



BOOK OF CHAPTERS



STUDIES IN ACCOUNTING

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FINANCIAL MANAGEMENT AND REPORTING: ANALYSIS AND INTERPRETATION OF BASIC FINANCIAL STATEMENTS

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At the end of the chapter the student should be able to:

1. *Explain the meaning of financial statements*
2. *Identify different components of financial statements.*
3. *Illustrate different methods of interpretation of financial statements*
4. *Explain the meaning of ratio and ratio analysis*
5. *Analyze different classes of ratio*
6. *Calculate different types of ratios*
7. *Interpret different results of ratio calculated*
8. *Advise management on the application of the ratios computed.*

Introduction.

Financial statements simply imply the end product of the rigorous book keeping exercise commencing from the subsidiary book through the ledger, trial balance and final presentation of report known as financial statement. There are basically five components of the financial statements namely, statement of profit or loss, statement of financial position, statement of cash flows, statement of changes in equity and the statement of value added.

Some of the financial statements such as the statement of profit or loss and statement of financial position are presented from the account details of different transactions of an entity while others such as statement of cash flows, statement of changes in equity and the statement of value added are presented using the information contained in the statement of profit or loss and

statement of financial position. The large number of figures contained in different components of the financial statements requires scrutiny and systematically analyzed so as to have meaning and aid the users of accounting information in making relevant decision. It is therefore necessary to analyze or x-ray different data in each component of the financial statement.

Analysis and interpretation of financial statements

Analysis and interpretation of financial statements therefore, simply means looking at different parts of the financial statements and relating each part to the other in recognition of the whole statement. The aim is to find out the relationship of different data in the financial statement, to discover the relationship between different components of the financial statement and to relate the impact of the various data to the whole statement so as to aid the management to make rightful decision. Such analysis, evaluating and discovering relationship between component parts of a financial statement helps the management to obtain a better understanding of a firm's position and performance.

Financial statement analysis is therefore the process of understanding the risk and profitability of a firm through analysis of reported financial information, by using different accounting tools and techniques. Simply put, it is a process of analyzing a company's financial statements for decision-making purposes where external stakeholders use it to understand the overall health of an organization and to evaluate the overall performance and business value while the internal stakeholders use the financial statement analysis as a monitoring tool for managing the invested finances.

It is a key to understanding an organization's financial condition which can be simply referred as the company's health "report card". It comprises the review of three significant financial statements: statement of financial position, statement of profit or

loss and statement of cash flows maintained by all the companies. It therefore provides a comprehensive and unbiased overview of a company's profitability, value, liquidity and financial security.

Methods of financial statement analysis

Basically, there are five common approaches to financial statements analysis, namely:

1. Horizontal analysis.
2. Vertical analysis
3. Ratio analysis
4. Trend analysis
5. Cost volume profit analysis.

We shall briefly discuss the above listed approaches and at the end discuss in detail ratio analysis approach.

Horizontal analysis: This approach compares historical data horizontally, by analyzing values of the line items across two or more years. Horizontal analysis approach usually portrays percentage growth of same line item in the base year of the financial statement. A particular year will be chosen as the base year and all figures in financial statement of the chosen base year will be expressed at 100 while the financial statements of other years will be expressed as a percentage of the base figure. It provides an opportunity for the stakeholders to spot trends and growth patterns of the company. It also enables them to forecast future projections.

Vertical analysis: This is another approach where each line item of a financial statement is listed as a percentage of another line item. The approach explores the vertical effects that line items have on other parts of the business and business' proportion. All figures in a particular statement are expressed in terms of one of the figures in the statement. Example is a situation where every

line item in the statement of financial position is stated as a percentage of total assets and also every line item in the statement of profit or loss is stated as a percentage of gross revenue. This approach gives the stakeholders an understanding of overall performance of an entity in terms of revenue and expenses.

Ratio analysis: This is the commonly used and more comprehensive approach which allows for a meaningful comparison between the different elements of a financial statement to portray the general upward or downward trend of the performance of different line items in the financial statement. Ratio analysis shows an overview of a company's financial health. Calculated ratios can be compared against the previous period, which is crucial for setting performance targets. It can also be compared with similar firms in the industry. The approach uses important ratio metrics to calculate statistical relationships.

Trend analysis: historical data are used in this approach to forecast the long-term direction of market movement. The expectation is that past events still remain relevant in taking future decision. This is because some of the past events may likely repeat itself in the future. Using the approach helps the business to adequately predict and prepare for any shock within a particular market segment.

Cost volume profit analysis:

This is another approach that helps companies to better understand the relationship between costs, revenue and business profit. It analyses the fixed cost and variable cost and then establishes the relationship between revenue and variable cost.

Objectives of financial statement analysis.

The basic objective of financial statement analysis is to understand and diagnose the information contained in financial

statement with a view to judge the profitability and financial soundness of the firm, and to make forecast about future prospects of the firm. Other objectives of the financial statement analysis include:

- To assess the earning capacity or profitability of the firm.
- To assess the operational efficiency and managerial effectiveness.
- To assess the short term as well as long term solvency position of the firm.
- To make inter-firm comparison.
- To make forecasts about future prospects of the firm.
- To assess the progress of the firm over a period of time.
- To help in decision making and control.
- To provide important information for granting credit.

Limitations of Financial Statement Analysis:

- Inherent limitations of the financial statements affect the financial statement analysis. This is simply because the data used in the analysis are imported from the financial statements.
- Price level change, creative accounting embedded in the financial statement, changes in accounting policy etc. affects the financial statement analysis.
- Financial analysis is based upon only monetary information and non-monetary factors are ignored.
- As the financial statements are prepared on the basis of going concern, it does not give exact position. Thus accounting concepts and conventions cause a serious limitation to financial analysis.
- Sudden changes in accounting procedure by a firm may often make financial analysis misleading.
- Financial statement analysis is only a means and not an end in itself. The analyst has to make interpretation and

draw his own conclusions. Different people may interpret the same analysis in different ways.

Importance of financial statement analysis.

Financial statement analysis is really of importance to organizations in the following ways.

- It enables business owners to identify and determine their financial strength and weaknesses.
- It helps in identification of area of improvement.
- It provides an objective and an acceptable systematic means of appraising a company.
- It helps to measure a company's performance against the wider sector, giving business owners an understanding on how they compare to their top competitors.

Further treatment of ratio analysis approach.

As earlier stated, ratio analysis is the most commonly used approach to financial statement analysis. It is therefore given a more detailed treatment below.

Ratio: Accounting ratio is a proportion or fraction or percentage expressing the relationship between one item in a set of financial statement and another item in the same financial statement.

Importance of ratio analysis.

- ✓ Evaluation of trading performance
- ✓ Appraisal and monitoring of the constituents of the capital structure
- ✓ To determine an entity's liquidity base.
- ✓ Comparing operation of an enterprise.

LIMITATIONS OF RATIO ANALYSIS

- **Heterogeneity or Homogeneity:** A company may have various divisions operating in many different industries. This can make it difficult to find comparative industry ratios to use for comparison purposes.
- **Need to determine whether the results of the ratio analyses are consistent:**
One set of ratios may indicate a problem, whereas another may indicate that the potential problem is only short-term in nature.
- **Need to use judgment:** Although financial ratios are used to help assess the growth, and risk profile of a company, they cannot be used alone. The entire operations of the company must be examined, and the external economic and industry setting in which it is operating must be considered when interpreting financial ratios.
- **The use of alternative accounting methods:** Companies frequently have latitude when choosing certain accounting methods. Ratios obtained from financial statements that employ different accounting choices may not be comparable unless adjustments are made.
- **Management assumptions, basis of estimation and judgment:** IFRS is principles-based; it requires significant judgment from management of entities, this could result in material differences in the financial statements of the entities. It can also further limit the financial analyses of financial statements with accounting ratios unless further adjustments are made to the accounts.
- **Differences in accounting policies:** IFRS as a principle-based financial reporting system, allows alternative treatment of transactions via accounting policy choice, which invariably makes comparison of company's performance via accounting

ratios more difficult and less meaningful unless alignment of the accounting policies of the entities are considered.

Use of historical cost data: Decisions about future expectations are based on historical data which in some cases make it difficult to reach economic decisions that are likely to take into consideration changes in underlying variables that determine company's performance.

Inflation can distort the financial statements: Inflation can distort the financial statements (particularly the statement of financial position). Any problem in the financials caused by inflation can be passed on to ratios.

Difference in ratio definitions may make it difficult to compare ratios from different sources. There can be many different ways to compute the same ratio. This can cause confusion or different answers.

Use of industrial average: Comparison against industry average may be subjected to factors that are not common in the industry.

Lack of comparative figures for a new entity: In the company's first year of trading, there will be no comparative figures, hence no indicator to compare with.

It only triggers off points for further investigation.

There is no generally accepted standard as an ideal ratio.

CLASSES OF RATIOS:

Ratios are normally grouped into five namely

1. **Profitability ratios.** These are ratios primarily used to assess the profitability of an enterprise.
2. **Liquidity ratios:** These ratios are used to assess the liquidity position of an entity.
3. **Stability/gearing ratio:** Used to assess what percentage of total funds is used to finance operations is generated from outside sources.

4. **Investors/Shareholders ratio:** This assesses the return attributable to each share.
5. **Activities ratio:** assesses the efficient utilization of the company's resources by its management.

Tabular presentation of different ratios and means of calculation.

CLASS	RATIO	FORMULA	PURPOSE
PROFITABILITY	Return on capital employed	$\frac{\text{Operating profit} \times 100}{\text{Capital employed}}$	Shows the % return generated by total funds employed to finance operations.
	Return on equity	$\frac{\text{Profit after tax} - \text{Pref Div} \times 100}{\text{Equity/shareholders fund Less Pref shares capital}}$	This ratio is a measure of the profitability of business in relation to the equity.
	Operating profit margin	$\frac{\text{Operating profit} \times 100}{\text{Sales (Revenue)}}$	This ratio shows the percentage of sales generated as operating profit.
	Gross profit margin	$\frac{\text{Gross profit} \times 100}{\text{Sales (Revenue)}}$	This ratio shows the percentage of sales that is generated as gross profit.
LIQUIDITY	Current ratio	$\frac{\text{Current assets}}{\text{Current liabilities}}$	Shows the ability of the enterprise to meet its short term liabilities from its current assets without selling its fixed assets.
	Liquid/Quick/Acid Test ratio.	$\frac{\text{Current assets} - \text{stock}}{\text{Current liabilities}}$	Shows the ability of the enterprise to meet its short term liabilities from its current assets without selling its stock.

	Debtors collection period	$\frac{\text{Average debtors} \times 365 \text{ days}}{\text{Credit purchases}}$	Measures how many credit days is given to customers.
	Creditors payment period	$\frac{\text{Average creditors} \times 365 \text{ days}}{\text{Credit Sales}}$	Shows how many credit days is received from suppliers.
	Debtors turnover	$\frac{\text{Credit Purchases}}{\text{Trade creditors}}$	Indicates how many times creditors are turned over during a period.
STABILITY/GEAR RING	Debt/Gearing/Leverage ratio	$\frac{\text{Debt Capital}}{100 \text{ Capital employed}} \times 100$	Indicates what % of funds employed is generated from outside sources.
	Debt/Equity ratio	$\frac{\text{Debt capital}}{100 \text{ Equity}} \times 100$	Expresses total funds generated from outside source as a % of owners interest.
	Interest cover	$\frac{\text{Operating profit} \times 100}{\text{Interest expense}}$	This indicates how many times operating profit will be able to cover interest payments.
	Proprietary ratio	$\frac{\text{Shareholder's fund}}{\text{Total assets}}$	This ratio establishes a relation between the proprietor's fund and the total assets of the company.
INVESTORS/SHARE	Earnings per share	$\frac{\text{Profit after tax}}{\text{No of ordinary shares in issue}}$	Indicates the net return attributable to each ordinary share.
	Dividend per share	$\frac{\text{Total dividend}}{\text{No of ordinary shares in issue}}$	Indicates amount paid for each ordinary share.
	Price/earnings ratio	$\frac{\text{Mkt price per share} \times 100}{\text{Earnings per share}}$	Indicates how many times earnings must be generated to cover the amount invested on a share.

REHOLDERS/ST OCK		$\frac{\text{Earnings per share}}{\text{X 100}}$ Market price per share	Earning's yield is the inverse of the P/E ratio. It tells the shareholder how much he has earned per share held.
	Dividend Yield	$\frac{\text{Dividened per share}}{\text{X 100}}$ Mkt. price per share	Indicates the net return in percentage earned by each holder of a company's ordinary share.
	Dividend Cover	$\frac{\text{Earning per share}}{\text{Dividened per share}}$	Indicates how many times EPS is able to cover the amount paid out as dividend
ACTIVITIES RATIO	Stock turnover	$\frac{\text{Cost of sales}}{\text{X 365 days}}$ Average stock OR $\frac{\text{Sales}}{\text{X 365 days}}$ Closing stock	Indicates how many times stock is turned over. (Use when cost of sales or average stock is not given)
	Asset turnover	$\frac{\text{Sales}}{\text{Total assets/fixed assets/Net assets}}$	Indicates how much sales is generated by NI of asset.

Required: Briefly explain the main aims and give TWO examples of each category of the above financial ratios.

Classes of Financial Ratios	Main Aims	Examples
Profitability and Efficiency -	It is aimed at determining the performance of an organization - Concerned with relative efficiency in the utilization of company's assets	Return on capital employed - Return on total assets - Gross profit margin - Net profit margin - Capital employed turnover - Total asset turnover - Return on shareholders' equity
Long term solvency and stability -	To determine a company's ability to meet its long-term obligation - To show the degree of safety of a business from failure in the long term	Fixed interest cover - Fixed dividend cover - Total debt to equity - Gearing ratio Debt to assets ratio
Short term solvency and Liquidity -	To determine the ability of a firm to meet its short term financial obligations.	Current ratio - Acid test/quick ratio - Receivable turnover - Receivable collection period - Trade payable turnover - Trade payable payment period.
Shareholder's investment ratios -	To determine the value of a company, consequently; - To enable for comparison between investment alternative before making decision. -	Earnings per share - Dividend per share - Price earnings ratio - Earnings yield - Dividend yield - Dividend payout ratio

Illustration 1:

The basic financial ratios can be grouped into the following broad categories.

Profitability and efficiency

- Long term solvency and stability
- Short term solvency and liquidity
- Shareholders' investment ratios

ILLUSTRATION 2.

Magifera Plc had been trading in merchandise for several years in Garden City. The information below relates to extracts from the Financial Statements for the past two (2) years. Statement of Profit or Loss and Other Comprehensive Income for the year ended September 30:

	2016 N' Million	2015 N' Million
Revenue	100,000	160,000
Gross Profit	45,000	70,000
Administrative Expenses	22,500	27,500
Finance Cost: 10% Loan Note Interest	1,250	1,250
	23,750	28,750
Operating Profit Before Tax	21,250	41,250
Less: Taxation Expense	8,000	16,000
Operating Profit for the year	13,250	25,250
Dividends Paid to Equity holders	6,050	8,550

Extract of Statement of Financial Position as at September 30

	2016 N' Million	2015 N' Million
Assets:		
Non - Current Assets at Cost	50,000	70,000
Less: Accumulated Depreciation	10,000	12,500
Carrying Amount	40,000	57,500
Current Assets:		
Inventory	32,500	7,500
Trade Receivables	20,000	5,000
Bank Balance	4,000	37,500
	56,500	50,000
Total Assets	96,500	107,500
Equity and Liabilities:		

Ordinary Share Capital @ 50k each	23,000	23,000
Retained Earnings	17,200	10,000
10% Loan notes	12,500	12,500
10% Redeemable Preference Shares	2,000	52,700
	47,500	
Current Liabilities: Trade Payables	7,500	10,750
Taxation	24,000	16,000
Bank Overdrafts	12,300	33,250
	43,800	60,000
Total Equity and Liabilities	96,500	107,500

The Board of Directors were worried over the dwindling financial performance and precarious financial position of the company. The products are ageing; the economic depression is biting as a result of the worsening exchange rate of \$1 to N400. The company imports 60% of the goods sold in Garden City. The worsening exchange rate had affected the company's importation, consequently the revenue of the company dropped significantly. The unsafe financial performance has also affected the market price of the company's share which dropped from 12kobo/share in the year ended September 30, 2015 to 8kobo/share in 2016.

You are required to:

- a. Calculate the following ratios for the year ended September 30, 2015 and 2016 in columnar form:
 - i. Return on Capital Employed
 - ii. Total Assets Turnover
 - iii. Quick Ratio
 - iv. Debt- Equity Ratio
 - v. Fixed Interest Cover
 - vi. Earnings Yield
 - vii. Price Earnings Ratio
 - viii. Dividend Yield

b. Write a brief and formal technical report to the Board of Directors to assess the performance, liquidity and stability of the Company using only:

- i. Return on Capital Employed
- ii. Total Assets Turnover
- iii. Quick Ratio
- iv. Fixed Interest Cover
- v. Debt Equity Ratio

RATIO	FORMULAE	2016	2015
(a) Calculation of Ratios			
(i) Return on capital employed =	$\frac{\text{PBIT}}{\text{Capital employed}}$	$\frac{21,250 + 1,250}{52,700} = 42.69\%$	$\frac{41,250 + 1,250}{89,470} = 46.57\%$
Or	$\frac{\text{PAT}}{\text{Equity}}$	$\frac{13,250}{40,200} = 32.96\%$	$\frac{25,250}{33,000} = 76.52\%$
(ii) Total asset turnover	$\frac{\text{Revenue}}{\text{TA}}$	$\frac{100,000}{96,500} = 1.04 \text{ times}$	$\frac{100,000}{107,500} = 0.93 \text{ times}$
(iii) Quick Ratio =	$\frac{\text{CA} - \text{Inventory}}{\text{CL}}$	$\frac{56,500 - 32,500}{43,800} = 0.55:1$	$\frac{50,000 - 7,500}{60,000} = 0.71:1$
(iv) Debt equity Ratio =	$\frac{\text{Debt}}{\text{Equity}}$	$\frac{12,500}{23,000}$	$\frac{12,500 + 2,000}{23,000 + 10,000}$

		$\frac{17,200}{31.09\%}$	$= 43.94\%$
(v) Fixed Interest Cover =	$\frac{\text{PBIT}}{\text{Fixed Interest}}$	$\frac{21,250 + 1,250}{1,250} = 18 \text{ times}$	$\frac{41,250 + 1,250}{1,250} = 34 \text{ times}$
(vi) Earnings yield =	$\frac{\text{EPS}}{\text{Market Price per share}}$	$\frac{13,250}{50k} = 26.5\%$	$\frac{25,250}{23,000} = 1.1 \text{ times}$
(vii) Price earning ratio =	$\frac{\text{MPS}}{\text{EPS}}$	$\frac{13,250}{23,000} = 0.576$	$\frac{25,250}{12k} = 2.104$
(viii) Dividend yield =	$\frac{\text{DPS}}{\text{MPS}}$	$\frac{6,050}{50k} = 12.1\%$	$\frac{8,550}{23,000} = 37.17\%$

b. REPORT

To: The Board of Directors
Magifera Plc., Garden City
From: Financial Accountant

REPORT ON PERFORMANCE, LIQUIDITY AND STABILITY OF MAGIFERA PLC.

The last two years have been challenging for the company. A review of the financial ratios of the company reveals the following:

Performance The company's performance is on the decline as evidenced by the two ratios below.

i. **Return on Capital Employed** This is the Primary ratio indicating the efficiency or otherwise of management in employing or utilising the resources available. The more the efficiency of utilisation, the higher the ROCE and vice versa. The company recorded a decrease in return on capital employed from 89.47% in 2015 to 42.69% in 2016. The decline in the return on capital employed can be attributed to the declining revenue which may not be specific to the company but to all companies in Garden City as the city is currently experiencing economic depression and worsening exchange rate coupled with its ageing products of the company.

ii. **Total Assets Turnover** The ratio indicates the efficiency in utilization of assets to generate revenue. The company recorded total assets turnover of 1.49 times in 2015 but decreased to 1.0 times in 2016. This is an indication that in 2016 the company did not utilize its assets as efficiently as it did in 2015. This decrease in the efficiency of the utilization of assets is also due to the challenges stated in return on capital employed above. Liquidity The company's liquidity worsened between 2015 and 2016.

iii. **Quick Ratio** The ratio indicates the liquidity of an entity by measuring the relative amount of cash and other near liquid assets available to meet current liabilities. Thus, it is a relatively strong indicator of illiquidity. The quick ratio of the company which is below the universal norm of 1: 1 in 2015 and 2016 is deteriorating. It decreased from 0.71: 1 in 2015 to 0.55: 1 in 2016.

iv. **Fixed Interest Cover** This ratio is an indicator of the long-term health of an entity in that it measures the number of times fixed interest is covered by the profit before deducting the fixed interest. The higher the fixed interest cover, the higher the long-term solvency of an entity. The decline by half of this ratio from 34 times in the preceding year to 18 times in the current year (2016) is an indication of the precarious nature of Magifera long term solvency. Stability

v. **Debt Equity Ratio** This ratio also indicates an entity's long-term solvency by measuring the extent of cover for external liabilities. The company's ratio of debt to equity decreased from 43.94% in 2015 to 31.09% in 2016. The ratio for both years indicates that the company has a reasonable gearing.

In conclusion the performance, liquidity and stability of the company deteriorate from 2015 to 2016.

Thank you
Yours faithfully
Financial Accountant

ILLUSTRATION 3.

The following financial statements were extracted from the books of Adebayo Trading Company Plc for the relevant years.

Statement of Profit or Loss and Other Comprehensive Income for the year ended March 31:

	2018 N'000	2017 N'000
Revenue	250,000	400,000
Cost of sales	(137,500)	(225,000)
Gross profit	112,500	175,000
Administrative expenses	(36,050)	(44,500)

Distribution expenses	(20,200)	(24,250)
Finance cost	(3,125)	(3,125)
Profit before tax	53,125	103,125
Taxation expense	(20,000)	(40,000)
Profit for the year	33,125	63,125

Statement of Financial Position as at March 31:

	2018	2017
Assets	N''000	N''000
Non-current assets at cost	136,500	196,000
Accumulated depreciation	(36,500)	(52,250)
	100,000	143,750
Current assets		
Inventory	79,250	20,750
Trade receivables	50,000	12,500
Bank balance	12,000	91,750
	141,250	125,000
Total Assets	241,250	268,750
Equity and Liabilities:		
Equity		
Ordinary shares of 50 kobo each	57,500	57,500
Retained earnings	43,000	25,000
	100,500	82,500
Non-current liabilities:		
10% Loan notes	31,250	31,250
12% Redeemable preference shares	-5,000	31,250
		36,250
Current Liabilities:		
Trade payables	18,750	26,875
Taxation	60,000	40,000
Bank overdraft	30,750	83,125
	109,500	150,000
Total equity and liabilities:	241,250	268,750

Additional Information:

- Dividend paid to Equity holders are N15, 125,000 for the year ended, March 31, 2018 and N21,375,000 in 2017.
- There was a drop in the market price per share of the company's equity shares from 36 kobo in the year ended March 31, 2017 to 24 kobo in 2018.
- The finance cost relates to the interest paid on the 10% loan notes. **Required:**

a. Calculate in columnar form, for the two relevant years the following financial ratios:

Return on capital employed

♣ Net profit margin (use profit after tax)

♣ Current ratio

♣ Quick ratio

♣ Debt ratio

♣ Fixed interest cover

♣ Dividend cover

♣ Dividend yield

b. Comment on the profitability and short-term liquidity of the company based on the ratios calculated.

c. Management may use various forms of Creative Accounting to manipulate the view given by the financial statements. Identify and explain four creative accounting techniques.

SOLUTION 3

RATIOS	FORMULAE	2018	2017
Return on capital employed	$\frac{\text{PBIT}}{\text{CE}}$	$\frac{53,123+3,125}{131,750} = 42.69\%$	$\frac{103,125 + 3,123}{118,750} = 89.47\%$
OR	$\frac{\text{PAT}}{\text{Equity}}$	$\frac{33,125}{100,500} = 32.96\%$	$\frac{63,125}{82,500} = 76.52\%$
ii. Net profit margin	$\frac{\text{PAT}}{\text{Revenue}}$	$\frac{33,125}{250,000} = 13.25\%$	$\frac{63,125}{400,000} = 15.78\%$
iii. Current ratio	$\frac{\text{CA}}{\text{CL}}$	$\frac{141,250}{109,500} = 1.29:1$	$\frac{125,000}{150,000} = 0.83:1$
iv. Quick ratio	$\frac{\text{CA} - \text{Inv.}}{\text{CL}}$	$\frac{62,000}{109,500} = 0.57:1$	$\frac{104,250}{150,000} = 0.70:1$
v. Debt Ratio	$\frac{\text{Debt}}{\text{Equity}}$	$\frac{31,250}{57,500 + 43,000} = 31.09\%$	$\frac{5,000 + 31,250}{57,500 + 25,000} = 43.94\%$
OR	$\frac{\text{Debt}}{\text{Total Asset}}$	$\frac{31,250 \times 100}{241,250 \times 1} = 12.95\%$	$\frac{36,250 \times 100}{268,250 \times 1} = 13.51\%$
vi. Fixed Interest Covered	$\frac{\text{PBIT}}{\text{Fixed interest}}$	$\frac{53,125+3,125}{3,125} = 18 \text{ times}$	$\frac{103,125+3,125}{3,125} = 34 \text{ times}$
vii.	PAT	33,125	63,125

Dividend Cover =	Dividend Paid	15,125	21,375
		2.19 times	2.95 times
viii. Dividend Yield =	DPS	13k	18.6k
	MPS	24k	36k
		54.8%	51.6%

Note: CA - Current asset
 CL - Current liability
 INV - Inventory
 PBIT - Profit before interest and tax
 PAT - Profit after tax
 DPS - Dividend per share
 MPS - Market price per share
 CE - Capital employed

b. Comments on Performance and Short-term Liquidity

i. Two ratios which are relevant for measuring the company's profitability are the ROCE and the net profit margin. While the ROCE measures the efficiency or otherwise of management in the employing or utilizing the resources available, the Net Profit margin measures management control over operating expenses. The higher the ratios, the better the performance of the company. For Adebayo Trading Company Plc, the performance is on the decline as evidenced by the two ratios. The company recorded a decrease in ROCE from 89.47% in 2017 to 42.69% in 2018. Also the net profit margin declined from 15.78% in 2017 to 13.25% in 2018. Contributing factors are the significant reduction in revenue without a reduction in overheads.

ii. Short term liquidity: The current and quick ratios are normally used to measure short term liquidity. The ratios measure the ability of an entity to meet its short terms obligations as they fall due. A current ratio of 1.29:1 though below the benchmark is better in 2018 than in 2017 for the quick ratio, the position in

2017 of 0.70:1 declined to 0.57:1 in 2018. This could be attributed to slow moving inventory resulting in lower sales revenue in 2018.

c. Creative accounting techniques

- (i) Window dressing: An entity enters into a transaction just before the year end and reverses the transaction just after the year end. For example, goods are sold on the understanding that they will be returned immediately after the year end; this appears to improve profits and liquidity. The only reason for the transaction is to artificially improve the view shown by the financial statements.
- (ii) "Off Balance Sheet" finance: Transactions are deliberately arranged so as to enable an entity to keep significant assets and liabilities out of the statement of financial position. This improves gearing and return on capital employed. Examples include sales and repurchase agreements and some forms of leasing.
- (iii) Changes in accounting policies or accounting estimates: For example, an entity can revalue assets (change from the cost model to the relevant model) to improved gearing or change the way in which it depreciates assets to improve profits.
- (iv) Profit smoothing: Manipulating reported profits by recognizing (usually) artificial assets or liabilities and releasing them to statement of profit or loss as required.
- (v) Aggressive earnings management: Artificially improving earnings and profits by recognizing sales revenue before it is earned.
- (vi) Capitalizing expenses: Recognizing "assets" which do not meet the definition in the IASB conceptual framework for the recognition criteria. Examples include: human resources, advertising expenditure and internally generated brand names.

Summary.

Analysis of the financial statements over the years has become a veritable tool used for effective appraisal of the performance of an

entity. To carry out financial statement analysis, various methods are adopted. Such includes horizontal analysis, vertical analysis, ratio analysis, trend analysis and cost volume profit analysis. The ratio analysis which is most commonly used is categorized into profitability ratios, liquidity ratios, stability/gearing ratio, investors/shareholders ratio, Activities ratio. Each of these classes of ratio is meant to assess the entity performance in a specific area.

Self-text exercise

Question One

The summarized balance sheet and operating results of Wellington limited for the two years ended 30th September 2015 were as follows:

Balance sheet as at 30th September 2015.

	2015 N'000	2014 N'000
Fixed assets (net)	16,222	6,941
Current assets:		
Stock	62,294	52,196
Debtors	54,859	50,052
Bank	7,234	14,565
	124,387	116,813
Current liabilities:		
Creditors	47,055	42,885
Taxation	4,154	3,219
Dividends	2,500	2,250
	53,709	48,354
Net current assets	70,678	68,459
10% debenture	25,000	25,000
Net assets	61,900	50,400

Financed by	12,500	12,500
Ordinary shares of N1 each	35,874	29,787
Revenue reserve	13,526	8,113
Deferred taxation	61,900	50,400

Operating results for the year ended 30th September.

	2015	2014
	N'000	N'000
Sales	672,944	559,071
Profit before interest and taxation	23,412	20,882
Interest payable	2,500	2,500
Taxation	10,506	8,747
Dividend	3,750	3,500

The shares of the company were quoted at N1.20 as at 30th September 2015.

Required:

- Calculate from the balance sheet and operating results:
 - Two ratios of interest to creditors
 - Two ratios of interest to management and
 - Two ratios of interest to shareholders.
- Comment briefly upon the changes between 2014 and 2015.

Question two.

You are the Chief Accountant of Johnbosco Nigeria Limited; Papiyo Limited is a competitor in the same industry as Johnbosco and has been operating for the past 20 years. The following is the result of Papiyo Limited for the last three years ended December 31.

Ratios	2016	2017	2018	Gross
profit margin	% 34	34.4		35.4
ROCE %	21.1	21.5		17.8
Net profit margin	%	11.9		12.4

11.4 Asset turnover times	1.78	1.73	1.56
Gearing ratio %	15.6	24.3	23.6
Debt ratio %	18.5	32.0	30.9
Interest cover times	16.7	8.1	5.5
Current ratoratio	3:1	2.8:1	2.7:1
Quick ratio ratio	1.2:1	1.1:1	1.1:1
Receivable collection period (days)	46	52	64
Inventory turnover period (days)	158	171	182
Payable payment period (days)	35	42	46

Required: Write a report to the finance director of Johnbosco Nigeria Limited analysing:

- Performance (profitability, liquidity and long-term financial stability) of Papiyo Limited based on the information available.
- Identify FIVE areas which require further investigation, including references to other pieces of information which would complement your analysis of the performance of Papiyo Limited.

References

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- ATSWA ICAN study pack. Principles and practice of financial accounting
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- Bhattacharyya, A. (2012) Essential of Financial Accounting. PHI leaning private limited publishers