PPA Education Centre

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ADVANCED FINANCIAL MANAGEMENT

Subject Faculty:

CMA Dipak N Joshi

9922159279, 2571545

dipak_joshi@rocketmail.com

Chapter 2

Capital Structure Theories

Q1. What is capital, define the types of capital?

Ans: Financial planning and decision play a major role in the field of financial management which consists of the major area of financial management such as, capitalization, financial structure, capital structure, leverage and financial forecasting.

Financial planning includes the following important parts:

- Estimating the amount of capital to be raised.
- Determining the form and proportionate amount of securities.
- Formulating policies to manage the financial plan.

MEANING OF CAPITAL

The term capital refers to the total investment of the company in terms of money, and assets. It is also called as **total wealth** of the company. When the company is going to invest large amount of finance into the business, it is called as capital. Capital is the initial and integral part of new and existing business concern.

The capital requirements of the business concern may be classified into two categories:

(a) Fixed capital
(b) Working capital.

(a)Fixed Capital

Fixed capital is the capital, which is needed for meeting the permanent or long-term purpose of the business concern. Fixed capital is required mainly for the purpose of meeting capital expenditure of the business concern and it is used over a long period. It is the amount invested in various fixed or permanent assets, which are necessary for a business concern.

Character of Fixed Capital

- Fixed capital is used to acquire the fixed assets of the business concern.
- Fixed capital meets the capital expenditure of the business concern.
- Fixed capital normally consists of long period.
- Fixed capital expenditure is of nonrecurring nature.
- Fixed capital can be raised only with the help of long-term sources of finance.

(b) Working Capital

Working capital is the capital which is needed to meet the day-to-day transaction of the business concern. It may cross working capital and net working capital. Normally working capital consists of various compositions of current assets such as inventories, bills, receivable, debtors, cash, and bank balance and prepaid expenses.

According to the definition of **Bonneville,** "any acquisition of funds which increases the current assets increase the Working Capital also for they are one and the same".

Working capital is needed to meet the following purpose:

- Purchase of raw material
- Payment of wages to workers
- Payment of day-to-day expenses
- Maintenance expenditure etc.

Q2. WHAT IS CAPITALIZATION

Ans: Capitalization is one of the most important parts of financial decision, which is related to the total amount of capital employed in the business concern.

Understanding the concept of capitalization leads to solve many problems in the field of financial management. Because there is a confusion among the capital, capitalization and capital structure.

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Meaning of Capitalization

Capitalization refers to the process of determining the quantum of funds that a firm needs to run its business. Capitalization is only the par value of share capital and debenture and it does not include reserve and surplus.

Definition of Capitalization

Capitalization can be defined by the various financial management experts. Some of the definitions are mentioned below:
According to **Guthman and Dougall,** "capitalization is the sum of the par value of stocks and bonds outstanding".
"Capitalization is the balance sheet value of stocks and bonds outstands".
— Bonneville and Dewey
According to **Arhur. S. Dewing,** "capitalization is the sum total of the par value of all shares".

So in short it is the Par value of Shares and debenture but it does not include Reserve and surplus the reason behind that is reserve and surplus is not having any market value.

Q3. What are the kinds of capitalization?

Ans: Capitalization may be classified into the following three important types based on its nature:

- Over Capitalization
- Under Capitalization
- Water Capitalization

Over Capitalization

Over capitalization refers to the company which possesses an excess of capital in relation to its activity level and requirements. In simple means, over capitalization is more capital than actually required and the funds are not properly used.

Under Capitalization

Under capitalization is the opposite concept of over capitalization and it will occur when the company's actual capitalization is lower than the capitalization as warranted by its earning capacity. Under capitalization is not the so called inadequate capital.
Under capitalization can be defined by **Gerstenberg,** "a corporation may be under capitalized when the rate of profit is exceptionally high in the same industry".
Hoagland defined under capitalization as "an excess of true assets value over the aggregate of stocks and bonds outstanding".

Watered Capitalization

If the stock or capital of the company is not mentioned by assets of equivalent value, it is called as watered stock. In simple words, watered capital means that the realizable value of assets of the company is less than its book value.
According to **Hoagland's** definition, "A stock is said to be watered when its true value is less than its book value."

Q4 Discuss the causes, effect and remedies on overcapitalization?

Ans: As we have seen overcapitalization means extra capital held by the company then its requirement, following are some causes which create over capitalization situation

Causes of Over Capitalization

Over capitalization arise due to the following important causes:

- Over issue of capital by the company.
- Borrowing large amount of capital at a higher rate of interest.
- Providing inadequate depreciation to the fixed assets.
- Excessive payment for acquisition of goodwill.
- High rate of taxation.
- Under estimation of capitalization rate.

Effects of Over Capitalization
Over capitalization leads to the following important effects:

- Reduce the rate of earning capacity of the shares.
- Difficulties in obtaining necessary capital to the business concern.
- It leads to fall in the market price of the shares.
- It creates problems on re-organization.
- It leads under or misutilisation of available resources.

Remedies for Over Capitalization
Over capitalization can be reduced with the help of effective management and systematic design of the capital structure.

- Efficient management can reduce over capitalization.
- Redemption of preference share capital which consists of high rate of dividend.
- Reorganization of equity share capital.
- Reduction of debt capital.

Q5. Discuss the causes, effect and remedies on undercapitalization?

Ans: Under capitalization is the opposite concept of over capitalization and it will occur when the company's actual capitalization is lower than the capitalization as warranted by its earning capacity. Under capitalization is not the so called inadequate capital.

Causes of Under Capitalization
Under capitalization arises due to the following important causes:

- Under estimation of capital requirements.
- Under estimation of initial and future earnings.
- Maintaining high standards of efficiency.
- Conservative dividend policy.
- Desire of control and trading on equity.

Effects of Under Capitalization
Under Capitalization leads certain effects in the company and its shareholders.

- It leads to manipulate the market value of shares.
- It increases the marketability of the shares.
- It may lead to more government control and higher taxation.
- Consumers feel that they are exploited by the company.
- It leads to high competition.

Remedies of Under Capitalization
Under Capitalization may be corrected by taking the following remedial measures:

1. Under capitalization can be compensated with the help of fresh issue of shares.
2. Increasing the par value of share may help to reduce under capitalization.
3. Under capitalization may be corrected by the issue of bonus shares to the existing Share holders.
4. Reducing the dividend per share by way of splitting up of shares.

Q6. Discuss the causes, effect and remedies on Watered capitalization?

Ans: Watered capital means that the realizable value of assets of the company is less than its book value.

Causes of Watered Capital

Generally watered capital arises at the time of incorporation of a company but it also arises during the life time of the business. The following are the main causes of watered capital:

1. Acquiring the assets of the company at high price.
2. Adopting ineffective depreciation policy.
3. Worthless intangible assets are purchased at higher price.

Q11. Define capital structure?

Ans: Capital is the major part of all kinds of business activities, which are decided by the size, and nature of the business concern. Capital may be raised with the help of various sources. If the company maintains proper and adequate level of capital, it will earn high profit and they can provide more dividends to its shareholders.

Meaning of Capital Structure

Capital structure refers to the kinds of securities and the proportionate amounts that make up capitalization. It is the mix of different sources of long-term sources such as equity shares, preference shares, debentures, long-term loans and retained earnings.

The term capital structure refers to the relationship between the various long-term source financing such as equity capital, preference share capital and debt capital. Deciding the suitable capital structure is the important decision of the financial management because it is closely related to the value of the firm.

Capital structure is the permanent financing of the company represented primarily by long-term debt and equity.

Definition of Capital Structure

The following definitions clearly initiate, the meaning and objective of the capital structures.

According to the definition of **James C. Van Horne,** "The mix of a firm's permanent long-term financing represented by debt, preferred stock, and common stock equity".

According to the definition of **Presana Chandra,** "The composition of a firm's financing consists of equity, preference, and debt".

According to the definition of **R.H. Wessel,** "The long term sources of fund employed in a business enterprise".

In simple sense it is the mixture of equity capital and debt capital

Q12.Define financial structure and Differentiate the capital structure and financial structure.

Ans: The term financial structure is different from the capital structure. Financial structure shows the pattern total financing. It measures the extent to which total funds are available to finance the total assets of the business.

Financial Structure = Total liabilities
Or
Financial Structure = Capital Structure + Current liabilities.

The following points indicate the difference between the financial structure and capital structure.

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Financial Structures	Capital Structures
1. It includes both long-term and short-term sources of funds	1. It includes only the long-term sources of funds.
2. It means the entire liabilities side of the balance sheet.	2. It means only the long-term liabilities of the company.
3. Financial structures consist of all sources of capital.	3. It consist of equity, preference and Retained earning capital.
4. It will not be more important while determining the value of the firm.	It is one of the major determinations of value of the firm

Example

From the following information, calculate the capitalization, capital structure and financial structures.

Balance Sheet

Liabilities	Amt(Rs)	Assets	Amt(Rs)
Equity share capital	50,000	Fixed assets	25,000
Preference share capital	5,000	Good will	10,000
Debentures	6,000	Stock	15,000
Retained earnings	4,000	Bills receivable	5,000
Bills payable	2,000	Debtors	5,000
Creditors	3,000	Cash and bank	10,000
Total	**70,000**	**Total**	**70,000**

(i) Calculation of Capitalization

SR	Sources	Amount
1	Equity share capital	50,000
2	Preference share capital	5,000
3	Debentures	6,000
Capitalization		**61,000**

(ii) Calculation of Capital Structures

SR	Sources	Amount
1	Equity share capital	50,000
2	Preference share capital	5,000
3	Debentures	6,000
4	Retained earnings	4,000
Total		65000

(iii) Calculation of Financial Structure

SR	Sources	Amount
1	Equity share capital	50,000
2	Preference share capital	5,000
3	Debentures	6,000
4	Retained earnings	4,000
5	Bills payable	2,000
6	Creditors	3000
Total		70000.

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Q13. What is optimum capital structure?

Ans: Optimum capital structure is the capital structure at which the weighted average cost of capital is minimum and thereby the value of the firm is maximum. Optimum capital structure may be defined as the capital structure or combination of debt and equity, that leads to the maximum value of the firm.

Objectives of Capital Structure

Decision of capital structure aims at the following two important objectives:

1. Maximize the value of the firm.
2. Minimize the overall cost of capital.

Forms of Capital Structure

Capital structure pattern varies from company to company and the availability of finance. Normally the following forms of capital structure are popular in practice.

• Equity shares only.
• Equity and preference shares only.
• Equity and Debentures only.
• Equity shares, preference shares and debentures.

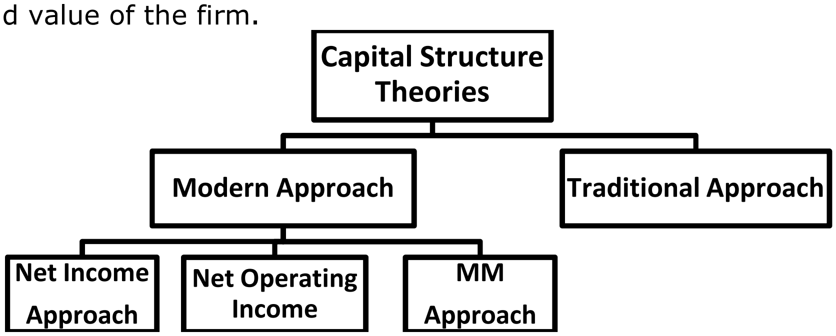
Q14. Discuss the various factors affecting the capital structure.

Ans: As we know decision of finding of capital structure is one of the important decision for finance manager, following are some factors which influence the decision of the capital structure of the firm.

1. **Leverage** It is the basic and important factor, which affect the capital structure. It uses the fixed cost financing such as debt, equity and preference share capital. It is closely related to the overall cost of capital.
2. **Cost of Capital:** Cost of capital constitutes the major part for deciding the capital structure of a firm. Normally long- term finance such as equity and debt consist of fixed cost while mobilization. When the cost of capital increases, value of the firm will also decrease. Hence the firm must take careful steps to reduce the cost of capital.
   (a) Nature of the business: Use of fixed interest/dividend bearing finance depends upon the nature of the business. If the business consists of long period of operation, it will apply for equity than debt, and it will reduce the cost of capital.
   (b) Size of the company: It also affects the capital structure of a firm. If the firm belongs to large scale, it can manage the financial requirements with the help of internal sources. But if it is small size, they will go for external finance. It consists of high cost of capital.
   (c) Legal requirements: Legal requirements are also one of the considerations while dividing the capital structure of a firm. For example, banking companies are restricted to raise funds from some sources.
   (d) Requirement of investors: In order to collect funds from different type of investors, it will be appropriate for the companies to issue different sources of securities.
3. **Government policy** Promoter contribution is fixed by the company Act. It restricts to mobilize large, long term funds from external sources. Hence the company must consider government policy regarding the capital structure.

Q15. Explain the capital structure theories.

Ans: Capital structure is the major part of the firm's financial decision which affects the value of the firm and it leads to change EBIT and market value of the shares. There is a relationship among the capital structure, cost of capital and value of the firm. The aim of effective capital structure is to maximize the value of the firm and to reduce the cost of capital.
There are two major theories explaining the relationship between capital structure, cost of capital and value of the firm.



Q16. Define Traditional Approach of capital structure theory.

It is the mix of Net Income approach and Net Operating Income approach. Hence, it is also called as intermediate approach. According to the traditional approach, mix of debt and equity capital can increase the value of the firm by reducing overall cost of capital up to certain level of debt. Traditional approach states that the Ko decreases only within the responsible limit of financial leverage and when reaching the minimum level, it starts increasing with financial leverage.

Assumptions
Capital structure theories are based on certain assumption to analysis in a single and convenient manner:

- There are only two sources of funds used by a firm; debt and shares.
- The firm pays 100% of its earning as dividend.
- The total assets are given and do not change.
- The total finance remains constant.
- The operating profits (EBIT) are not expected to grow.
- The business risk remains constant.
- The firm has a perpetual life.
- The investors behave rationally.

Q17. Define Net Income (NI) Approach?

Ne t income approach suggested by **the Durand.** According to this approach, the capital structure decision is relevant to the valuation of the firm. In other words, a change in the capital structure leads to a corresponding change in the overall cost of capital as well as the total value of the firm.
According to this approach, use more debt finance to reduce the overall cost of capital and increase the value of firm.

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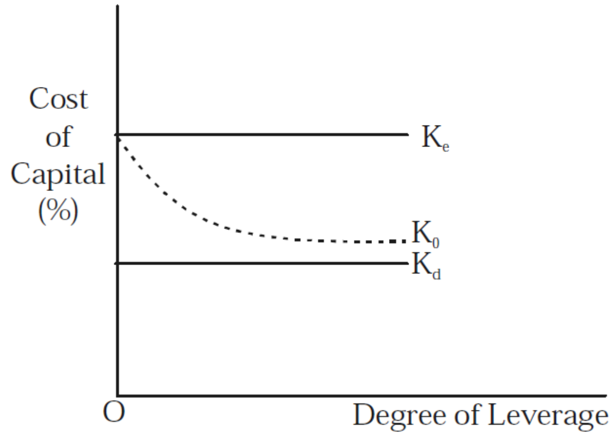


Net income approach is based on the following three important assumptions:
1. There are no corporate taxes.
2. The cost debt is less than the cost of equity (Ke>Kd).
3. The use of debt does not change the risk perception of the investor.

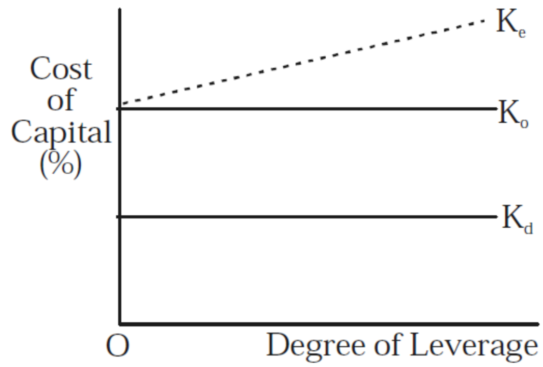
V = S+B
V = Value of firm
S = Market value of equity
B = Market value of debt
Market value of the equity can be ascertained by the following formula:
S =NI/Ke
where
NI = Earnings available to equity shareholder
Ke = Cost of equity/equity capitalization rate
Format for calculating value of the firm on the basis of NI approach.

Particulars	***Amount***
Net operating income (EBIT)	XXX
Less: interest on debenture	XXX
Earnings available to equity holder (NI)	XXX
Equity capitalization rate (Ke)	XXX
Market value of equity (S)	XXX
Market value of debt (B)	XXX
Total value of the firm (S+B)	XXX
Overall cost of capital= Ko = EBIT/V(%)	XXX%

Q18.Define Net Operating Income (NOI) Approach

Ans: Another modern theory of capital structure, suggested by **Durand**. This is just the opposite to the Net Income approach. According to this approach, Capital Structure decision is irrelevant to the valuation of the firm. The market value of the firm is not at all affected by the capital structure changes.

According to this approach, the change in capital structure will not lead to any change in the total value of the firm and market price of shares as well as the overall cost of capital.



NI approach is based on the following important assumptions;
The overall cost of capital remains constant;
There are no corporate taxes;
The market capitalizes the value of the firm as a whole;
Value of the firm (V) can be calculated with the help of the following formula
V =EBIT / Ko
Where,
V = Value of the firm
EBIT = Earnings before interest and tax
Ko = Overall cost of capital

Q19. Modigliani and Miller Approach

Modigliani and Miller approach states that the financing decision of a firm does not affect the market value of a firm in a perfect capital market. In other words MM approach maintains that the average cost of capital does not change with change in the debt weighted equity mix or capital structures of the firm.
Modigliani and Miller approach is based on the following important assumptions:
- There is a perfect capital market.
- There are no retained earnings.
- There are no corporate taxes.
- The investors act rationally.
- The dividend payout ratio is 100%.
- The business consists of the same level of business risk.

Value of the firm can be calculated with the help of the following formula:

EBIT(l-t)/Ko

Where
EBIT = Earnings before interest and tax
Ko = Overall cost of capital
t = Tax rate

20. Explain the concept of planning the capital structure in practical circumstances.

Ans: Planning the Capital Structure in Practical Circumstances

Many firms are still not able to articulate their capital structure policy. The reasons why many firms have not been able to define their capital structure policy with definitiveness seem to be as follows:

(a) Widening of the Instruments of Financing: The range of instruments of financing has widened over years. Convertible debentures which were relatively unknown in here before have assumed great significance in recent years. Likewise, leasing & hire purchase are becoming important. In addition, some new instruments like cumulative convertible preference shares & cumulative convertible debentures have been introduced or are likely to be introduced.
(b) Lack of Long Expertise with Debt: Before the emergence of term lending financial institutions, most of the firms relied largely, on internal accruals. Hence, debt-equity ratios were very low. With the easier availability of term finance from the sixties & debenture finance in more recent years, many firms have resorted to substantial debt finance to support their ever increasing capital investment programmes. The experience of these firms with debt-finance is apparently not sufficient long to provide a sound basis for delineating their capital structure policies definitively.
(c) Changing Complexion of Business Risk: The pace of change in the Indian industry has quickened with the introduction of new products & services, adoption of modern technologies, intensification of competition & shifts in the consumer tastes & preferences. These developments are naturally altering the complexion of business risk. In such a fluid situation, it becomes somewhat difficult to articulate capital structure policies because a degree of financial risk a firm can assume depends considerably on the level of its business risk.

Firms which have articulated their capital structure policy seems to follow one of the following five policies.

Policy – A: No debt should be used in any circumstances.
Policy – B: Debt should be employed to a very limited extent.
Policy – C: The ratio of debt-to-equity should be maintained around 1:1
Policy – D: The ratio of debt-to-equity should be kept within 2:1
Policy – E: Debt should be tapped to the extent it is available.

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Practical Aspect Of Capital Structure Theories

Exercise 1 [Traditional Approach]

ABC Ltd., needs Rs. 30,00,000 for the installation of a new factory. The new factory expects to yield annual earnings before interest and tax (EBIT) of Rs.5,00,000. In choosing a financial plan, ABC Ltd., has an objective of maximizing earnings per share (EPS). The company proposes to issuing ordinary shares and raising debit of Rs. 3,00,000 and Rs. 10,00,000 of Rs. 15,00,000. The current market price per share is Rs. 250 and is expected to drop to Rs. 200 if the funds are borrowed in excess of Rs. 12,00,000. Funds can be raised at the following rates.

–up to Rs. 3,00,000 at 8%
–over Rs. 3,00,000 to Rs. 15,000,00 at 10%
–over Rs. 15,00,000 at 15%
Assuming a tax rate of 50% advise the company.

Exercise 2

Compute the market value of the firm, value of shares and the average cost of capital from the following information.

Net operating income Rs. 1,00,000
Total investment Rs. 5,00,000
Equity capitalization Rate:
(a) If the firm uses no debt 10%
(b) If the firm uses Rs. 25,000 debentures 11%
(c) If the firm uses Rs. 4,00,000 debentures 13%

Assume that Rs. 5,00,000 debentures can be raised at 6% rate of interest whereas Rs. 4,00,000 debentures can be raised at 7% rate of interest.

Exercise 3 [NI Approach]

(a) A Company expects a net income of Rs. 1,00,000. It has Rs. 2,50,000, 8% debentures. The equality capitalization rate of the company is 10%. Calculate the value of the firm and overall capitalization rate according to the net income approach (ignoring income tax).

(b) If the debenture debts are increased to Rs. 4,00,000. What shall be the value of the firm and the overall capitalization rate?

Exercise 4[NOI Approach]

XYZ expects a net operating income of Rs. 2,00,000. It has 8,00,000, 6% debentures. The overall capitalization rate is 10%. Calculate the value of the firm and the equity capitalization rate (Cost of Equity) according to the net operating income approach. If the debentures debt is increased to Rs. 10,00,000. What will be the effect on volume of the firm and the equity capitalization rate?

Exercise 5 [NOI Approach]

Abinaya company Ltd. expresses a net operating income of Rs. 2,00,000. It has Rs. 8,00,000 to 7% debentures. The overall capitalization rate is 10%.

(a) Calculate the value of the firm and the equity captialization rate (or) cost of equity according to the net operating income approach.

(b) If the debenture debt is increasesd to Rs. 12,00,000. What will be the effect on the value of the firm, the equity capitalization rate?

Exercise 6 [M M Approach]

There are two firms 'A' and 'B' which are exactly identical except that A does not use any debt in its financing, while B has Rs. 2,50,000 , 6% Debentures in its financing. Both the firms have earnings before interest and tax of Rs. 75,000 and the equity capitalization rate is 10%. Assuming the corporation tax is 50%, calculate the value of the firm.

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Exercise 7 [M M Approach]

The following data regarding the two companies 'X' and 'Y' belonging to the same equivalent class:

	Company 'X'	Company 'Y'
Number of ordinary shares	75,000	1,25,000
5% debentures	40,000	–
Market price per shares	Rs. 1.25	Rs. 1.00
Profit before interest	Rs. 25,000	Rs. 25,000

All profits after paying debenture interest are distributed as dividends.
You are required to explain how under Modigliani and Miller approach, an investor holding 10% of shares in company 'X' will be better off in switching his holding to company 'Y'.

Exercise 8

A limited company is considering different methods to finance its investment proposal. It is estimated that initially Rs.40,00,000 will be needed. Two alternative methods are available for raising the funds:

(i) To raise Rs.20,00,000 by sale of equity shares of Rs.100 each & balance at 18% term loan.

(ii) To raise the entire amount by sale of equity shares of Rs.100 each.

The existing capital structure of the company consists of:

(i) 50,000 equity shares of Rs.100 each&

(ii) 17% term loan of Rs.20,00,000.

The expected EBIT (Earnings before interest & tax) id Rs.15,00,000. Advise the company on the basis of EPS (Earnings per share) in each alternative.

Exercise 9

A new project under consideration by your company requires a capital investment of Rs.150 lakhs. The required funds can be raised either through the sale of equity shares or by borrowing from a financial institution. Interest on term loan is 15% & on tax rate is 50%. If the debt-equity ratio 2:1 is to be maintained calculate the indifference point of the project.

Exercise 10

XYZ Ltd. has currently an ordinary share capital of Rs.250 lakhs consisting of equity shares of Rs.100 each. The company is planning to raise another Rs.200 lakhs for financing a major expansion program. The following four options are available.

(i) Entirely through ordinary shares.

(ii) Rs.100 lakhs through ordinary shares & the balance by 15% term loan.

(iii) Rs.50 lakh through ordinary shares, Rs.150 lakhs through long-term borrowings at 15% rate of interest.

(iv) Rs.100 lakhs through ordinary shares, & Rs.100 lakhs through preference shares with 14% dividend.

Expected EBIT of the company id Rs.80 lakhs. Calculate EPS under each alternative & advice the company about the most beneficial alternative.

Income-tax rate can be taken as 50%.

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Exercise 11

A company gives you the following figures:

Particulars	Amount (Rs.)
Profit before interest & tax	24,00,000
Less: Interest on debentures @ 12.5%	2,00,000
Interest on long term loans @ 16%	2,00,000
Total Interest	**4,00,000**
Profit before tax	20,00,000
Less: Income-tax at 50%	**10,00,000**
Profit after tax	10,00,000
Number of equity shares (Rs.10 each)	4,00,000
Earnings per share	2.50
Current market price	20.00
Price earnings ratio	8

The company has undistributed reserves & profits of Rs.81,50,000. The company needs to raise Rs.36,00,000 for repayment of debentures & modernization of plants. Two alternative sources are available for raising this money.

(i) Raising the entire amount through term loans @ 18% interest.

(ii) Raising partially by sale of Rs.1,00,000 equity shares at an expected price of Rs.18 per share & the balance through term loan @ 16% interest.

The company expects that the rate of return i.e. before tax & interest on funds employed will improve by 4% because of modernization & if debt-equity ratio [debt/debt plus shareholders funds] exceeds 25%, the P/E ratio will go down to 6.

Advice the company about the proper course of action.

Problem 11

A company wants to have an optimum mix of debt & equity. The cost of debt & cost of equity at a different debt equity ratio is as follows:

Debt equity ratio	Cost of debt % [Post-tax]	Cost of equity [%]
-	-	12.5
10:90	.05	13.0
20:80	.05	13.6
30:70	.06	14.3
40:60	.07	16.0
50:50	.08	18.0
60:40	.10	20.0

What is the optimum capital structure of the company?

Problem 12

A company needs Rs.5,00,000 for modernization. The following three plans are available. (i) Issue of 50,000 equity shares of Rs.10 per share. (ii) Issue of Rs.25000 equity shares of Rs. 10 per share & 2,500 debentures of Rs.100 each at 14% rate of interest. (iii) Issue of 25,000 equity shares & the balance through 10% preference shares.

If the company's earnings before interest & tax are Rs.10,000, Rs.20,000, Rs.40,000, Rs.60,000 & Rs.1,00,000, what will be the earnings per under each of the three financial plans? Assume an income-tax rate of 50%.

Exercise 13

AB Ltd. needs Rs.10,00,000 for expansion. The expansion is expected to yield an annual EBIT of Rs.1,60,000. In choosing a financial plan, AB Ltd. has an objective of maximizing earnings per share. It is considering the possibility of issuing equity shares & rising debt of Rs.1,00,000 or Rs.4,00,000 or Rs.6,00,000. The market price per share currently is Rs.50 & is Rs.50 & is expected to drop up to Rs.40, if funds are borrowed in excess of Rs.5,00,000. Funds can be borrowed at the rates indicated below:

(a) Up to Rs.1,00,000 @ 8%,

(b) Over Rs.1,00,000 up to Rs.5,00,000 @ 12%

(c) Over Rs.5,00,000 @ 18%

Assuming a tax rate of 50%, calculate EPS under the three financing plans.

Exercise 14

Goodshape Co. has currently an Ordinary Share Capital of Rs.25 lacs consisting of 25,000 shares of Rs.100 each. The management is planning to raise another Rs.20 lacs to finance a major programme of expansion through one of the four possible financial plans. The options are as follows:

(a) Entirely through ordinary shares.

(b) Rs.10 lacs Borrowing through ordinary shares & Rs.10 lacs through long-term borrowing at 15% interest p.a.

(c) Rs.5 lacs through ordinary shares & Rs.15 lacs through long-term borrowing at 16% interest p.a.

(d) Rs.10 lacs through ordinary shares & Rs.10 lacs through preference shares with 14% dividend.

The company's expected EBIT will be 8 lacs. Assuming a Corporate Tax Rate of 50%, determine the EPS under each alternative.

1st floor Gajanan Plaza, Opp Kashiba medical, Ashok Stambh, Nasik.
9922159279, 2571545