Financial Management:-

Financial Management means planning, organizing, directing and controlling the financial activities such as procurement and utilization of funds of the enterprise.

-> It means applying general management principles to financial resources of the enterprise.

Functions of financial Management

1. Estimation of capital requirements:- A finance manager has to make estimation with regards to capital requirement of the company. This will depend upon expected costs and profits and future programs and policies of a concern.

2. Determination of capital composition:- once the estimation has been made, the capital structure has to be decided. This involves short-term and long-term debt equity analysis.

3. Choice of sources of funds:- For additional funds to be procured, a company has many choices like-
   a. Issue of shares and debentures
   b. Loans to be taken from banks and financial institutions
   c. Public deposits to be drawn like in form of bonds,

4. Investment of funds:- The finance manager has to decide to allocate funds into profitable ventures so that there is safety on investment and regular returns is possible.

5. Disposal of surplus:- The net profit decision has to be made by the finance manager. This can be done in 2 ways.
   a. Dividend declaration - It includes identifying the rate of dividends and other benefits like bonus.

b. Retained Profits – The volume has to decided which will depend upon expansion, innovation, diversifica plans of the company.

6. Management of cash: Finance manager has to make decisions with regards to cash management. Cash is required for like payment of wages, salaries, waterbill purchase of raw materials etc.

Scope of Financial Management

1. Investment decision: Financial management is involved in managing all investment decision of an organizatio Managers are responsible for deciding how available funds should be invested in fixed or current assets to earn optimum returns.

2. Working capital decision: Taking working capital decisions properly is another important scope of financial management. These decisions are concerned with investment in current asset or current liabilities. Working capital decision revolve around working capital and short-term financing.

3. Financing decision: Financing decisions involves decid how the required funds should be raised from available long term or short-term sources. A financial manager is required to form a proper finance mix or optimum capital structure of the company to raise its value.

4. Dividend decision: Financial management involves taki all dividend decision of the company. These decision involve developing a proper dividend policy regarding the distribution or retaining of company profits. Finan manager should decide an optimum dividend payout ratio out of available profit.

5. Ensures liquidity: Maintaining proper liquidity in an organization is another important role played by financial management. The finance manager ensures that there is a regular supply of funds in an organization. Ensuring the optimum level of liquidity in an organization is one of the important scopes of financial management.

Objectives of financial Management:

1. Profit Maximization: It is the capability of the firm in producing maximum output with the limited input or it uses minimum input or producing stated output. It is termed as the foremost objective of the company. Profit maximization is a traditionally approach. profit is a long term objective, but it has a short term perspective i.e, one financial year.

2. Wealth Maximization: One of the main objectives of financial management is to maximize shareholder's wealth which is achievement of capital structure & proper utilization of funds. It is different than profit maximization. Wealth maximization is a more holistic approach or modern approach for growth of organization.

3. To Ensure Availability: The sound financial Condition of business is a must for any business to survive. The availability of funds at the proper time of need is an important objective of business. The organization will not be able to function without funds, and activities will come to a halt.

4. Attain optimum capital structure: To maintain the optimum capital structure, a perfect combination of debentures and shares is a requirement. The organization will not want to give away too much equity and also control the cost of capital. It is a delicate balance.

5. Effective utilization of funds:
Business is not only needs a large number of funds but also skills to handle such large amounts. To cut down unnecessary costs and save funds from wasting in useless assets is crucial for business. An example of such misuse of funds would be investing

for extra raw material, for guarantees not required.

6. Ensuring the safety of funds

The vital objective of financial management is to ensure the security of the funds through the creation of reserves. The chances of risk in investment should be minimum possible.

Difference between Profit Maximization and wealth maximization

Profit	Wealth
→ It doesn't take into account time value of money.	→ It takes into account time value of money.
→ It doesn't take into consideration the uncertainty of future earnings.	→ It takes into account the risk factor.
→ It doesn't consider the effect of dividend policy on market price of shares.	→ It takes into account the effect of dividend policy on Market price of shares.
→ It doesn't differentiate between the short term and long term profits.	→ It considers the different strategies for long term and short term profits.

Functions of a finance manager in changing environment

The changed business environment in the recent past has widened the role of a financial manager. The size and content of business activities are dependent upon the availability of finances.

Function:

1. Financial forecasting & Planning:- A financial manager has to estimate the financial needs of a business. He has to plan the funds needed in the future. How these funds will be acquired and applied is an important function of a finance manager.

2. Acquisition of funds:- After making financial Planning, the next step will be to acquire funds. There are a number of sources available for supplying funds. These sources are shares, debentures, commercial bank etc. The choice of a wrong source for funds may

create difficulties at a later stage.

3. Investment of funds:- The funds should be used for the best possible way. The cost of acquiring them and the returns should be compared. A financial manager has to keep in mind the principles of safety, liquidity and soundness while investing funds.

4. Helping in Valuation Decision:- A number of mergers and consolidation take place in the present competitive industrial world. A finance manager is supposed to assist management in making valuation. For this purpose, he should understand various methods of valuing shares and other assets so that correct values are arrived at.

5. Maintain Proper Liquidity:- Every concern is required to maintain some liquidity for meeting day-to-day needs. Cash is the best source for maintaining liquidity. A finance manager is required to determine the need for liquid assets and then arrange liquid assets in such a way that there is no scarcity of funds.

Favourable arguments for wealth maximization:-

→ It is superior to the profit maximization because the main aim is to improve the value or wealth of the shareholder.
→ It considers both time & the risk of the business concern.
→ It provides efficient allocation of resources.
→ It ensures the economic interest of the society.
→ The concept of wealth maximization is universally accepted.
→ It is guide the mgt. in framing consistent strong dividend policy to reach maximum returns to the equity holders.

Unfavourable argument for wealth maximization

→ Wealth maximization is nothing but profit maximization, it is indirect name of profit maximization.
→ It creates ownership-management controversy.
→ Management alone enjoys such benefits.

28/04/2023 23:

→ It can be activated only with the help of profitable position of the business.

→ There is some controversy as to whether the objective is to maximize the stockholders wealth or wealth of the firm.

Q) What is time value of money? Explain the concept of time value of money.

Ans) The interest which may be earned on the money held at present underlies the concept of time value of money. The money which is receivable at present has more value than money receivable in the future. Hence the relation that exits between the value of money receivable at present & the value of money receivable at future is known as time value of money.

Formula:—

Value of money receivable at present = Value of money receivable at future + Time value of money

Future value of money = Value of money at present + Interest

Concept:

There are two techniques for adjusting the time value of money:—

1. Compounding technique
2. discounting or present value technique.

Compounding techniques:— compound value concept is use to find out the future value of the present money. It is the same as the compound interest, where in the interest earn in preceding years is invested at the prevailing rate of interest for the remaining period.

Future value:— It refers the value of asset or cash at a particular date in the future which is equivalent to the value of a specified sum at present.

Formula: Future value = $PV(1+i)^n$

where, PV = Present value

$i = \frac{r}{100}$, r = rate of interest

n = Number of instalments

Present Value: — Present value of the money is today's value of tomorrow's money. In other words it is the difference between future value & interest for the period between present & future. It is future value of money discounted at a given rate of interest.

Formula: Present value: $PV = \frac{FV}{(1+i)^n}$

where, PV = Present Value

FV = Future Value

$i = \frac{r}{100}$, r = rate of interest

N = number of instalment

Discounting or present value technique: — present value is the exact opposite of compound or future value. While future value shows how much a sum of money becomes at some future period, Present value shows what the value is today some future sum of money. The Present value of the money to be received on future date will be less because we have lost the opportunity of investing it at some interest. It is for this reason that the Present value technique is called discounting.

Formula: Present value = future value $(1+i)$

Problem

Calculate the future value of ₹ 20,000 invested now for a period of 5 years at a time preference rate of 8%.

Ans- $FV = PV(1+i)^n$

$= 20,000\left(1+\frac{8}{100}\right)^5$

$= 20,000\,(1+0.08)^5$

$= 20,000\,(1.08)^5$

$= 29,400$

Q) What is annuity? Discuss different types of annuity?

(Ans) An annuity is a series of equal amount of payments given for a certain years is called an annuity. Calculating the future value of an annuity assists you in knowing about how much profit would be generated by an investment over a certain time period.

Types:-

Ordinary Annuity:- An ordinary annuity involves payment being made at the end of each period. for ex: Recurring deposit in post office & bank usually being made at the end of every month & year to the maturity date.

Annuity due:- Under this categories of annuities the payments are recieved to be made at the begining of each period. ex: Rent. It is paid the first day of every month.

Fixed Annuity:- A fixed annuity involves making fixed payments. These annuities are generally used for low risky investment like corporate bonds or govt. securities. Fixed rate of dividend is received at the end of a fixed period.

Variable annuity:- The variable annuities are regulated & controlled by the security exchange board of India. These annuities also allow you to invest in parts of money market

Risk:- In finance, risk is the probability that actual results will differ from expected results. In the capital asset pricing model (CAPM), risk is defined volatility of returns.

) The concept of "risk and return" is that riskier asset should have higher expected returns to compensate investors for the higher volatility and increased risk.

Types of risk

Systematic Risk - The overall impact of the market

Unsystematic Risk - Asset specific or company specific uncertainty.

Political/Regulatory Risk — The impact of political decision and changes in regulation.

Financial Risk — The capital structure of a company (degree of financial leverage or debt burden)

Interest Rate Risk — The impact of changing interest rates.

Country Risk — Uncertainties that are specific to a country.

Social Risk — The impact of changes in social norms, movements and unrest.

Environmental Risk — Uncertainty about environmental liabilities or the impact of changes in the environment.

Operational Risk — Uncertainty about a company's operations, including its supply chain and the delivery of its product or services.

Management Risk — The impact that the decisions of a management team have on a company.

Legal Risk — Uncertainty related to lawsuits or the freedom to operate.

Competition — The degree of competition in an industry and the impact choices of competitors will have on a company.

Risk Management strategies :-

#1 Diversification :- It's a method of reducing unsystematic risk by investing in a number of different assets. The concept is that if one investment goes through a specific incident that causes it to underperform, the other investments will balance it out.

#2 Hedging :- Hedging is the process of eliminating uncertainty by entering into an agreement with a counterparty. Examples include forwards, options, future, swaps, and other derivatives that provide a degree of certainty about what an investment can be bought or sold for in

the future. Hedging is commonly used by investors to reduce market risk, and by business managers to manage costs or lock in revenues.

#3 Insurance:- There is a wide range of insurance products that can be used to protect investors and operators from catastrophic events. Example include key Person Insurance, general liability insurance, property insurance, etc. While there is an ongoing cost to maintaining insurance, it pays off by providing certainty against certain negative outcomes.

#4 Operating Practices:- There are countless operating practices that manager can use to reduce the riskiness of their business. Examples include reviewing, analyzing and improving their safety practices; using outside consultants to audit operational efficiencies; using robust financial planning methods; and diversifying the operations of the business.

#5 Deleveraging:- Companies can lower the uncertainty of expected future financial performance by reducing the amount of debt they have. Companies with lower leverage have more flexibility and lower risk of bankruptcy after ceasing to operate.

→ It is important to point out that since risk is two sided the above strategies may result in lower expected returns.

Spreads and Risk Free investments

The concept of uncertainty in financial investments is based on the relative risk of an investment compared to a risk-free rate, which is a government-issued bond. Below is an example of how the additional uncertainty or repayment translates into more expenses invested.

Return:

The term return refers to income from a security after a defined period of that for the form of interest, dividend, or market appreciation for security value.

→ Return can be defined as the actual income from a project as well as appreciation to the value of capital.

Types of Return

Historical return:- Historical return is the rate of return on an asset like a stock, bond (treasury), fund over a period of time that occur in the past.

→ There are several ways to calculate return, the non-compounding version is called arithmatic & the compounding version is called geometric.

Expected return:- Expected return is the anticipated profit or loss an investor can predict for a specific investment based on historical rate of return.

→ Expected return = (return A X Probability A) + (return B X Probability B)

Absolute return:- It is a return that an asset gains over a certain period of time.

→ Absolute return measures the gain or loss that an asset achive over a given period of time.

→ The assets could be mutual funds, stock etc.

→ Absolute return is express in percentage (%).

$$\text{Absolute return} = \frac{100 \times (\text{Selling Price} - \text{Cost Price})}{\text{Cost Price}}$$

Holding Period return :- The holding period return is the total return an asset or investment portfolio over a period for which the asset & portfolio has been held.

→ Holding Period = Investment appreciation + Investment income

Annual rate of return :- The annual rate of return is a method that enables calculating the returns of a given investment on an annual basis.

→ It expressed in percentage.

→ This rate of return indicates the equivalent annual return an investor on an investment that has been held for more than one year.

Unit-02

* What is capital budgeting? Discuss capital budgeting process.

Ans) Capital budgeting is a process of making decision regarding capital investment in fixed asset such as machinery, land, buildings, furniture etc. It is a long term plan to make & finance proposed capital outlay.

Process

Step 1:- Identification of various investment proposal:-
The capital budgeting may have various investment proposals. The heads of various department analyse the various investment decisions & will select proposals submitted to the planning committee.

Step 2:- Screening or matching for the proposals:-
The planning committee will analyse the various proposals and screening. The selected proposals are considered with the available resources of the concern. Here resources referred as the financial part of the proposal.

Step 3:- evaluation:-
After screening the proposals are evaluated with the help of various methods and techniques such as pay back period proposal, cash inflow & outflow, accounting rate of return (ARR) & risk analysis.

Step 4:- Fixing property:-
After the evaluation the planning committee will predict with proposals which will give more profit or economic consideration. If the project or proposals are not suitable to the concerns financial condition the project are rejected.

Step 5:- Final approved:-
After the review of the project has been completed a detail programme of action will be initiated is directed towards the capital expenses & the cost of planning the capital.

28/04/2023 23:34

Step 6 Implementation :-
The concerned authority spends the money & implements the proposals. While implementing the proposals assigns responsibilities to the people for completing it within the time alloted & reduce the cost for the purpose.

Step 7 performance review & feedback :-
The final stage of capital budgeting is actual results, compare with the standard results. The deviations are identified & thereby rectified for future proposals.

6) Short note on cash flow estimation :-
(Mar) cash budgeting depends upon the cash flow for the project. There is need for estimation the cash flow of the project. The cash flow project appraisal involve following types of cash flows.

(i) Initial invest or cash outlay :-
Initial investment is an outlay of cash that take place in the initial period. It comprises cost of new asset to purchase like plant, land etc. The initial investment also includes expenses on insurance freight loading & unloading installation cost etc. On this net working capital increases are also added to cost of the asset.

(ii) Operating cash flow :-
The investment in capital asset is expected to generate future benefit in the form of net annual cash flow from the operation. These annual cash flow should be estimated on after tax. Depreciation has to be added back to the earning before tax, but tax being a cash expenses has to be deducted to determine net annual cash flow.

(iii) Terminal cash flow :-
At the end of life of capital asset or when the asset is terminated some value of asset is left. The asset may be sold as a scrap is may fetch some salvage. This inflows of cash in the last year is called terminal cash flows.

Q) Discuss the different technique of capital budget?

(Ans) There are no. of technique for evaluating the capital budgeting of the project. There are classified budgeting as a) traditional & non-traditional technique & b) discounted cash flow & time adjusted tech.

1) Tradition technique
   (i) Accounting rate of return
   (ii) Pay back period
2) Discounted cash-flow technique
   (i) Discounted payback period
   (ii) Net present value method
   (iii) Internal rate of return method
   (iv) Modified internal rate of return
   (v) Profitability index
   (vi) Net present value index
   (vii) Net terminal value

1) (i) Accounting rate of return:-
It means the average annual yield of the project. It is found out by dividing the annual average profit after tax by the average investment.

Annual average earning after tax = Total earning after dep. & tax / Total period of the project

(ii) Pay back period:-
It is the length of initial cash outlay on the project. According to the payback criteria to shorter the payback period more desirable the period flows using the payback criteria generally specify the maximum acceptable payback period.

Limitations:-
-) It fails the consideration the time value of money.
-) It ignores cash flows beyond payback period.
-> It is a measure of projects capital recovery.

2) d) Discounted Payback Period :-

Discounted payback period refers to the period within which entire cost of the project is expected to be completed to recovered by the way of discounted cash inflows.

Computation of discounted payback period :-

The discounted payback period is calculated by computing commulative discounted cash inflows become equal to the present value of cash out flows. The steps are calculated as :-

→ Calculate cash inflow after tax
→ Calculate cash out flows
→ Calculate present value of cash inflow
→ Calculate present value of cash out flow

$$\text{Discounted Payback Period} = \text{Commulative present value of cash inflow} - \text{Present value of cash outflow} + \frac{\text{Present value of total cash out flow} - \text{Commulative present value of all cash inflow}}{\text{Present value of commulative cash inflows in following year}}$$

ii) Net Present value Method (NPV) :-

NPV is the difference between present value of all cash inflows & the present value of all cash out flows associated with the project.

Steps :-

→ Calculate all cash out flows associated with the project.
→ Calculate all cash inflows associated with project.
→ Calculate the present value of all cash out flows associated with the projects.
→ Calculate the present value of cash inflows associated with the project.
→ calculated the NPV.

(iii) Modify internal rate of return method (MIRR)
MIRR is that rate of compounding which makes the initial cash flows in zero years equal rate of terminal value of cash inflows. The project is accep if the MIRR is greater than re-investment rate & the projected is rejected the MIRR is, less than (k)

(iv) Profitability Index
It also called as desirability of factor which is one of the discounted cash flows techniques, which takes into account the time value of money. The PI refers to the ratio on present value of all cash outflows with the project. The project is accepted when PI is greater than 1, the project is rejected when PI is less than

(v) Internal rate of return :-
→ This is defined as the rate at which the NPV of the investment is zero.
→ The discounted cash inflow = discounted cash outflow
→ This methods considers time value of money.
→ It is also known as cutoff rate or hurdle rate.

$$IRR = L + \frac{NPV_L}{NPV_H - NPV_L}(H-L)$$

Where, as
L = Lower discount rate
H = Higher discount rate
NPV_L = Net Present value of lower discount rate.
NPV_H = Net present value of higher discount rate

→ If, IRR > K (cost of capital) then Project should be accepted.
→ If, IRR < K then project should be rejected.

Ex:- PR-1 10% (L) PR-2 12% (H) → Proceed

NPV = 50,000 80,000

$= L + \frac{NPV_L}{NPV_H - NPV_L} (H-L)$

$= 10\% + \frac{50,000}{80,000 - 50,000} (12\% - 10\%)$

$= 10\% + \frac{50,000}{30,000} \times 2\%$

$= \frac{10}{100} \times \frac{50,000}{30,000} \times$

1) Payback Period =

2) ARR =

3) NPV = (If PVCI > PVCO then, NPV +ve.
If PVCI < PVCO then, NPV is -ve)

4) IRR = (If IRR > R cost of capital) then, Project should be accepted
If IRR < K then, Project should be rejected)

5) Profitability Index =
(If PI is more than 1, then Project accepted.
If PI is < 1, then Project rejected.)

Cash outlay (investment) / Annual cash inflow

Average income / Average investment

PV of cash inflow - PV of cash outflow

If NPV > 0, accept the project

If NPV < 0, then reject the project

$L + \frac{NPV_L}{NPV_H - NPV_L} (H-L)$

Present value of cash inflow / Present value of cash outflow

Relation Between Profitability Index and Net Present Value

PI > 1 and NPV > 0, i.e NPV positive, then accept the project.

PI < 1 and NPV < 0, i.e NPV negative, then reject the project.

PI = 1 and NPV = 0, Irrelevant decision.

Illustration-3

A Project costs ₹ 1,00,000 and yields an annual cash inflow of ₹ 20,000 for 8 years, calculate its payback period.

Cash outflow = ₹ 1,00,000

Cash inflow = ₹ 20,000

Payback Period = $\frac{\text{Cash outflow}}{\text{Cash inflow}}$ or

$\frac{\text{Initial outlay of the Project}}{\text{Annual Cash inflow}}$

$= \frac{1,00,000}{20,000} = \frac{10}{2} = 5$ years

Illustration-4

Determine the payback Period for a project which requires a cash outlay of ₹ 10,000 and generates cash inflows of ₹ 2,000, ₹ 4,000, ₹ 3,000 and ₹ 2000 in the first, second, third and fourth year respectively.

(Ans) Total cash outlay = ₹ 10,000

Total cash inflow for the first 3 years =

2000 + 4,000 + 3000 = 9000

upto the third year the total cost is not recovered but the total cash inflows for the four years are

₹ 9,000 + ₹ 2000 = 11,000

i.e, ₹ 1000 more than the cost of the Project, so the

payback Period is somewhere bet^n 3 & 4 years. Assuming cash inflows occure evenly throughout the year. The time required to recover ₹ 1000 will be (1000/2000) $\times 12 = 6$ months.

∴ Hence Payback Period is 3 years 6 month.

Illustration-5

A Project cost ₹ 5,00,000 and yields annually a Profit of ₹ 80,000 after depreciation @ 12% p.a but before tax of 50%. Calculate the payback Period.

(Ans) Cashoutflow = 5,00,000

Profit before tax = ₹ 80,000

Less tax @ 50% = ₹ $\frac{80,000}{2}$ = 40,000

Profit after tax = ₹ 40,000

Add back depreciation @ 12% on ₹ 500000

$\Rightarrow 500000 \times \frac{12}{100} = ₹ 60,000$

Profit before depreciation but after tax or annual cash inflow = ₹ 100000

Pay back Period = $\frac{5,00,000}{1,00,000}$ = 5 years

Illustration-14

Calculate the average rate of return, for Projects A and B from the following.

	Project	
Investments	₹ 20,000	₹ 20,000
Expected life (no salvage value)	4 year	5 year
project Net Income (after interest, depreciation and taxes)		

Years	Project A ₹	project B ₹
1	2000	3,000
2	1,500	3,000
3	1,500	2,000
4	1000	1000
5	—	1000
	6,000	10,000

If the required rate of return is 12%. which Project should be undertaken?

(Ans)

	Project A	Project B
Total Profit (after depreciation, interest and taxes)	6,000	10,000
Average Profit	$\frac{6,000}{4}$ = 1500	$\frac{10,000}{5}$ = 2000
Net investment on the project	20,000	30,000

Average rate of return $\left(\frac{\text{Average Annual Profit}}{\text{Net investment in the Project}} \times 100\right)$ $\frac{1500}{20,000} \times 100$ = 75%. (Project A)

(Project B) $\Rightarrow \frac{2000}{30,000} \times 100$

= 6.66%

But if we calculate rate of return on average investment which is initial investment divided by 2; then average investment (Project A) $\frac{20,000}{2}$ = 10,000

(Project B) $\frac{30,000}{2}$ = 15,000

Average Return on Investment =

(Project A) $\frac{1500}{10000} \times 100 = 15\%$

(Project B) $\frac{2,000}{15,000} \times 100 = 13.33\%$.

Q) What do you mean by cost of capital? Discuss different methods for computation of cost of capital.

Meaning:—

→ cost of capital of a firm is the minimum rate of return expected by its investors. It is the weighted average cost of various sources of finance used by firm.

→ The capital used by a firm may be in the form of debt, preference capital, retained earnings.

→ It is the minimum required rate of earnings or the cutoff rate of capital expenditures.

Computation of cost of capital:—

Computation of overall cost of capital of a firm involves the following components.

→ cost of equity share capital
→ cost of preference share capital
→ cost of deb. capital.
→ cost of retained earnings

* cost of equity share capital

The cost of equity is the maximum rate of return that the company must earn on equity financed portion of its investment in order to leave unchanged the market price of its stock.

(a) divident yield method:—

When dividend is constant, below mentions formula will be used.

$K_e = \frac{D}{mp}$ where, K_e = cost of equity capital

D = expected dividend rate per share

mp = Net proceeds of an equity share

(b) Dividend Yield Plus Growth in dividend method:

When the dividends of the firm are expected to grow at a constant rate & the dividend pay-out ratio is constant this method may be used to compute the cost of equity capital. According to this method the cost of equity capital is based on the dividends & the growth rate.

$$Ke = \frac{D1}{NP} + g \text{ or } Ke = \frac{D1}{MP} + g.$$

Where, g = growth rate.

Ke = Cost of equity

Mp = Market price of equity per share

Np = Net proceeds per share

D1 = Expected dividend per share

* Cost of Preferred or preference share capital

A fixed rate of dividend is payable on preference shares. Incase dividends are not paid to preference shareholder, a will affect the fund raising capacity of the firm.

Hence, dividends are usually paid regularly on preference shares except when there are no profits to pay dividends for the calculation of cost of capital, preference shares are made into two forms, one is irredeemable preference shares & redeemable preference shares.

(a) Cost of irredeemable Preference Shares:-

The cost of Preference capital which is perpetual can can be used calculated as:-

$$Kp = \frac{PD}{NP}$$ where, PD = Preference Dividend

NP = Net proceeds

KP = cost of Preference shares

b) Cost of redeemable Preference Shares:

Redeemable Preference Shares are issued which can be redeemed or conceived on maturity date. The cost of redeemable preference shares can be calculated by using the following formula:

$$K_P = \frac{PD + \frac{1}{n}(MV - NP)}{\frac{1}{2}(MV + NP)}$$

where)

K_P = Cost of redeemable Preference Shares
MV = Maturity value or redeemable value
PD = Preference Dividend
NP = Net proceeds
n = Number of years to Redemption

* Cost of Debt. Capital:

Cost of debt is a rate of return expected by lenders before tax the cost of debt is equal to the rate of interest payable on debt. For calculating real cost of debt it is necessary to consider not only contractual cost but also imputed cost.

(i) Before-tax cost of debt:

$K_d = \frac{I}{P}$ where, I = Interest
P = Principal

(ii) After tax cost of debt:

$K_{da} = \frac{I}{NP} \times [1 - t]$ where, K_{da} = Cost of debt after tax

I = Interest
t = Tax rate
NP = Net proceeds

$K_d = \frac{I}{P}$ where, I = Interest
P = principal

(a) Cost of Irredeemable debt:-

A company may issue irredeemable debentures or bonds in order to retain constant debt in its capital structure. It is also called perpetual debt.

(b) Cost of Debt issued at Par:-

Debt issued at par means debt is issued at the face value of the debt. It may be calculated with the help of the following formula.

$K_d = I(1-t)/P$ where, K_d = cost of debt capital
t = tax rate
P = debenture int. rate.

(c) Debt issued at Premium or Discount:-

When the debentures are issued more than the face value, it is called Premium. And when the debentures are issued less than the face value, it is called discount. If the debt is issued at Premium or discount, the cost of debt is calculated with the help of the following formula:-

$K_d = \frac{I}{NP} \times (1-t)$ where,
K_d = cost of debt capital
I = Annual interest payable
NP = Net Proceeds of debenture
t = Tax rate

(d) Cost of redeemable debt:-

It is the rate of return which the lenders expect when the debt is issued to be redeemed after a certain period during the life time of a firm each debt is called redeemable debt. The cost of redeemable debt capital is calculated by using the following formula.

$$K_d = \frac{I\,[1-t.] + \frac{1}{n}\,[P-NP]}{1/2\,[P+NP]}$$

Where, P = Payable on maturity
NP = Net proceeds
n = no. of years to maturity
t = tax rates & I = Interest

Cost of Retained Earnings (Cost of internally generated funds)

→ Retained earnings are one of the sources of finance for investment proposal, it is different from other sources like debt, equity & Preference shares. Cost of retained earnings is the same as the cost of an equivalent fully subscribed issue of additional share, which is measured by the cost of equity capital.

Cost of retained earnings can be calculated with the help of the following formula;—

$$K_r = k_e \cdot (1-T)\,(1-B)$$

Where, K_r = Cost of retained earnings
k_e = Cost of equity
T = tax rate
B = Brokage cost

UNIT-03

LEVERAGE

In general leverage is tools or technique used to achieves certain things without which it is difficult to accomplish it.

-> In financial management leverage is means use of debt along with equity capital in capital structure to achieve increase in earning per share. So, the company should take advantages value (EPS) which is the basis/ Primary objectives of financial management.

Leverage is of three types:-

1. operating leverage
2. Financial leverage
3. Combined or Composite leverage

1. Operating leverage:-

Sales	XXX
less-V.C	XXX
Contribution	XXX
less-F.C	XXX
EBIT	XXX
less-tax	XXX
profit available for equity shareholder.	XXX

-> Operating leverage means change in operating Profit (EBIT) due to change in sales.

-> Change in EBIT due to change in sales is because of presence of fixed costs.

-> FC is responsible for operating leverage - NO FC, no operating leverage. This may be favourable or unfavourable depending on circumstances.

Derivation of operating leverage:-

$$DOL = \frac{\% \text{ Change in EBIT}}{\% \text{ Change in Sales}} \times 100$$

or, $$\frac{\frac{\Delta EBIT}{EBIT}}{\frac{\Delta \text{ sales}}{\text{sales}}} = \frac{\Delta EBIT}{EBIT} \times \frac{\text{Sales}}{\Delta \text{Sales}}$$

or, $$\frac{\text{Contribution}}{EBIT} \times 100$$

Interpretation:-

It tells what percentage change in EBIT takes place with 1% change in sales. If DOL is 5.6% it signifies that every 1% change in sales brings 5.6% change in EBIT.

2. Financial leverage:-

Use of debt in capital structure is called financial leverage. In other words % change in EPS due to % change in EBIT is called financial leverage.

→ Factor responsible for financial leverage is Presence of interest which is fixed.

Derivation

$$DOL = \frac{\% \text{ change in EPS}}{\% \text{ change in EBIT}}$$

$$= \frac{\frac{\Delta EPS}{EPS}}{\frac{\Delta EBIT}{EBIT}} = \frac{\Delta EPS}{EPS} \times \frac{EBIT}{\Delta EBIT}$$

or $$DOFL = \frac{EBIT}{EPS \text{ or } EBT}$$

Interpretation:—

It shows that if 1% change in EBIT takes place how much percentage change in EPS or EBT it will bring to the firm.

→ If DFL is 3% it indicates that 1% change in EBIT brings 3% change in EBT, it may be favourable or unfavourable.

3. Combined leverage:—

→ It is a Product of operating leverage and financial leverage.

$CL = OL \times FL$

→ Change in EPS due to change in sales is called Combined leverage.

$$\text{Degree of } CL = \frac{\% \text{ change in EPS}}{\% \text{ change in sales}}$$

$$= \frac{\Delta EPS}{EPS} \times \frac{sales}{\Delta sales}$$

Or, $\boxed{DCL = OL \times FL}$

Q) Find out leverage of the company & gives comment on the results of the company from the following.

Particulars	X Ltd. (in lacs)	Y Ltd. (in lacs)
Sales	500	1000
V. cost	200	300
F. cost	150	300
Interest	50	100
Tax	30%	30%

$$OL = \frac{\text{Contribution}}{EBIT}$$

	X	Y
Sales	500	1000
(-) VC	200	300
Contribution	300	700
(-) F.C	150	300
EBIT	150	400
(-) Interest	50	100
	100	300
(-) Tax	30	90
PAT	70	210

OL = X → 300 = 2

Y → 700/400 = 1.75

$FL = \frac{EBIT}{PAT}$

$X = \frac{150}{70} = 2.14$ $Y = \frac{400}{210} = 1.9$

C.L = OL × FL

X = 2 × 2.14 = 4.28 Y = 01.75 × 1.9 = 3.33

Interpretation:-

(1) O.L of company 'X' is 2 and whereas that of 'Y' is 1.75. Therefore, tendency of operating profit with respect to sales is less in 'Y' and more in X. So operating risk is more with 'X' as compared to 'Y'.

(2) F.L indicates use of debt in capital structures. In the above question, F.L of company 'X' is more than that of 'Y' so 'X' is having more financial risk.

(3) If we compare X and Y company with respect to combined leverage, financial risk & operating risk combinedly is more in company X.

Q) A Company has a sales of 20 lakhs and fixed cost 4 lakhs and debt of 10 lakhs @ 10% interest what are the OL, FL & CL of the company. And if the firm wants to double its earning before tax & interest how much increase in sales is required

Sales	20,00,000
(-) V.C	14,00,000
Contribution	6,00,000
(-) F.C	4,00,000
EBIT	2,00,000
(-) Interest	1,00,000
	1,00,000

$O.L = \frac{\text{Contribution}}{EBIT} = 6/2 = 3$ lakhs

F.L = 2

C.L = 3 × 2 = 6

Required EBIT = 2 × 2 = 4 lakhs

1% change in sales → 3% change in EBIT

how much change in sales → 100% change in EBIT

100% in EBIT = 1/3 × 100 = 33 1/3 % change in sales

(Ans)

Sales	26,66,667
(-) V.C	18,66,667
	8,00,000
(-) (F.C)	4,00,000
EBIT	4,00,000

∴ Sales has to increase 33 1/3 % i.e, 6,66,667 so, that EBIT will be doubled.

6) D.L is 3, when Sales increased by 100%.

EBIT = 1,120 lakhs

PBT = 320 lakhs

F.C = 700 lakhs

Calculate % of change in earnings per share if sales are increased by 5%.

$$D.L = \frac{\text{Contribution}}{EBIT}$$

$$= \frac{\text{fixed cost} + EBIT}{EBIT} = \frac{1120 + 700}{1120} = 1.63$$

$$F.L = \frac{EBIT}{EBT} \quad \frac{1120}{320} = 3.5$$

$$C.L = 1.63 \times 3.5 = 5.7$$

$$\Rightarrow C.L = \frac{\% \text{ change in EPS}}{\% \text{ change in sales}}$$

$$5.7 = \frac{\% \Delta EPS}{5\%}$$

$$\Rightarrow \% \text{ change in EPS} = 28.5\%$$

Capital Structure:—

Capital Structure is comprised of debt and equity components of a business. The pattern of capital structure may be:

(I) Equity (Unleveraged firm)

(II) Equity and Preference

(III) Equity and debt

(IV) Equity & R earnings

(V) Equity, R.E & Preference shares

(VI) Equity, R.E & debt

(VII) Equity, R.E, Pref. & debt

-) Incase a company raises in debt levercaged firm. No company remained as levercage firm as risk is 100%.

-) Capital Structure states that the ~~preparation~~ proportion ate in which the components of capital are Presend.

→ capitalisation is the total amount associated with the Capital Structure. Financial Structures consists of the Non current liabilities and C.L capital structure is a part of financial structures.

Importance of Capital Structure:-

Use of debt. Pref shares, retained earning with equity in capital structures is called trading on equity or financial levercage. The more & more debt is used in capital structure the company gets the advantage of debt. financing of such as fixed interest & tax levercage, at the same time financial risk also increases, cost of debt remains always less than cost of equity because equity Shareholders bears the financial risk.

optimum capital structures in one where the weight average cost of capital is minm and value of the firm is maxm.

$$V = S + D$$

V = value of firm
S = value of equity shares.
D = value of debt.

value of equity = $\frac{\text{Earning available to equity share}}{\text{Cost of equity or equity capitalisation rate}}$

⇒ value of debt = $\frac{\text{Interest payable to debt holders}}{\text{Cost of debt or debt capitalisation rate}}$

In a company 1000 equity shares of ₹ 100 each and EBIT was ₹ 40,000, debt was ₹ 2,00,000 which carries 10% interest. The company decided to expand for which additional cap of ₹ 5,00,000 is required and the same was decided to be financed by debt. Show the value of the finance & overall cost of capital before expansion & after expansion.

⇒ Value of firm & Cost of Capital:-

Before explanation

Equity Capital — ₹ 1,00,000

Debt capital — ₹ 2,00,000

EBIT — 40,000

- Int (10% of 2,00,000) 20000

Earnings available to equity share 20,000

Overall cost of capital = $\frac{\text{Total Profit available for debt \& equity} \times 100}{\text{Total Capital debt \& equity}}$

$K_o = \frac{40,000}{3,00,000} \times 100 = 13.33\%$

Value of the firm = ₹ 3,00,000 (Debt + Equity)

After explanation

Equity = 1,00,000

Debt = 7,00,000

EBIT 1,06,667

less Int 10% of 7 70,000

Cost of capital (equity capital) 36,667

$K_e = ₹ \frac{36667}{1,00,000} \times 100$

$= 36.667\%$

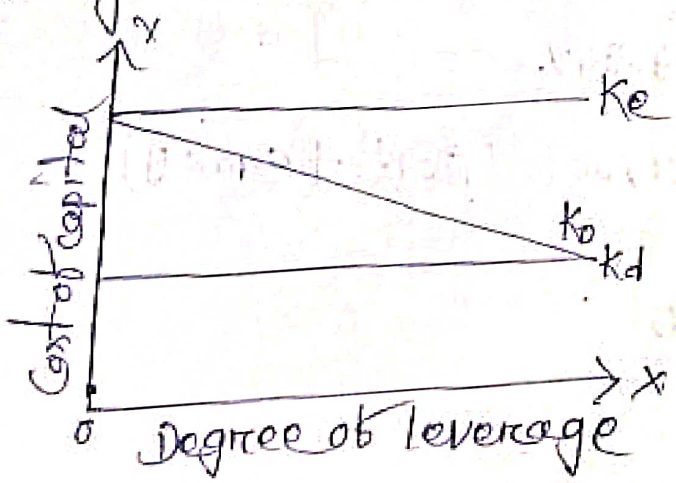
Value of the firm has increased from 8 lacks to 5 lacs with use of debt resulting in increased in cost of equity from 20% to 36.67%. There by value per share has increased to the extent of 16.67%.

Theories of Capital Structure:-

1. Net Income Approach
2. Net operating Income Approach
3. Traditional Approach
4. Modigliani & Miller Approach
5. Packing order Theory

Net Income Approach (Theory of relevance) ($K_d \downarrow$, $K_o \downarrow$, $V \uparrow$)

As we know debt financial is less expensive because of tax leverage and fixed interest chargeable to profit. This theory of capital structure demonstrates that when more & more debt is used in capital structures overall cost of capital decreases & value of the firm increases. Therefore net income theory of capital structure is relevance for financial performance of the business. Let us explain this theory with the help of diagram.

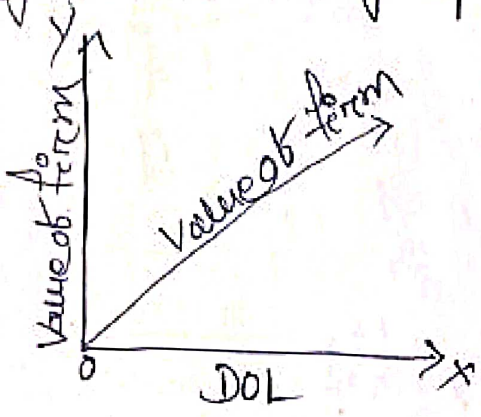


Assumptions:-

1. Cost of debt (K_d) always less than cost of equity (K_e)
2. Tax is ignored
3. The perception of investors about the risk does'nt changed with change in debt in capital structure (Perception remains constant)

According to this theorem, cost of debt is represented by the diagram Kd which is parallel to ox axis, it signifies that irrespectives of degree of leverage it remains constant. Cost of equity is represented by Ke but in diagram it is constant irrespective of degree of leverage because the benefits of debt financing is compensated by the financial risk created due to debt financing; therefore, Ko is parallel to ox-axis. Ko represents overall cost of capital of the business, as explained in the diagram Ko continues decrease with more & more degree of leverage.

* Degree of leverage & value of the firm



As per this theory as the cost of capital decreases with use of more debt in the capital structures the value of the firm will automatically increase as given in the diagram.

CASE STUDY:-

A company expects EBIT of ₹ 80,000. It has ₹ 1,00,000 8% debentures and equity capitalisation rate is 10%. Calculate value of the firm and overall cost of capital according to income theory. If the company wants to expand and an additional capital of ₹ 3,00,000 is needed by issuing deb. then find out value of the firm & overall Ko.

Soln

Value of firm = S + D

S = V − D

EBIT = 80,000

less Interest = 8,000
= 2,000

Value of equity = EBT / Equity capitalization rate

= 72,000 / 10%

= ₹ 7,20,000

V = S + D

= 7,20,000 + 1,00,000

= 8,20,000

Overall Cost of capital (K_o) = EBIT / V × 100

= 80,000 / 8,20,000 × 100 = 9.76%.

EBIT as given 80,000

less Int (8% of 4,00,000) 32,000

48,000

E.C rate — 10%.

value of equity = 48,000 / 10%.

= ₹ 4,80,000

value of the firm

Value of equity 4,80,000

Value of debt (Loan) 4,00,000

8,80,000

K_o = EBIT / V × 100

= 80,000 / 8,80,000 × 100 = 9.09%.

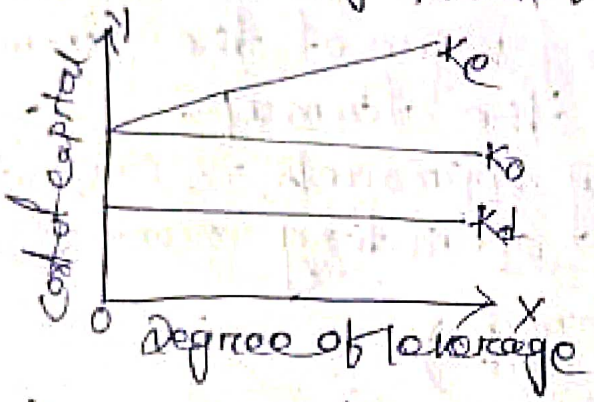
* With use of additional capital from debt financing overall K_o has reduced from 9.76% to 9.09% simultaneously at the same time value of the firm has increased from 8,20,000 to 8,80,000. Therefore, we can say that more & more use of debt in the capital structure leads to decrease in the K_o & increase in the value of the firm.

Net operating Income Theory :- (Irrelevance theory)

Net operating income theory is just opposite of net income theory. It means cost of capital and volume value of the firm remain unaffected by capital structures. Because the benefit of using debt are compensated by financial risk it creates for equity shareholders.

Assumption :-

1) Level of financial risk with use of debt remain same.
2) There are no taxes.
3) The firm capitalies value as a whole i.e, $\frac{EBIT}{K_o}$ = then values of equity is to be calculated by deducting value of debt from value of firm & value of debt by deducting values of equity from value of firm.

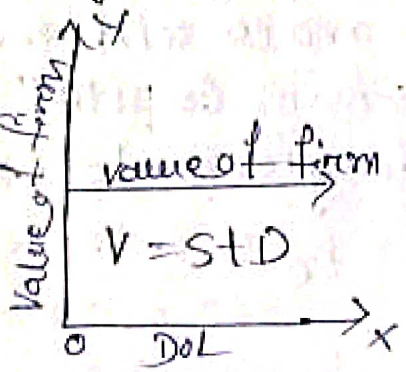


$V = E + D$

$E = D - V$

(Diagram-I)

In the given diagram, K_o is constant irrespective of degree of leverage.



(Diagram-II)

In the above diagram II, value of the firm remains unaffected with degree of leverage. In the given diagrams K_d has remain constant and K_e goes on increasing because the rate of return expected by shareholders is more than rate of financial risk they take up from use of debt in the capital structure. Therefore, net operating income

approach allocates that capital structure is irrelevant from cost of capital and value of the firm perspective

Calculation of value of firm :-

As per the assumption of theory, value of the firm is calculated as a whole and value of equity and value of debt are calculated. Therefore value of the firm;

$= \frac{EBIT}{K_0}$ $\quad S = V - D$ $\quad D = V - S$

Traditional Approach: ($V_0 \uparrow$, $K_0 \downarrow$ / $V_0 \downarrow$, $K_0 \uparrow$)

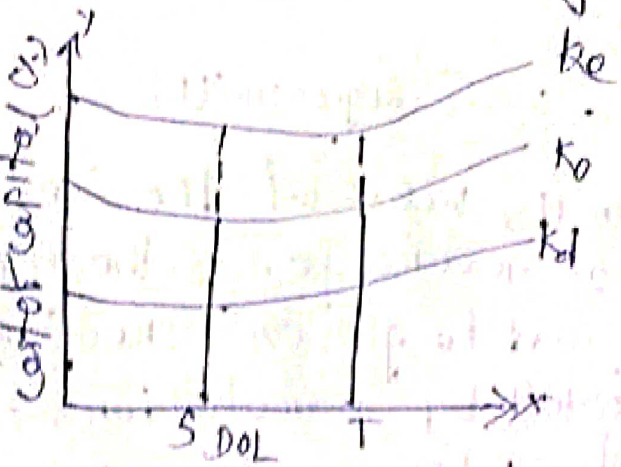
According to this theorem, initially value of the firm increases and cost of overall capital decreases with use of debt in capital structure.

There comes a point after which use of more debt in a capital structure brings value of the firm decreases and overall value of the firm up.

Therefore, traditionally approach is composite of net income theory and net operating income theory

Optimum capital Structure ($V_0 \rightarrow max$, $K_0 \rightarrow min$)

optimum capital structure is arrive when value of firm is maximum and cost of capital is minimum to the firm continuous to use more and more debt in capital structure, till optimum capital structure is obtained. Let us take a diagram to explain the theory.



According to the theory, the diagram given above explained that degree of leverage increases initially

of debt remains constant till the firm achieve optimum capital structure.

→ In this diagram capital structure ranges from S to T that means any point b/n S and T is optimum capital structure because overall cost of capital at its minimum and value of firm is maximum.

→ So far as cost of equity is concerned theoretically with the use of debt in capital structure, But if more debt is used after optimum capital structures cost of debt start increasing as well as cost of equity and overall cost of capital.

Modigliani and Miller Approach:—

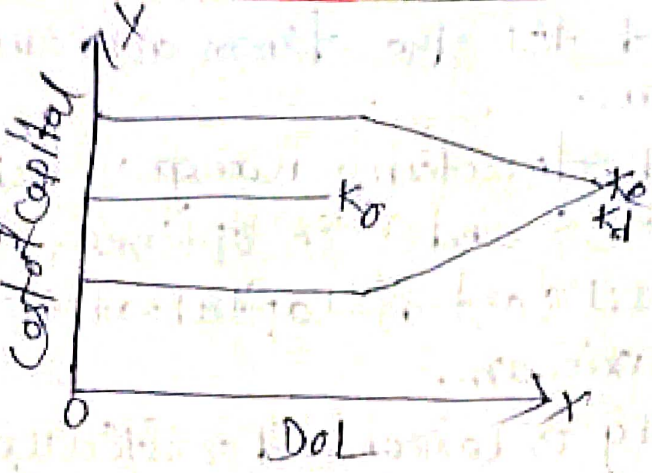
MM approach believes in two theories, one is theory of relevances (tax exists).

Theory of irrelevances (No tax):—

This theory states that is debt is used in capital structure, value of the firm and cost of capital are not affected by the capital structure cost of debt is always less than cost of equity in the initial years, the reason being the benefits of leverage increases earnings per share.

→ However, total earning remains constant this continuous upto 'O' particular point of time. Cost of capital remains constant because financial risk & EPS to equity share-holders compensate each other.

If excess debt is used, the financial risk becomes more than the tolerable limit of the company is that case debt holders start demanded more rate of interest, there by K_d increases and K_e decreases. Let us discuss it with the help of a diagram:—



The above diagram explains that K_o is independent of Cap structure, value of the firm remains also constant.

Theory of Relevance:- (Net income approach)

With use of more and more debt in capital structure, the value of firm and cost of capital are affected initially the value of the firm increases and cost of capital decreases. But this theory is based on the fact that tax is not ignored, therefore this theory is of 2 parts

(a) Unleveraged firm

(b) Leveraged firm

* Value of unleveraged firm:-

$$V_u = \frac{EBIT(1-t)}{K_o}$$

where, t = Corporate tax

* Value of leveraged firm:-

$$V_L = V_u + tD$$

where, t = tax rate (discounting factors)

D = debt

Dividend Decision

As per Section 2(35) of the companies act 2013 deals with the meaning and definition of dividend.

→ Dividend is a portion of profit ~~stable~~ payable to shareholders as return their investment.

Why dividend (importance)

Payment of dividend is a financial Policy of a company it dividend is pay or declared by the company it gives rise to two factors.

(i) On one hand shareholders debt return on their investment to ~~which each~~ which motivate the potential investors to invest in the company.

(ii) On other hand Company for its growth and expansion will raise finance from the market by issue of shares or debt which involves cost.

Therefore, a balance has to maintain bet'n these two, so that the value of the firm or value per share can be maximum

FORMS OF DIVIDEND

(1) Bonus Share:-

A bonus share is a free share of stock to current or existing shareholders to a company.

(2) Stock Splits:-

It is a method commonly used to lower the market price of share by increasing the no. of shares belonging to the shareholders.

(3) Buyback of Share :-

When a firm buy its own share from whoever want to sale his holding at a specified price during a specified period.

Theories of dividend :-

(1) Theory of relevance :-

(a) Walter Model :- ~~This model supports the doctrine~~ Professor James E. Walter argues that the choice of dividend policies almost always affects the value of the enterprise. His model shows clearly the importance of the relationship between the firm's internal rate of return (r) and its cost of capital (k) in determining the dividend policy that will maximize the wealth of shareholders.

Walter's Model is based on the following assumptions

1. The firm finances all investment through retained earnings that is debt or new equity is not issued.
2. The firm's internal rate of return (r) and its cost of capital (k) are constant.
3. All earnings are either distributed as dividend or reinvested internally immediately.
4. Beginning earnings and dividends never change. The values of the earnings per share (E), and the dividend per share (D) may be changed in the model to determine results, but any given values of E and D are assumed to remain constant forever in determining a given value.
5. The firm has a very long or infinite life.

Criticism of Walter's model:—

* No external financing
* Constant return
* Constant opportunity cost of capital

Walter's formula to determine the market price per share is as follows:

$$P = \frac{DPS}{K} + \frac{(EPS - DIV)\,r/K}{K}$$

Here p = market price per share
DPS = dividend per share
EPS = earning per share
r = firm's average rate of return
K = firm's cost of capital

Criticism of Walter's model, Financial Management:

(i) No External financing:— Financed exclusively by retained earnings and no external financing is used. It was therefore then the model could be applicable to only those firms for which equity was the only source of finance.

(ii) Constant Rate of Return:— Realistic assumption because when increased investments are made by the firm are as well changes.

(iii) Constant Equity Capitalization Rate (Ke):— Capitalization rate remains constant. This is as well not a realistic assumption because equity capitalization rate changes directly with the change in risk complexion of the firm.

Gordon Model :-

The Gordon growth model (GGM) assumes that a company exists forever and that there is a constant growth in dividends when valuing a company's stock.

The Gordon's theory on dividend policy states that the company's and the relationship between its rate of return (r) and the cost of capital (k) influence the market price per share of the company.

Assumptions of Gordon's Model :-

Gordon's model is based on the following assumptions.

1. **No Debt :-**
The model assumes that the company is an all equity company, with no proportion of debt in the capital structure.

2. **No external Financing :-**
The model assumes that all investment of the company is financed by retained earnings and no external financing is required.

3. **Constant IRR :-**
The model assumes a constant External Rate of Return ignoring the diminishing marginal efficiency of the investment.

4. **Constant Cost of Capital :-**
The model is based on the assumption of a constant cost of capital (k), implying the business risk of all the investments to be the same.

5. **perpetual Earnings :-**
Gordon's model believes in the theory of perpetual earnings for the company.

6. **Corporate Taxes :-**
Corporate taxes are not accounted for in this model.

Valuation formula of Gordon's Model and its demotections

Gordon's formula to calculate the market Price per share (P) is $P = \{EPS * (1-b)\} / (k-g)$ where,

p = market price per share

EPS = Earning per share

b = retention ratio of the firm

(1-b) = Payout ratio of the firm

K = cost of capital of the firm

g = growth rate of the firm = $b * r$

Criticism of Gordon's Model

Gordon's theory on dividend policy is criticized mainly for the unrealistic assumptions made in the model.

Constant Internal Rate of Return and cost of capital

The model is inaccurate in assuming that r and k always remain constant. A Constant r means that the wealth of the shareholders is not optimized. A Constant K means the business risks are not accounted for while valuing the firm.

No external financing:

Gordon's belief of all investment being financed by retained earnings is faulty. This reflects sub-optimum investment and dividend.

Miller and Modigliani:

According to Miller and Modigliani Hypothesis or MM Approach, dividend policy has no effect on the price of the firm and believes that it is the investment policy that increases the firm's share value.

The assumptions of M-M Hypothesis are:-

1. (i) Perfect capital market;
   (ii) Investors are rational;
   (iii) There are no transaction costs;
   (iv) Securities are infinitely divisible;
   (v) No investor is large enough to influence market price of securities.
   (vi) There are no floatation costs.
2. There are no taxes, Alternatively, there are no differences in tax rates between capital gains and dividends.

Unit-04

Inventory management:-

The word inventory means raw material, work in progress and finished goods which are consumable in nature. So, inventory management is a process of tracking stock levels and the moment of goods whether it is delivery raw materials, two manufacture or fulfilling orders for finished goods.

Techniques of inventory management:-

1. EOQ:- (Economic order Quantity)

→ EOQ refers to how much inventory a company should purchase with a set of variables like total cost of production, demand rate etc.

→ It has two parts i.e ordering cost & carrying cost.

→ ordering cost are those cost which are associated with purchasing and ordering of materials.

→ carrying cost are those cost which are used for holding the inventory.

$$EOQ = \sqrt{\frac{2AO}{C}}$$

where as,

A = Annual demand

O = ordering cost

C = carrying cost

2. ABC-Analysis:-

* Catagory A:- Is the most valuable product that contribute the most overal profit of the company.
* Catagory B:- Is the product that fall in between the most and least valuable.

/catagory C:- Is for small transaction that are vital for overall Profit but don't matter much individually..

3. Determination of stock levels :-

(a) Minimum level :- This represent the quantity which most be maintain in hand at all times, if stocks are less than minimum level then the work will stop due to shortage of matterial.

Formula :-

Minimum stock level = Re-ordering level - (Normal Consumption X Normal Re-order Period)

* Re-ordering level :-

→ When the quantity of materials reaches at a certain figure then fresh order is sent to get matterials again.

So, re-order level or ordering level is fixed between minimum level and maximum level.

ROL = maximum consumption Rate X maximum Reorder Period.

(b) Maximum level :-

→ It is the quantity of matterials beyond which a firm should not exceed its stock.

→ If the quantity exceed max^m level @ limit it will be overstocking.

Maximum stock level = Re-ordering level + Re-ordering Quantity - (minimum consumption X minimum Re-ordering Period)

(1) Safety Stock:-

→ Safety stock is used to meet some un-anticipated increase in uses.

→ The use of inventory cannot be perfectly forecasted it fluctuates over a period of time.

Cash Management:-

Cash management deals with cash inflow and cash outflow of the business which generally requirred to meet busines obligation etc.

Methods of Cash Management:-

1. Promote Payment by Customers:-

→ The customer should be promptly informed about the amount payable and the time by which it should be Paid.

→ The customers gets promoted, if they find cash discount.

2. Centralisation of Payment:-

→ The Payment should be centralised and Payment should be made through draft or Cheque..

3. Quick Conversion of Payment into cash:-

→ cash inflows can be accelerated by improving the cash collecting Process.

→ once the customer right the cheque in favour of concern the collection can be quick by its early collection.

4. Lockbox System:-

→ Lockbox system is another technique of reducing mailing, Processing & collecting time.

→ under this system the firm select some

centres at different places. The place are selected on the basis of no. of consumers and remittances to be receipt from a particular place.

→ The firm hire a post box in a post office and the parties are ask to send cheque on that post box number.

Working Capital:-

Working Capital management is managing the capital of the entity to finance its day-to-day operational activities.

→ It is the difference between the current assets and the current liabilities of an entity.

Objectives of Working Capital

1. optimization of working capital operating cycle:-

→ In simple terms, working capital cycle starts from the day raw materials are acquired and completes when the finished products are sold.

→ One of the major objectives of working capital management is to ensure that there is no hindrance during the above mentioned process.

2. Minimize Rate of interest or cost of capital:-

→ It is important to understand that the interest cost or cost of capital is one of the major costs in any business. To achieve higher profitability, the cost of funds utilized in working capital should be minimum.

3. Strengthen Liquidity Position:-

First of all, the objective of working capital management is to strengthen the liquidity position

of a business. Businesses can achieve this by properly managing their cash flows through useful management of current assets and current liabilities.

Types of working Capital :-

1. Gross Working Capital :- Gross working capital is the total value of the company's current assets. current assets include cash, receivables, short-term investments, and especially market securities.
2. Net Working Capital :- Net working capital is the difference between the current assets and current liabilities of the company. If the company assets are more than current liabilities it indicates positive working capital and if the assets less than current liabilities it indicates negative working capital.
3. Permanent Working Capital :- Permanent working capital is the minimum amount of capital required to carry on the operations without interruption or difficulty.
4. Regular Working Capital :- Regular working capital is the amount of funds businesses require to fund its day to day operations.
5. Seasonable Variable Working Capital :- seasonable variable working capital is the amount of capital kept aside to meet the seasonable demand.

Receivable Management :-

→ Receivable management keeps track of what customers buy on credit from a company.

→ Receivable management can be referred to as buying on credit because customers receive goods and services without making an upfront payment.

Objective of Receivable Management :-

1. Credit Policy :- Credit policy is the determination of credit standards and analysis. It may vary from firm to firm or even some time product to product in the same industry.

2. Cash discount :- Cash discount is the incentive to the customers to make early payment of the due date. A special discount will be provided to the customer for his payment before the due date.

3. Ageing analysis :- Accounts receivable aging is a cash management technique used by accountants to evaluate the accounts receivable of a company and identify potential irregularities.

* The costs associated with the extension of credit and accounts receivable are identified as follows:

1. Collection cost :- This cost incurred in collecting the receivables from the customers to whom credit sales have been made.

2. Capital cost :- This is the cost on the use of additional capital to support credit sales which

alternatively could have been employed elsewhere.

3. Administrative Cost:- This is an additional administrative cost for maintaining account receivable in the form of salaries to the staff kept for maintaining accounting records relating to customers, cost of investigation etc.

4. Default Cost:- Default costs are the over dues that cannot be recovered. Business concern may not be able to recover the over dues because of the inability of the customers.

5. Delinquency costs:- The cost arises out of the failure of the customers meet their obligations when payment on credit sales become due after the expiry of the credit period.