

Resource Sheet – Accounting

Interpretation of Accounts – Student Activity Answers

(Q1) In the earlier Boyle plc question, calculate the following (use 2 decimal places where appropriate):

(a) Return on Capital Employed:

$$\frac{\text{Net Profit before Deb. Int.}}{\text{Capital Employed}} \times 100 = \frac{47,000 + 24,000}{945,000} \times 100 = 7.51\%$$

(b) Return on Equity Funds:

$$\frac{\text{Net Profit after Pref. Div.}}{\text{Equity Funds}} \times 100 = \frac{47,000 - 5,000}{500,000 + 45,000} \times 100 = 7.71\%$$

(c) Earnings per Share:

$$\frac{\text{Net Profit after Pref. Div.}}{\text{Issued Ordinary Shares}} = \frac{47,000 - 5,000}{500,000} = 8.4c$$

(d) Price Earnings Ratio:

$$\text{Market Price : Earnings per Share} = 130 : 8.4 = 15.48 \text{ years}$$

(e) Market Price if P/E is 15.5:

$$\text{Earnings per Share} \times 15.5 = 8.4 \times 15.5 = \text{€}1.30$$

(f) Ordinary Dividend per Share:

$$\frac{\text{Ordinary Dividend}}{\text{Issued Ordinary Shares}} = \frac{35,000 - 5,000}{500,000} = 6c$$

(g) Dividend Yield:

$$\frac{\text{Ord. Dividend per Share}}{\text{Market Price}} \times 100 = \frac{6}{130} \times 100 = 4.62\%$$

(h) Dividend Cover:

$$\frac{\text{Net Profit after Pref. Div.}}{\text{Ordinary Dividend}} = \frac{47,000 - 5,000}{35,000 - 5,000} = 1.4 \text{ times}$$

(i) How long to recoup the 2016 market price at present earnings:

$$\frac{\text{Market Price}}{\text{Earnings per Share}} = \frac{130}{8.4} = 15.48 \text{ years}$$

(j) How long to recoup the 2016 market price at present pay out rate:

$$\frac{\text{Market Price}}{\text{Dividend per Share}} = \frac{130}{6} = 21.67 \text{ years}$$

(k) Current Ratio:

$$\text{Current Assets} : \text{Current Liabilities} = 120,000 : 75,000 = 1.6:1$$

(l) Quick (Acid Test) Ratio:

$$(\text{C. Assets} - \text{Cl. Stock}) : \text{Current Liabilities} = 60,000 : 75,000 = 0.8:1$$

(m) Gearing Ratio:

$$\frac{\text{Fixed Interest Capital}}{\text{Capital Employed}} \times 100 = \frac{300,000 + 100,000}{945,000} \times 100 = 42.33\%$$

(n) Interest Cover:

$$\frac{\text{Net Profit before Deb. Int.}}{\text{Debenture Interest}} = \frac{47,000 + 24,000}{24,000} = \mathbf{2.96 \text{ times}}$$

(o) Opening Stock if the rate of stock turnover is 10 based on average stock:

$$\begin{aligned} \text{Rate of Stock Turnover} &= 10 \\ \frac{\text{Cost of Goods Sold}}{\text{Average Stock}} &= 10 \\ \frac{790,000}{\text{Average Stock}} &= 10 \\ 10 \text{ Average Stock} &= 790,000 \\ \text{Average Stock} &= 79,000 \\ \frac{\text{Opening Stock} + \text{Closing Stock}}{2} &= 79,000 \\ \text{Opening Stock} + \text{Closing Stock} &= 158,000 \\ \text{Opening Stock} + 60,000 &= 158,000 \\ \text{Opening Stock} &= 158,000 - 60,000 = \mathbf{€98,000} \end{aligned}$$

(p) Cash Sales if the period of credit given to debtors is 1.5 months:

$$\text{Credit Given} = 1.5 \text{ months}$$

$$\frac{\text{Debtors}}{\text{Credit Sales}} \times 12 = 1.5$$

$$\frac{35,000}{\text{Credit Sales}} \times 12 = 1.5$$

$$\frac{420,000}{\text{Credit Sales}} = 1.5$$

$$1.5 \text{ Credit Sales} = 420,000$$

$$\text{Credit Sales} = 280,000$$

$$\text{Cash Sales} = \text{Total Sales} - \text{Credit Sales}$$

$$\text{Cash Sales} = 950,000 - 280,000 = \mathbf{\text{€}670,000}$$

(q) Cash Purchases if credit rec. is 1.3 months, Op. Stock €70,000, Cl. Stock €60,000:

Credit Received	=	1.3 months				
$\frac{\text{Creditors}}{\text{Credit Purchases}} \times 12$	=	1.3				
$\frac{65,000}{\text{Credit Purchases}} \times 12$	=	1.3				
$\frac{780,000}{\text{Credit Purchases}}$	=	1.3				
1.3 Credit Purchases	=	780,000				
Credit Purchases	=	600,000				
Cash Purchases	=	Total Purchases	-	Credit Purchases		
Cash Purchases	=	780,000*	-	600,000	=	€180,000

*Opening Stock + Total Purchases – Closing Stock = Cost of Goods Sold

$$70,000 + \text{Total Purchases} - 60,000 = 790,000$$

$$\text{Total Purchases} = 790,000 - 70,000 + 60,000$$

$$\text{Total Purchases} = 780,000$$

(Q2) In the earlier Boyle plc question, state an ordinary shareholder's comment on:

- (a) **Dividend Policy:** The Dividend per Share was 8.6c in 2015 and 6c in 2016 which is worse. The Dividend Yield was 5.21% in 2015 and 4.62% in 2016 which is worse. The Dividend Cover was 1.7 times in 2015 and 1.4 times in 2016 which is worse. The cover is too low. The company is paying out 71.43% ($100 \div 1.4$) of its profits in dividends. Not enough is being retained to repay the debentures.
- (b) **Market Value:** The Market Price was €1.65 in 2015 and €1.30 in 2016 which is 35c worse. This shows lack of stock market confidence in the company. The P/E Ratio was 11.3:1 in 2015 and 15.48:1 in 2016 which is worse. It takes too long to recover the investment.

- (c) **Opportunity to Purchase Shares:** 160,000 shares are available. Why are so many being sold?
This is 32% of the already issued shares requiring a bid for the remaining shares ($\geq 30\%$). Also the fixed rate of 9% is above the ROCE of 7.51%. Savings of €60,000 would also be at risk. The offer price of €1.20 is a discount of 10c but may not be good value with a falling share price.

(Q3) Actions Advised if a Company has Poor Results

- (a) Reduce cost of sales.
- (b) Sale and leaseback of tangible fixed assets.
- (c) Sell investments not issue debentures.
- (d) Collect debts more quickly.
- (e) Pay a lower ordinary dividend.
- (f) Issue any remaining shares.
- (g) Diversify into other areas.

(Q4) Reasons for a Falling Gross Profit Percentage

- (a) Cash losses – cash sales not recorded.
- (b) Stock losses – purchase of out of date stock or theft.
- (c) Change in sales mix – more low mark-up goods sold.
- (d) Lower selling prices – sale of old stock.
- (e) Incorrect stock valuation – opening stock overvalued or closing stock undervalued.
- (f) Higher cost of sales – with no change in selling price.

(Q5) A rising Liquidity Ratio is a sign of Prudent Management. Briefly discuss.

A rising liquidity ratio is **not always** a sign of prudent management.

If the ratio is at or a little above 1:1, the company can:

- (a) pay its short-term debts on time.
- (b) receive cash discount.
- (c) avoid paying interest.

If the ratio is well above 1:1 the company has:

- (a) too much resources tied up in liquid assets.
- (b) cash resources left idle.
- (c) resources not used to earn profits.

(Q6) Explain the difference between the terms 'Liquidity' and 'Solvency' when used in Ratio Analysis.

Liquidity: This measures the company's ability to pay its short term debts as they fall due.

The Quick Ratio is the best indicator as it includes only liquid assets.

Solvency: This measures the company's ability to pay its all debts as they fall due.

A company is solvent if the total assets exceed the outside liabilities.

(Q7) (a) Explain the term 'Gearing'.

Gearing measures how a company is financed in the long-term.

It measures the relationship between fixed interest capital and capital employed.

Below 50% is low geared and above 50% is high geared. Low geared is better.

(b) Benefits of Having a Low Gearing

- (1) More profits available for investment in the business.
- (2) Easier to pay a dividend to shareholders.
- (3) Easier to raise more loan finance.
- (4) Less risk of liquidation.

(c) Ways to Reduce the Gearing of a Company

- (1) Sell more ordinary shares.
- (2) Increase retained profits.
- (3) Reduce or repay loans.
- (4) Convert long-term debt to equity.

(Q8) Limitations of Ratio Analysis as a Financial Analysis Technique

- (a) Analyses past figures only which are quickly out of date.
- (b) Seasonal fluctuations are not allowed for.
- (c) Different accounting bases used in companies makes comparisons difficult.
- (d) Shows a limited picture of the business.
- (e) Some significant items are not shown i.e. monopoly position, economic climate, staff morale.