FitchLearning

Chapter 15
Ratio Analysis

4-6 questions

2. Investors' Ratios

Dividend yield

Calculation

$$\text{Dividend yield} = \frac{\text{Net dividend per share}}{\text{Market price per share}} \times 100\%$$

Interpretation

- **Low** dividend yield may indicate **high** future growth

Links

The dividend yield is an income yield, like the flat yield on a bond.

2. Investors' Ratios

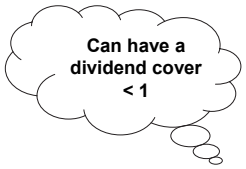
Dividend cover

Calculation

$$\text{Dividend cover} = \frac{\text{Earnings per share}}{\text{Net dividend per share}}$$

Interpretation

- The likelihood of a dividend being maintained



Hints

Payout ratio is the inverse of dividend cover:

Net dividend / EPS = Payout ratio

Keeping on target

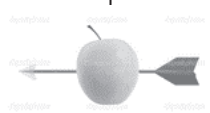
The nominal value of a share is a £1.00. The earnings per share is 15p. The dividend per share is 5p and the current market price is £1.60. What is the dividend cover?

A. 20x

B. 10.7x

C. 6.7x

D. 3x



Keeping on target

XYZ dividend is 10p, dividend cover is two times, and the PE ratio is 15. The dividend yield is:

A. 3.3%

B. 4.17%

C. 12.5%

D. 20.0%

2. Investors' Ratios

Earnings per share (EPS)

Calculation

$$EPS = \frac{\text{Profit available to ordinary shareholders}}{\text{Number of ordinary shares}}$$

Diluted EPS

Further information

The purpose of publishing a separate figure for diluted earnings per share is to warn shareholders of potential future changes in the earnings per share figure as a result of events that actually may have, or theoretically could have, taken place.

Links

In the equity chapter we looked at absolute valuations, such as holding period return and Gordon's growth model. Most ratios are relative valuation models, that allow comparison with similar companies.

Answer to the questions on the previous slide:

D

Dividend cover = EPS / DPS = 15p / 5p = 3 times.

A

Dividend cover = EPS / net dividend per share. Therefore earnings per share = 2 x 10p = 20p.

Price earnings ratio is 15, therefore the price can be derived by multiplying the EPS by the price earnings ratio = 15 x 20p = 300p.

Dividend yield = net dividend / share price x 100

= 10p / 300p x 100 = 3.3%.

2. Investors' Ratios

Price-earnings ratio (PE ratio)

Calculation

$$\text{PE ratio} = \frac{\text{Market price per share}}{\text{Earnings per share}}$$

Interpretation

- **High** PE may indicate **high** future growth

Further information

Prospective P/E Ratio

Instead of using the historic EPS of the company, the prospective P/E ratio uses the current financial year's forecast.

Keeping on target

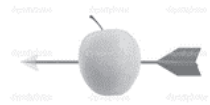
A company's shares have a nominal value of 20p and a share price of 360p. If the PE ratio is 24, what is the EPS?

A. 15p

B. 6.7p

C. 11.25p

D. 18p



2. Investors' Ratios

EBITDA multiple

- Calculation

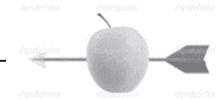
$$\frac{EV}{EBITDA} = EV/EBITDA$$

- EV = Enterprise value: the market value of equity and debt
- EBITDA = Earnings before interest, tax, depreciation and amortisation

Further information

Other multiples include:

- Price to book
- Price to sales
- Price to cash flow



Answer to the question on the previous slide:

A

PE ratio = Market price per share / EPS

24 = 360p / EPS

EPS = 360p / 24 = 15p

3. Gearing and Liquidity Ratios

Gearing (or debt/equity)

Calculation

$$\text{Debt/equity ratio} = \frac{\text{Total long term debt}}{\text{Total equity}} \times 100\%$$

Further information

Gearing Ratio

The debt figure usually includes all long term obligations, including convertible bonds, while the equity figure will usually include the book value of any ordinary shares, preferred stock and retained earnings.

3. Gearing and Liquidity Ratios

Operational gearing

Calculation

$$\text{Operational Gearing} = \frac{\text{Sales revenue - variable costs}}{\text{Trading profit}}$$

$$\text{Operational Gearing} = \frac{\text{Trading profit + fixed costs}}{\text{Trading profit}}$$

Hints

These two formula say the same thing

	Company X
	£m
Sales	200
Fixed costs	(40)
Variable costs	(120)
Trading profit	40

3. Gearing and Liquidity Ratios

Current and quick ratios

Calculation

$$\text{Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

$$\text{Quick ratio (acid test)} = \frac{\text{Current assets - Stock}}{\text{Current liabilities}}$$

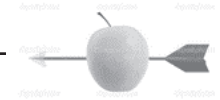
Keeping on target

Company A has a current ratio of 1.8 and a quick ratio of 0.9

Company B has a current ratio of 1.3 and a quick ratio of 1.25

Which of the following is correct?

A. Company A is in a much better position to cover its long term debt than Company B
B. Company A is in a much better position to pay its short term debt than Company B
C. Company A more dependent upon inventory to cover its short term debt than Company B
D. Company A has a much lower cash balance than Company B



4. Operating Ratios

ROCE: Calculation

$$\text{Return on capital employed (ROCE)} = \frac{\text{Operating profit}}{\text{Capital employed}} \times 100$$

Where:

- **Capital employed** = Share capital + reserves + all borrowing
- **PBIT** = Profit **before** interest and tax

Hints

Remember the accounting equation?

Total assets = Capital + Reserves + Liabilities

The examiner can use either side of the equation to define capital employed.

Further information

ROCE = Asset Turnover x Operating profit margin

$$\text{Operating profit margin} = \frac{\text{Operating profit}}{\text{Sales}}$$

$$\text{Asset turnover} = \frac{\text{Sales}}{\text{Capital employed}}$$

Answer to the question on the previous slide:

C

The quick ratio for Company A shows that without inventory they would have more difficulty in servicing their debt.