange/Segment and its Clearing Corporation/House. The eligibility conditions have been framed to ensure that Derivative Exchange/Segment & Clearing Corporation/House provide a transparent trading environment, safety & integrity and provide facilities for redressal of investor grievances. Some of the important eligibility conditions are-

  - Derivative trading to take place through an on-line screen based Trading System.
  - The Derivatives Exchange/Segment shall have on-line surveillance capability to monitor positions, prices, and volumes on a real time basis so as to deter market manipulation.
  - The Derivatives Exchange/ Segment should have arrangements for dissemination of information about trades, quantities and quotes on a real time basis through atleast two information vending networks, which are easily accessible to investors across the country.
  - The Derivatives Exchange/Segment should have arbitration and investor grievances redressal mechanism operative from all the four areas / regions of the country.
  - The Derivatives Exchange/Segment should have satisfactory system of monitoring investor complaints and preventing irregularities in trading.
  - The Derivative Segment of the Exchange would have a separate Investor Protection Fund.
  - The Clearing Corporation/House shall perform full novation, i.e., the Clearing Corporation/House shall interpose itself between both legs of every trade, becoming the legal counterparty to both or alternatively should provide an unconditional guarantee for settlement of all trades.
  - The Clearing Corporation/House shall have the capacity to monitor the overall position of Members across both derivatives market and the underlying securities market for those Members who are participating in both.
  - The level of initial margin on Index Futures Contracts shall be related to the risk of loss on the position. The concept of value-at-risk shall be used in calculating required level of initial margins. The initial margins should be large enough to cover the one-day loss that can be encountered on the position on 99% of the days.
  - The Clearing Corporation/House shall establish facilities for electronic funds transfer (EFT) for swift movement of margin payments.
  - In the event of a Member defaulting in meeting its liabilities, the Clearing Corporation/House shall transfer client positions and assets to another solvent Member or close-out all open positions.
  - The Clearing Corporation/House should have capabilities to segregate initial margins deposited by Clearing Members for trades on their own account and on account of his client. The Clearing Corporation/House shall hold the clients' margin money in trust for the client purposes only and should not allow its diversion for any other purpose.
  - The Clearing Corporation/House shall have a separate Trade Guarantee Fund for the trades executed on Derivative Exchange / Segment.

  Presently, SEBI has permitted Derivative Trading on the Derivative Segment of BSE and the F&O Segment of NSE.

- ***What are the various membership categories in the derivatives market?***

  The various types of membership in the derivatives market are as follows:
  - **Trading Member (TM)** – A TM is a member of the derivatives exchange and can trade on his own behalf and on behalf of his clients.
  - **Clearing Member (CM)** –These members are permitted to settle their own trades as well as the trades of the other non-clearing members known as Trading Members who have agreed to settle the trades through them.
  - **Self-clearing Member (SCM)** – A SCM are those clearing members who can clear and settle their own trades only.

- ***What are the requirements to be a member of the derivatives exchange/ clearing corporation?***

  - **Balance Sheet Networth Requirements:** SEBI has prescribed a networth requirement of Rs. 3 crores for clearing members. The clearing members are required to furnish an auditor's certificate for the networth every 6 months to the exchange. The networth requirement is Rs. 1 crore for a self-clearing member. SEBI has not specified any networth requirement for a trading member.
  - **Liquid Networth Requirements:** Every clearing member (both clearing members and self-clearing members) has to maintain atleast Rs. 50 lakhs as Liquid Networth with the exchange / clearing corporation.
  - **Certification requirements:** The Members are required to pass the certification programme approved by SEBI. Further, every trading member is required to appoint atleast two approved users who have passed the certification programme. Only the approved users are permitted to operate the derivatives trading terminal.

- ***What are requirements for a Member with regard to the conduct of his business?***

  The derivatives member is required to adhere to the code of conduct specified under the SEBI Broker Sub-Broker regulations. The following conditions stipulations have been laid by SEBI on the regulation of sales practices:
  - Sales Personnel: The derivatives exchange recognizes the persons recommended by the Trading Member and only such persons are authorized to act as sales personnel of the TM. These persons who represent the TM are known as Authorised Persons.
  - Know-your-client: The member is required to get the Know-your-client form filled by every one of client.
  - Risk disclosure document: The derivatives member must educate his client on the risks of derivatives by providing a copy of the Risk disclosure document to the client.
  - Member-client agreement: The Member is also required to enter into the Member-client agreement with all his clients.

- ***What derivative contracts are permitted by SEBI?***

  Derivative products have been introduced in a phased manner starting with Index Futures Contracts in June 2000. Index Options and Stock Options were introduced in June 2001 and July 2001 followed by Stock Futures in November 2001. Sectoral indices were permitted for derivatives trading in December 2002. Interest Rate Futures on a notional bond and T-bill priced off ZCYC have been introduced in June 2003 and exchange traded interest rate futures on a notional bond priced off a basket of Government Securities were permitted for trading in January 2004.

- ***What is the eligibility criteria for stocks on which derivatives trading may be permitted?***

  A stock on which stock option and single stock future contracts are proposed to be introduced is required to fulfill the following broad eligibility criteria:-
  - The stock shall be chosen from amongst the top 500 stock in terms of average daily market capitalisation and average daily traded value in the previous six month on a rolling basis.
  - The stock's median quarter-sigma order size over the last six months shall be not less than Rs.1 Lakh. A stock's quarter-sigma order size is the mean order size (in value terms) required to cause a change in the stock price equal to one-quarter of a standard deviation.
  - The market wide position limit in the stock shall not be less than Rs.50 crores.

  A stock can be included for derivatives trading as soon as it becomes eligible. However, if the stock does not fulfill the eligibility criteria for 3 consecutive months after being admitted to derivatives trading, then derivative contracts on such a stock would be discontinued.

- ***What is minimum contract size?***

  The Standing Committee on Finance, a Parliamentary Committee, at the time of recommending amendment to Securities Contract (Regulation) Act, 1956 had recommended that the minimum contract size of derivative contracts traded in the Indian Markets should be pegged not below Rs. 2 Lakhs. Based on this recommendation SEBI has specified that the value of a derivative contract should not be less than Rs. 2 Lakh at the time of introducing the contract in the market. In February 2004, the Exchanges were advised to re-align the contracts sizes of existing derivative contracts to Rs. 2 Lakhs. Subsequently, the Exchanges were authorized to align the contracts sizes as and when required in line with the methodology prescribed by SEBI.

- ***What is the lot size of a contract?***

  Lot size refers to number of underlying securities in one contract. The lot size is determined keeping in mind the minimum contract size requirement at the time of introduction of derivative contracts on a particular underlying. For example, if shares of XYZ Ltd are quoted at Rs.1000 each and the minimum contract size is Rs.2 lacs, then the lot size for that particular scrips stands to be 200000/1000 = 200 shares i.e. one contract in XYZ Ltd. covers 200 shares.
- ***What is the margining system in the derivative markets?***

  Two type of margins have been specified -
  - **Initial Margin** - Based on 99% VaR and worst case loss over a specified horizon, which depends on the time in which Mark to Market margin is collected.
  - **Mark to Market Margin** (MTM) - collected in cash for all Futures contracts and adjusted against the available Liquid Networth for option positions. In the case of Futures Contracts MTM may be considered as Mark to Market Settlement.

Dr. L.C Gupta Committee had recommended that the level of initial margin required on a position should be related to the risk of loss on the position. The concept of value-at-risk should be used in calculating required level of initial margins. The initial margins should be large enough to cover the one day loss that can be encountered on the position on 99% of the days. The recommendations of the Dr. L.C Gupta Committee have been a guiding principle for SEBI in prescribing the margin computation & collection methodology to the Exchanges. With the introduction of various derivative products in the Indian securities Markets, the margin computation methodology, especially for initial margin, has been modified to address the specific risk characteristics of the product. The margining methodology specified is consistent with the margining system used in developed financial & commodity derivative markets worldwide. The exchanges were given the freedom to either develop their own margin computation system or adapt the systems available internationally to the requirements of SEBI.

A portfolio based margining approach which takes an integrated view of the risk involved in the portfolio of each individual client comprising of his positions in all Derivative Contracts i.e. Index Futures, Index Option, Stock Options and Single Stock Futures, has been prescribed. The initial margin requirements are required to be based on the worst case loss of a portfolio of an individual client to cover 99% VaR over a specified time horizon.

The Initial Margin is Higher of

(Worst Scenario Loss +Calendar Spread Charges)

Or

Short Option Minimum Charge

The *worst scenario loss* are required to be computed for a portfolio of a client and is calculated by valuing the portfolio under 16 scenarios of probable changes in the value and the volatility of the Index/ Individual Stocks. The options and futures positions in a client's portfolio are required to be valued by predicting the price and the volatility of the underlying over a specified horizon so that 99% of times the price and volatility so predicted does not exceed the maximum and minimum price or volatility scenario. In this manner initial margin of 99% VaR is achieved. The specified horizon is dependent on the time of collection of mark to market margin by the exchange.

The probable change in the price of the underlying over the specified horizon i.e. 'price scan range', in the case of Index futures and Index option contracts are based on three standard deviation (3σ) where 'σ ' is the volatility estimate of the Index. The volatility estimate 'σ ', is computed as per the Exponentially Weighted Moving Average methodology. This methodology has been prescribed by SEBI. In case of option and futures on individual stocks the price scan range is based on three and a half standard deviation (3.5 σ) where **'σ' is the daily volatility estimate of individual stock**.

If the mean value (taking order book snapshots for past six months) of the impact cost, for an order size of Rs. 0.5 million, exceeds 1%, the price scan range would be scaled up by square root three times to cover the close out risk. This means that stocks with impact cost greater than 1% would now have a price scan range of - Sqrt (3) * 3.5σ or approx. 6.06σ. For stocks with impact cost of 1% or less, the price scan range would remain at 3.5σ.

For Index Futures and Stock futures it is specified that a minimum margin of 5% and 7.5% would be charged. This means if for stock futures the 3.5 σ value falls below 7.5% then a minimum of 7.5% should be charged. This could be achieved by adjusting the price scan range.

The probable change in the volatility of the underlying i.e. 'volatility scan range' is fixed at 4% for Index options and is fixed at 10% for options on Individual stocks. The volatility scan range is applicable only for option products.

Calendar spreads are offsetting positions in two contracts in the same underlying across different expiry. In a portfolio based margining approach all calendar-spread positions automatically get a margin offset. However, risk arising due to difference in cost of carry or the 'basis risk' needs to be addressed. It is therefore specified that a calendar spread charge would be added to the worst scenario loss for arriving at the initial margin. For computing calendar spread charge, the system first identifies spread positions and then the spread charge which is 0.5% per month on the far leg of the spread with a minimum of 1% and maximum of 3%. Further, in the last three days of the expiry of the near leg of spread, both the legs of the calendar spread would be treated as separate individual positions.

In a portfolio of futures and options, the non-linear nature of options make short option positions most risky. Especially, short deep out of the money options, which are highly susceptible to, changes in prices of the underlying. Therefore a short option minimum charge has been specified. The short option minimum charge is 3% and 7.5 % of the notional value of all short Index option and stock option contracts respectively. The short option minimum charge is the initial margin if the sum of the worst –scenario loss and calendar spread charge is lower than the short option minimum charge.

To calculate volatility estimates the exchange are required to uses the methodology specified in the Prof J.R Varma Committee Report on Risk Containment Measures for Index Futures. Further, to calculate the option value the exchanges can use standard option pricing models - Black-Scholes, Binomial, Merton, Adesi-Whaley.

The initial margin is required to be computed on a real time basis and has two components:-

- The first is creation of risk arrays taking prices at discreet times taking latest prices and volatility estimates at the discreet times, which have been specified.
- The second is the application of the risk arrays on the actual portfolio positions to compute the portfolio values and the initial margin on a real time basis.

The initial margin so computed is deducted from the available Liquid Networth on a real time basis.

CONDITIONS FOR LIQUID NETWORTH

Liquid net worth means the total liquid assets deposited with the clearing house towards initial margin and capital adequacy; LESS initial margin applicable to the total gross open position at any given point of time of all trades cleared through the clearing member.

The following conditions are specified for liquid net worth:

- Liquid net worth of the clearing member should not be less than Rs 50 lacs at any point of time.
- Mark to market value of gross open positions at any point of time of all trades cleared through the clearing member should not exceed the specified exposure limit for each product.

Liquid Assets

At least 50% of the liquid assets should be in the form of cash equivalents viz. cash, fixed deposits, bank guarantees, T bills, units of money market mutual funds, units of gilt funds and dated government securities. Liquid assets will include cash, fixed deposits, bank guarantees, T bills, units of mutual funds, dated government securities or Group I equity securities which are to be pledged in favor of the exchange.

Collateral Management

Collateral Management consists of managing, maintaining and valuing the collateral in the form of cash, cash equivalents and securities deposited with the exchange. The following stipulations have been laid down to the clearing corporation on the valuation and management of collateral:

- At least weekly marking to market is required to be carried out on all securities.
- Debt securities of only investment grade can be accepted.10% haircut with weekly mark to market will be applied on debt securities.
- Total exposure of clearing corporation to the debt or equity of any company not to exceed 75% of the Trade Guarantee Fund or 15% of its total liquid assets whichever is lower.
- Units of money market mutual funds and gilt funds shall be valued on the basis of its Net Asset Value after applying a hair cut of 10% on the NAV and any exit load charged by the mutual fund.
- Units of all other mutual funds shall be valued on the basis of its NAV after applying a hair cut equivalent to the VAR of the units NAV and any exit load charged by the mutual fund.
- Equity securities to be in demat form. Only Group I securities would be accepted. The securities are required to be valued / marked to market on a daily basis after applying a haircut equivalent to the respective VAR of the equity security.

Mark to Market Margin

Options – The value of the option are calculated as the theoretical value of the option times the number of option contracts (positive for long options and negative for short options). This Net Option Value is added to the Liquid Networth of the Clearing member. Thus MTM gains and losses on options are adjusted against the available liquid networth. The net option value is computed using the closing price of the option and are applied the next day.

Futures – The system computes the closing price of each series, which is used for computing mark to market settlement for cumulative net position. If this margin is collected on T+1 in cash, then the exchange charges a higher initial margin by multiplying the price scan range of 3 σ & 3.5 σ with square root of 2, so that the initial margin is adequate to cover 99% VaR over a two days horizon. Otherwise if the Member arranges to pay the Mark to Market margins by the end of T day itself, then the initial margins would not be scaled up. Therefore, the Member has the option to pay the MTM margins either at the end of T day or on T+1 day.

MARGIN COLLECTION

Initial Margin - is adjusted from the available Liquid Networth of the Clearing Member on an online real time basis.

Marked to Market Margins-

Futures contracts: The open positions (gross against clients and net of proprietary / self trading) in the futures contracts for each member are marked to market to the daily settlement price of the Futures contracts at the end of each trading day. The daily settlement price at the end of each day is the weighted average price of the last half an hour of the futures contract. The profits / losses arising from the difference between the trading price and the settlement price are collected / given to all the clearing members.

Option Contracts: The marked to market for Option contracts is computed and collected as part of the SPAN Margin in the form of Net Option Value. The SPAN Margin is collected on an online real time basis based on the data feeds given to the system at discrete time intervals.

Client Margins

Clearing Members and Trading Members are required to collect initial margins from all their clients. The collection of margins at client level in the derivative markets is essential as derivatives are leveraged products and non-collection of margins at the client level would provide zero cost leverage. In the derivative markets all money paid by the client towards margins is kept in trust with the Clearing House / Clearing Corporation and in the event of default of the Trading or Clearing Member the amounts paid by the client towards margins are segregated and not utilised towards the dues of the defaulting member. Therefore, Clearing members are required to report on a daily basis details in respect of such margin amounts due and collected from their Trading members / clients clearing and settling through them. Trading members are also required to report on a daily basis details of the amount due and collected from their clients. The reporting of the collection of the margins by the clients is done electronically through the system at the end of each trading day. The reporting of collection of client level margins plays a crucial role not only in ensuring that members collect margin from clients but it also provides the clearing corporation with a record of the quantum of funds it has to keep in trust for the clients.

- ***What measures have been specified by SEBI to protect the rights of investor in Derivatives Market?***

  The measures specified by SEBI include:

  - Investor's money has to be kept separate at all levels and is permitted to be used only against the liability of the Investor and is not available to the trading member or clearing member or even any other investor.
  - The Trading Member is required to provide every investor with a risk disclosure document which will disclose the risks associated with the derivatives trading so that investors can take a conscious decision to trade in derivatives.
  - Investor would get the contract note duly time stamped for receipt of the order and execution of the order. The order will be executed with the identity of the client and without client ID order will not be accepted by the system. The investor could also demand the trade confirmation slip with his ID in support of the contract note. This will protect him from the risk of price favour, if any, extended by the Member.
  - In the derivative markets all money paid by the Investor towards margins on all open positions is kept in trust with the Clearing House/Clearing corporation and in the event of default of the Trading or Clearing Member the amounts paid by the client towards margins are segregated and not utilised towards the default of the member. However, in the event of a default of a member, losses suffered by the Investor, if any, on settled / closed out position are compensated from the Investor Protection Fund, as per the rules, bye-laws and regulations of the derivative segment of the exchanges.

    The Exchanges are required to set up arbitration and investor grievances redressal mechanism operative from all the four areas / regions of the country.

Financial Services

MERCHANT BANKING:

The merchant bankers undertake the following activities:

- Managing of public issue of securities
- Underwriting connected with the aforesaid public issue management business
- Managing/advising on international offerings of debt/equity i.e., GDR, ADR, BONDS and other instruments
- Private placement of securities
- Primary or satellite dealership of government securities
- Corporate advisory services related securities market including takeovers, acquisition and disinvestment
- Stock broking
- Advisory services for projects
- Syndication of rupee term loans
- International financial advisory services

MUTUAL FUNDS:

- These funds are the institutions, which provide small investors with avenues of investment in the capital market.

Advantages:

- Professional management
- Diversification
- Convenient administration
- Return potential
- Low costs
- Liquidity
- Transparency

Types:

Open ended mutual funds:

- Is a fund with a non-fixed number of out standing shares, that stands ready at any time to redeem shares on demand
- The fund itself buys back the shares surrendered and is ready to sell new shares.
- Generally the transaction takes place at the net asset value which is calculated on a periodical basis

Close-ended funds:

- It is the fund where mutual fund management sells a limited number of shares and does not stand ready to redeem them.
- The shares of such funds are traded in the secondary markets.
- The requirement for listing is laid down to grant liquidity to the investors who have invested with the mutual fund.
- These funds more like equity shares.

VENTURE CAPITAL:

- Is a form of equity financing, which is specially designed for funding high risk and high reward projects
- It is direct investment in securities of new and unseasoned enterprises by way of private placement.
- Is the capital that is invested in equity or debt securities (with equity conversion terms) of young unseasoned companies promoted by technocrats who attempts to break new path.
- It is a source of finance for new or relatively new, high risk, high profit potential products as the projects belong to untried segments or technologies.

Venture capital generally provides following services:

- Finance new and rapidly growing companies
- Typically knowledge-based, sustainable, up scalable companies
- Purchase equity/ quasi-equity securities
- Assist in the development of new products or services
- Add value to the company through active participation
- Take higher risks with the expectation of higher rewards
- Have a long term orientation

Problem areas facing the industry are:

- There is insufficient understanding of venture capital as a commercial activity
- The support to the venture capital industry, by the government is in inadequate
- The exit options available to the venture capitalist are limited
- Market limitations hinder the growth of venture capital; and
- The inadequacy of the legal framework for venture capital industry.

LOAN SYNDICATION:

- Arrange/ procure finance on request for the projects that come up for counseling.
- A pre-requisite would require arrangement of funds that would involve,
    - Assessing the quantum and nature of funds required
    - Locating the various sources of finance

- Approaching these sources with loan application forms and complying with other formalities etc.

- Estimating capital requirements:
  - Preliminary expenses
  - Cost of fixed assets
  - Cost of current assets
  - Cost of acquiring know how
  - Provisions for contingencies
  - Cost of financing, brokerage, underwriting etc.
  - Any other element of cost likely to be incurred.
- An important aspect of loan syndication, which would include preparation of loan application, filing and following up the loan application with the financial institution and arranging the disbursal of the same.

CREDIT RATING:

- Refers to the rating (or assessment and gradation) of creditor-ship securities or debt-instruments, particularly with regard to the probability of timely discharge of payment of interest and repayment of principal obligations.

The objectives:

- To provide superior information to the investors at allow cost
- To provide a sound basis for proper risk-return structure
- To subject borrowers to a healthy discipline and
- To assist in the framing of public policy guidelines on institutional investment

The approaches:

- **Implicit judgmental approach-** wherein broad range of factors concerning promoter, project, environment and instrument characteristics are considered generally.
- **Explicit judgmental approach-** involves identification and measurement of the factors critical to an objective assessment of credit score or index.
- **Statistical approach-** assignment of weights to each of the factors and obtaining the overall credit rating score with a view to doing away with personal bias inherent in both explicit and implicit judgement.

FACTORING:

- Is a type of financial service which involves an outright sale of the receivables of a firm to a financial institution called the factor which specialises in the management of trade credit.
- A factor collects the accounts on the due dates, effects payments to the firm on these dates (irrespective of whether the customers have paid or not) and also assumes the credit risks associated with the collection of the accounts.
- Fundamental to the functioning of factoring:
  - Assumption of credit and collection function
  - Credit protection
  - Encashing of receivables
  - Collateral functions
- Factoring v/s Accounts Receivables Loans:
  - AR is simply a loan secured by a firm's accounts receivable by way of hypothecation or assignment of such receivables with the power to collect the debts under a power of attorney.
- Factoring v/s Bill Discounting:
  - The drawer undertakes the responsibility of collecting the bills and remitting the proceeds to the financing agency.
  - It is always with recourse whereas factoring can be either with recourse or without recourse.

<u>Mechanics of Factoring:</u>

- seller (client)negotiates with the factor for establishing factoring relationship
- seller requests credit check on buyer(client)
- factor checks credit credentials and approves buyer. For each approved buyer a credit limit and period of credit are fixed.
- Seller sells goods to buyer
- Seller sends invoice to factor. The invoice is accounted in the buyers account in the factor's sales ledger.
- Factor sends copy of the invoice to buyer
- Factor advices the amount to which seller is entitled after retaining a margin. Say 20%, the residual amount paid later.
- On expiry of the agreed credit period, buyer makes payment of invoice to the factor
- Factor pays the residual amount to seller.

LEASES:

- Is a special type of transaction-contractual arrangement under which the owner of the asset (movable or immovable) allows its exclusive use by another party (lessee) over a certain period of time for some consideration (rentals)

OPERATING LEASE:

- Is a rental agreement where the lessee is committed to pay more than the original cost of equipment during contractual period.
- It provides for maintenances expenses and taxes by lessor.
- Leasing company assumes risk of obsolescence

- Contract period ranges from intermediate to short-run
- Contract under this category are usually cancelable from either party is lessor or the lessee
- The financial commitment is restricted to regular rental payment

FINANCING LEASE:

- Is like an instalment loan.
- It is a legal commitment to pay for the entire cost of equipment plus interest over a specified period of time.
- The lessee commits to a series of payments which in total exceeds the original cost of the equipment.
- It excludes the provisions for maintenance or taxes which are paid separately by the lessee.
- Lessee assumes the risk of obsolescence
- Contract period ranges from medium to long run
- Contract under this category are cancelable.
- The lease involves a financial commitment similar to loan by a leasing company. It places the lessee in a position of borrower.
- The lessor financial function

REAL ESTATE MORTGAGES:

- Mortgages are adapted to different types of real estate and vary according to the repayment plan and the purpose of the mortgage.
- Term mortgage provides for periodic interest payments and the principal is repaid at the end of the term.
- If the principal is not repaid, at the end of the term, the lender might elect to grant another mortgages provide for the repayment of the principal over the term of the mortgage. Here the interest is paid on the reducing balances of the principal.
- Partially amortized mortgages also termed as 'baloon mortgage' provide for principal repayment down to a given amount and then required a lump sum payment for the balance of the principal.

SECURITISATION OF MORTGAGE:

- In a mortgage transaction a lender makes a loan to the borrower against the transfer of an interest in an immovable property, collects re-payment of interest and principal.
- In this event of default the lender seeks to take possession of the property.
- Thus, lender's interest in the mortgage generally is confined to the collection of interest and eventual collection of the principal amount lent and as such mortgage is an asset which he has to hold for, generally, a long period of time against which no 'liquidity' is available.
- In securitization the loan itself is not another lender but rather a security instrument is created backed by the principal and interest payments on the loan.

DEPOSITORY:

- In the depository system, share certificates belonging to the investors are to be dematerialised and their names are required to be entered in the records of depository as beneficial owners.
- Consequent to these changes, the investors' names in the companies register are replaced by the name of depository as the registered owner of the securities.
- The depository however does not have any voting rights or other economic rights in respect of the securities held by a depository.

MODELS OF DEPOSITORY:

- **Immobilization:** where physical share certificates are kept in vaults with the depository for safe custody.
- **Dematerialisation:** is a process by which the physical certificates of an investor are taken back by the company and an equivalent number of securities are credited his account in electronic form at the request of the investor.

DEPOSITORY FUNCTIONS:

- Account opening
- Dematerialisation
- Rematerialisation
- Settlement
- Initial public offers
- Pledging

DEPOSITORY PARTICIPANTS:

- Is the representative (agent) of the investor in the depository system providing the link between the company and investor through the depository.
- The depository participant maintains securities account balances and intimate the status of holding to the account holder from time to time.
- Dematerialisation of shares is optional and an investor can still hold shares in physical form.

Characteristics:

- Acts as an agent of depository
- Customer interface of depository
- Functions like securities bank
- Account opening
- Facilities of Dematerialisation.

DEMATERIALISATION PROCESS:

- Investor opens account with DP
- Fills Dematerialisation request form (DRF) for registered shares
- Investor lodges DRF and certificates with DP
- DP intimates the depository
- Depository intimates register/issuer
- DP sends certificates and DRF/issuer
- Registrar/issuer confirms demat to depository
- Depository credits investor a/c

REMATERIALISATION PROCESS:

- Client submits RRF to DP
- DP intimates depository
- Depository intimates the registrar/issuer
- DP sends RRF to the registrar/issuer
- Registrar/issuer prints certificates and sends to investor
- Look-in should be retained
- Registrar/ issuer confirms remat to depository
- Investor's account with DP debited.

BENEFITS OF DEPOSITORY SYSTEM:

- Elimination of bad deliveries
- Elimination of all risks associated with physical certificates
- Immediate transfer and registration of securities
- Faster disbursement of non-cash corporate benefits like rights, bonus, etc.
- Reduction in brokerage by many brokers for trading in dematerialised securities
- Reduction in handling of huge volumes of paper and periodic status reports to investors on their holdings and transactions, leading to better controls
- Elimination of problems related to change of address of investor, transmission, etc.
- Elimination of problems related to selling securities on behalf of a minor.

"My mother drew a distinction between achievement and success. She said that achievement is the knowledge that you have studied and worked hard and done the best that is in you. Success is being praised by others. That is nice but not as important or satisfying. Always aim for achievement and forget about success."

Treasury Management. (TM)

OBJECTIVES:

- Management of funds
- Availability of the funds in right quantity
- Availability in right time
- Deployment in right quantity
- Deployment in right time
- Profiting from availability and deployment

FUNCTIONS:

- The function of treasury mgt. Is concerned with both macro and micro facets of the economy
- At the macro level, the pumping in and out of cash, credit and other financial instruments are the functions of the government and business sectors, which borrow from the public
- These two sectors spend more than their means and have to borrow in finance their ever-growing operations. They accordingly issue securities in the form of equity or debt instruments.
- The latter are securities including promissory notes and treasury bills which are redeemable after a stipulated time period.
- Such borrowings for financing the needs of the government and the business sector are met by surplus funds and savings of the household sector and the external sector. these two sectors have a surplus of incomes over expenditure.
- The micro units urtilise these surpluses and build up their capacities for production of output and this leads to the productive system and distribution and consumption systems.

SCOPE:

- **Unit level**: the performance of production, marketing and HRD functions is dependent upon the performance of the treasury department. the lubricant for day-to-day functioning of a unit is money or funds and these funds are arranged by the treasury manager.
- **Domestic level**: the scope is to channelise the savings of the community into profitable investment avenues. This job is performed by the commercial banks. TM is a crucial activity in banks and financial institutions as they deal with the funds, borrowings and lending and investments.
- **International level**: is concerned with management of funds in the foreign currencies.

RELATIONSHIP BETWEEN TREASURY MGT. AND FINANCIAL MGT.:

1. **Control Aspects:**
   - Financial mgt. Is to establish, coordinate and administer, an adequate plan for control of operations.
   - Treasury mgt. Is to execute the plan of finance function
   - The finance function of a firm would fix the limit for investment in short term instruments for a firm
   - It is the treasury function that would decide which particular instruments are to be invested in within the overall limit having regard to safety, liquidity and profitability.

2. **Reporting Aspects:**
   - FM is concerned with the preparation of profit and loss account and the balance sheet. Taxation aspects and external audit. And reports are submitted to the top mgt. Of the firm.
   - TM is concerned with monitoring the income and expenditure budgets on a periodic basis vis-à-vis the budgets. it is also involved in the internal audit of the firm.

3. **Strategic Aspects:**
   - For FM are the investment and financing. While making these choices, the finance manager is taking a long term view of the state of affairs
   - For TM is more short term in nature. The treasury manager has to decide about the tools of accounting and development of systems for generation of controlling reports.

4. **Nature of Assets:**
   - The finance manager is concerned with creation of fixed assets for the firm. Fixed assets are those assets which yield benefit to the firm over a longer period of time.
   - The treasury manager is concerned with the net current assets of the firm. Net current assets are the difference between the current assets and current liabilities of the firm.

ROLES OF THE TREASURY MANAGER:

- Originating roles
- Supportive roles
- Leadership roles
- Watchdog roles
- Learning roles
- Informative roles

RESPONSIBILITES OF THE TREASURY MANAGER:

- Compliance with statutory guidelines
- Equal treatment to all departments
- Ability to network
- Integrity and impartial dealings
- Willingness to learn and to teach.

TOOLS OF TM:

- Analytic and planning tools
- Zero based budgeting
- Financial statement analysis

INTERNAL TREASURY CONTROL:

- Is a process of self-improvement. It is concerned with all flows of funds, cash and credit and all financial aspects of operations.
- The financial aspects of operations include procuring of inputs, paying creditors, making arrangement for finance against inventory and receivables.
- **Principles:**
  - Control should be at all levels of management and participation should be from all cadres of personnel.
  - There has to be a system of building up of effective communication from top to bottom and bottom to the top.
  - The control should be built upon the management information system.

ENVIRONMENT FOR TREASURY MANAGEMENT:

- **Legal environment:** refers to the legislations, which govern corporate functioning.
- **Regulatory environment:** regarding employment, wages, land laws, promotion of units and closure of units etc.
- **Financial environment:** pertains to policies regarding monetory and fiscal control, financial supervision, exchange control etc.

"The great successful men of the world have used their imagination? they think ahead and create their mental picture in all its details, filling in here, adding a little there, altering this a bit and that a bit, but steadily building - steadily building."