

CHAPTER 10 – RATIO ANALYSIS

PAST RATIO ANALYSIS QUESTIONS

<p>2019 - DECREASE IN SALES HAS ON A BUSINESS (A)</p> <ol style="list-style-type: none">1. Reduction in profits2. Restructuring of costs required3. Employee numbers may have to be reduced4. Sales Promotions may need to be increased5. Identify alternative suppliers6. Product modifications7. Market Research - new markets required.	<p>2019 - EXPLAIN WHAT IS MEANT BY A LIQUIDITY PROBLEM IN A BUSINESS. (B) i</p> <p>A Liquidity problem refers to the inability of a business to raise funds to pay short term debts as they fall due.</p>	<p>2019 - CALCULATE THE CURRENT RATIO AND THE ACID TEST RATIO FOR BIOMED LTD FOR 2017 AND 2018.(B) ii</p> <p>CA/CL</p> <p>2017 - 40,000:20,000 = 2:1</p> <p>2018 - 62,500:25,000 = 2.5:1</p> <p>CA-Stock/CL</p> <p>40,000-10,000:20,000 = 1.5:1</p> <p>62,500-42,500:25,000 = 0.8:1</p>																
<p>2019 - ANALYSE THE SIGNIFICANCE OF THE TRENDS FOR THE LIQUIDITY OF BIOMED LTD (B) iii</p> <ol style="list-style-type: none">1. The current ratio increased from 2:1 to 2:5:1. This is above the ideal ratio of 2:1.2. The acid test has decreased from 1.5:1 to 0.8:1 This is below the ideal of 1:1.3. The business is carrying too much stock in its current assets. This may result in a difficulty in raising cash to pay short term debts, as stock can take time to sell.	<p>2018 - EXPLAIN THE TERM WORKING CAPITAL.</p> <p>The level of cash available for the day by day running of a business/ the level of cash available to run the business in the short run/It is used to pay current liabilities such as creditors, bank overdraft, accruals/Working Capital is calculated by subtracting current liabilities from current assets.</p>	<p>2018 - OUTLINE TWO PROBLEMS CAUSED BY INSUFFICIENT WORKING CAPITAL FOR A START-UP BUSINESS</p> <ol style="list-style-type: none">1. Objectives of the business cannot be achieved affects the liquidity position2. Short term liabilities cannot be met on time3. Business opportunities like cash discount and trade discount cannot be availed4. The business may be overtrading																
<p>2017 - CALCULATE THE FOLLOWING FOR EQUINOX DESIGN (B) i & ii</p> <p>MUST SHOW FORMULA</p> <table><tr><td>Net Profit Margin</td><td>Current Ratio</td></tr><tr><td>$\frac{\text{Net Profit}}{\text{Sales}} \times 100$</td><td>Current Assets: Current Liabilities</td></tr><tr><td>$\frac{30,400}{200,000} \times 100$</td><td>20,000:16,000</td></tr><tr><td>15.2%</td><td>1.25:1</td></tr></table>	Net Profit Margin	Current Ratio	$\frac{\text{Net Profit}}{\text{Sales}} \times 100$	Current Assets: Current Liabilities	$\frac{30,400}{200,000} \times 100$	20,000:16,000	15.2%	1.25:1	<p>2017 - CALCULATE THE FOLLOWING FOR EQUINOX DESIGN (B) iii & iv</p> <p>MUST SHOW FORMULA</p> <table><tr><td>Return on investment</td><td>Debt Equity</td></tr><tr><td>$\frac{\text{Net Profit}}{\text{Capital Employed}} \times 100$</td><td>Debt:Equity</td></tr><tr><td>$\frac{30,400}{300,000+400,000+60,000} \times 100$</td><td>400,000: (300,000+60,000)</td></tr><tr><td>4%</td><td>1.1:1</td></tr></table>	Return on investment	Debt Equity	$\frac{\text{Net Profit}}{\text{Capital Employed}} \times 100$	Debt:Equity	$\frac{30,400}{300,000+400,000+60,000} \times 100$	400,000: (300,000+60,000)	4%	1.1:1	<p>2017 - ANALYSE THE PROFITABILITY AND LIQUIDITY OF EQUINOX DESIGN (C) i</p> <p>Profitability</p> <ol style="list-style-type: none">1. The Net Profit Margin (NPM) has decreased from 20.5% to 15.2%2. The Return on Investment (ROI) has decreased from 8% to 4%.3. Analysis of trends: NPM: A major review of its costs will be required as well as a review of its sales strategy/seek cheaper raw materials/increase selling prices.4. This decrease in ROI (profitability) will concern the shareholders of the business, as they may get a better return for their investment
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<p>2017 - ANALYSE THE PROFITABILITY AND LIQUIDITY OF EQUINOX DESIGN (C) i</p> <p>Liquidity</p> <p>The Current Ratio has decreased from 2:1 to 1.25:1</p> <p>Analysis of trend: This is unsatisfactory for the business as while still having enough to pay their short term debts, liquidity has declined. This will be of concern to suppliers/could sell off slow moving lines to improve liquidity etc.</p>	<p>2017 - SHOULD EQUINOX DESIGN LTD EXPAND ITS BUSINESS? (C) ii</p> <p>No.</p> <p>The business should not expand as all key financial indicators are in decline</p>	<p>2017 - OUTLINE TWO LIMITATIONS OF USING RATIOS (C) iii</p> <ol style="list-style-type: none">1. Staff relations with Management not taken into account2. Assets may not be shown at their true value.3. Ratios are based on past figures and not on projected4. Final Accounts only hold for a certain year/Balance Sheets are only true for the day they are written.5. Does not consider business environment i.e. Competition6. Different accounting policies may be used from one year to The next																

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PAST MANAGEMENT SKILLS QUESTIONS

<p>2016 - USING THE FIGURES BELOW, CALCULATE THE DEBT/EQUITY RATIO (GEARING) (i)</p> <p>Debt Capital: Equity Capital 700,000:220,000 + 130,000 700,000:350,000 2:1</p>	<p>2016 - IS LALCO LTD. A HIGHLY GEARED OR LOWLY GEARED (ii)</p> <p>Lalco Ltd. is highly geared - this means the firm has to make high interest payments resulting in low/no dividend payments to shareholders. Assets may be used as security/Capital repayment required/May impact on ability to borrow in the near future/Impact on the firm's profits/cash flow.</p>	<p>2015 - CALCULATE THE NET PROFIT PERCENTAGE (MARGIN) (i)</p> <p>Net profit/Sales X 100 Gross Profit 22,000 - Expenses 12,000 = Net Profit of €10,000 = 10,000 / 50,000 = 20%</p>
<p>2015 - HOW MANAGEMENT COULD USE THIS INFORMATION (ii)</p> <p>The Net Margin has fallen by 5% showing that the firm's profitability has decreased and that it may be time for management to control its costs by deciding for example to cut wages, source cheaper raw materials or it should try to increase sales revenue.</p>	<p>2014 - EXPLAIN THE TERM 'DEBT/EQUITY RATIO'. (B) i</p> <p>The debt/equity ratio is an analysis of the capital structure of the business. It indicates what proportion of capital is made up of long term loans and what proportion of capital is made up of reserves and issued ordinary share capital.</p>	<p>2014 - CALCULATE THE DEBT/EQUITY RATIO FOR 2013 (B) ii</p> <p>Debt: Equity 200,000 : 450,000 + 150,000 200,000 : 600,000 .33 : 1</p>
<p>2014 - IMPORTANCE OF THE DEBT/EQUITY RATIO IN DECIDING ON NEW SOURCES OF FINANCE (B) iii</p> <p>Flame Ltd is a lowly geared company which means the majority of the capital has been provided by the owners in the form of share capital and retained earnings. Flame Ltd can raise further capital by selling shares up to a limit of €450,000 (Authorised - Issued). Raising finance through additional loans is an option for Flame Ltd because it does not have too many existing loans already, as it is lowly geared.</p>	<p>2013 - CALCULATE THE CURRENT RATIO (A)</p> <p>Current Ratio is CA: CL</p> <p>CA 12000 + 15000 + 8000 = €35000 CL 20000 + 50000 = €70000</p> <p>Current Ratio = €35,000: €70,000 0.5:1</p>	<p>2013 - COMMENT ON THE LIQUIDITY POSITION OF SENTRY LTD (B)</p> <ol style="list-style-type: none"> 1. Sentry Ltd has not managed to attain the recommended current ratio of 2:1. 2. Sentry Ltd is not liquid and is overtrading i.e. it cannot pay its debts as they arise. 3. Sentry Ltd will have difficulty in raising cash quickly and paying its bills as they fall due.

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PROFIT AND LOSS ACCOUNT AND BALANCE SHEET

PROFIT AND LOSS ACCOUNT

Sales			£
Less cost of Sales			
Opening Stock		£	
Add Purchases	£		
Add Custom Duty	£		
Add Import Duty	£		
Add Carriage In	£	£	
Cost of goods available for resale		£	
Less Closing Stock		£	
Cost of good Sold			£
Gross Profit			£
Less Expenses			
<u>Administration</u>			
Wages and Salaries		£	
Rent		£	
Insurance		£	
Telephone		£	
<u>Selling and Distribution</u>			
Carriage out		£	
Advertising		£	
Selling Expenses		£	
Bad Debts		£	
<u>Depreciation</u>			
Depreciation on fixed assets		£	£
Net Profit			£
Less Corporation tax			£
			£
Less Dividends			£
Reserves (Retained Profit)	Finance by Section in		£

BALANCE SHEET

Statement of Financial Position of ABC Ltd as at xx/xx/xxxx			
Fixed Assets	Cost	Depreciation	Net Book Value
Premises	£	£	£
Machinery	£	£	£
Vehicles	£	£	£
Total Fixed Assets	£	£	£
Current Assets			
Bank		£	
Closing Stock		£	
Debtors		£	
Cash		£	
Less Creditors falling due within one year			
Bank overdraft	£		
Creditors	£	£	
Working Capital			£
Total Net Assets			£
Financed By			
Creditors falling due after one year			£
Capital reserves	Authorised	Issued	
Share Capital	£	£	
Add Reserved		£	£
Capital Employed			£

Key Words

Cost of sales - This is the cost of purchasing or making the product (Raw materials, purchases stock)

Gross profit - This is the profit before any expenses, interest are deducted. Low gross profit indicated that the cost of raw materials are too high or the selling price is not high enough

Expenses - These included items such as Rent, wages, Electricity, Light and heat

Net Profit - This is the profit after expenses are deducted. A low net profit indicated that the business expenses are too high

Corporation Tax - This is tax that is paid by companies on their profits

Dividends - This is a share of the profits that are paid to the shareholders

Retained earnings - This is the profits that is left after all the expenses, cost and dividends

have been taken out (It is an important source of long-term finance)

Fixed Assets - These are permanent items owned by the business. They can be tangible - they can be seen or touched (Building) or intangible - They can't be seen (Good Will). Fixed assets show a bank how much security a business has when they are applying for a loan

Current Assets - These are assets that are always changing during the year.

And Included Debtors who are people who owe the business money

Current Liabilities These are debts that should be paid within one year. The included Creditors who are the people the business owe money too

Working Capital- This is the finance that is used for the day to day running of a business. It is usually gotten by subtracting the current assets figure from the current liabilities figure. It shows if the business has enough money to pay their short term debts

Finance By - This section shows the source of long term finance that is raised by a business. It included ordinary shared, preference shares, Debentures and loans. It shows the borrowing in a business and if they can borrow more

Ordinary shares - This is the value of share that have been issued to shareholders

Equity capital This is the amount of funds that are owned by the shareholders

Capital Employed - This is the total finance that the company used in a year

WHAT IS THE PROFIT AND LOSS ACCOUNT?

A profit and loss (P&L) account shows the amount of income earned, expense incurred, and profit made by the business. It also shows

1. How much profit was paid out in tax
2. How much was paid in dividends
3. How much was retained in the business for the future

WHAT IS THE BALANCE SHEET?

This is a statement of the wealth of a business. It shows all the assets (something the business owns) and liabilities (Owes) by the business at a specific

CHAPTER 10 – RATIO ANALYSIS

RATIOS

PROFITABILITY

Gross Profit Margin	Net Profit Margin	Return on Capital Employed
$\frac{\text{Gross Profit}}{\text{Sales}} \times \frac{100}{1}$	$\frac{\text{Net Profit}}{\text{Sales}} \times \frac{100}{1}$	$\frac{\text{Net Profit}}{\text{Capital Employed}} \times \frac{100}{1}$
<ol style="list-style-type: none"> It shows the amount of Gross Profit the company will get from Sales. For example, a Gross Margin of 45% means that the business is earning 45c Gross Profit. The higher the Gross Profit the easier the business can pay its expenses 	<ol style="list-style-type: none"> It shows the amount of Net Profit the company will get from sales. For example, a Net Margin of 20% means that the business is earning 20c Net Profit. The higher the Net Profit Margin the higher the profits. 	<ol style="list-style-type: none"> This figure measures the firm's ability to generate profits from the money invested in the business. It shows the return the investor will get for the money the give to the business. The higher the ROI the better
a decline in this ratio is due to Increased cost of Sales - This can be due to higher material or production costs Lower profit This is because the selling price is low	A decline in the net profit margin is due to an increase in the expenses	

HOW TO MANAGE THE WORKING CAPITAL IN A BUSINESS

It is very important that all business manage their working capital so they can pay back their debts. To Help with this firms can do the following

- Sell of slow-moving stock - this will result in the company getting cash
- Proper stock control - This will reduce the amount of money that the company has tied up in stock and free up storage
- Credit Control - Monitor which customers to give credit to and for how long. Effective credit control and reduce bad debts
- Increase prices - This will increase the profit margin
- Raise more finance - This can be done by selling shares, getting a loan or selling off assets

LIQUIDITY

Current Ratio	Acid Test Ratio
$\frac{\text{Current Assets}}{\text{Current Liabilities}}$	$\frac{\text{Current Assets} - \text{Closing stock}}{\text{Current Liabilities}}$
<ol style="list-style-type: none"> This is also known as the Working Capital Ratio. The Ideal Ration here is to have 2:1. This means that for every 1 Liability we owe we have 2 Assets to pay for it or for every €1 we own we have €2 to pay. This means that we can repay our debts and still have money in the business 	<ol style="list-style-type: none"> This is also known as the Quick Ratio. The Ideal Ration here is to have 1:1. This means that for every 1 Liability we owe we have 1 Assets to pay for it or for every €1 we own we have €1 to pay. This means that we can repay our debts and still have closing stock left over to sell.

WHAT THE LIQUIDITY RATIO TELLS US ABOUT THE BUSINESS

- Liquidity - This is the firm's ability to repay back it's debts. If liquidity is too low the business will not be able to repay its debt on time and might go out of business
- Insolvency - This occurs when the liabilities (Debt) is higher that the Assets. This means that the business can't pay its debts back. This is very serious and can result liquidation
- Liquidation - is when a business is closed, and their assets are sold off. The money raise is used to pay the creditors

HIGH GEARING CAN CAUSE THE FOLLOWING PROBLEMS

- Greater pressure on Management - To increase profits to repay the interest
- Reduced dividends - Payments of Preference share and debenture loan get paid before first
- Difficulty raising finance - Less likely to pay dividends and therefore more risky
- Difficulty raising loan finance - Bank will have doubts in the firm's ability to pay back loans
- Risk of Liquidation - risk interest rate ore not paid on time

WHY STAKEHOLDERS ARE INTERESTED IN MONITORING A BUSINESS

Managers - Help with decision and how well the business is performing
 Investors - How risky the business is, the ability to make a profit and the return they will get
 Employees - If they will have a job, use to seek a wage increase
 Banks - Ability to repay a loan, looking at the liquidity ratios
 Suppliers - Ability to pay for supplies given on credit
 Government - The Tax to be paid

GEARING

Current Ratio
$\frac{\text{Debt Capital}}{\text{Equity Capital}}$
<ol style="list-style-type: none"> This ratio shows the capital structure of the business and its ability to repay long term debts.
<p>Lowly Geared - Equity > debt usually less than 1 or 100%</p> <p>Neutral Geared - 1 or 100%</p> <p>Highly Geared - Debt higher than equity usually higher than 1 or 100%</p>