

RATIO ANALYSIS

Q.1) The capital of ABC Ltd. consist of 9% Preference Share of 10 each Rs. 3,00,000, Equity share of Rs.10 each Rs.8,00,000, The Profit After Tax is Rs.2,70,000, Equity dividend is each 20% and Market Price of Equity shares of Rs.40. You are required to calculate following ratio.

- a) Dividend Yield Ratio
- b) Dividend Cover Ratio
- c) EPS
- d) P/E Ratio
- e) Return on Equity

Q.2) ABC Ltd. following information for the year ended 31st march 2017.

Profit Before Interest and Taxes (EBIT)	=	Rs.16,50,000
Tax Rate	=	30%
Proposed Equity Dividend	=	25%

Capital Employed :

80,000 Equity Share of Rs. 10 each	=	8,00,000
10% Preference Share Capital	=	15,00,000
15% Debenture of Rs.100 each	=	7,00,000
Reserves and Surplus	=	12,00,000
Total	=	42,00,000

Current market price per equity share is Rs. 50 per share.

You are required to calculate:

- 1. EPS
- 2. Dividend yield ratio
- 3. P/E ratio
- 4. Dividend cover ratio
- 5. Return on equity
- 6. Return on proprietary fund
- 7. Return on capital employed
- 8. Book Value per Share
- 9. Interest Coverage ratio
- 10. Debt equity ratio

Q.3) Following information is available relating to A Ltd. and B Ltd.

Particulars	A Ltd. Rs. In Lakhs	B Ltd. Rs. In Lakhs
Equity share of Rs.10 each	200	250
10% Preference share capital	80	100
15% Debenture	20	60
EBIT	60	80
Proposed Dividend	20	25
Provision for Tax	17	21
Market Price per Share	Rs. 50	Rs. 60

You are required to calculate: a) EPS
b) P/E Ratio
c) Dividend Payout Ratio
d) Return on Equity
e) Return on Capital Employed.

RATIO ANALYSIS

Q.4) The following information is available in respect of 2 companies namely.

Particulars	Yuhina Ltd.	Monal Ltd.
Equity share capital (Rs. 10 each)	600 lakhs	1000 lakhs
12% Preference share capital	100 lakhs	200 lakhs
Profit after tax	400 lakhs	600 lakhs
Tax rate	30%	30%
Dividend per share	Rs.3	Rs.2
Market price per share	Rs.150	Rs.120

You are required to calculate:

1. Earnings per share
2. P/E ratio
3. Dividend payout ratio
4. Return on total capital

Q1).

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given

$$\text{Pref div} = 9\% \text{ of } 3,00,000 = 27,000$$

$$\text{FV of Pref} = \text{Rs. 10.}$$

$$\text{ESC} = \text{Rs. 8.00.000}$$

$$\text{FV of ES} = \text{Rs. 10}$$

$$\text{PAT} = 2,70,000$$

$$\text{Equity dividend} = 20\%$$

$$\text{MPS} = \text{Rs. 10.}$$

Ans:

1) Dividend Yield.

$$\therefore \frac{\text{DPS}}{\text{MPS}} \times 100 = \frac{2}{10} \times 100 = 20\%$$

$\because \text{DPS} = \text{Face Value} \times \text{Dividend payout}$

$$= 10 \times 20\%$$

$$= \text{Rs. 2}$$

2) Dividend cover

$$1) \text{Equity div cover} = \frac{\text{EPS}}{\text{PPS}} = \frac{3.04}{2} = 1.52$$

$$\text{EPS} = \frac{\text{Profit avail to ESH}}{\text{No. of ES}} = \frac{2,43,000}{80,000} = 3.04$$

$$\text{No. of ES} = \frac{8,00,000}{10} = 80,000$$

$$\begin{aligned} \text{Profit avail to ESH} &= \text{PAT} - \text{Pref Div} \\ &= 2,70,000 - 27,000 \\ &= 2,43,000 \end{aligned}$$

2) Pref Dividend Cover

$$\frac{\text{PAT}}{\text{Pref Div}} = \frac{2.70.000}{27.000} = 10.$$

3). EPS = Profit avail to ESH

$$\frac{\text{Total Eq Div}}{\text{No of ES}} = \frac{2.43.000}{80.000} = 3.04$$

$$4) P/E = \frac{\text{MPS}}{\text{EPS}} = \frac{40}{3.04} = 13.15$$

5) Return on equity:

$$\frac{\text{Profit avail to ESH}}{\text{ESC}} \times 100$$

$$= \frac{2.43.000}{8.00.000} \times 100$$

$$= 30.38\%$$

Q2.

Given:

$$PBIT = 16,50,000$$

$$\text{Tax rate} = 30\%$$

$$\text{Equity div} = 25\%$$

$$ESC = 80,000$$

$$FV \text{ of Equity} : 10.$$

$$\text{Pref} = 10\% \text{ of } 7,00,000 = 15,00,000$$

$$\text{Debt interest} = 15\% \text{ of } 7,00,000 \Rightarrow \text{Interest}$$

$$FV \text{ of debt} : 100.$$

$$R & S = 12,00,000$$

$$MPS = 80$$

Ans:

$$1) EPS = \frac{\text{Profit avail to ESH}}{\text{No. of ES.}} = \frac{9,31,500}{80,000} = 11.64$$

$$\text{No. of ES} = \frac{ESC}{FV \text{ of ES}} = \frac{8,00,000}{10} = 80,000.$$

$$\text{Profit avail to ESH} = 9,31,500$$

$$EBIT - \text{Interest} = 16,50,000 - 105,000 \\ = 15,45,000$$

$$EBT - \text{Tax} = 15,45,000 - 4,68,000 \\ = 10,81,000$$

$$PAT - \text{Pref Div} = 10,81,000 - 1,50,000 \\ = 9,31,500.$$

2) Dividend Yield.

$$\frac{\text{DPS}}{\text{MPS}} \times 100 = \frac{2.5}{50} \times 100 = 5\%$$

$$\begin{aligned}\text{EPS} &= \text{FV} \times \text{Div payout} \\ &= 10 \times 25\% \\ &= 2.5\end{aligned}$$

$$3). \text{ P/E ratio: } \frac{\text{MPS}}{\text{EPS}} = \frac{50}{11.64} = 4.29$$

4) Dividend cover ratio:

1) Equity div cover

$$\frac{\text{EPS}}{\text{DPS}} = \frac{11.64}{2.5} = 4.66$$

2) Pref div cover

$$\frac{\text{PAT}}{\text{Pref div}} = \frac{10,81,500}{1,50,000} = 7.21$$

5) Return on Equity :

$$\frac{\text{Profit available to ESH}}{\text{ESCAP + R & S}} \times 100 = \frac{9,31,500}{8,00,000 + 12,00,000} \times 100 = 46.58\%$$

6) Return on Proprietary Fund.

$$\frac{\text{PAT}}{\text{ESC} + \text{R2S} + \text{Pref. Share Cap}} \times 100 = \frac{10,81,500}{8,00,000 + 12,00,000 + 17,00,000} = 50,30\%$$

7) Return on Capital Employed.

$$\frac{\text{EBIT}}{\text{Capital Employed}} \times 100 = \frac{16,50,000}{42,00,000} \times 100 = 39,29\%$$

$$8) \text{ Book Value per share}^* = \frac{\text{ESC} + \text{Total R2S}}{\text{No of ES}} \\ = \frac{8,00,000 + 19,31,500}{80,000} = 34.14$$

9) Interest coverage ratio.

$$\frac{\text{EBIT}}{\text{Interest}} = \frac{16,50,000}{1,05,000} = 15.71$$

10) Debt Equity Ratio

$$\frac{\text{Long term debt}}{\text{Equity Investment}} = \frac{700,000}{20,00,000} = 0.35 : 1$$

* Book Value per Share

ESC + Total R + S

No. of ES

Total Reserve & Surplus

$$= \text{Existing } R + S + \text{New } R + S$$

$$= 12,000,000 + 7,31,500$$

$$= 19,31,500.$$

New R + S. = Profit toward to ESH - Total Eq. Div

$$= 9,31,500 - 2,00,000$$

$$= 7,31,500$$

$$\text{Total Eq. Div} = 2.5 \times 80,000$$

Q3.)

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1) EPS

Company A $\text{EPS} = \frac{\text{Profit avail to ESH}}{\text{No. of ES.}} = \frac{47,00,000}{20,00,000}$

No. of ES = 20,00,000 $= 2.3$

Profit avail to ESH = PAT - Pref Div.

$$\begin{aligned} \text{EBIT} - \text{Interest} &= 60,00,000 - 300,000 \\ &= 57,00,000 \end{aligned}$$

$$\begin{aligned} \text{EBT} - \text{Tax} &= 57,00,000 - 17,00,000 \\ &= 50,00,000 \end{aligned}$$

$$\begin{aligned} \text{EAT} - \text{Pref Div} &= 50,00,000 - 8,00,000 \\ &= 42,00,000 \end{aligned}$$

Company B $\text{EPS} = \frac{\text{Profit avail to ESH}}{\text{No. of ES.}} = \frac{40,00,000}{25,00,000} = 1.6$

Profit avail to ESH = PAT - Pref Div

$$\begin{aligned} \text{EBIT} - \text{Interest} &= 80,00,000 - 9,00,000 \\ &= 71,00,000 \end{aligned}$$

$$\begin{aligned} \text{EBT} - \text{Tax} &= 71,00,000 - 21,00,000 \\ &= 50,00,000 \end{aligned}$$

$$\begin{aligned} \text{EAT} - \text{Pref Div} &= 50,00,000 - 10,00,000 \\ &= 40,00,000 \end{aligned}$$

2) P/E Ratio

Company A P/E Ratio:

$$\frac{MPS}{EPS} = \frac{SD}{21} = 23.80$$

Company B P/E Ratio:

$$\frac{MPS}{EPS} = \frac{60}{1.6} = 37.50$$

3) Dividend Pay out Ratio.

$$\text{Company A: } \frac{DPS}{EPS} \times 100 = \frac{1}{2.1} \times 100 = 47.61$$

$$\begin{aligned} DPS &= FV \times \text{Div payout} \\ &= 10 \times 10\% \\ &= 1 \end{aligned}$$

$$\text{Company B: } \frac{DPS}{EPS} \times 100 = \frac{1}{1.6} \times 100 = 62.5$$

4) Return on Equity.

$$\frac{\text{Profit avail to ESH}}{\text{ESL}} \times 100 =$$

$$\text{Company A} = \frac{42,00,000}{20,000,000} \times 100 = 21$$

$$\text{Company B} = \frac{40,00,000}{25,00,000} \times 100 = 16$$

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e) Return of Capital Employed

$$\frac{\text{EBIT}}{\text{Capital Employed}} \times 100,$$

$$\text{Company A} = \frac{60,00,000}{800,00,000} \times 100 = 7.5$$

$$\text{Company B} = \frac{80,00,000}{410,00,000} \times 100 = 19.51$$

(Q4).

1) EPS

Company A : Yuhima Ltd

$$EPS = \frac{\text{Profit avail to ESH}}{\text{No. of ESH}} = \frac{388,00,000}{60,00,000} = 6.47$$

$$\begin{aligned}\text{Profit avail to ESH} &= \text{PAT} - \text{Pref. div} \\ &= 400,00,000 - 12,00,000 \\ &= 38,800,000\end{aligned}$$

Company B : Monal Ltd

$$EPS = \frac{5,76,00,000}{160,00,000} = 5.76$$

$$\begin{aligned}\text{Profit avail to ESH} &= \text{PAT} - \text{Pref. div} \\ &= 600,00,000 - 2,400,000 \\ &= 576,00,000\end{aligned}$$

2) P/E Ratio

Company A :

$$\frac{MPS}{EPS} = \frac{150}{6.47} = 23.18$$

Company B :

$$\frac{MPS}{EPS} = \frac{120}{5.76} = 20.88$$

3) Dividend payout ratio

$$\frac{\text{DPS}}{\text{EPS}} \times 100$$

Company A :

$$\frac{3}{6.47} \times 100 = 46.36$$

Company B

$$\frac{2}{5.76} \times 100 = 34.72\%$$