



SRI AKILANDESWARI WOMEN'S COLLEGE, WANDIWASH

MANAGEMENT ACCOUNTING

Class : III UG Commerce

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DEBTORS TURNOVER RATIO

Pankajam Ltd. sells goods on cash as well as on credit basis. The following information is extracted from their books of accounts for 1993:

	Rs.
Total sales	1,00,000
Cash sales (included in the above)	20,000
Sales returns	7,000
Total Debtors for sales as on(31.12.1993)	9,000
Bills receivables as on 31.12.1993	2,000
Provision for doubtful debts	1,000
Trade creditors as on 31-12-93	10,000

You are required to calculate

- (1) Debtors/ Receivables turnover ratio
- (2) The average collection period

Solution:

(1) Debtors/Receivables turnover ratio:

Credit sales

Average Accounts Receivables

Credit sales = Total sales – cash sales – sales returns

Credit sales = 1,00,000 – 20,000 – 7,000

Rs 73,000

Average accounts receivables = Average debtors + Average Receivables

Average Debtors = Opening debtors + Closing debtors

2

Average Receivables =
receivables

Opening bills receivables + Closing bills

2

Average Accounts Receivables = Closing debtors + closing bills receivables

= 9,000 + 2,000 = Rs. 11,000

Debtors turnover ratio

= 73,000 / 11,000 = 6.636 times

Cont:

(2) Average collection period:

Days / Months in the year

Debtors turnover ratio

Average collection period = 365

6.636

= 55 days

(or)

= 12/ 6.636

= 1.8 months

Debtors Turnover Ratio

17. Calculate the debtors turnover ratio from the following:

	Rs.
Total sales for the year 1987	1,00,000
Cash sales for the year 1987	20,000
Debtors as on 1.1.1987	10,000
Debtors as on 31.12.1987	15,000
Bills receivables as on 1.1.1987	7,500
Bills receivables as on 31.12.1987	12,500

Solution:

Debtors turnover ratio:

Credit sales

Average accounts Receivables

Credit sales = Total sales – Cash sales

Credit sales = 1,00,000 – 20,000 =Rs. 80,000

Average Accounts receivables = Average debtors + Average Receivables

Average debtors = Opening debtors + Closing
debtors

$$= \frac{10,000 + 15,000}{2} = \text{Rs. } 12500$$

Average Receivables =

Opening receivables + Closing receivables

$$= \frac{7,500 + 12,500}{2} = \text{Rs. } 10,000$$

Debtors turnover ratio

$$= \frac{80,000}{22,500} = 3.56 \text{ times}$$

PROFITABILITY RATIO

The following information is extracted from the books of Confident Co. Ltd. You are required to rearrange the information for Financial Analysis and calculate (1) Return on investment (ROI) (2) Return on shareholders funds (3) Return on equity shareholders' funds (4) Return on total assets.

Particulars	Rs.	Particulars	Rs.
Net Sales	10,00,000	Profit & Loss Account	2,00,000
Cost of goods sold	6,00,000	Debentures	2,50,000
Interest on debentures	25000	Sundry creditors	50,000
Loss on sale of furniture	5000	Equity share capital	3,00,000
Interest on govt. securities	5,000	10% Pref. share capital	2,00,000
Fixed assets less depreciation	10,75,000	Operating expenses	1,50,000
Investment in govt. securities	50,000	Provision for tax	75,000
Current assets	5,00,000		
Reserves	4,00,000		

Profit and Loss Account

Particulars	Rs.	Particulars	Rs.
To Cost of goods sold	6,00,000	By Net sales	10,00,000
To Gross Profit c/d	4,00,000		
	10,00,000		10,00,000
To Operating expenses	1,50,000	By Gross Profit b/d	4,00,000
To Operating Profit c/d	2,50,000		
	4,00,000		4,00,000
To Interest on debentures	25,000	By Operating Profit b/d	2,50,000
To Loss on Sale of furniture	5,000	By Interest on govt. securities	5,000
To Provision for tax	75,000		
To Net Profit c/d	1,50,000		
	2,55,000		2,55,000

Statement of Funds (or) Position Statement

Particulars	Rs.	Rs.
Fixed Assets (A)		10,75,000
Current assets	5,00,000	
Less: Current liabilities:		
Creditors	50,000	
Provision for tax	75,000	
	1,25,000	
Working capital (B)		3,75,000
Capital employed (A+B)		14,50,000
Add: Investment in govt. securities		50,000
		15,00,000
Less: Debentures		2,50,000
Shareholders funds		12,50,000
Less: Preference share capital		2,00,000
Equity shareholders funds		10,50,000

(1) Return on Investment

Profit before interest and tax

$$= \frac{\quad}{\quad} \times 100$$

Capital employed

2,50,000

$$= \frac{\quad}{14,50,000} \times 100 = 17.24\%$$

14,50,000

(2) Return on shareholders' funds

Net profit after interest and tax

$$= \frac{\quad}{\quad} \times 100$$

Shareholders' funds

1,50,000

$$= \frac{\quad}{12,50,000} \times 100 = 12\%$$

12,50,000

Cont:

(3) Return o equity shareholders' funds

Net profit after interest, tax and preference dividend
_____ x100

Equity shareholders funds

1,50,000 – 20,000

_____ x100

10,50,000 – 20,000

1,30,000

_____ x100 = 12.62%

10,30,00

Cont:

(4) Return on total assets

Net profit after tax + interest

_____ x100

total assets

1,50,000 + 25,000

_____ x100

10,75,000 + 5,00,00 + 50,000

1,75,000

_____ x100

16,25,000

10,77%

Ascertain the Return on shareholders' funds from the following data:

Equity share capital	Rs. 12,00,000
Preference share capital	Rs. 3,00,000
Reserves	Rs. 5,00,000
Profit after tax	Rs. 10,00,000

Net profit after interest and tax

_____ x100

shareholders funds

10,00,000

_____ x100

20,00,000

50%

STOCK TURNOVER RATIO

(a) From the following details of a trader you are required to calculate stock turnover ratio

	Rs.
Sales	39,984
Sales returns	380
Opening stock at cost	1378
Closing stock at cost	1814
Total Gross profit for the year	8068

(b) Calculate stock turnover ratio and stock turnover period from the following:

Sales Rs. 10,00,000; Gross profit ratio 20%;

Stock at the beginning of the year Rs.

1,75,000; Stock at the end of the year Rs.

1,45,000

Solution:

(a) Stock turnover ratio:

$$\begin{aligned} \text{cost of sales} &= \frac{\text{Cost of sales}}{\text{Average stock}} \\ &= \frac{\text{Sales} - \text{Gross profit}}{\frac{\text{Opening stock} + \text{Closing stock}}{2}} \\ &= \frac{(39984 - 380) - 8068}{\frac{1378 + 1814}{2}} \\ &= \frac{39604 - 8068}{2} \\ &= \frac{31,536}{1,596} \\ \text{Average stock} &= 1,596 \\ \text{Stock turnover ratio} &= \frac{31,536}{1,596} = 19.76 \text{ times} \end{aligned}$$

Cont:

(b) Stock turnover ratio:

$$\begin{aligned} &= \frac{\text{Cost of sales}}{\text{Average stock}} \\ \text{Cost of Sales} &= \text{Sales} - \text{Gross profit} \\ \text{Gross profit} &= \text{Sales} \times \text{Gross profit ratio} \\ &= 10,00,000 \times 20/100 = 2,00,000 \\ \text{Cost of sales} &= 10,00,000 - 2,00,000 \\ &= \text{Rs.} 8,00,000 \\ \text{Average stock} &= \frac{\text{Opening stock} + \text{Closing stock}}{2} \\ &= \frac{1,75,000 + 1,45,000}{2} = \text{Rs. } 1,60,000 \\ \text{Stock turnover ratio} &= \frac{8,00,000}{1,60,000} = 5 \text{ times} \\ \text{Stock turnover period} &= \frac{\text{Days/ months in the year}}{\text{stock turnover ratio}} \\ \text{Stock turnover period in days} &= 365/5 = 73 \text{ days} \\ \text{Stock turnover period in months} &= 12/5 = 2.4 \text{ months} \end{aligned}$$

Cont:

16. Calculate Stock Turnover ratio from the following trading Account:

	Trading account	
	Rs.	Rs.
Opening stock	40,000	Sales 2,00,000
Purchases	1,00,000	Closing Stock 20,000
Freight	10,000	
Gross profit	70,000	
	<hr/>	<hr/>
	2,20,000	2,20,000
	<hr/>	<hr/>

Solution:

Stock turnover ratio:

$$\begin{aligned} &= \frac{\text{Cost of sales}}{\text{Average stock}} \\ \text{Cost of sales} &= \text{Sales} - \text{Gross profit} \\ &= 2,00,000 - 70,000 = \text{Rs. } 1,30,000 \\ \text{Average Stock} &= \frac{\text{Opening stock} + \text{Closing stock}}{2} \\ &= \frac{40,000 + 20,000}{2} = \text{Rs. } 30,000 \\ \text{Stock Turnover ratio} &= \frac{1,30,000}{30,000} = 4.33 \text{ times} \end{aligned}$$