

Financial Management theory

Q.1 Define the term Financial Management. What are the characteristics of Financial Management?

Ans. Financial management is a service activity which is associated with providing quantitative information, primarily financial in nature and that may be needed for making economic decision regarding reasoned choice among different alternative course of actions. Thus, financial management is a process of identification management, accumulation analysis, preparation, interpretation and communication of financial information to plan, evaluate and control.

Financial Management is that specialised function of general management which is related to the procurement of finance and its effective utilisation for the achievement of common goal of the organisation. It includes each and every aspect of financial activity in the business. Financial Management has been defined differently by different scholars. A few of the definitions are being reproduced below :

Weston and Brigham—"Financial Management is an area of financial decision making, harmonizing individual motives and enterprise goals.". Howard and Upon—"Financial Management is the application of the planning and control functions to the finance function".

Joseph and Massie—"Financial Management is the operational activity of a business that is responsible for obtaining and effectively utilising the funds necessary for efficient operations".

From the above definitions, it is clear that financial management is that specialised activity which is responsible for obtaining and effectively utilising the funds for the efficient functions of the business and therefore, it includes financial 'planning, financial administration and financial control.

Nature/Characteristics of Financial Management

Modern concept of financial management has increased the importance of financial management in the field of business administration. Now, it does not deal with procuring the finance but its judicious application. Now, it has become a continuous business activity. The following are the main features of financial function or financial management :

(i) **Financial Management is a branch of Business Management**—Financial management is a branch of business management which is associated with future planning organisation, coordination and control.

(ii) **Essence of Managerial Decision**—Financial management provides a sound base to all managerial decisions. Financial management is the focal point in the process of decision making such as : Production, Sale Employees. Research and Development decisions are based on financial management

(iii) **Important Position in the Organisational Structure**—No one can under-rate the role of financial management in the process of modern business. The financial manager is a guide to top management and has a direct say in the process of important decisions and plans.

(iv) **Continuous Administrative Function**—According to traditional approach, financial function was confined to the source of finance. But in the present day system of complex business environ-

ment it has become an administrative function which is associated with acquiring of funds and its judicious application.

(v) **Financial Management is a scientific and analytical analysis**—In the process of decision making and financial analysis modern mathematical techniques are used. J.B. Cohen and S.M. Robbins remarks are correct, "Managing a firm is both science and an art". It requires not only a feeling for the situation and an analytical skill, but also a thorough knowledge of the techniques and tools of financial analysis and the knowledge to apply them and interpret the results.

(vi) **Centralised Nature**—All business activities are centrally administered and control. All financial decisions in business are taken at a central point. Jack O. Vance has rightly remarked, "Functional areas such as marketing and production are decentralised in the modern industrial concern, but financial co-ordination and control are achieved through centralisation." In a business finance function is associated to heart in human body which supervises co-ordinate and control all parts of body and is centrally located.

(vii) **Basis of Managerial Process**—Financial management is the basis of whole management process, such as planning, co-ordination and control. According to sound financial planning all other plans are executed and controlled.

(viii) **Forecasts of Cash Requirement**—It is the duty of financial manager to decide how much profit share be kept for expansion and how much be distributed as dividend among shareholders. The sound approach is to keep balance upon cash inflows and outflows, so that bills are paid on regular basis.

(ix) **Borrowing Polity**—In a business credit is the soul of business. Thus borrowing is a must. The own sources of every business are always limited. Therefore borrowing is the only answer, which can be from commercial banks, financial institution, or issuing shares or debentures.

(x) **A Measure of Performance**—Financial management deals with risk and uncertainty factors which are directly hit by profitability and risk. Thus, financial management is needed for maintaining proper balance in risk and uncertainty.

Q.2 Explain the basic characteristics of a sound financial plan?

Ans. The success of business very much depends upon financial plan (capital plan) based upon certain basic principles of corporation finance. The essential characteristics of an ideal capital plan may briefly be summarised as follows :

1. **Simplicity**—The capital plan of a company should be as simple as possible. By 'simplicity' we mean that the plan should be easily understandable to all and it should be free from complications and/or suspicion-arising statements. At the time of formulating public it should be borne in mind that there would be no confusion in the mind of the investors about their nature and profitability. Suppose a company issues three types of equities and half a dozen type of preference shares viz. Cumulative, non cumulative, participating, non participating, convertible, redeemable etc. Such plan cannot be said to be a good financial plan as it creates confusion.

2. **Foresight**—The planners should always keep in mind not only the needs of 'today' but also the needs of 'tomorrow' so that a sound capital structure (financial plan) may be formed. Capital requirements of a company can be estimated by the scope of operations and the scope of operation must be planned in such a way that may predict the need for capital as accurately as possible. Al-

though it is difficult to predict the demand of the product yet it cannot be an excuse for the promoters to use foresight to the best advantage in building the capital structure of the company.

3. **Intensive use**—Effective use of capital is as much necessary as its procurement. Every `paise' should be used properly for the prosperity of the enterprise. Wasteful use of capital is as bad as inadequate capital. There must be `fair capitalisation' i.e. company must procure as much capital as it requires, nothing more and nothing less. Over capitalisation and under capitalisation are both danger signals.

4. **Flexibility**—The capital structure of a company must be flexible enough to meet the capital requirements of the company. The financial plan should be chalked out in such a way that both increase and decrease in capital may be feasible. The company may require additional capital for financing schemes of modernization, automation, betterment of employees etc. It is not difficult to increase the capital. It may be done by issuing fresh share or debentures to the public or raising loans from special financial institutions, but reduction of capital is really a ticklish problem and needs statement like dexterity. Reduction of share capital except redeemable preference share capital is not permissible.

5. **Liquidity**—Liquidity means that a reasonable amount of current assets must be kept in the form of liquid cash so that business operations may be carried on smoothly without any shocks to them due to shortage of funds. This cash ratio to current assets upon a number of factors e.g., the nature and size of the business, credit standing, goodwill and money market conditions etc.. Which must be considered while determining the minimum liquidity requirements of the firm.

5. **Economy**—The cost of capital procurement should always be kept in mind while formulating the financial plan. It should be the minimum possible. Dividend or interest to be paid to shareholders (ordinary and preference) should be a burden to the company in any way. But the cost of capital is not the only criterion, other factors should also be given due importance.

6. **Provision for anticipated contingencies**—Business cycles i.e. Prosperity and depression) are the general phenomenon of the economic world. In depression period, it is very difficult for a company even to procure the minimum amount of working capital because none would be interested in investing his money in equities (having-no guarantee of dividend) and would likely prefer fixed income securities such as debentures, preference shares etc.

Hence, to tide over such business oscillations, it is advisable that company should make provisions in its capital structure, we never mean that company should always keep surplus capital) to meet such unforeseen contingencies. It means that planners should forecast what kind of contingencies the corporation is likely to be called upon to face and how they can be provided for either form internal financing or by issuing new capital.

Above are certain basic principles of corporation finance which should be following by the planners which formulating the financial plan of a company. The ideal financial plan of a company is one which has the ideal combination of all the principles discussed above.

Factors Affecting Financial Plan

Financial planning the first and foremost function of financial management. The main purposes of financial planning are—Procurement of sufficient amount of capital at minimum cost and establishment of effective co-ordination between costs and risks. A sound financial plan must consider the long term and the short term financial needs of the company and the various sources of raise-funds. The following points must be considered in formulating a financial plan.

1. **Nature of the Industry**—Nature of the industry plays a decisive role in financial planning. The nature decides the quantum of capital and the sources of its procurement. Capital intensive industries require a larger amount of capital in comparison to the labour intensive-industries. Moreover,

industries having stability and regularity in earnings may collect from the market very easily in comparison to those having instability or irregularity in their income.

2. **Status of Industrial Units**—Certain individual characteristics of the unit such as age, size and goodwill of the industry, area of its operation and the goodwill of its management and promoters etc. affect the financial planning. Large companies or companies having good standing in the market may collect their finances (through equities or debentures or public deposits) very easily whereas the new companies get difficulties in raising their capital and loan from the market.

3. **Amount of Risks**—The amount of risks involved in the process of production also affects the planning. The industries would depend more upon the ownership securities such as shares in case of greater amount of risks and uncertainties are involved whereas the other industries having lesser amount of risk may depend upon debts and thus earning higher profits for equities. Amount of risks also affects the liquidity of cash.

4. **Appraisal of Alternative sources of Finance**—Various alternative sources of finance must be appraised of in the light of their cost, availability, limitations etc., at the time of formulating financial plan.

5. **Attitude of Management**—Management may like financial control over the industry. In such a case. They would not like issue equity shares or if they issue they would purchase a majority of such shares themselves or would prefer debt financing. Such management would not like to issue new equity shares even for its expansion or modernisation programmes. Ploughing back of profits is always preferred in such units.

6. **Flexibility**—flexibility and not the rigidity should be the main principle to be followed in the financial planning. If there is no flexibility in financial plan, it would be very difficult later on, to carry on its expansion or diversification programmes due to lack of funds.

7. **Government Control**—Government policies, financial controls and other statutory provisions should also be taken into consideration while formulating the financial plan of the concern. For example, a company in India is required to obtain the approval of controller of capital issues at the time of issuing shares or debentures from the public and such approval is to be given only if, the present mix of securities is an ideal one.

8. **Capital Structure**—The capital structure of the company must be of high grade securities. It should be diversified but balanced. No permanent charge should be created on the capital of the industry. A fair rate of dividend should also be maintained.

9. **Magnitude of External capital Requirements**—It would be good policy for the industry to finance its expansion or diversification programmes through internal resources such as ploughing back of profits, reserves and surpluses etc. But short-term finances may be obtained from external sources by issuing redeemable preference shares or debentures if they are urgently needed.

Limitations of Financial Planning—The above factors must be taken into consideration while formulating a sound financial plan of the company but it is subject to certain limitations. Such limitations are as follows :

1. Financial planning is always based on forecasts. Future is uncertain and nothing can be said about it exactly. If forecasting is wrong, the financial plan would be ineffective. So it should be reviewed periodically taking the present economic and business circumstances into mind to make

it effective.

2. Cooperation between various authorities and co-ordination among the various activities are very necessary for the effectiveness of the planning. Absence of co-ordination and indecision among management personnel render financial plan ineffective.

3. In practice, financial management takes the rigid view about financial planning, it is not ready even to make certain periodic adjustments in the plan necessary for the smooth running of the business. There are a number of good reasons for that, first—huge capital investment is committed in advance for large capital projects and the change cannot be readily made. Second, arrangements for raw materials and equipment are also made in advance. Any change in this arrangement may lead the firm to trouble. Third, the management personnel are not prepared psychologically to make any change in the financial plan prepared by them.

Q.3 Explain EBIT-EPS analysis and the methods determining indifference level of EBIT.

Ans.

EBIT—EPS Analysis

One widely used approach to select an appropriate financial plan is to analyse the relationship between EBIT and EPS. Essentially, the method involves the comparison of alternative methods of financing under various assumptions of EBIT. At one level EBIT one plan may be advantageous while at another level of EBIT a different plan may look attractive. Thus a plan is elected having regard to expected level of EBIT in future.

To decide which one out of two financial plan is advantageous, the indifference point/level of EBIT is determined. Indifference point/level of EBIT is that level of EBIT at which EPS is same for two alternative financial plans. It can be defined as the level of EBIT beyond which the benefits leverage start accruing in terms of increase in EPS. In other words if the expected EBIT is more than the indifference level of EBIT, the use of fixed charge sources of funds (debt and preference capital) is advantageous from the point of view of EPS. On the other hand if the expected EBIT is lower than the indifference level of EBIT, the use of equity capital is preferred. Here are two methods of determining indifference level of EBIT; (i) Algebraic and (ii) graphical.

I. Algebraic Method—According to this method, the indifference level of EBIT is determined by solving mathematical equation in which following symbols are used:

X = Indifference level of EBIT

N_1 = Number of equity shares outstanding if only equity shares are issued.

N_2 = Number of equity shares outstanding if equity shares are issued alongwith issue of debentures.

N_3 = Number of equity shares outstanding if equity shares are issued with issue of preference shares.

N_4 = Number of equity shares outstanding if equity shares are issued alongwith issue of debentures and preference shares.

I = the amount of interest on debentures.

P = Preference dividend

t = Corporate income tax rate.

The mathematical equation for determining indifference level of EBIT

'nil depend upon whether the issuing enplane is a newly foxed company or an existing company.

(a) Newly rented Company- For a newly form ed company indifference eve' is determined by fling the folioing equations

(i) Equity sharcs Vs. Debentures

$$\frac{X(1-t)}{N_1} = \frac{(X-I)(1-t)}{N_2}$$

(ii) Equity Shares Vs. Preference Shares

$$\frac{X(1-t)}{N_1} = \frac{(X)(1-t) - P}{N_3}$$

(iii) Equity shares Vs. Preference Shares and Debentures

$$\frac{X(1-t)}{N_1} = \frac{(X-I)(1-t) - P}{N_4}$$

(b) Existing Company— For an existing company having debentures and preference share out-standing symbol I is replaced by I_1 (interest payable on existing debt) and I_2 (Interest payable on new debt) and symbol P is replaced by P_1 (existing preference dividend) and P_2 (new preference dividend) and appropriate equations and determined.

Example

Anupam Txtiles has formulated following financial plans to raise Rs. 1500,000 to finance investment projects. (i) Either equity capital of Rs. 1500,000 or Rs.750,000 debentures and Rs. 750,000 equity; (ii) Either equity capital of Rs. 1500,000 or Rs. 12% preference shares of Rs. 500,000 and Rs. 10,00000 equity/(iii) Either equity capital of Rs. 1500,000 or 12% preference capital of Rs. 500,000 Rs.500,000 10% debentures and Rs. 500,000 equity capital.

Assuming 50% corporate income tax rate and Rs. 100 as face value of one equity share, determine indifference point for each financial plan.

$$(i) \quad \frac{X(1-t)}{N_1} = \frac{(X-I)(1-t)}{N_2}$$

$$\text{Or} \quad \frac{X(1-.5)}{15,000} = \frac{(X - \text{Rs. } 75,000)(1-.5)}{7,500}$$

$$\text{Or} \quad \frac{.5x}{15,000} = \frac{0.5x - \text{Rs. } 37,500}{7,500}$$

$$\text{Or} \quad \frac{.5x}{2} = .5x - \text{Rs. } 37,500$$

$$\text{Or} \quad .5x = x - \text{Rs. } 75,000$$

$$\text{Or} \quad -.5x = - \text{Rs. } 75,000$$

$$\text{Or} \quad x = \text{Rs. } 150,000$$

$$(ii) \quad \frac{X(1-t)}{N_1} = \frac{x(1-t) - P}{N_3}$$

$$\text{Or} \quad \frac{x(.5)}{15,000} = \frac{x(.5) - \text{Rs. } 50,000}{10,000}$$

$$\text{Or} \quad \frac{.5x}{3} = \frac{.5x - \text{Rs. } 50,000}{2}$$

$$\text{Or} \quad x = 1.5x - \text{Rs. } 150,000$$

$$\text{Or} \quad -.05 = - \text{Rs. } 150,000$$

$$\text{Or} \quad x = \text{Rs. } 300,000$$

$$(iii) \quad \frac{x(1-t)}{N_1} = \frac{(X-I)(1-t) - P}{N_4}$$

$$\text{Or} \quad x \frac{(.5)}{15,000} = \frac{(x - \text{Rs. } 50,000)(.5) - \text{Rs. } 50,000}{5,000}$$

$$\text{Or} \quad \frac{.5x}{3} = .5x - \text{Rs. } 25,000 - \text{Rs. } 50,000$$

$$\text{Or} \quad .5x = 1.5x - \text{Rs. } 2,25,000$$

$$\text{Or} \quad -x = - \text{Rs. } 2,25,000$$

$$\text{Or} \quad x = \text{Rs. } 2,25,000$$

(II) **Graphic Approach** Indifference level of EBIT can also be determined graphically. Figure 1

portray the graphic presentation of plan 1 of example 2 the horizontal X represents EBIT while EPS is represented on Y axis

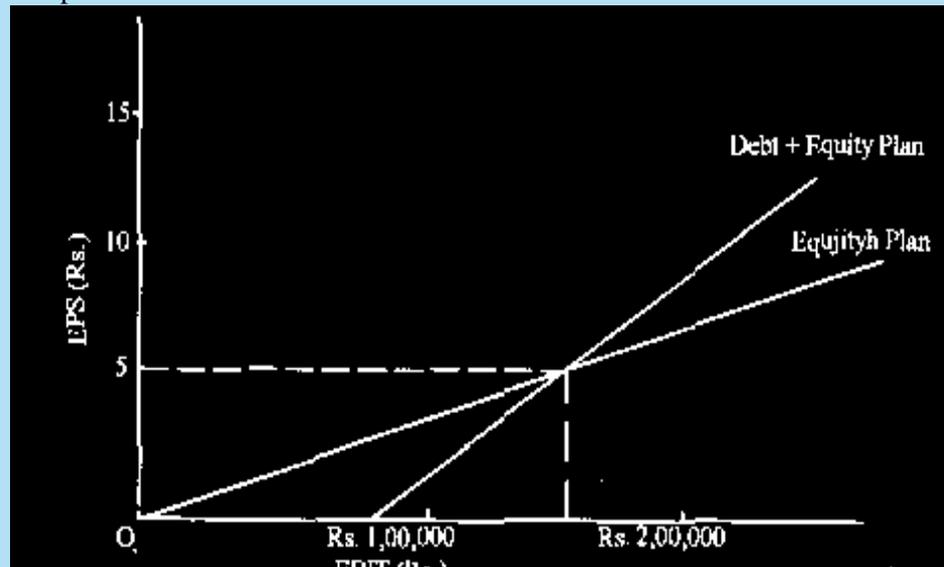


Fig EBIT – EPS chart

In order to graph the financial plan two sets of EBIT—EPS co-ordinates are required. The EPS associated with EBIT values of Rs. 100,000 and Rs. 200,000 are calculated and plotted on the graph under each financial plan in case of figure 1. It may be noted that 100% equity plan starts from origin (o) because EPS would be zero if EBIT is zero. In case of debt plus equity alternative EBIT required to have EPS value as zero is Rs. 75,000 i.e. interest charges payable on 10% debentures of Rs. 750,000. A perpendicular to the X axis is drawn from the point of intersection. The point at which the perpendicular is drawn on the X-axis represents the indifferent level of EBIT which in present case is Rs. 150,000.

Figure 1 shows that EPS of the equity plan is higher if the expected EBIT is below the indifferent level of EBIT. On the other hand EPS of debt plus equity alternative is higher if the expected EBIT is higher than the indifference level of EBIT.

To sum up the EBIT/EPS analysis, greater is the expected EBIT than the-indifference point, the better would be the levered plan to maximise the EPS. Conversely lower is the Expected EBIT than the indifference point, the more advantageous the unleveled financial plan from the point of view of EPS'

EBIT—UEPS Analysis EBIT—UEPS (uncommitted earning per share) analysis is an improvement over EBIT—EPS analysis. In EBIT—EPS analysis the focus of the analyst is on the earnings per share at different levels of EBIT under alternate financing plans. Where as is EBIT—CEPS analysis the focus is not on the earning per share but on the uncommitted earnings means those earnings which are unconditionally available to the equity shareholders. These are found out after deducting the commitment on the servicing of debt (like sinking fund appropriations for the redemption of debt) from the profits after tax and preference dividend. The uncommitted earnings per share is computed as follows

	Rs.
Earnings before interest and taxes (EBIT)	
Less interest on debt (I)	
Profit before tax (PBT)	
Less tax	

Profit after tax	
Less preference dividend	
Profit after tax and preference dividend	
Less Sinking fund appropriations	Uncommitted earnings
No. of equity shares	
*Uncommitted earnings per share	

$$UEPS = \frac{\text{Uncommitted earnings}}{\text{No. of equity shares}}$$

Like EBIT—EPS analysis the purpose of EBIT—UEPS analysis is to find out the suitability or otherwise of a financing plan at a particular level of EBIT. To decide which one of the two given financing plans should be selected the indifference point/level of EBIT is found out. The indifference point/level of EBIT is that level of EBIT at which UEPS (uncommitted earnings per share) is same for two alternative financial plans. It can be defined as the level of EBIT beyond which the benefits of financial leverage start accruing in terms of increase in UEPS. In other words if; the expected EBIT is more than the indifference level of EBIT, the use of fixed charge sources of funds (debt or preference capital) is preferable from the point of view of UEPS. On the other hand if the expected EBIT is lower than the indifference level of EBIT, the use of equity capital is preferable from the UEPS point of view.

There are two methods of determining indifference level of EBIT : (i) Algebraic and (ii) graphical.

I. Algebraic Method—Under this method, the indifference level of EBIT is determined by solving mathematical equations in which all the symbols used in EBIT/EPS analysis are used. In addition one more symbol Sfd will also be used ;

Sfd = Sinking fund appropriations for redemption of debt.

The mathematical equation for determining indifference level of EBIT will depend upon whether the issuing company is a newly formed company or an existing company.

(a) **Newly formed Company**—For a newly formed company indifference level of EBIT is determined by using the following equations

(1) Equity shares Vs Debentures

$$\frac{(X)(1-t)}{N_1} = \frac{(X)(1-t) - Sfd}{N_2}$$

(2) Equity shares Vs Preference Shares

$$\frac{(X)(1-t)}{N_1} = \frac{(X)(1-t) - P}{N_3}$$

(3) Equity shares Vs Preference shares and Debentures

$$\frac{(X)(1-t)}{N_1} = \frac{(X)(1-t) - (t)P - Sfd}{N_4}$$

(b) **Existing Company**—For an existing company having debentures and preference shares outstanding symbol I is replaced by (interest payable on existing debt) and I2 (interest payable on new debt), symbol P is replaced P, (existing preference dividend) and Pz (new preference dividend) and symbol Sfd is replaced by Sfd1 sinking fund appropriations on existing debt) and Sfd2

(sinking fund appropriations on new debt) and appropriate equations are formed.

Q.4 Discuss the assumptions of MM Hypothesis and the criticism of this hypothesis.

Ans. According to Modigliani and Miller (MM) the dividend decision of a firm has no effect on its share prices and is therefore of no consequence. They argue that the value of the firm depends upon firm's earnings which results from its investment policy. Given the investment decision of the firm - the split of earnings between dividends and retained earnings is of no significance in determining the value of the firm.

Assumptions of MM Hypothesis

The MM hypothesis of dividends irrelevance is based upon the following assumptions.

1. Perfect Capital markets where investors behave rationally. Information is freely available and transactions are free of cost. Securities are infinitely divisible. No investor is large enough to affect the market-price of a share.
2. Investment policy of a firms is fixed. It does not depend upon dividend policy.
3. Taxes do not exist. Alternatively there are no difference in tax rates on dividend and capital gains.
4. Every investors is certain about future investment and profits of the firm. It means at investors can forecast future prices and dividends with certainty.

Crux or MM Hypothesis

MM hypothesis of irrelevance of dividend is based upon arbitrage process. Arbitrage process involves a switching or balancing operation. It involves entering simultaneously into two transaction which completely offset each other. These two transactions in the case of dividend policy are payment of dividends and raising an equivalent amount by issue of new equity shares or debt. Take the case of a firm which has a fixed investment programme. Given the investment decision the firm can

- (i) retain entire earnings for reinvestment;
- (ii) (ii) or pay dividends and raise the equivalent amount through the issue of new equity shares or debt for investment The second course of action involves arbitrage process as the payment of dividends is completely matched by the issue of new shares or debt.

When the firm pays dividends the market price of its shares increases, but the issue of additional share causes a decline in the terminal value of the shares. The advantage of paying dividend is completely neutralised by the issue of new shares. As a result the present value of per share after dividends and external financing is equal to the present value per share before the payment of dividends. Since the market value of the shares is not affected by the dividend payment, shareholders would be indifferent between dividend and retention of earnings.

MM assert that dividend irrelevance hypothesis will not be affected, even if the external funds are raised through the issue of debt instead of equity capital. This is due to the irrelevance of leverage (capital structure decision) on the value of firm. The firm's cost of capital remain unaffected as the real cost of debt is the same as the real cost of equity.

The MM hypothesis also implies that the total market value plus current dividends of two firms which are similar in all respects except payment ratio would be same. Also the firm's cost of capital would be independent of its dividend decision since dividends are irrelevant.

MM dividend irrelevance hypothesis also implies that the shareholders are indifferent between dividends and capital gains. If a shareholder is paid dividend, he can do either of the two things; (i) spend it on consumption or (ii) invest it. On the other hand if dividend is not paid, it increases the market value of the share i.e. he gets capital appreciation. If he does not require income for