

41 Balance Sheet had the following amounts as at 31st March, 2023;

10% preference share capital	5,00,000
Equity share capital	15,00,000
Security premium reserve	1,00,000
Reserve and surplus	4,00,000
long-term loan from IDBI @ 9%	30,00,000
Current Assets	12,00,000
Current Liabilities	8,00,000
Investment (in other companies)	2,00,000
Property, plant and Equipment - cost	60,00,000
Depreciation written off	14,00,000

Calculate ratios indicating the Long-term and the short-term financial position of the company.

solution:

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

$$= \frac{1,20,000}{8,00,000}$$

$$\text{Current Ratio} = 1.5:1$$

Equity = preference share + Equity share + Reserve & Surplus

$$= 5,00,000 + 15,00,000 + 4,00,000$$

$$= 24,00,000$$

Debt = Long term loan form IDBI @ 9%

$$= 30,00,000$$

$$\text{Debt to Equity ratio} = \frac{\text{Debt}}{\text{Equity}} = \frac{30,00,000}{24,00,000} = 1.25:1$$

42 Calculate Debt to Equity Ratio from the following information:

Property, plant and equipment (Gross)	8,40,000
Accumulated Depreciation	1,40,000
Non-current investment	14,000
Long-term Loss and Advances	56,000
Current Assets	3,50,000
Current Liabilities	2,80,000
10% Long-term Borrowings	4,20,000
Long-term Provisions	1,40,000

Solution:

Debt = Long-term Borrowings + Long term provisions

$$= 4,20,000 + 1,40,000$$

$$= 5,60,000$$

Equity = Total Assets - Total Outside Liabilities

Total Assets = (Fixed Assets - Acc. Depreciation) + Non-current
Investment + Long-term loans and Advances +
Current Assets

$$= (8,40,000 - 1,40,000) + 14,000 + 56,000 + 3,50,000$$

$$= 11,20,000$$

Total outside liabilities = Non-current liabilities + current Liabilities

$$= 5,60,000 + 2,80,000 = 8,40,000$$

Equity = Total Assets - Total outside liabilities

$$= 11,20,000 - 8,40,000 = 2,80,000$$

$$\text{Debt to Equity ratio} = \frac{\text{Debt}}{\text{Equity}} = \frac{5,60,000}{2,80,000} = 2:1$$

- 43 From the following information, calculate Debt to equity share ratio: Total Debts 6,00,000; current liabilities 2,00,000 and capital employed 6,00,000.**

Solution:

Total Debts = Non-Current liabilities + Current liabilities

$$6,00,000 = \text{Non-current liabilities} + 2,00,000$$

$$\text{Non-current liabilities (debt)} = 4,00,000$$

capital employed = equity + non-current liabilities

$$6,00,000 = \text{equity} + 4,00,000$$

$$\text{Equity} = 2,00,000$$

$$\text{Debt to Equity ratio} = \frac{\text{Debt}}{\text{Equity}} = \frac{4,00,000}{2,00,000} = 2:1$$

- 44 Calculate Debt to Equity Ratio: Total Assets 14,00,000; Total debt 12,00,000; capital employed 10,00,000.**

Solution:

$$\text{Equity} = \text{Total Assets} - \text{Total Debts}$$

$$= 14,00,000 - 12,00,000$$

$$= 2,00,000$$

$$\text{Capital Employed} = \text{Equity} + \text{Debt (Non-Current liabilities)}$$

$$10,00,000 = 2,00,000 + \text{Debt (Non-current liabilities)}$$

$$\text{Debt (Non-current liabilities)} = 8,00,000$$

$$\text{Debt to Equity ratio} = \frac{\text{Debt}}{\text{Equity}} = \frac{8,00,000}{2,00,000} = 4:1$$

- 45 Capital Employed 8,00,000; shareholder's funds 2,00,000. Calculate Debt to Equity Ratio.

Solution:

$$\text{Debt} = \text{Capital Employed} - \text{Share holders funds}$$

$$= 8,00,000 - 2,00,000$$

$$= 6,00,000$$

$$\text{Share holders funds (Equity)} = 2,00,000$$

$$\text{Debt to Equity ratio} = \frac{\text{Debt}}{\text{Equity}} = \frac{6,00,000}{2,00,000} = 3:1$$

- 46 King Ltd has current ratio of 2.5:1. Its working capital is 1,20,000. Total Assets are of 3,80,000 and Total Debt of 2,80,000. Calculate Debt to equity ratio.

Solution:

Current Ratio = 2.5:1

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

$$2.5 = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

$$2.5 \text{ C.L} = \text{C.A} \quad \text{-----(1)}$$

Working capital = Current Assets - Current Liabilities

$$1,20,00 = \text{C.A} - \text{C.L} \quad \text{-----(2)}$$

putting equation (1) value in equation (2)

$$1,20,000 = 2.5 \text{ C.L} - \text{C.L}$$

$$\text{C.L} = \frac{1,20,000}{1.5}$$

Current liabilities = 80,000

Debt (Non-current liabilities) = Total Debt - Current liabilities

$$= 2,80,000 - 80,000$$

$$= 2,00,000$$

Equity (Share holder's funds) = Total Assets - Total Debts

$$= 3,80,000 - 2,80,000$$

$$= 1,00,000$$

$$\text{Debt to Equity ratio} = \frac{\text{Debt}}{\text{Equity}} = \frac{2,00,000}{1,00,000} = 2:1$$

- 47 Monica Ltd. has Quick Ratio of 1.5 : 1. Its working capital is 1,20,000 and its inventories are of 80,000. Total Assets of**

3,80,000 and total debts of 2,80,000. Calculate Debt to equity Ratio.

Solution:

$$\begin{aligned}\text{Quick Ratio} &= \frac{\text{Quick Assets}}{\text{Current Liabilities}} \\ &= \frac{\text{Current Assets} - \text{Inventories}}{\text{Current Liabilities}}\end{aligned}$$

$$1.5 = \frac{\text{Current Assets} - 80,000}{\text{Current Liabilities}}$$

$$1.5 \text{ C.L} = \text{C.A} - 80,000$$

$$\text{C.A} = 1.5 \text{ C.L} + 80,000 \text{ -----(1)}$$

Working capital = Current Assets - Current liabilities

$$1,20,000 = \text{C.A} - \text{C.L} \text{ -----(2)}$$

Putting C.A Value from Eq (1) into Eq (2)

$$1,20,000 = 1.5 \text{ C.L} + 80,000 - \text{C.L}$$

$$5 \text{ C.L} = 40,000$$

$$\text{Current Liabilities} = \frac{40,000}{5} = 80,000$$

Debt (Non-current liabilities) = Total Debt - Current liabilities

$$= 2,80,000 - 80,000$$

$$= 2,00,000$$

Equity (share holder's funds) = Total Assets - Total Debt

$$= 3,80,000 - 2,80,000$$

$$= 1,00,000$$

$$\text{Debt to Equity ratio} = \frac{\text{Debt}}{\text{Equity}} = \frac{2,00,000}{1,00,000} = 2:1$$

48 When Debt to Equity Ratio is 2, State, giving reason, whether this ratio will increase, decrease or will have no change in each of the following cases;

- I. Sale of land (Book value 4,00,000 for 5,00,000);
- II. issue of equity share for the purchase of plant and machinery worth 10,00,000;
- III. issue of preference shares for redemption of 13% Debentures, worth 10,00,000.

Ans- I decrease

II decrease

III decrease

49 Debt to equity ratio of a company is 0.5 : 1. Which of the following would increase, decrease or not change it:

- I. Issue of Equity shares;
- II. Cash received from debtors;
- III. Redemption of debentures
- IV. Purchased good on credit?

I. Decrease

II. No change

III.No change

IV.No change

50 Assuming that the debt to Equity ratio is 2 : 1, state, giving reasons, which of the following transactions would (i) Increase (ii) Decrease (iii) Not alter Debt to equity Ratio.

- I. Issue of new share for cash.
- II. Conversion of debentures into equity shares.
- III. Sale of fixed assets at profit.
- IV. Purchase of a fixed asset on long-term deferred payment basis.
- V. Payment to Creditors.

ANS

I.Decrease

II.Decrease

III.Decrease

IV.Increase

V.No change

51 From the following Balance Sheet to ABC Ltd. as at 31st March, 2023, Calculate Debt to Equity Ratio.

Particulars	Note No.	
I. EQUITY AND LIABILITIES		
1. Shareholders' Funds		
(a) Share capital		
(i) Equity share capital	5,00,000	
(ii) 10% preference share capital	<u>5,00,000</u>	10,00,000
(b) Reserve and surplus		2,40,000
2. Non-Current Liabilities		
Long-term Borrowings (Debentures)		2,50,000
3. Current Liabilities		
(a) Trade payables		4,30,000

(b) Other current liabilities	20,000
(c) Short-term provisions: for Tax	3,00,000
Total	22,40,000
II. ASSETS	
1. Non-current Assets	
Property, Plant and Equipment and intangible Assets:	
(i) property, plant and equipment	6,40,000
(ii) Intangible Assets	1,00,000
2. Current Assets	
(a) Inventories	7,50,000
(b) Trade Receivables	6,40,000
(c) Cash and Cash Equivalents	1,10,000
Total	22,40,000

Solution:

Debt = Long term Borrowings

= 2,50,000

Equity = Equity share Capital + 10% preference share capital reserve &

Surplus

= 5,00,000 + 5,00,000 + 2,40,000

= 12,40,000

Debt to equity ratio = $\frac{Debt}{Equity}$

$$= \frac{2,50,000}{12,40,000} = 0.2016:1$$

$$= 0.2:1$$

52 Calculate total Assets to Debt ratio from the following information:

Long-term Debts 4,00,000; Total Assets 7,70,000.

Solution:

$$\text{Total Assets} = 7,70,000$$

$$\text{Long-term Debts (Debts)} = 4,00,000$$

$$\begin{aligned} \text{Total Assets to Debt Ratio} &= \frac{\text{Total Assets}}{\text{Debt}} \\ &= \frac{7,70,000}{4,00,000} \\ &= 1.925 : 1 \end{aligned}$$

53 Shareholder's Funds 1,60,000; Total Debts 3,60,000; current Liabilities 40,000.

Calculate Total Assets to Debt Ratio.

Solution:

$$\text{Total Assets} = \text{Share holder's Funds} + \text{Total Debts}$$

$$= 1,60,000 + 3,60,000$$

$$= 5,20,000$$

$$\text{Total Debts} = \text{Non-current liabilities} + \text{current liabilities}$$

$$3,60,000 = \text{Non-current liabilities} + 40,000$$

$$\text{Non-current liabilities (Debt)} = 3,20,000$$

$$\begin{aligned}
 \text{Total Assets to Debt Ratio} &= \frac{\text{Total Assets}}{\text{Debt}} \\
 &= \frac{5,20,000}{3,20,000} \\
 &= 1.625 : 1
 \end{aligned}$$

- 54 Total Debt 60,00,000; Shareholder's funds 10,00,000; Reserve and surplus 2,50,000; Current Assets 25,00,000; Working Capital 5,00,000. Calculate Total Assets to Debt Ratio.

Solution:

$$\begin{aligned}
 \text{Total Assets} &= \text{Total Debt} + \text{Share holder's Funds} \\
 &= 60,00,000 + 10,00,000 \\
 &= 70,00,000
 \end{aligned}$$

$$\text{Working Capital} = \text{Current Assets} - \text{Current liabilities}$$

$$5,00,000 = 25,00,000 - \text{Current Liabilities}$$

$$\text{Current Liabilities} = 20,00,000$$

$$\text{Total Debt} = \text{Non-Current Liabilities} + \text{Current Liabilities}$$

$$60,00,000 = \text{Non-Current Liabilities} + 20,00,000$$

$$\text{Non-Current Liabilities} = 40,00,000$$

$$\begin{aligned}
 \text{Total Assets to Debt Ratio} &= \frac{\text{Total Assets}}{\text{Debt}} \\
 &= \frac{70,00,000}{40,00,000} \\
 &= 1.75 : 1
 \end{aligned}$$

- 55 Total Debt 15,00,000; Current liabilities 5,00,000; Capital Employed 15,00,000. Calculate Total Assets to Debt Ratio.

Solution:

$$\text{Total Assets} = \text{Capital Employed} + \text{Current Liabilities}$$

$$= 15,00,000 + 5,00,000$$

$$= 20,00,000$$

$$\text{Total Debt} = \text{Non-Current Liabilities} + \text{Current Liabilities}$$

$$15,00,000 = \text{Non-Current Liabilities} + 5,00,000$$

$$\text{Non-Current Liabilities} = 10,00,000$$

$$\begin{aligned} \text{Total Assets to Debt Ratio} &= \frac{\text{Total Assets}}{\text{Debt}} \\ &= \frac{20,00,000}{10,00,000} = 2 : 1 \end{aligned}$$

- 56 Total Debt 12,00,000; Shareholders funds 2,00,000; Reserve and surplus 50,000; Current Assets 5,00,000; Working capital 1,00,000. Calculate Total Assets to Debt Ratio.

Solution:

$$\text{Total Assets} + \text{Shareholder's} + \text{Total Debt}$$

$$= 2,00,000 + 12,00,000$$

$$= 14,00,000$$

$$\text{Working capital} = \text{Current Assets} - \text{Current Liabilities}$$

$$1,00,000 = 5,00,000 - \text{Current liabilities}$$

$$\text{Current Liabilities} = 4,00,000$$

$$\text{Total Debt} = \text{Non-Current Liabilities} + \text{Current Liabilities}$$

$$12,00,000 = \text{N.C.L (Debt)} + 4,00,000$$

Non-Current liabilities (Debt) = 8,00,000

$$\begin{aligned}\text{Total Assets to Debt Ratio} &= \frac{\text{Total Assets}}{\text{Debt}} \\ &= \frac{14,00,000}{8,00,000} = 1.75 : 1\end{aligned}$$

57 Calculate Total Assets to Debt Ratio from the following information:

Particulars	₹	Particulars	₹
Total assets	15,00,000	Bills payable	60,000
Total Debts	12,00,000	Bank Overdraft	50,000
Creditors	90,000	Outstanding Expenses	20,000

Solution:

**Current Liabilities = Creditors + Bills payable + Bank Overdraft
+ Outstanding Expenses**

$$\begin{aligned}&= 90,000 + 60,000 + 50,000 + 20,000 \\ &= 2,20,000\end{aligned}$$

Total Debt = Non-Current Liabilities + Current Liabilities

$$12,00,000 = \text{Non-Current Liabilities} + 2,20,000$$

Non Current Liabilities (Debt) = 9,80,000

$$\begin{aligned}\text{Total Assets to Debt Ratio} &= \frac{\text{Total Assets}}{\text{Debt}} \\ &= \frac{15,00,000}{9,80,000} = 1.53 : 1\end{aligned}$$

58 Calculate 'Total Assets to Debt Ratio' From the following information:

Equity share capital	4,00,000
Long-term Borrowing	1,80,000
Surplus, i.e., Balance of P & L	1,00,000
General Reserve	70,000
Current Liabilities	30,000
Long-term provisions	1,20,000

Solution:

$$\begin{aligned}\text{Debt} &= \text{Long term borrowings} + \text{Long term provisions} \\ &= 1,80,000 + 1,20,000 \\ &= 3,00,000\end{aligned}$$

$$\begin{aligned}\text{Share holder's funds} &= \text{Equity share capital} + \text{Surplus profit \& Loss} + \text{General Reserve}\end{aligned}$$

$$\begin{aligned}&= 4,00,000 + 1,00,000 + 70,000 \\ &= 5,70,000\end{aligned}$$

$$\begin{aligned}\text{Total Assets} &= \text{Share holder's funds} + \text{Non-Current liabilities (Debt)} + \text{Current Liabilities}\end{aligned}$$

$$\begin{aligned}&= 5,70,000 + 3,00,000 + 30,000 \\ &= 9,00,000\end{aligned}$$

$$\begin{aligned}\text{Total Assets} &= \text{Share holder's funds} + \text{Non-Current liabilities (Debt)} + \text{Current Liabilities}\end{aligned}$$

$$\begin{aligned}&= 5,70,000 + 3,00,000 + 30,000 \\ &= 9,00,000\end{aligned}$$

$$\begin{aligned}\text{Total Assets to Debt Ratio} &= \frac{\text{Total Assets}}{\text{Debt}} \\ &= \frac{9,00,000}{3,00,000} = 3 : 1\end{aligned}$$

59 From the following information, calculate Total Assets to debt Ratio:

property, plant and Equipment (Gross)	6,00,000
Non-Current Investment	10,000
Current Assets	2,50,000
Long term Borrowings	3,00,000
Accumulated Depreciation	1,00,000
Long-term Loans and Advances	40,000
Current Liabilities	2,00,000
Long-term provisions	1,00,000

Solution:

Total Assets = [Fixed Assets (Gross) - Acc. Depreciation] + Non Current investment + Long term loans & advances + Current Assets

$$= (6,00,000 - 1,00,000) + 10,000 + 40,000 + 2,50,000$$

$$= 5,00,000 + 10,000 + 40,000 + 2,50,000$$

$$= 8,00,000$$

Debt = Long term Borrowings + Long term provisions

$$= 3,00,000 + 1,00,000$$

$$= 4,00,000$$

$$\begin{aligned} \text{Total Assets to Debt Ratio} &= \frac{\text{Total Assets}}{\text{Debt}} \\ &= \frac{8,00,000}{4,00,000} = 4 : 1 \end{aligned}$$

60 From the following information, calculate proprietary Ratio:

Share capital	3,00,000
Non-Current Assets	13,20,000
Reserve and Surplus	1,80,000
Current Assets	6,00,000

Solution:

$$\begin{aligned} \text{Total Assets} &= \text{Non-Current Assets} + \text{Current Assets} \\ &= 13,20,000 + 6,00,000 \\ &= 19,20,000 \end{aligned}$$

$$\begin{aligned} \text{Share holder's funds} &= \text{Share capital} + \text{Reserve \& Surplus} \\ &= 3,00,000 + 1,80,000 \end{aligned}$$

$$\text{Share holder's funds} = 4,80,000$$

$$\begin{aligned} \text{Property Ratio} &= \frac{\text{Shareholder's funds}}{\text{Total Assets}} \\ &= \frac{4,80,000}{19,20,000} \\ &= 0.25 : 1 \end{aligned}$$