

## Role of Ratio Analysis in Business Decisions: A Case Study NBC Maiduguri Plant

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### Abstract

*Accounting information provided by means of financial statements- The income statement and the Balance Sheet are often in summarized form. Viewed on the surface, the truths about the results and the financial position of a business hidden in them remain veiled. To be of optimal benefit and as well enable the users make well – informed decisions, financial statements need to be analyzed by means of ratios. Therefore, in order to establish the role of ratio analysis in business decisions, this research is carried out; using NBC Maiduguri Plant was use as the Case study. The researcher made use of both primary and secondary sources of data collection. However, for the former, questionnaires were administered, whereas for the later, relevant were received. The data Collected via the primary data sources were analyzed using simple averages and percentages.*

**Keywords:** Ratio Analysis, Business, Accounting and Decisions Making

### 1. Introduction

The two primary objectives of every business are profitability and solvency. Profitability is the ability of a business to make profit, while solvency is the ability of a business to pay debts as they come due. (Hermanson et al, 1992: 824). However, the achievement of these objectives requires efficient management of resources of the business through planning, budgeting, forecasting, control, and decision – making. Also, the strengths and weakness of the business need to be identified and necessary corrective measures applied. Interestingly, accounting provides information that facilitates these functions.

Basically, accounting measures and communicates economic information needed for decision –making. Thus, the American Accounting Association (in Okezie, 2002:1) defined accounting as “the process of identifying, measuring and communicating economic information to permit informed judgments and decisions by the information”. Statement and the Balance Sheet. The Income Statement shows the profitability or profitability or operational result of a business, while the balance sheet shows the solvency or financial position of a business.

Although profiles are often used as the basis for judging the performance of a business, such profits must be related to the various items of the financial statements in order to be meaningful and useful for decision making. Furthermore, owing to the summarized nature of financial statements, a lot of truths are hidden in them. Thus, they need to be analyzed and interpreted by means of financial ratios to enable the users understand the meaning of the absolute amounts shown in them, and make informed business decisions.

In this regard, Essien (2006:144) observed:

Financial statements carry lots of financial Information that are hidden in the figures. The figures in financial statements become more useful when they are related to each other or to some other relevant financial data. Therefore, users of financial information go a further step to establish relationships (or ratios) among selected data in financial statements.

According to Igben (1999:423), "Accounting {or financial} ratio is a proportion or fraction or percentage expressing the relationship between one item in a set financial statements and another item in the financial statements. Accounting ratios are the most powerful of all tools used in analyzed and interpreting financial statements". Therefore, ratio analysis involves taking stats of number (or items) out of financial statements and forming ratios with them, to enhance informed judgments and decisions (Lasher, 1997:66).

McShane et al. (2000:336) defined decision-making as "a conscious process of making choices among one or more alternatives with the interior of moving toward some desired state of affairs." Therefore, business decisions can be defined as choices relating to the allocation and/or use of business resources to achieve business goals.

Decision-making calls information. Bittel et al. (1984:340) observed: "Managers want information because they need to make decisions. The proper use of information is an important part of decision-making." Remarkably, one of the effective ways of providing information needed for decision-making is ratio analysis.

Yes, business decisions of make or buy, investment or divestment, expansion or contrition, capital-organization and reconstruction, and so on cannot be properly made without the aid of financial ratios. They give cue to the financial strengths and weaknesses of a business, and highlight aspects of a business requiring further investigation. Financial information provided in financial statements is useful in business decisions. However, it must be noted that financial statements are means to an end not an end in themselves. Thus the use of financial statements in decision-making is not always easy owing to the problem of summarized nature of the information contained in financial statements, they need to be analyzed and interpreted by means of financial ratios to enable management and stakeholders understand them and make well-informed business decisions. Therefore, this research paper is carried out to show how ratio analysis help managers, shareholders, investors, creditors, and other stakeholders make informed judgments and decisions about the past performance, present condition, and futures potential of a business.

## 2. Research Questions

- i. Is ratio analysis useful in evaluating and prediction the performance of a business as well as intensifying areas that regret improvement?
- ii. Do you agree with the fact that ratio analysis facilitates proper understanding of information contained in financial statements?
- iii. Is ratio analysis useful to management investors, shareholders and creditors in their business divisions?
- iv. Does financial ratio helps to unravel the mass of truth hidden in financial statements?
- v. Are there obstacles that affect the proper use of ratio analysis in business decisions?

## 3. Literature Review

### 3.1 The concept of financial statement analysis

According to Hermanson et al (1992:824), "financial statement analysis consists of applying analysis tools and techniques to financial statements and other relevant data to show important relationships and obtain useful information." Therefore, financial statement analysis can be defined as the breaking down, interpretation, and translation of data contained in financial statements to provide information and show important relationships among the items of financial statements and drawing conclusion about the past performance, current financial position, and future potentials of a business.

### *3.2 Parties interested in financial statement analysis*

With particular reference to business organizations, parties interested in financial statement analysis are divided into two categories, namely: internal users and external users.

The internal users include management and employees of an organization, while external include shareholders, investors, creditors, debenture/bond holders, financial analysis, etc.

#### *3.2.1 Management and Employees*

Financial statement analysis helps management and employees to know the operating results, financial position and future potentials of a business.

#### *3.2.2 Shareholders/Owners*

The analysis helps shareholders or owners of a business to ascertain the profitability of the operation of the business, as well as return on their investments.

#### *3.2.3 Investors and Creditors*

Financial statement analysis helps investors to know the profitability and return on investment in a business. In the other hand, it helps trade creditors and note holders to know the liquidity or the ability of a business to pay its debts when they fall due.

#### *3.2.4 Debenture/bond holders*

Those who lend money to the business would like to know the ability of the business to repay on maturity both the interests and the principal of the loans granted to it.

#### *3.2.5 Financial analysis*

Financial statement analysis enables financial analysis to offer professional advice to their clients on investments.

### *3.3 Objectives of financial statement analysis*

According to Needles et al. (1996:770) financial statement analysis is used to achieve two basic objectives: (1) Assessment of past performance and current position, and (2) Assessment future potential and related risks of a business.

#### *3.3.1 Assessment of Past Performance and Current Position*

Financial statement analysis helps in assessing or judging the past performance of a business by taking a look at the trend or historical sales, expenses, net income cash flow, and return on investment. Also an analysis of current position will tell for example, what assets the business owns and what liabilities must be paid.

#### *3.3.2 Assessment of Future Potential Related Risk*

Information about the past and present (performance) is useful only to the extent that it bears on decisions about the future (potentials). Financial statement analysis thus help for example investors to judge the earning potential of a company. It also enables creditors to assess the potential debt

paying ability of the company. Therefore financial statement analysis helps in assessing the riskiness of an investment or loan by making it easy to predict the future profitability and liquidity of a business.

### *3.4 Sources of information for financial statement analysis*

According to Needles et al. (1996:773), the major sources of information about publicly held corporations are reports published by the company, SEC reports, business periodical, and credit and investment advisory services.

#### *3.4.1 Reports Published by the Company*

The annual report of a publicly held corporation is an important source of financial information.

#### *3.4.2 SEC Reports*

Annual, quarterly and current financial reports filed by publicly held corporations with the Securities and Exchange Commission (SEC) are sources of information for analysis of financial statements.

#### *3.4.3 Business Periodicals*

Financial magazines and newspapers contain reports about the performance of companies.

#### *3.4.4 Credit and Investment Advisory Services*

They provide data and information about the performance of companies as well as on industry norm. For example, Dun and Bradstreet Corporation in USA offers an annual analysis using fourteen ratios of 125 industry groups.

### *3.5 Ratio ANALYSIS*

Dansby et al. (2000:845) defined ratio as "fractional relationship of one number to another". On the other hand, Needles et al. (1996:795) defined ratio analysis as "a technique of financial analysis in which meaningful relationship is shown between the components of financial statements". Ratio analysis is often expressed proportionately to show the relationship between figures in the financial statements. Ratios are guides or shortcuts that are useful in evaluating a company's financial position and operations and making comparisons with results in previous years or with other companies. The primary purpose of ratio is to point out areas needing further investigation. They should be used in connection with a general understanding of the company and its environment. (Needles et al., 1996:786).

Thus, Lasher (1997:69) noted are most meaningful when used in comparison. For that reason, it is difficult to make a generalization about with a good or acceptable value is for any particular figure. One measure alone does not tell the whole story about a company and one measure should never be the sole basis for a financial decision". Hermanson et al. (1992:840) added: "standing alone, a single financial ratio may not be informative. Greater insight can be obtained by computing and analyzing several related ratios for a company".

#### *3.5.1 Uses and objectives of ratio analysis*

Basically, ratio analysis is used in determining:

1. The short-term and long-term liquidity of a firm or the ability of the firm to meet its short-

- term (current) and long-term financial obligations.
2. The riskness or long-term solvency of a business. That is, the level of gearing or leverage or the extent the firm is financed by debt.
  3. The Performance, profitability or overall earning power of a business.
  4. The assets utilization or efficiency in the use of assets of a business to generate sales revenue.
  5. The potential return and risk associated with owing shares or investing in the stock a company.

### 3.5.2 Types of ratio analysis

#### 3.5.2.1 Liquidity (short-term solvency) ratios

According to Dansby et al. (2000:826) "Liquidity is the ability of a business to meet its financial obligations as they fall due". On the other hand, Needles et al. (1996 :787) defines liquidity, as "a company's ability to pay bills when they are due and to meet unexpected needs of cash".

Liquidity ratios can be divided into two – short-term liquidity (solvency) ratios. However, for the purpose of this study, liquidity Ratios refers to short-term liquidity ratios while Debt Management Ratios refer to long-term liquidity ratios.

Liquidity ratios (short-term solvency ratios) are of particular concern to short-term lenders and suppliers who provide products and services to the firm on credit. They want to be sure the company has the ability to pay its debts. (Lasher, 1997:69). Liquidity Ratios include Current Ratio and Quick or Acid Test Ratio.

#### 3.5.2.2 Current Ration

This indicates the ability of a business to meet or pay its short-term financial obligations or current liabilities out of the current assets. Thus, it is also known as the ratio of current assets to current liabilities. It is the primary measure of a company's liquidity.

A low current ratio may be an indication of a firm's inability to pay its financial obligations in the near future, while a high current ratio may indicate excessive amount of current assets or inefficient asset utilization by management.

The yardstick against which current ratio are measured is the standard of 2 to 1 (2:1). This means that for every N1 current liability there must be a minimum of N2 current assets to cover it. This standard is often used by lending institutions and credit bureau and is generally considered as good. (Dansby et al., 2000:827).

However, prospective creditors or lenders must take care of sticking to this standard as a company may manipulate its current ratio (by inflating inventory for instance,) in order to paint a picture of better financial position. Current ratio can be calculated as follows:

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liability}}$$

#### 3.5.2.3 Quick (Acid Test) Ratio

This measures the ability of a firm to pay all of its current liabilities if they come due immediately. (Dansby et al., 200: 828). It is a better measure of liquidity because unlike current ratio, it omits stock or inventory (which may not be easily turned into cash) from the current assets to get quick assets. It is therefore, the ratio of quick assets to current liability and indicates a firm's ability to pay its debt quickly. It is also called acid test, which implies a particularly tough, discerning test. (Lasher, 1997:70). The standard for quick ratio is 1:1. Quick or acid Test Ratio can be calculated as follows:

$$\text{Quick or Acid Test Ratio} = \frac{\text{Quick Assets}}{\text{Current Liabilities}}$$

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$$\text{Quick or Acid Test Ratio} = \frac{\text{Quick Assets}}{\text{Current Liabilities}}$$

$$\text{i.e. } \frac{\text{Current Assets} - \text{Inventory}}{\text{Current Liabilities}}$$

#### 3.5.2.5 Profitability (activity) ratios

Profitability refers to the ability of a firm to earn a satisfactory income or return on investment in the business. Therefore, profitability ratios measure the profit or money making or earning success of a firm. They are of primary importance to stockholders, investors and creditors because earnings produce cash flows with which to pay dividends and debts.

Profitability ratios are also called activity ratios because they indicate the ability of firm to earn profits in relation to the sales made, assets employed, or equity (capital) invested or employed. They are generally stated as percentages. (Lasher, 1997:76). Profitability ratios include Return on SALES, return on Assets, and Return on Equity.

#### 3.5.2.6 Return on sales (ROS)

Return on Sales (ROS) is simply percentage of the net income or profit after tax to net sales. It is also called the profit margin (or net profit margin). It is a fundamental indication of the overall Profitability of the business. It gives insight into management's ability to control the income statement items of revenue, cost, and expense (Lasher 1997:76).

ROS can be divided into Gross profit Margin, Operating Income Margin, and Net profit margin. However, in general terms and for the purpose of this study, ROS refers to Net profit Margin.

#### 3.5.2.7 Gross profit margin

This is otherwise known as the percentage of Gross profit to Net sales.

It is a measure of efficiency of the sales of a firm in relation to the cost of goods sold. It indicates a firm's ability to control cost of vice versa.

#### 3.5.2.8 Net profit margin

This is otherwise called the percentage of Net profit to Net sales. It is a measure of the proportion of net sales that remains after the deduction of all costs and expenses. It indicates the ability of a firm to control operating and non-operating expenses.

Net profit margin can be calculated as follows:

$$\text{Net Profit Margin} = \frac{\text{Net Income}}{\text{Net Sales}} \times 100$$

### 3.5.2.9 Return on assets (ROA)

Return on Assets (ROA) measures the overall ability of the firm to utilize the assets in which it has invested to earn a profit. (Lasher, 1997:76) It indicates the profitability of a firm's assets, the amount of net income it earns in relation to the assets available for use during the year. (Dansby et al., 2000:833). The higher the ROA the more profitable is the assets in producing income. ROA can be divided into two, namely; return on operating Assets and Return on Total Assts. However, in general terms and for the purpose of this study, ROA refers to return on Total Assets.

### 3.5.2.10 Return on operating assets

This measures the Profitability of a business in carrying out its primary functions, by indicating the proportion of the operating assets that become net operating income. Operating assets are all assets actively used in producing operating revenues. Therefore, non operating assets such as land held for future use, a factory building rented to another company, and long-term bond investments are excluded when calculating return on operating assets. (Hermanson et al. 1992:837) The formula is:

$$\text{Return on Operating Assets} = \frac{\text{Net Operating Income}}{\text{Average Operating Assets}}$$

Or

$$\frac{\text{Net Operating Assets}}{\text{Average Total Assets (Where there are no non-operating assets)}}$$

### 3.5.2.11 Return on total assets

Return On Total Assets quantifies the success of the efforts of a business in using its assets earn profit by stating net income or profit after tax as a percentage of total assets.

$$\text{Return on Total Assets} = \frac{\text{Net Income}}{\text{Average Total Assets}} \times 100$$

### 3.5.2.12 Return on equity (ROE)

Return on Equity (ROE) measures the firm's ability to earn a return on the owner's invested capital. It is the most fundamental profitability ratio because stockholders are primarily interested in the relationship between net income and their investment in the company. It states net income as a percentage of equity. (Lasher, 1997:77) It is known as Return on Capitals Employed (ROCE) or Return on Investment (ROI) because it shows proportion of capital employed, stockholders equity or owners investment (total assets less total liabilities or debts) which return to owners or stockholders as net income.

ROE can be calculated as follows

$$\text{ROE} = \frac{\text{Net Income}}{\text{Average Stockholder's Equity}} \times 100$$

### 3.5.2.13 Assets management (efficiency) ratios

Assets management ratios address the fundamental efficiency with which a company is run. (Lasher, 1997:71). They show how efficiently the business is utilizing or managing assets (current assets and fixed assets) in generating revenue and cash flow. Thus, they are also called Efficiency Ratios. Asset management Ratios include: Inventory Turnover, Average Days' Inventory On Hand, and Accounts Receivable Turnover, Average Collection period for Accounts Receivable, Total Assets Turnover, and Fixed Assets Turnover.



### 3.5.2.14 Inventory turnover

Inventory Turnover measures the number of times in which the average inventory or stock is sold in a give perio. This is of prime importance to management because for a business to generate greater sales volume for the year, it, must but, sell and replenish its goods or stock as rapidly as possible. (Dansby et al, 2000:830).

Inventory Turnover an attempt to measure whether or not the firm has excess funds tied in inventory. A higher inventory turnover is better in that it implies doing business with fewer funds tied up in inventory. A low inventory turnover figure can mean some old inventory is on the books that being used. Holding inventory costs money-it involves the cost of storage, pupilage, obsolescence, etc.

The ratio is calculated as follows:

$$\text{Inventory Turnover} = \frac{\text{Cost of goods sold}}{\text{Average Inventory}}$$

### 3.5.2.15 Average days' inventory on hand

This is a measure of average number of days taken to sell inventory. It is an extension of inventory turnover and thus helps a firm to know the speed at which it sells inventory or stock.

The ratio computed as follows.

$$\text{Average days' inventory on hand} = \frac{365 \text{ days}}{\text{Inventory Turnover}}$$

$$\text{Accounts Receivable Turnover} = \frac{\text{Net Credit Sales}}{\text{Average Accounts Receivable}}$$

Or Net Sales

Accounts Receivable

Average collection period for accounts receivable (acp)

This is a measure of length of time taken to collect accounts receivable or number of days accounts receivable or debtors have been outstanding. It is determined by dividing the number of days in the year by the accounts receivable turnover. Thus it is an extension of accounts receivable turnover. (Dansby et al 2000:830). The ration measures average liquidity of accounts receivable and gives an indication of their quality. A comparison of the average collection period with the credit extended customers by a company or the firms, credit extension policy will provide further insight into the quality of accounts receivable.

The formula for this ration is

$$\text{ACP} = \frac{365 \text{ days}}{\text{Accounts Receivable Turnover}}$$

Total assets turnover (tat)

Total assets turnover (TAT) measures how efficiently assets are used to produce sales. (Needles et al., 1996:789). It is a measure of the magnitude of net sales generated by the assets of the firm. The higher the assets turnover rate, the better the firm is using its assets to generate sales. In other words, the larger the total assets turnover, the larger will be the income on each (naira) invested in the assets of the busing. (Hermanson et al., 1992: 834). TAT can be calculated as follows.

$$\text{TAT} = \frac{\text{Net Sales}}{\text{Average Total Assets (excluding investments)}}$$

Investments are excluded from the formular since they are not intended\ to produce sales. (Dansby et al., 2000:834). In other words, the ratio is known as Turnover of Operating Assets, because it to generate sales revenue. (Hermanson et al., 1992:837).

Fixed assets turnover (fat)

Fixed assets Turnover (FAT) measures the capacity of fixed assets in producing sales. It



shows the relationship between fixed assets and sales. The ratio is appropriate in industries where significant equipment is required to be business. (Lasher, 1997:73). A Lower FAT or a reducing sales being generated from each naira invested in fixed assets may indicate over capacity, poorer-performing equipment, or under utilization of fixed assets.

FAT can calculated as follows:

$$\text{FAT} = \frac{\text{Net Sales}}{\text{Average fixed Assets}}$$

Debt management Ratios measure how the firm uses other people's money to its own advantage. The primary concern is to ensure that the firm does not borrow so much that becomes overly risky. (Lasher, 1997:73).

Therefore debt management ratios measure the briskness of a business. They are also known as long-term solvency, liquidity or stability ratios because they focus on the long-term stability and capital structure of the firm. They are of interest to management, stockholders and creditors. Management wants to know the long-term stability of the business. Creditors want to make user funds are available to pay interest and principal. Stockholders are concerned about the impact of excessive debt and interest on long-term Profitability of the business. (Lasher, 1997:76).

Thus, Debt Management Ratios tell the size of owner's investments in the business as well as the strength of the business to pay its total liabilities (current and-term liabilities) or all of its financial obligations to outsiders at long run. Therefore, for the purpose of this purpose of this study, debt refers to total debt or total liabilities.

Debt management Ratios include Debt Ratio, Equity Ratio, debt-to Equity Ratio, Leverage Ratio, Fixed Assets to Long-term liabilities, times interest Earned, cash Coverage and fixed charge coverage.

#### 3.5.2.16 Debt Ratio

Debt Ratio measures the relationship between total debt and equity in supporting assets of a business. It tells how much of the firm's assets are supported by other people's money. (Lasher,1997:74). It is also known as the ratio of total liabilities to total assets, because it shows the proportion or percentage of total assets supported by debt or total or debt. A high debt ratio is viewed as risky by investors, especially lenders.

Debt ratio calculated as follows:

$$\text{Debt ratio} = \frac{\text{Total Liabilities}}{\text{Total Assets}} \times 100$$

#### 3.5.2.17 Equity (proprietary) Ratio

This is the opposite of debt ratio. It measures the extent to which assets of the financed by stockholders or owners of the business. In other words, equity ratio indicates proportion of total assets of the business that is supported by the owner's fund or resources. The higher the ratio, the better and more secure or solvent is the firm.

Equity Ratio can be calculated as follows:

$$\text{Equity Ratio} = \frac{\text{Stockholders' Equity}}{\text{Total Assets}} \times 100$$

#### 3.5.2.18 Debt-To-Equity Ratio

This ratio is a measure of mix of debt (total liabilities) and equity within the firm's total capital. It states the amount of owners' equity in relation to a company's total liabilities, it is an important measure of risk because a interest charges. This makes the firm's profitability fragile in reversionary times. (Lasher, 1997:74). It is also known as debt-equity ratio. The higher the ratio, the better the

position of the company in the eyes of its creditors, lenders, investors and shareholders.

### 3.5.2.19 Leverage (Gearing) Ratio

This is similar to ratio but the only difference is that it measures the size of long-term liabilities or fixed-interest debts in comparison with the stockholders' or owners' equity. The standard for this ratio is 1:1. a firm with high leverage ratio is said to be highly geared and such makes the firm to be financially because high interest charges will reduce the profitability of the business as well as dividends payable to shareholders, especially in times of economic downturns or fluctuations in earnings. In practice, a gearing ratio greater than 0.6:1 is often regarded as high while the one that is less than 0.2:1 is regarded as low. The lower the gearing, the better and more secure the company is to settle long-term debts.

Leverage (Gearing) ratio can be calculated as follows:

$$\text{Leverage Ratio} = \frac{\text{Long-term Liabilities}}{\text{Stockholders' Equity}}$$

## 4. Limitations of Ratio Analysis

According to Hermanson et al. (1992:846), "financial analysis relies heavily on informed judgment. Percentages and ratios are guides to aid comparison and useful in uncovering potential strengths and weaknesses. However, the financial analysis should seek the basic causes behind changes and established trends." This means that, although financial ratios help us identify areas of the business that, although financial ratios help us identify areas of the business that requires further investigation, make informed business decisions and asks the right questions, they do not provide answers or solutions due to the following limitations:

1. Differences in Accounting Policies and Procedures: Accounting policies and methods of companies differ. This makes cross-sectional analysis difficult. For instance, firms adopt different methods of depreciation, stock-valuation, treatment of goodwill, preference shares, and research and development cost, and such may result to differences in the net income of essentially identical firms.
2. Inflation: Financial statements do not reveal the impact of inflation on the reporting entity. (Hermanson et al), (1992:848). Real estate purchased years ago for example, will be carried on the Balance sheet at its original cost. Yet it may be worth many times the amount in today's market. During periods of rapid inflation, inventory, cost of sales and depreciation can badly distort true results. (Lasher, 1997:82,83).
3. Window Dressing: In a deliberate attempt to make Balance sheets look better than they otherwise would, firms try to make some year-end improvements that don't last, in their finances. For instance, a company with a low current ratio may try to improve it by borrowing a long-term loan a few days before the end of the year, holding the proceeds in cash over year-end, and repaying the loan a few days later.
4. Historical Information: financial ratios are computed from historical accounts, and historical information is of little use in assessing future prospects of a company. This is because trends do reverse and past may not be a useful measure of adequacy. Thus, past performance may not be enough to meet present needs and make reliable projections.
5. Uniqueness Of Companies: Every Company is unique in size, operation, management, and location. Thus, two companies that operate in the same industry may not be strictly comparable. For instance, comparing a firm which finances its fixed plant through rental, (thus not showing it as an asset), with a firm which purchases its own assets will be difficult irrespective of their operation in the same industry or sector. (Omuya, 1983:456).
6. Limited Information: Financial statements do not present information that covers all aspects of the business. Therefore, financial ratios provide only quantifiable or quantitative

information and omits non-quantifiable or qualitative information such as managerial skills, staffing requirement, and changes in the operating environment, which are all necessary variables determining the success of a business.

7. No Universal Standard: Financial ratios do not have universally accepted standards, norms or yardsticks for comparison. Standards are used in accordance with industry, firm, circumstance and objective pursued. For instance, the rule-of-thumb measure of 2:1 used in current ratio may not be acceptable in certain situations or firms in consideration of some managerial policies.
8. Interpretation: Interpretation of ratios is not always clear. Interpretation of changes in a ratio needs careful examination of changes in the figures used in the computation (both the numerator and denominator). Without a very full and detailed investigation, some wrong conclusions can be drawn. Also, only experts can understand and interpret ratios properly. (Omuya, 1983:456).
9. Underestimation: Ratios often present different picture of companies from the naira figures and results. The actual naira results or effects of the business may be disregarded or underestimated as ratios are stated in small figures. For instance, millions of naira may be represented by decimal numbers or figures less than 100. This may make people to underestimate the meaning of financial ratios or effect of the operations of a business on its success.

## 5. Methodology

This study is a survey designed to find out the role of ratio analysis in business decisions; it is descriptive and analytical in nature. The two main sources of data collection used in the study are the primary and the secondary sources. The population of the study is 27 members of the management and staff of NBC Maiduguri Plant. It covers all the departments of sales and marketing, the purchase and supply department, the administration and personnel department and the finance and accounts department. All staff of these departments are further grouped into two groups namely; management staff and Non management staff. Sample size is the part of the population that was selected for the study and the sample size of the study is 25, and the sampling techniques used in the selection of the sample size for the study is the simple random sampling technique. The questionnaires used for the study was made up of 6 questions. It was mainly designed in such a way that alternative answers were produced for the respondents. Random method was used for the distribution of the questionnaires to the respondents. Data collected were presented and analyzed through tabulation and the simple percentage statistical tool.

### 5.1 Question 1

Do you agree that Ratio Analysis facilitates proper understanding of information contained in financial statements?

**Table 1:** Retio analyses as a facilitor of proper undstanding of financial statements

Responses	Mgt. Staff	Non-mgt. staff	Total
Yes	5 20%	15 75%	20 100%
No	0 0%	0 0%	0 0%
Total	5 20%	15 75%	20 100%

**Source:** Questionnaire

As shown in the table above all the 20 (100%) of respondents agreed that Ratio Analysis facilitates proper understanding of information contained in financial statements.

### 5.2 Question 2

Do you think that Ration Analysis is useful to management, investors, shareholders and creditors in their business decisions?

**Table 2:** Usefulness of ratio analysis in business decisions.

Responses	Mgt. staff	Non mgt. staff	Total
Yes	5 25%	13 65%	18 90%
No	0 0%	2 10%	2 10%
Total	5 25%	15 75%	20 100%

**Source:** Questionnaire

The table above shows that 18 out of 20 or (90%) out (100%) of the respondents agreed that Ratio Analysis is useful to management, investors, shareholders, and crediting in their business decisions.

### 5.3 Question 3

Do you believe that efficient use of financial ratios helps is evaluating and predicting the performance and financial position of a business, as well as identifying areas that require improvement

**Table 3:** Use of financial ratios in evaluation and prediction of business performance

Responses	Mgt. staff	Non mgt. staff	Total
Yes	5 25%	12 60%	17 85%
No	0 0%	3 15%	3 15%
Total	5 25%	15 75%	20 100%

**Source:** Questionnaire

Table 3 shows that 17(85%) out of 20 (100%) of the respondents agreed that efficient use of financial ratios helps in evaluating and predicting the performance and financial position of a business.

### 5.4 Question 4

Do you agree with the saying that ratio Analysis helps us to ask the right questions but do not provide answers unless the right comparative standards and techniques are used.

**Table 4:** Ration analysis provide the right answer when right comparative standards and techniques

Response	Mgt. staff	Non-mgt. staff	Total
Yes	5 25%	10 50%	15 75%
No	0 0 %	5 25%	5 25%
Total	5 25%	15 75%	20 100%

**Source:** Questionnaire

From the table 4 above it shows that 5 (25%) the mgt, staff agreed with the fact that Ratio

Analysis answers the right Question when the right comparative and technique are used, 10 (50%) of the non mgt, staff also agree. While 5 (25%) of non-mgt, staff did not agreed with that saying.

### 5.5 Question 5

Are there obstacles to the proper use of financial ratios in business decisions?

**Table 5:** Obstacles to the use of financial ratios

Responses	Mgt, staff	Non-mgt, staff	Total
Yes	5 25%	14 70%	19 95%
No	0 0%	1 5%	1 5%
Total	5 25%	15 75%	20 100%

**Source:** Questionnaire

From the table above, it can be deduced that 19 (95%) out of the 20 respondents agreed that there are obstacles to the proper use of financial ration in business decisions.

### 5.6 Question 6

Does financial ratio help to unravel the mass of truth hidden in financial statement?

**Table 6:** Financial ratio in unravel the mass of truth that was hidden in financial statement.

Response	Mgt, staff	Non-mgt staff	Total
Yes	5 25%	14 70%	19 95%
NO	0 0%	1 5%	1 5%
Total	5 25%	15 75%	20 100%

**Source:** Questionnaire

From the table 4.6 above it shows that all the mgt, staff agreed that financial ratio help to unravel the mass truth hidden in the financial statement while 14 (70%) of the Non mgt staff also agreed bringing a total of 19 (95%) of the respondent disagree with that fact.

## 6. Conclusion

Financial statements contain lots of information summarized in figures. Viewed on the surface, they do not provide enough information about the viability of the reporting entity. Thus, they need to be analyzed by means of financial ratios to unravel the mass of truth hidden in them, and to enhance decision-making.

Ratio analysis helps to reveal, compare and interpret salient features of financial statements. When applied to a set of financial statements, financial ratios highlight significant aspects of the financial position and operational results of a business requiring further investigation. They help to identify the strengths and weaknesses of a business.

In fact, ratio analysis helps to evaluate the past performance, the present condition, and the future prospects of a business. It enables us to ask the right questions about a business, and paves way to finding the useful answers. Such analysis therefore, aids planning, control, forecasting and decision- making.

## 7. Recommendations

With reference to the findings of the study, the researcher recommends the following:

1. Users of financial statements need to have at least, a fair knowledge of accounting so as to enable them understand and appreciate accounting information.
2. Prospective investors should properly analyze the financial statements of companies before deciding to invest in the companies.
3. Users of financial statement who are not knowledgeable enough to analyze or understand the information contained in them should seek the services of qualified financial analysts, accountants, stockbrokers, bankers, etc.
4. In view of the remarkable influence which accounting informations have on the decisions of the users, it is pertinent that only qualified and honest persons should and audit financial statements.
5. Financial ratios should be used with careful examination and proper understanding of the meaning, implication and effect of the actual figures shown in financial statements, in order to avoid making wrong judgments, conclusions and decision.
6. Financial ratios should be judiciously used by firms, investors, lenders, shareholders, managers, and other stakeholders, in view of their numerous benefits and limitations.

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