

# VIDYA BHAWAN BALIKA VIDYA PITH

## शक्तिउत्थानआश्रमलखीसरायबिहार

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### Accounting Ratios

#### Illustration 22

From the following details, calculate Return on Investment:

Share Capital : Equity (Rs.10)	Rs. 4,00,000	Current Liabilities	Rs. 1,00,000
12% Preference	Rs. 1,00,000	Discount on Shares	Rs. 5,000
General Reserve	Rs. 1,89,000	Fixed Assets	Rs. 9,50,000
10% Debentures	Rs. 4,00,000	Current Assets	Rs. 2,34,000

Also calculate Return on Shareholders' Funds, EPS, Book value per share and P/E ratio if the market price of the share is Rs. 34 and the net profit after tax was Rs. 1,50,000, and the tax had amounted to Rs. 50,000.

#### Solution

Profit before interest and tax	=	Rs. 1,50,000 + Debenture interest + Tax
	=	Rs. 1,50,000 + Rs. 40,000 + Rs. 50,000
	=	Rs. 2,40,000
Capital Employed	=	Equity Share Capital + Preference Share Capital + Reserves + Debentures - Discount on Shares
	=	Rs. 4,00,000 + Rs. 1,00,000 + Rs. 1,89,000 + Rs. 4,00,000 - Rs. 5,000 = Rs. 10,84,000
Return on Investment	=	Profit before Interest and Tax / Capital Employed × 100
	=	Rs. 2,40,000 / Rs. 10,84,000 × 100
	=	22.14%
Return on Shareholders Fund	=	Profit after Tax / Shareholder's Fund × 100
	=	Rs. 1,50,000 / Rs. 6,84,000 × 100
	=	13.84%
EPS	=	Profit available for equity shareholders / No. of Equity Shares
	=	Rs. 1,38,000 / 40,000 = Rs. 3.45
Profit available to equity shareholders	=	Profit after Tax - Preference Dividend
	=	Rs. 1,50,000 - Rs. 12,000 = Rs. 1,38,000
P/E Ratio = Market price of a share / Earnings per share	=	34 / 3.45
	=	9.86 Times
Book Value per share	=	Equity Shareholders' funds / No. of Equity Shares
Hence, Book value per share	=	Rs. 5,84,000 / 40,000 shares = Rs. 14.6

It may be noted that various ratios are intimately correlated with each other. Sometimes, the combined information regarding two or more ratios is given and some missing figure is to be calculated. In such a situation, the formula of the ratios will help in working out the missing figures (See Illustration 23 and 24).

**Exhibit - 2**

<b>UNICHEM LABORATORIES LTD.</b>					
<b>Key Ratios</b>					
<b>As on March 31</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>
ROCE %	29.40	25.80	27.20	27.90	27.80
RONW %	31.20	22.80	25.10	24.50	23.70
EVA (Rs. in millions) Economic Value Added	230.10	167.60	250.00	257.80	449.30
<b>Per share Data</b>					
EPS (Rs.)	36.30*	31.75*	12.98	13.22	23.84
Dividend	80%	80%	60%	70%	100%
Book Value per share (Rs.)	115.70	138.50	44.30	53.55	83.50

**Exhibit - 3**

<b>GRASIM INDUSTRIES LTD.</b>											
<b>Ratios &amp; Statistics</b>											
PBITD Margin	(%)	24.0	28.7	28.9	24.7	20.8	20.2	17.3	17.9	20.0	22.9
Interest Cover (PBITD-Tax/Interest)	W	12.55	9.61	7.88	5.60	4.48	3.56	2.84	2.28	2.56	2.57
ROACE (PBIT/Avg. CE)	(%)	18.5	23.1	20.9	16.2	12.9	13.5	10.5	10.1	13.1	15.0
RONE (PAT/Avg. NW)	(%)	18.6	22.3	23.7	12.9	11.7	14.4	8.6	6.6	10.4	13.5
Debt Equity Ratio	W	0.40	0.46	0.57	0.70	0.76	0.76	0.82	0.93	0.92	0.98
Dividend per Share	Rs./Sh.	20.00	16.00	14.00	10.00	9.00	8.00	7.00	6.75	6.75	6.50
Earning per Share	Rs./Sh.	94	97	85	40	33	41	25	18	32	38
Cash Earning per Share	Rs./Sh.	123	130	116	85	72	67	51	41	55	56
Book Value per Share	Rs./Sh.	543	472	393	324	295	271	303	285	320	296

**Exhibit - 4**
**ASIAN PAINTS (INDIA) LTD.**

	<b>APIL</b>		<b>AP Group (Consolidated)</b>	
	<i>2004-05</i>	<i>2003-04</i>	<i>2004-05</i>	<i>2003-04</i>
PBDIT/Sales	16.8%	17.2%	14.4%	14.8%
PBT before EOI/Sales	14.2%	14.0%	11.2%	10.9%
PAT/Sales	8.9%	8.7%	6.8%	6.5%
Return on Average Capital Employed (ROCE)	41.5%	37.7%	34.6%	31.4%
Return on Average Net Worth (RONW)	31.4%	29.3%	31.7%	28.8%
EPS (Rs.)	18.53	16.12	18.15	15.11
Debt: Equity	0.15:1	0.13:1	0.38:1	0.28:1
Interest Cover (PBIT/Interest)	101	46	28	17

\*Capital Employed and Networth as at 31.03.2005 are after providing for implicit loss.

### Illustration 23

Calculate current assets of a company from the following information:

Stock turnover ratio	=	4 times
Stock at the end is Rs. 20,000 more than the stock in the beginning.		
Sales Rs. 3,00,000 and gross profit ratio is 20% of sales.		
Current liabilities	=	Rs. 40,000
Quick ratio	=	.75

### Solution

Cost of Goods Sold	=	Sales - gross profit
	=	Rs. 3,00,000 - (Rs. 3,00,000 × 20%)
	=	Rs. 3,00,000 - Rs. 60,000
	=	Rs. 2,40,000
Stock Turnover Ratio	=	Cost of Goods Sold / Average stock
	=	Cost of Goods Sold/Average stock
Average Stock	=	Cost of Goods Sold /4
	=	Rs. 2,40,000/4 = Rs. 60,000
Average Stock	=	(Opening stock + Closing stock) /2
Rs. 60,000	=	(Opening stock+Opening stock+Rs.20,000) /2
Rs. 60,000	=	Opening stock + Rs. 10,000
Opening Stock	=	Rs. 50,000
Closing Stock	=	Rs. 70,000
Liquid Ratio	=	Liquid assets/current liabilities
.75	=	Liquid assets/Rs. 40,000
Liquid Assets	=	Rs. 40,000 × .75 = Rs. 30,000
Current Assets	=	Liquid assets + Closing stock
	=	Rs. 30,000 + Rs. 70,000 = Rs. 1,00,000.

### Illustration 24

The current ratio is 2.5:1. Current assets are Rs. 50,000 and current liabilities are Rs. 20,000. How much must be the decline in the current assets to bring the ratio to 2:1.

### Solution

Current liabilities	=	Rs. 20,000
For a ratio of 2:1, the current assets must be 2 × 20,000	=	Rs. 40,000
Present level of current assets	=	Rs. 50,000
Necessary decline	=	Rs. 50,000 - Rs. 40,000
	=	Rs. 10,000.