

Financial Management

Q.1. Explain Operating Leverage (Business Risk)

The company is said to have a **high** degree of operating leverage if it employs a **greater** amount of **fixed costs** and a small amount of variable costs. On the contrary if the company employs a greater amount of variable costs and a smaller amount of fixed costs, it is said to have a low operating leverage. The degree of operating leverage will, therefore, depends upon the amount of fixed element in the operating cost structure of the company. Thus, there will be no operating leverage if the company does not have fixed operating costs.

$$\text{Operating Leverage} = \frac{\text{Contribution}}{\text{EBIT (operating profit)}}$$

It indicates % change in EBIT for every 1% change in sales.

Operating leverage may be favorable or unfavorable. Where the contribution exceeds the fixed cost, the operating leverage is termed as favorable, and vice versa.

Utility of Operating Leverage:

The operating leverage shows the impact of change in sales on the operating profits. If a company has a high degree of operating leverage, a small change in sales will bring a large change in EBIT. Thus, the operating profits of a company having a high degree of operating leverage will increase at a faster rate than the increase in sales. Likewise, the operating profits of such a company will also fall at a faster rate than the decrease in its sales. This will help the finance manager to select appropriate infrastructure which will suit the projected sales and income.

Generally companies do not like to operate under conditions of a high degree of operating leverage. This is very risky situation because a small decrease in sales can excessively damage the company's efforts to increase its profits.

Example: The installed capacity of a company's factory is 500 units. Actual capacity used is 300 units. Selling price per unit is Rs.15. Variable cost per unit is Rs.7 per unit. Calculate the operating leverage in each of the following three situations:

- i. When fixed cost are Rs.500.
- ii. When fixed cost are Rs.1,000.
- iii. When fixed cost are Rs.1,500.

Computation of Operating Leverage

Situation	I	II	III
Sales [300@15]	4,500	4,500	4,500
[-] Variable Cost [300@7]	2,100	2,100	2,100
Contribution	2,400	2,400	2,400
[-] Fixed Cost	500	1,000	1,500
EBIT	1,900	1,400	900
Operating Leverage= $\frac{\text{Contribution}}{\text{EBIT}}$	1.26	1.71	2.67

It is evident from the above example that the degree of operating leverage increases with the increase in fixed cost in the cost structure of the company.

Q.2. Explain Financial Leverage (Financial Risk)

Financial leverage results from the presence of fixed financial cost namely interest & preference dividend. These fixed charges do not vary with the EBIT. They are to be paid regardless of the EBIT available to pay them.

Capital Employed consist of two types of funds:

1. Funds with fixed interest or dividend (Long Term Debt & Preference Capital).
2. Funds without fixed interest or dividend (Equity Share Capital & Retained Earnings)

On debts company has to pay fixed rate of interest irrespective of its earnings. Similarly on preference capital, company has to pay fixed rate of dividend. The equity share holders are entitled to the remainder of the profits of the firm after all prior obligations are met.

Financial leverage involves the use of funds obtained at a fixed cost in the hope of increasing the returns to the shareholders.

$$\text{Financial Leverage} = \frac{EBIT}{EBT}$$

It indicates % Increase in EPS for every 1% Increase in EBIT

Favorable leverage occurs when the firm earns more on the funds, than the fixed costs of their use i.e. if ROI > Interest Rate, the FL is favorable. Unfavorable leverage occurs, when the firm does not earn as much as the funds cost i.e. if ROI < Interest Rate, the FL is unfavorable. Thus financial leverage is based on the assumption that the firm is able to earn more on the funds, on which a fixed rate of interest/dividend is to be paid.

The difference between the earning from the funds and the fixed costs on the use of the funds goes to the equity holders. Financial leverage is also, therefore, called as ‘trading on equity’. However, in adverse situation when earnings are not adequate, the presence of fixed charge will imply that the shareholders will have to bear the burden. Thus, leverage/trading will operate in opposite direction such that the earnings per share, instead of increasing , will actually fall as a results of the use of funds carrying fixed cost.

Example: A Company has a choice of the following three financial plans.

	Financial Plan		
	I	II	III
Equity Capital	4,000	2,000	6,000
Debt	4,000	6,000	2,000
EBIT	800	800	800
[-] Interest @ 10% on Debt	400	600	200
EBT	400	200	600
Financial Leverage = $\frac{EBIT}{EBT}$	800 400 = 2	800 200 = 4	800 600 = 1.33

Although the total amount of capital in all the three cases is the same, but the capital structure is different. Similarly, the EBIT in all the three cases is the same, still financial leverage is varying. This indicates high fixed financial burden of interest and high financial risk to the company. Increase in fixed financial cost requires necessary increase in EBIT level. If a company fails to do so, it may be technically forced into liquidation.

Importance of Using Financial Leverage:

Financial Leverage is an important tool in the hands of financial management. If used carefully, it can maximize the return to shareholders. In other words, so long as the return on assets exceeds the cost of debt, it is to the advantage of the company and of the shareholders. The higher the leverage, the higher is the rate of return on equity.

But very often, corporate management follows a policy of high degree leverage in its enthusiasm to maximize the return on equity shares; it may prove risky in a competitive market. They should also bear in mind, the limitations of trading on equity while taking a decision on the degree of financial leverage.

Financial leverage is like a super structure which requires a solid foundation. This is provided by the low operating leverage (with high margin of safety). In order to plan a balanced capital structure, both financial and operating leverage should be paid due attention. More dependence on high financial leverage; without paying due attention to operating leverage; result in risky capital structure, high incidence of interest charges, low profits and ultimately sure dissolution.

The companies which go in for a heavy dose of debt without analyzing the operating leverage may be loser at a later stage. Debt is just like a fat which is good for a healthy living for a healthy person. A person with high blood pressure and heart trouble has to regulate the intake of fat. Similarly corporations should resist themselves in administering the dose of debt. Mere availability of debt finance should not induce them to increase their debt proportion without considering their debt-absorbing and debt repaying capacity.

Thus, financial leverage is important tool in the hands of management to plan a balanced capital structure of the company and maximize the return on shares.

Q.3. Explain Combined leverage (Total Risk)

The operating leverage explains the business risk complexion of the firm where as the financial leverage deals with the financial risk of the firm. But a firm has to look in to the overall risk or total risk of the firm which is business risk plus the financial risk. Therefore, a financial manager should consider both the operating leverage and financial leverage simultaneously.

The operating leverage causes magnified effect of the change in sales level on EBIT level and if the financial leverage is also considered simultaneously, then the change in EBIT will, in turn, have a magnified effect on the EPS. Thus, a firm having both the financial leverage and operating leverage will have wide fluctuations in the EPS for even a small change in the sales level. This effect of change in sales level on the EPS is known or combined leverage may be defined as the % change in EPS for a given % change in the sales level.

$$CL = OL \times FL$$

$$CL = \frac{\text{Contribution}}{EBT}$$

It indicates % increase in EPS for every 1% increase in sales

Q.4. Combinations of leverages and their effect

Operating Leverage	Financial Leverage	Combined effect
High	High	This combination is very risky and should preferably be avoided.
High	Low	It indicates discretion on the part of management because adverse effects of high operating leverage have been taken care of by having a financial plan with low financial leverage.
Low	High	It is an ideal situation for the maximization of profits with minimum of risk in a situation; management can follow an aggressive debt policy as there is built-in safety due to low operating leverage.
Low	Low	This combination shows that management is adopting a very cautious attitude and may, in fact, be losing a number of good investment opportunities for expansion or diversification which could be possible by having an additional dose of debt financing. A very cautious attitude has also got a cost. The objective of maximizing the interest of the owners of the firm may not be attained by having this combination.

Q.5. Distinction between Operating Leverage and Financial Leverage:

Operating Leverage	Financial Leverage
(1) The objective of operating leverage is to magnify the effect of changes in sales on EBIT.	(1) The objective of financial leverage is to magnify the effect of changes in EBIT on EPS.
(2) Formula.	(2) Formula
(3) It is known as first stage leverage.	(3) It is known as second stage leverage.
(4) It affects earnings before interest and tax.	(4) It affects earnings after interest and tax.
(5) It relates to the “Assets” side of the Balance Sheet.	(5) It relates to the “Liabilities” side of the Balance Sheet.
(6) It relates with investment decisions.	(6) It relates with financing decisions.
(7) It deals with operating risk of being unable to cover fixed operating cost.	(7) It deals with financial risk of being unable to cover fixed financial cost.

Q.6. What are major factors governing capital structure?

Appropriate capital structure depends on the number of factors like:

1. Company’s nature of business.
2. Regularity of earnings of the company.
3. Period of finance
4. Market sentiments.
5. Size of the company.
6. Cost of Capital.
7. Business and Financial Risk
8. Objectives of Promoters to maintain Control over business

It is regarding the basic difference between debt and equity. Debt is the liability on which interest has to be paid. Increase in debt in the capital structure i.e. improvement of debt-equity ratio implies greater payment of interest amount than before. The company has to

pay interest irrespective of its profits. Hence, a company has to be sure enough of getting steady return to bear the interest amount.

On the other hand equity consists of shareholders or owners funds on which payment of dividend depends on company's profits. The cost to raise debt is lower compared to cost to raise equity. This is because interest is allowed as an expense so tax benefit. Dividend is considered profit so no tax benefit.

Q.7. Explain the Meaning of Optimal Capital Structure.

When the company is new, it is difficult for it to collect debt as per its requirements as it has established its credit-worthiness. Hence, they have to be dependent on equity very much. On the other hand, the established companies have good track record of their profit earning capacity that helps them to create their credit-worthiness. So lenders feel safe to invest in such companies, hence, these companies have no problem to raise debt. The company in this case raises debt in such a way that becomes beneficial for the company in terms of increase in EPS, profitability and value of the firm.

If the cost of capital is greater than the return, profitability of the company, EPS and value of firm is affected. The company if not able to repay its debt on time, then it will affect the goodwill and create problem in future for collecting further debt. Hence, company has to select an appropriate capital structure with due consideration.

Capital structure varies from one firm to another firm and from one industry to another. You might find similarity in capital structure of two firms of same industry, but it is almost impossible to precisely generate the model capital structure for all business undertakings. Research suggests that financial planner should plan optimal capital structure.

In practice financial management literature does not provide specified methodology for designing a firm's optimum capital structure. Hence, its financial manager has to plan capital structure of the firm inspite of many conflicting factors for the types of funds to be sought. Hence, it is not possible to find out exact debt-equity mix where capital structure is optimum. But of course a range can be determined.

For optimal capital structure a perfect balance between the risks and returns has to be struck.

Following are the features of an appropriate capital structure:

1. **Profitability:** It is that capital structure which minimises cost of financing and maximises earning per equity share.
2. **Solvency:** A firm should plan the capital structure in such a way that it does not run the risk of becoming insolvent. Excess use of debt threatens the solvency of the company.
3. **Flexibility:** It should be such that it can provide funds whenever the company needs it, to finance for profitable activities.
4. **Conservatism:** Debt content in capital structure should be in limits so that the company can service the debt comfortably.
5. **Control:** it should be such that it involves minimum risk of loss of control of the company.

Q.8. What is the Meaning/Purpose/Objectives of Accounts Receivables

The sale of goods on credit is an essential part of the modern competitive economic systems. Therefore, receivables are treated as a marketing tool to aid the sale of goods. The objective of receivable management is to promote sales and profits until that point is reached where the return on investment in further funding receivables is less than the cost of funds raised to finance that additional credit (i.e. cost of capital). The purpose of receivables is directly connected with the company's objectives of making credit sales which are:

1. Increasing total sales as, if a company sells goods on credit, it will be in a position to sell more goods than if it insists on immediate cash payment.
2. Increasing profits as a result of increase in sales not only in volume, but also because companies charge a higher margin of profit on credit sales as compared to cash sales.
3. In order to meet increasing competition, the company may have to grant better credit facilities than those offered by the competitors.
4. Creating, preserving, and collecting accounts receivable.
5. Maintaining up-to-date records of accounts receivables.
6. Initiating collection procedures on overdue accounts.
7. New customers.
8. Increased market share.

Q.9. Cost of Receivable management

- a) **Collection Cost:** Collection costs are administrative costs incurred in collecting the receivables from the customers to whom credit sales have been made. Included in this category of costs are: (a) additional expenses on the creation and maintenance of a credit department with staff, accounting records, stationery, postage and other related items; (b) expenses involved in acquiring credit information either through outside specialist agencies or by the staff of the firm itself. These expenses would not be incurred if the firm does not sell on credit.
- b) **Capital Cost:** The increased level of accounts receivable is an investment in assets. They have to be financed thereby involving a cost. There is a time-lag between the sale of goods to, and payment by, the customers. Meanwhile, the firm has to pay employees and suppliers of raw materials, thereby implying that the firm should arrange for additional funds to meet its own obligations while waiting for payment from its customers. The cost of the use of additional capital to support credit sales, which alternatively could be profitably employed elsewhere, is, therefore, a part of the cost of extending credit or receivables.
- c) **Delinquency Cost:** This cost arises out of the failure of the customers to meet their obligations when payment on credit sales becomes due after the expiry of the credit period. Such costs are called delinquency costs. The important components of this cost are: (1) blocking-up of funds for an extended period, (2) cost associated with steps that have to be initiated to collect the overdue, such as, reminders and other collection efforts, legal charges, where necessary, and so on.

- d) **Default Cost:** The firm may not be able to recover the overdue because of the inability of the customers. Such debts are treated as bad debts and have to be written off as they cannot be realised. Such costs are known as default costs associated with credit sales and account receivable.

Q.10. Explain various sources of Information Before Granting Credit

A firm has to evaluate the credit worthiness of a customer before granting him credit. For this purpose, a credit manager obtains information from various sources. The following are the important sources:

- a) The credit standards of any customer/firm are usually determined by five “C”s, namely
- **Character:** In order to make payment the applicant must have willingness to pay the debts. It shows integrity and moral attitude of the customer.
 - **Capacity:** It refers to capacity of the firm to run the business and the firm’s plant capacity. Ability to run the business depends on the competency of the management. It also refers to ability of the customer to meet credit obligations out of the operating cash.
 - **Capital:** It is the amount invested in business. Financial strength of the applicant depends on the capital. The Analysts consider here the liquidity position.
 - **Collateral:** It is the security offered by the customer in the form of pledged assets.
 - **Conditions:** It refers to the general economic conditions that affect the customers. If there is a good deal of competition, there is a possibility of default or failure.
- b) **Trade reference:** The prospective customer may be required to give two or three trade references. He may give a list of personal acquaintances or some other existing credit-worthy customers. The credit manager can send short questionnaires to the references seeking the relevant information.
- c) **Bank reference:** Sometimes the customer is asked to request his banker to provide the required information. However, bankers in India normally refuse to give detailed and unqualified credit reference.
- d) **Credit bureau reports:** In some cases the associations for specific industries maintain credit bureaus which provide useful and authentic credit information for their members.
- e) **Past experience:** In case of an existing customer, past experience of his account would be a valuable source of essential data for scrutiny and interpretation. A shrewd manager can look into the account carefully and try to find out the credit risk involved.
- f) **Published financial statements:** Sometimes published financial statements can be examined to see the credit worthiness of a customer. Further if a customer’s name appears in the list of approved suppliers of a Government agency, it can be taken as a plus point.
- g) **Salesmen’s Interview and reports:** First-hand information through personal contact can also aid in judging the credit rating of a customer. Many companies evaluate the credit-worthiness of their customers by consulting salesmen or sales representatives. For proper determination of credit limit of customers, the salesmen should also ascertain the potential sales which the customers can affect to the ultimate customers.

Q.11. Explain Different Collection Methods of Accounts Receivable

- a) **Centralized collection system-** when a firm has a central collection office and carries out the collection of all the branches and different areas from one single location.
- b) **Decentralized collection system-** when a firm maintains different collection departments or carries out collections from various sub locations pertaining to the area of each establishment and the transactions related to that establishment only.
- c) **Postdated cheques-** A cheque that is dated ahead is post-dated and cannot be processed until the day indicated.
- d) **Bills of exchange-** An unconditional order in writing addressed by one person to another, signed by the person giving it, requiring the person to whom it is addressed to pay on demand or at a fixed or determinable future time a certain sum in money to order or to bearer; in commercial usage, often synonymous with draft or acceptance. The term is by custom, generally confined to an order to pay money arising out of a foreign transaction, "draft" being the term relating to a domestic transaction.
- e) **Lock-box system-** under this arrangement, firms hire a post office lock box at important collection centers the customers are required to remit payments to the post office lock-box. The local banks of the firm at the respective places are authorised to open the box and pick up the remittances (cheques) received from the customers.
- f) **Drop-box system-** drop box system is similar to the lock box system the only difference is that they are placed at various public locations other than post offices and can be made use of at ones ease and convenience.
- g) **Factoring-** it is an agreement in which receivables arising out of a sale of goods or services are sold by a firm (client) to the factor a financial intermediary as a result of which title to the goods and services represented by the said receivables passes on to the factor.
- h) **Collection staff-** this constitutes maintaining human resource which personally picks up the collections. It usually involves maintaining a collection department with collection personnel. They carry out various functions like personal visits, telephone and written correspondence and reminders, as well as perform various legal procedures to ensure receipt of the collectibles.
- i) **Collection agents-** these are specific agents appointed by the principle to carry out its collection activities. The following are examples of collection agents.
- j) **Debt collector-** They use up to date technology to secure payment from debtors: for very little cost. In a 'standard' case the debt agency will charge about 5%. The cost, even in difficult cases, never usually exceeds 25%. The art of using a debt agency is not to use them too late. Give them a chance to collect while the debt is 'young' and success is probable.
- k) **Del credere agent-** A del credere agent is one who, selling goods for his principal on credit, undertakes for an additional commission to sell only to persons who are absolutely solvent. His position is thus that of a surety who is liable to his principal should the vendee make default.

Q.12. Explain different ways of Monitoring /Controlling Receivables

An import aspect of receivables management is to monitor the payment of receivables several measures can be employed by the credit manager for this purpose (i) Days sales outstanding: (ii) ageing schedule and (iii) Collection matrix are some of the measures employed.

i) Days Sales Outstanding

$$\text{Days sales outstanding (DSO)} = \frac{\text{Accounts Receivable at time } t}{\text{Average daily sales}}$$

According to this method accounts receivable are deemed to be in control if the DSO is equal to or less than certain norm. If the value of DSO exceeds the specified norms, the collections are deemed to be slow.

ii) Ageing Schedule (AS)

AS classifies outstanding receivables at given point of time into a different age brackets. An illustrative AS is given below:

Age Group (in days)	% of Receivables
0-30	40
31-60	30
61-90	25
Above 90	5

The actual AS of the firm is compared with some standard AS to determine whether accounts receivable are in control. A problem is indicated if the actual AS shows a greater proportion of receivables, as compared with standard AS, in the higher age group.

iii) Collection Matrix

In order to study correctly the changes in the payment behaviour of customers, it is helpful to look at the pattern of collections associated with credit sales.

Illustrative collection matrix is given below:

	January Sales	February Sales	March Sales
Collection:			
In same month	13%	14%	15%
In next month	42%	35%	40%
In 2 nd month	33%	40%	21%
In 3 rd month	12%	11%	24%

From the collection pattern one can judge whether the collection is improving, stable, or deteriorating. A secondary benefit of such an analysis is that it provides a historical record of collection % that can be useful in projecting monthly receipts for each budgeting period.