ANALYSIS AND INTERPRETATION OF FINANCIAL STATEMENT AS A MANAGERIAL TOOL FOR DECISION MAKING

(A CASE STUDY OF NWOKEJI URBAN PLANNING AND ARCHITECTURAL STUDIO [NUPAS]

BY

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ACC/2008/495

DEPARTMENT OF ACCOUNTANCY

FACULTY OF MANAGEMENT AND SOCIAL SCIENCES

CARITAS UNIVERSITY, AMORJI-NIKE,

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AUGUST, 2012

TITLE PAGE

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A RESEARCH PROJECT SUBMITTED TO THE DEPARTMENT OF ACCOUNTANCY

FACULTY OF MANAGEMENT AND SOCIAL SCIENCES, CARITAS UNIVERSITY OF AMORJI-NIKE ENUGU

IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF BACHELOR OF SCIENCE (B.SC.) DEGREE IN ACCOUNTANCY

AUGUST, 2012

APPROVAL PAGE

We hereby satisfied that the project by Nwokeji Uzochukwu with Registration Number **ACC/2008/495** is worthy of acceptance in partial fulfillment of the requirement for the Award of Bachelor of Science Degree (B.Sc.)

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DEDICATION

I dedicate this work to God Almighty. And also to my parents Mr. and Mrs. Jerome Nwokeji

ACKNOWLEDGEMENT

I acknowledge and honour the Almighty God for His grace and kindness towards the success of this research work.

I am deeply committed in gratitude to my parents Mr. & Mrs. Jerome Nwokeji whose abilities made me to be a baptized academic.

My sincere thanks goes to my supervisor, Mr. Chinedu Enekwe for his encouragement and who supervised with all his effort to make sure that my research project is successful. Also with him I share my heartfelt to my HOD, Dr. Frank Ovute, and my lecturers Mr. Nsoke, Mr. Desmond and Mr. James for their love, care and encouragement.

My special thanks goes to Rev. Fr. Remy N. Onyewueyi, the chaplain and DVC Caritas University Amorji-Nike for his moral advice and support.

Finally, I appreciate my siblings – Udenna, Aunli, Mmeli and Nonye for their love and care throughout my stay in school and also to my friends and well-wishers. May God bless you all.

Abstract

Financial Statement Analysis and Interpretation is a very vital instrument of good management decision-making in business enterprise. Good decisions ensure business survival, profitability and growth. Without financial statement analysis in investment decisions, an enterprise is likely to make decisions, which could spell its doom. Poor or lack of qualitative financial statement analysis could lead to investment returns, low profitability and even inability to identify viable investment opportunities. The main objective of this project is therefore, was to determine how firms could use financial statement analysis and interpretation to aid management decisions and to avert the problems highlighted above. Primary and secondary data are employed to broaden the scope of this study. Primary data are sourced from questionnaire responses. This provided data for the validation of the hypotheses tested with the use of chi-square (X^2). The test revealed as follows: (1) Significant difference between the returns of the financial statement in Analysis and Interpretation based on management decision. (2) Organizational profitability has relationship with financial statement analysis and interpretation based management decision but not significantly. The project concludes that companies should pay great attention to the use of financial statement analysis so as to properly equip themselves with this invaluable tool. The researcher recommends the following: (a) Accountants or financial analysts should not be rushed in collection, preparation, analysis and interpretation off financial statements. (b) Financial statements should be made to reflect current cost accounting to eliminate or reduce the effects to historical cost principle and inflation risk element. (c) A combination of different ratios should be used in analyzing a company's financial and/or operating performance. Proper use of financial statement analysis should be made not only in investment but also in other areas of decision making.

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CHAPTER ONE

1.0 INTRODUCTION

1.1 Background of the Study

The complex nature of today's business world and the transformation of the entire world into a global village have been of great concerns to manages of all forms of business organizations. According to Ojuigo (2001), the problems of managers are multi:- varied because of inefficiency in management of poor decision outcomes of these organizations. Therefore, the managers are unable to achieve the organizational objective within a period of time.

As diverse as business is, its controllable and uncontrollable factors influence all decisions which ultimately lead to the realization of set objectives. To achieve this, management needs reliable, authentic and relevant information from the financial statements to efficiently facilitate decision making.

It must be noted that every business stores at making at least from investments "sustainable profits" so as to stay afloat and continue in business. Therefore, profit being the concern of every manager is a factor in business. To achieve this, available information from the financial statements of organizations must be analysed, interpreted and used as a basis for decision making (Needham and Dransfield 1991). Financial statement analysis is often considered as a vital tool used in evaluating a company's

performance and ensuring that decisions are based on facts rather than rule of thumb.

A financial analyst needs financial statements of companies to be able to identify operating and financial problems which may affect the companies (Mbat, 2001:60). Thus, any person who analyses the financial statements of firms should be able to identify the cause and effect of financial and operating problems of such firms.

The cause of any financial or operating problem is an event, which produces an effect (the problem). However, in order to identify the cause and effect, the system, which represents an indictor f the problem, should be observed. This process is referred to as interpretation (Pandey, 2005). According to (Mbat, 2001), it is the responsibility of the financial manager or analyst to enable them make better management decisions.

The symptoms could be:

- Declining liquidity
- Declining profit
- External debt recovery period
- Increased volume of inventory
- Declining return on total assets
- Increasing operating expenses etc

The identification of causes should also be important in order to appropriately evolve corrective measures.

Financial analysis and interpretation assist in the:

- Identification of organizational performance through the use of analystical data.
- Identification of empirical relationships between operating results and those items which have influenced the achievement of the results.
- Identification of historical data order to determine which internal or external factors have exerted positive or negative influence on the operating results (Mbat 2001:61).

Categorically, there are three forms of financial analysis. These include: multivariate, univariate and ratio analysis (Welsh, 1987). Moreover, ratios are the end results of basis analysis. The ratio requires an interpretation on the basis of their trends and in the lights of what is known of the business as a young concern. It should be noted that financial statements represent the positions of a firm at a particular point in time.

However, the success or failure of a business depends largely on the quality of decisions made by management, which in turn depends on reality of accounting information available on them.

Research into this area is quite relevant given the apparent investment failures experienced by many business organizations. The collapse of many business either private or public is due to poor decision. The question is whether management has used information provided in the financial statement extensively to enable rational decision making?

1.2 Statement of the Problem

The principal aim of making investment decision is to get adequate returns from it. According to Needham and Dransfield (1991), “people as a rule will only tie up their money in a business if they are satisfied with the returns they get from it”.

In an attempt to achieve maximum returns from investment in production, services shares or stock and/or other securities outside the firm, a comprehensive analysis of the company which is intended to be invested in should be carried out using the company’s financial statements to ascertain both its explicit and implicit investment opportunities. However, organizations that do not use financial statement analysis in making investment decisions could be ill formed. As a result, the following problems may arise:

(i) Inability to identify viable investment opportunities
(ii) Decreasing returns from investments.
(iii) Decline in organizational overall profitability.
(iv) Increased investment risk: The organization might not achieve its corporate objective at the end of the period.

If the trend continues, it will likely lead to the failure of the organization. Therefore, there is a great need for organizations to consider and analyse company’s financial statements before investing in that company. These are the focus of this study.

1.3 Objectives of the Study

On noting that most investments made by firms end in failure, it is the overall objective of this study to determine how firms can use

financial statement analysis and interpretation to aid management decisions. Specifically, the study is designed to:

i) Find out how the use of financial statement analysis assists organizations in identifying investment opportunities.
ii) Find out how increasing investment returns can be achieved using financial statement analysis.
iii) Find out the extent to which a company's overall profitability can be hampered if it does not analyse another company's financial statement before investing in it.
iv) Find out how business failures can be curbed or minimized and corporate objective achieved through successful investment.
v) Identify alternative ways of minimizing investment risk.

1.4 Research Questions

The following questions are put forward for the purpose of the study.

1) Is financial statement analysis important/necessary in every organization?
2) Who are the users of financial statement?
3) How can a financial statement of an organization be interpreted?
4) How can its interpretation be used in making effective management decisions?

1.5 Hypotheses of the Study

To id the achievement of the desired objectives, the following hypothesis are formulated:

H_O: Represents Null hypothesis

H_I: Represents Alternative hypothesis

Research hypothesis No 1

$H_{O:}$ There is no significant difference between the returns of a financial statement analysis and interpretation based on management decisions.

$H_{1:}$ There is a significant difference between the returns of a financial statement analysis and interpretation based on management decisions.

Research hypothesis No 2

$H_{O:}$ There is no significant relationship between a firms profitability an financial statement analysis and interpretation based management decisions.

H_I: There is a significant relationship between a firms profitability and financial statement analysis and integration based management decision.

1.6 Significance of the Study

The study of the use of financial statement analysis and interpretation in management decision is meant to contribute immensely to sustained business operations in selected firms south south region and general growth in business, be it private or public. The study shall be beneficial in the following ways:

i) It will redirect management on the need for the use of financial statement analysis and interpretation of rational investment decision.

ii) It will inform management on the possible and available investment ratio, their functions and uses for a greater evaluation of a company's capabilities and profitability.

iii) The work will also serve as a reference material to other persons who will conduct studies in similar areas both within and outside the university.

1.7 Scope of the Study

The study is conducted to cover selected firms both in South-South region.

However, this study is conducted to cover the use of financial statement which includes; (Balance sheet, income statement, statement of cash flow and statement of retained earnings) analysis civil interpretation management decision.

1.8 Limitation of the Study

The research work has some limitations due to some problems encountered from the sources of collecting useful materials also some unforeseen circumstances which posted as a threat during preparation of this research project includes:

- TIME: A research of this kind would require enough time to cover many areas of activity effectively, but since the researcher is a student with other classroom works to do, the time allocated for the study was limited.

- FINANCE: During the course of this research, another stumbling block. Judgment financial resources was encountered. The researcher has to make due with little financial provision available to achieve a qualitative and acceptable research finding.
- Health was also a limiting factor, for instance, the researcher falling ill in the cause of the study, which stopped the research for some time.
- TRANSPORATION: The source of collecting useful material or information is far and the transport logistics expensive, in some cases, the journey was fruitless if the staff was not available.

1.9 Definition of Terms

***** RATIOS: A ratio is the relationship between two amounts that results from dividing one by the other. It is an accounting term used to describe the financial index which compares two financial variables such as current assets and current liabilities.

Examples of ratios are quick ratio, and test etc.

* ACCOUNTING RATIOS: “they are the relationship between figures expressed as ratios”

* INVESTMENT DECISIONS: This relates to allocation of capital and involves decisions to commit funds to long term assets, which will yield benefits in future.

* RATIO ANALYSIS:

It is an analytical tool designed to identify significant relationships between two financial statement amounts.

* SECURITY: Security is a financial asset which earns a fixed and/or variable periodic income till terminal maturity period if any.

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CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The use of financial statement analysis and interpretation in investment decision has been addressed by a series of authors in one way or the other. In some instances, the sue of this analysis to determine profitability of a company and specifically returns on investment and optimal management decisions have been stated.

According to Pandey (2005), profitability is the ability of an entity to earn income. It can be assessed by computing various relevant measures including the ratio of net sales to assets, the rate earned on total assets etc.

Meigs and Meigs (2003) stated that the rate of return on investment (ROI) is a test of management's efficiency in using available resources. This review is organized under the following sub-heads for ease of comprehension.

1. What is financial statement?
2. Objective of financial statement analysis
3. Uses and users of financial statement analysis
4. Classification of financial statement
5. Techniques of financial statement analysis and interpretation.
6. Limitations of financial statement analysis
7. Features of a good management decision

8. Decision making environment
9. Impact of inflation on financial statement analysis

2.2 What is Financial Statement?

According to Meigs and Meigs (2003), financial statement are a structured representation of the financial position and financial performance of an entity. The objective of financial statements is to provide information about the financial position, financial performance and cash flows of an entity that is useful to a wide range of users in making economic decisions.

Financial statements also show the results of the management's stewardship of the resources entrusted to it. To meet these objectives, financial statements provide information about an entity's:

i) Assets
ii) Liabilities
iii) Equity
iv) Income and expenses, including gains and losses
v) Contribution by and distribution to owners in their capacity as owners, and vi) cash flows

A complete set of financial statement comprises:

1) A statement of financial position as at the end of the period:
2) A statement of comprehensive income for the period;
3) A statement of changes in equity for the period:
4) A statement of cash flow for the period.

5) Notes of Account comprising a summary of significant accounting policies and other explanatory information; and
6) A statement of financial position as at the beginning of the earliest comparative period when an entity applies an accounting policy retrospectively or makes a retrospective restatement of items in its financial statements or when it reclassifies items in its financial statements.

2.2.1 Objective of a Financial Statement Analysis

Business decisions are made on the basis of the best available estimates of the outcome of such decisions. According to Meigs and Meigs (2003), the purpose of financial statement analysis is to provide information about a business unit for decision making purpose and such information need not to b limited to accounting data. White ratios and other relationships based on past performance may be helpful in predicating the future earnings performance and financial health of a company, we must be aware of the inherent limitations of such data.

According to Meigs and Meigs (2003), the key objectives of financial analysis are to determine the company's earnings performance and the soundness and liquidity of its financial position. We are essentially interested in financial analysis as a predictive tool.

Accordingly, we want to examine both quantitative and qualitative data in order to ascertain the quality of earnings and the quality and protection of assets. In periods of recession when business failures are common, the balance sheet takes on increase

importance because the question of liquidity is uppermost in the minds of many in the business community. However, when business conditions are good, the income statement receives more attention.

Nevertheless, a financial analyst has to grapple on the above complexities of using financial statement analysis to achieve a specific purpose.

2.3 Uses and Users of Financial Statement

According to Akpan (2002), financial statement may be used by users for different purposes:

a) OWNERS AND MANAGERS: Require financial statement to make important business decisions that affect its operations. Financial analysis is then performed on these statements to provide management with a more detailed understanding of the figures. These statement are also used as part of management's annual report to the stockholders.
b) EMPLOYERS: Also need these reports in making collective bargaining agreements (CBA) with the management, in the case of labour unions or for individuals in discussing their compensation promotion and rankings.
c) PROSPECTIVE INVESTORS: They make use of financial statements to assess the viability of investing in a business. Financial analysis are often used by investors and are prepared by professionals (financial analyst), thus providing them with the basis for making investment decisions.

d) FINANCIAL INSTITUTIONS: Financial institutions (banks and other lending company) use them to decide whether to grant a company with fresh working capital or extend debt securities (such as a long term bank loan or debentures) to finance expansion and other significant expenditures.
e) GOVERNMENT ENTITIES: Government entities (Tax authorities) need financial statements to ascertain the property and accuracy of taxes and other duties declared and paid by a company.
f) VENDORS: They require financial statement to access the credit worthiness of the business
g) MEDIA AND GENERAL PUBLIC: They are also interested in financial statements for a variety of reasons.

2.4 Classification of Financial Statement

According to Diamond (2006), all watchful business owners have an innate sense of how well their business is doing. Almost without thinking about it, these business owners can tell you any time during the month how close they are to butting budgeted figures. Certainly, cash in bank plays a part, but its more than that.

Helpful is the nowtine review of financial statements. They are three types of financial statements. Each will give important information about how efficiency and effective the business is operating.

1) INCOME STATEMENT:

The income statement shows all items of income and expense for arts or crafts business. It reflects a specific time period. So an income statement for the quarter ending March 31, shows revenue and expense for January, February and March, if the income statement is for the calendar year-ending December 31, it would contain all the information from January 1 to December 31. Note that the normal accounting period for income statement is 12 months or year.

Income statements are also known as profit and loss account. The button line on an income statement is income less expenses. If when income is more than expenses it is known as net profit and when expense is more than income it is a net loss.

2) BALANCE SHEET

Accounting is based upon a double entry system. For every entry into the books there has to be an opposite and equal entry. The net effect of the entries is zero, which results your books being balanced. The proof of this balancing act is shown in the balance sheet when Asset = Liability + Equity.

The balance sheet shows the health of a business from day one to the date on the balance sheet. Balance sheet are always dated on the late day of the reporting period. If you have been in business since 1st January 2011 and your balance sheet is dated as of 31 December of the current year the balance sheet will show the

results of your operations from 1st January 2011 to December 31, 2011.

3) STATEMENT OF CASH FLOWS

The statement of cash flows the ins and outs of cash during the reporting period. You may be thinking-well who needs that type of report? I will just look at the checkbook. Good point, unless you are reporting things that don't immediately affect cash such as depreciation, accounts receivable, accounts payable.

If I could only choose one of those three financial statements to evaluate the ability of a company to pay dividends and meet obligations (indicating a healthy business), I would pick the statement of cash flows. The statement of cash flows takes aspects of the income statement and balance sheet and kind of crams them together to show cash sources and uses for the period.

4) THE STATEMENT OF RETAINED EARNINGS

The statement of retained earnings shows the break down of retained earnings. Net income for the year is added to the beginning of year balance, and dividends are subtracted. This results in the end of year balance for retained earnings.

Remember that expenses, revenues and dividends impact retained earnings. Since net income equals revenue minus expenses, we need to include dividends when computing end of period retaining earnings, plus net income and minus dividends.

2.5 Relationship among the Statement of Financial Position, Income Statement, Statement of Cash Flows and Statement of Retained Earnings.

As mentioned above, the balance sheet shows the financial position at a point in time. It therefore cannot contain information that is related to some period, such as sales or wages expense.

It is a common practice to include beginning of a period balance sheet as well as an end period balance sheet in a financial report. This way the reader can form an opinion about how the firms financial position has changed.

The cash flow statement and the income statement-statement both give information about the firms performance over the period, albeit from different angles. The cash flow statement explains the change in cash. In other words, it explains how the beginning of period cash has turned into the end of period cash by differentiating between operating, investing and financial activities.

The income statement shows a presentation of the sales, the main expenses and the resulting net income over the period. Net income is based on accounting principles which gives guidance/rules on when to recognize revenues and expenses, whereas cash from operating activities, obviously is cash based.

As dividends do not reduce net income, the income statement does not always explain the change in retained earnings over the year (Net income always equals the change in retained earnings when no dividend is paid out). The statement of retained earnings is

included to show how equity has changed because of net income and possible dividend payments. It shows the beginning value of retained to which net income is added and dividends subtracted, resulting in end of year retained earnings.

2.6 Techniques of Financial Statement Analysis and Interpretation

Financial statement users and analysts have developed a number of techniques to help them analyse and interpret financial statements. According to Diamond (2006) the most common of these includes, horizontal, vertical and ratio analysis. All of these techniques focus on relationships among items in the financial statement themselves.

In trying to understand the current financial position of firm and its future outlook, it is important, to consider changes from year to year as well as trends over several years. One way to accomplish this is to use comparative financial statements and the five-or-ten year summary of data found in the firms annual report to spot important or emerging trends, ibidi.

2.6.1 Horizontal Analysis

Horizontal analysis focuses on the naira (₦) and percentage changes that have occurred in certain accounts from year to year, Pendey (2005). Using percentage changes is better for comparative purposes than using actual naira changes.

In order to calculate percentage changes the following formula should be used:

$$\text{Percentage change} = \frac{\text{Amount of Naira Change}}{\text{Based-year amount}} \times \frac{100}{1}$$

The base year always is considered to be the first year in the comparisons. For example, NUPAS total current assets were ₦11848 6+6000 at the end of fiscal year 2010 and ₦13496 589 000 at the end of fiscal year 2011. This represents a naira increase of N1647 913 000 and a percentage increase of 13.9% calculated as follows:

$$\frac{13496589000}{11848\ 676000} \times \frac{100}{1}$$

$$= 13.9\%$$

Horizontal analysis can be used in conjunction with the balance sheet and the income statement as an example exhibit 2.5 and 2.6 presents comparative balance sheet for NUPAS Nigeria Plc.

2.6.2 Trend Analysis

This involves computing ratios and comparing them with previous year ratios of the same company to assess the performance of the company. Diamond (2006)

When more than two years are involved, index numbers are used instead of percentage changes, ibid. Essentially, one year is

selected as the base year and is set to 100%. To measure real growth the value of the index can be compared with either the consumer price index or any specific price index for the industry.

Exhibit 25

NUPAS INC

Balance sheet as at 2011

	2011	2010	Naira	Percentage
	₦'000	₦'000	change	change
Fixed Assets	7350320	6530376	819144	12.6%
Investment	18316	8316	-	12.6%
Current Assets				
Stock	4363362	4134670	228692	5.5%
Debtors and Prepayments	9401062	803421	136641	17.0%
Deposits for imports	2204702	4596567	(2391865)	-52%
Cash on Bank				
Balances	5988463	2314008	367444	158.8%
Total Current Assets	13496589	11848676	1647913	13.9%
Current Liabilities				
Creditors and Accounts	7737547	5653009	2084558	36.9%
Bank Overdraft	268687	1351 524	(1082 837)	-80.1%
	8006234	7004533	1001701	143%
Net Current Assets	13,496,589	11,848,676	1647913	13.9%
Current Liabilities=				
Creditors and Accounts	7,737,547	5,653,009	2084558	36.9%

Bank Overdraft	268687	1351524	(1082837)	-80.1%
	800 234	7004533	1001 701	14.3%
Net Current Asset	5490355	4844143	646212	13.3%
Total Assets less				
Our Liabilities	12858991	11392 835	1466156	12.9%
Debenture stock		(20000)	-	-
Provision for Liabilities and Charges:				
Defined taxation (2,177,837)		(2,087,137)	(90,700)	-4.3%
Total net assets	10,681,154	9,285698	1,395,456	15.0%
Capital and Reserve				
Call up share capital	353,982	353,982	0	-
Share Premium Account	1,929,268	1929268	-	-
Revaluation Reserve	4,182,729	4236588	(53839)	1-3%
Other reserve	4,215,155	2765860	1449295	52.5%
Total Equity				
(Shareholders)	10,681,154	9,285,698	1,395,456	15.0%

Source: NUPAS Nwokeji Uban Planning Architectual Studio Annual Report 2011 pp.18

NUPAS INC

PROFIT AND LOSS ACCOUNT FOR THE YEAR ENDED 30TH JUNE 2011

	2011 ₦'00	2010 ₦'00	Naira Change (₦'00)	Percentage Change
Turnover	14817218	11,853023	2963195	25%
Cost of Sales	(7,436 945)	(4859 194)	(2577751)	53%
Gross profit	7380273	6994829	385444	5.5
Dist Expenses	(1539084)	(,103.866)	(435 218)	39.4
Trading Profit	4,397,021	376,229	634 223	16.9%
Net Interest Receivable	246230	131881	114349	86.7%
Profit before tax	4643251	3894 179	749 072	86.7%
Taxation	(1548681)	1276 631	272 050	21.3%
Profit after tax	3094 570	2,617,548	477 022	18.2%
Proposed Dividend	(1699114)	(1276631)	424778	33.3%
Retained Profit for the year Transferred				
To Gen Reserve	1395456	1343212	52244	3.9%
Earnings/share (kobo)	437	370	67	18.1%
Dividend/Share (kobo)	240	180	60	33.3%

Source NUPAS INC Annual Report 2011 PP17

2.6.3 Vertical Analysis

According to Diamond (2006), vertical analysis is used to evaluate the relationships within a single financial statement. Essentially, the appropriate total figure in the financial statement is set to 100% and other items are expressed as a percentage of that figure, ibidi. For the balance, this figure usually is total assets or the total of liabilities plus stockholders equity. Net sale usually is the total figure used in the income statement.

Exhibit 2.8 and 2.9

2.6.4 Ratio Analysis

According to Diamond (2006), Ratio analysis is a method of expressing relations among various items in a company's financial statement. However, ratios are not substitutes for looking dipper into the financial position of the company. There is a danger that inexperienced financial statement analysts might use what is called a rule of the thumb analysis to make important decisions. However, according to Diamond, there are few rules of thumb that are adequate in today's complex financial world. It is important to keep that caveat in mind when performing ratio analysis.

2.7 Definition of Ratio

Ratios has been defined by different authors in many ways:

Hornby A.S. et al (2002) defines ratio as a “relation between two amount determined by the number of times one contains the other”.

Another author, Pandey (2005) defines ratio as “the indicated quotient of two mathematical expression” and as “the relation between two or more things”. From the researchers point of view, ratio can be defined as a mathematical expression that has a relationship between two or more accounting figures, which makes the interpretation of financial statements meaningful to the users.

Furthermore, ratios are among the most popular and widely used tools of financial analysis. They provide with clues and symptoms of underlying conditions. A ratio can help us uncover conditions and trends difficult to detect by inspecting individual component making up the ratio. Like other analytical tools, ratio are usually future oriented that they are often adjusted for their probable future trend and magnitude. Usefulness of ratios depends on our skilful interpretation of them, and is the most challenging aspect of ratio analysis.

A ratio expresses a mathematical relation between two qualities. For instance, a change in account balance from ₦100 to ₦20 can be expressed as: (a) 150% (b) 2.5 times or (c) 2.5 to 1 (or 2.5=1). While computation of a ratio is a simple arithmetical operation, its interpretation is not. To be meaningful, a ratio must refer to an economically important relation. For example, there is a direct and circular relation between an items sales price and its cost price.

Accordingly, the ratio of cost of goods sold to sales is a significant one in contrast, there is no obvious relation between freight cost and the balance of marketable securities. Diamond (2006)

2.8 Types and Classification

Ratios calculated from the accounting data can be grouped into various classes according to its financial activities or their function of evaluation. Short and long term creditors, shareholders and management are the parties that are more interested in financial analysis. The short-term creditors main interest is in the liquidity position of the company. On the other hand, the long term creditors rely on the solvency and profitability position of the company. Similarly, the shareholders concentrate on the company's profitability and financial condition. While the management is interested in evaluating every aspect of the company's performance. They have to protect the interest of all parties and sees that the firm grows profitably.

Pandey (2005), classifier ratio into the following:

I) Liquidity ratios
II) Leverage ratios
III) Activity ratios
IV) Profitability ratios

Hornby (2002) shares the same view of classification. Thus,

(I) Short term solvency and liquidity ratios
(II) Long term solvency and stability ratios

(III) Profitability ratios

(IV) Investors/shareholders/potential and actual growth ratios.

Furthermore, according to Hornby (2002), no one of such classes of ratios gives sufficient information by which to judge the financial condition and performance of the firm. Only when the group of ratios are analysed can reasonable judgments be made. Seasonal character of a business must be taken into account.

Underlying trends may be assessed only through a comparison of raw figures and ratios of the same time of the year. Ratio comparisons should not be made between December 31 balance sheet with May 31 balance sheet; rather, it should be compared with December 31 and December 31 balance sheet. Although the number of financial ratios that might be computed increases geometrically with the amount of financial data. Emphasis will be laid on the most important and necessary ones. Thus, the researchers concern will be on:

2.8.1 Liquidity Ratios

This measures the ability of the company to meet its current liabilities (short term obligations) as they fall due, out its current assets (Mabt 2001). Analysis of liquidity needs the preparation of cash budgets and cash funds flow statements, but liquidity ratios by establishing a relationship between cash and other current assets to current obligations, provide a quick measure of liquidity. The failure of a company to meet its obligations due to lack of sufficient liquidity,

will result in wrong decision making, poor credit worthiness, loss of creditors confidence, or even in legal tangles resulting in the disclosure of the company.

Also, a high degree of liquidity is bad because idle assets earn nothing since the company's fund will be unnecessarily tied up in current assets. Hence, there is a need for equal between high liquidity and lack of liquidity. The two common ratios which indicate the extent of liquidity or lack of liquidity are:

(i) Current Ratio=

Current ratio is calculated thus

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

The ratio f 2:1 is considered an idle for current ratio and it is a conventional rule. It represents a margin of safety of creditors. The higher the current ratio, the greater the margin of safety: the larger the amount of current assets in relation current liabilities the most the firm's ability to meet its current obligations. However, current ratio should not be followed blind because a company with less than 2:1 ratio may be doing well and the one of high ratio only struggles to meet its obligations because current ratio only measures the quality and not the quality.

ii) Quick Ratio = This is also known as acid test ratio; it establishes a relationship with quick or liquid assets and current liabilities. It indicates the ability of the company to meet its short term

liabilities from its current assets without having to sell stock. It is computed as:

$$\text{Quick Ratio} = \frac{\text{Current Asset – Inventories}}{\text{Current Liabilities}}$$

It is vital index of the firms liquidity. The ratio of 1:1 is considered to represent a satisfactory current financial condition. But 1:1 in essence does not imply sound liquidity position because a high value of quick ratio in a company may have problem of funds shortage, if it has a slow paying doubtful and longer period outstanding debtors. At the same time, if the firms are able to meet its current obligations in time by turning over their inventories efficiently they can prosper. Although quick ratio is a more penetrating test of liquidity than the current ratio, yet it should be used cautiously. Others are=

i) Cash Ratio = Since cash is the most liquid asset, a financial analyst may examine cash ratio and its equivalent to current liabilities. Trade investment or marketable securities are equivalent of cash therefore, they may be included in the computation of cash ratio.

$$\text{Cash ratio} = \frac{\text{Cash + Marketable Securities}}{\text{Current Liabilities}}$$

ii) Interval Measure: This assesses a firms ability to meet its regular cash expenses. It relates liquid assets to average daily operating cash outflows. The daily operating expenses will be equal to cost of goods sold plus selling, administrative and general

expenses less depreciation (and other non-cash expenditure) divided by number of days in the year (say 360).

$$\text{Interval Measure} = \frac{\text{Current asset – Inventory}}{\text{Average daily operating expenses}}$$

iii) Net Working Capital Ratio: This ratio measures the firm's potential reservoir of funds. It is the difference between current assets and current liabilities excluding short term bank borrowing, it can be related to net assets (or capital employed)

$$\text{NWC} = \frac{\text{Net working capital}}{\text{Net Assets}}$$

2.8.2 Leverage Ratios =

This ratio indicates mix of funds provided by owners and lenders. It measures the relationship between long term debt and equity and firms total capital financing. There is a general rule which states that, there should be an appropriate mix of debt and owner's equity in financing the firm's assets. The manner in which assets are financed has a number of implications. First between debt and equity, debt is more risky from the firms point of view. Secondly, the use of debt is advantageous for shareholders in two ways:

- They can retain control of the firm with a limited state
- Their earning will be magnified, when the firm earns a rate of return on the total capital employed higher than the interest rate on the borrowed funds.

Average ration can be calculated from the balance sheet items to determine the proportion of debt in total financing. And can equally be calculated from the profit and loss account to determine the extent to which operating profit are sufficient to cover the fixed charges (Pendey 2005).

It has the following ratios:

i) Debt Ratio=

This ratio measures the proportion of the firm's total assets which are paid for by both long and short term debt. It is calculated as:

$$\text{Debt Ratio} = \frac{\text{Total Debt (TD)}}{\text{Net Assets (NA)}}$$

ii) Debt – Equity Ratio:

This ratio expresses the direct proportion of debt to owner's equity. It is indirectly computed by dividing total debt by net worth. That is:

$$\text{Debt –Equity Ratio} = \frac{\text{Total debt}}{\text{Net worth}}$$

(iii) Coverage Ratio:

The interest coverage ratio or the time interest earned is used to test the firm's debt-servicing capacity. It measures the extent to which the net profit may drop before the firm becomes unable to serve the loan. It is calculated as:

$$\text{Coverage ratio} = \frac{\text{EBIT}}{\text{Interest}}$$

Where: EBIT = Earnings Before Interest and Tax

2.8.3 Activity Ratios:

These are employed to evaluate the efficiency with which the firm manages and utilizes its assets. They are also called the turnover ratios in that the indicate the speed with which the assets are being converted or turned over into sales. Thus, the activity ratio is said to have a relationship between sales and assets. The effectiveness of asset utilization is judged by the calculation of activity ratios. Activity ratios has the following:

(i) Inventory Turnover:

This indicates the efficiency of the firm in producing and selling its products. It is given by dividing the cost of goods sold by the average inventory. In a manufacturing company, inventory of finished goods is used to calculate inventory turnover:

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

The average inventory is the average of opening and closing balances of inventory.

ii) Debtor (Account Receivable) Turnover: It indicates the number of times debtors turnover each year. Generally, the higher the value

of debtors turnover, the more efficient is the management of credit. Thus, debtors turnover can be calculated by dividing total sales by the year and balance of debtors (Pandey, 2005:526)

$$\text{debtors Turnover} = \frac{\text{Sales}}{\text{Debtors}}$$

iii) Average Collection Period: It measures the quality of debtors because it indicates the speed of their collection. This ratio is useful to an analyst in two ways:

i. In determining the collectibles of debtors and thus, the efficiency of collection efforts, and
ii. To find out the firms comparative strength and advantage relative to its credit policy and performance vis-à-vis the competitor's credit policies and performance. Thus, the shorter and average collection period, better the quality of debtors since a short collection period implies the prompt payment by debtors (Pandey 2007). It is computerized as=

$$\text{Average collection Period} = \frac{360}{\text{Debtors Turnover}}$$

$$= \frac{\text{Debtors}}{\text{Sales}} \times \frac{360}{1}$$

iv) Total Assets Turnover $= \frac{\text{Sales}}{\text{Total Assets}}$

v) Net Assets Turnover=

The most important aspect of its operating performance is measured by the ability of the firm to produce a large volume of sales for a given amount of net sales.

It is given by:

$$\text{Net Assets Turnover} = \frac{\text{Sales}}{\text{Net Assets}}$$

vi) Fixed and Current Assets Turnover:

It measures the willingness of the firm to efficiently utilize its fixed assets and current assets separately. It is computed by the following:

a) $\text{Fixed Assets turnover} = \frac{\text{Sales}}{\text{Net Fixed Assets}}$

b) $\text{Current Assets turnover} = \frac{\text{Sales}}{\text{Current Assets}}$

vii) Working Capital Turnover:

This indicates the extent in which current assets (or working capital gap) relate to sales calculated by:

$$\text{Working Capital Turnover} = \frac{\text{Sales}}{\text{Net Current Assets.}}$$

2.8.4 Profitability Ratios

These rations indicate the net result of a large number of policies and decisions. They are calculated to measure the operating

efficiency of the company. Besides management, creditors, owners and even customers are also interested in the profitability of the company.

Usually, profitability ratios are calculated in two major ways:

a) Profitability in relation to investment
b) Profitability in relation to sales

Profitability ratio is classified into the following:

i) Gross Profit Margin: Gross Profit Margin reflects the efficiency with which management produces each unit of product. It indicates the average spread between the cost of goods sold and the sales revenue.

It is given by:

$$\text{Gross Profit Margin} = \frac{\text{Sales-cost of goods sold}}{\text{Sales}}$$

$$= \frac{\text{Gross Profit}}{\text{Sales}}$$

ii) Net Profit Margin: This ratio indicates the firm's ability withstand adverse economic conditions. It establishes a relationship between net profit and sales and also indicates management's efficiency in manufacturing, administering and selling of products. Net profit margin ratio is the overall measure of the firm's ability to turn each Naira sales into Net profit, it is measured by dividing profit after tax by sales:

$$\text{Net profit margin} = \frac{\text{Profit After Tax}}{\text{Sales}}$$

iii) Return on Capital Employed (ROCE):

This ratio measures the firm's operating performance. It indicates the firm earning power. It is calculated as:

$$\text{ROCE} = \frac{\text{Operating Profit}}{\text{Capital employed}} \times \frac{100}{1}$$

iv) Return on Equity: This ratio is one of the most important relationships in financial analysis. It indicates how well the company has used the resources of owners. The return on equity ratio is of great interest to the present as well as the prospective shareholders and also of great concern to management, which has the responsibility of maximizing the owner's welfare. It is given as=

$$\text{ROE} = \frac{\text{Profit After Tax (PAT)}}{\text{Net Worth (Equity) NW}}$$

v) Earnings Per Share = This allows the profitability of the firm on a per share basis. The earnings per share of a company should always be compared with the industry average and the earnings per share of another company. It is calculated by:

$$\text{EPS} = \frac{\text{Profit After Tax (PAT)}}{\text{Number of Outstanding Shares}}$$

vi) Dividend Per Share: This is the earnings distributed to ordinary shareholders against the outstanding number of ordinary shares. It is given by=

$$\text{dividend per share} = \frac{\text{Earnings paid to shareholders (Dividend)}}{\text{Number of ordinary shares outstanding}}$$

vii) Dividend and Earnings Yield: This ratio evaluates the shareholders return in relation to the market value of the share> It is given by the following:

a) $\text{Dividend yield} = \frac{\text{Dividend per share (DPS)}}{\text{Market value per share (MV)}}$

b) $\text{Earnings yield} = \frac{\text{Earnings per share (EPS)}}{\text{Market value per share (MY)}}$

viii) Price Earning Ratio: The price earning ratio is widely used by the security analysts to value the firm's performance as expected by investors. It indicate investor's judgment or expectations about the firm's performance.

2.9 Nature of Accounting Ratios

Accounting ratios are used as a benchmark for evaluating the financial position and performance of a firm. There is no meaningful understanding of the performance and financial position of a firm by only reporting the accounting figures in the financial statement. Accounting figures can only give meaning when they are related to some other relevant information, that is, through the use of ratio.

Hence, ratio can be defined a the relationship between two amounts determined by the number of times one contain the other (Hornby, 1998).

For instance, a certain amount of net profit may look impressive, but the firm's performance can be said to be good or bad only when the net profit figures is related to the company's investment. This relationship between two accounting figures expressed mathematically, is known as a ratio.

Ratios assist in summarizing large quantities of financial data and to make informed and quantitative judgments about the firms financial performance. For example, if current ratio is to be determined, it is calculated by dividing current assts by current liabilities. This relationship is seen as an index or a yardstick that enables the firm to judge its capability in meeting its short term obligations as they fall due. The liquidity of the firm is measured. It is vital to note that, ratio reflects a quantitative relationship that helps to form a quanlitative judgement (Pandey, 2005:518).

Basically, financial ratios are computed for items in the income statement and balance sheet embodied in the financial statement which can be compared using any of the methods of comparison in determining changes in a firm's ratio over time and highlighting improvement in performance or problems areas that need attention.

2.10 uses of Ratio in Analyzing Financial Statement

To determine the financial condition and performance of a company, the financial analyst needs certain yardstick. The yardsticks frequently used is a ratio, relating two pieces of financial data to each other. Analysis and interpretation of various ratio should give experienced, skilled analysts a better understanding of the financial condition and performance of the firm than they would obtain from analyzing only the financial data.

The essence of the financial soundness of a company lies in balancing its goals, product market choices, commercial strategy and resultant financial needs. Ratio analysis is a very useful analytical tool to raise pertinent questions on a number of managerial issues. Many groups of people in a company are interested in using analysed financial statements to know the company's operating performance. The use of ratio gives a statement reader a clear idea about items and eliminate some difficulties he/she may have in understanding the significance of the naira amount.

Ratio is also useful in security analysis whose major interest is on long term profitability. The analyst here is interested in the efficiency with which the firm is exposed.

The usefulness of ratio analysis also extends to the area of performance analysis, competitive analysis and trend analysis. Management have to protect the interest of all concerned parties so as to ensure some minimum operation efficiency and keep the risk of a firm at a minimum since their future position depends on their operating performance. Analysis of financial statement is of greater

use to the management because they use it from time to time to determine the firm's financial strength and weaknesses and as a proper basis for decision making. However, management should make use of financial ratios as they have access to internal information which is not available to other analysts, such as credit and security analysts (Pandey, 2005).

2.11 Limitations of Financial Statement Analysis

In this survey, it will be pertinent to discuss the limitations of financial statement analysis and recommend ways of minimizing or overcoming them. Categorically, according to Diamond (2006), three problems involved in such analysis are:

i) That firms use different accounting principles and methods.
ii) That it is often difficult to define what industry and firm is really a part of and
iii) That accounting principles varies among countries

2.12 Use of Different Accounting Principles

A firm's management has the right to select among a set of generally accepted accounting principles and methods. Even firms in the same industry select different methods to account for the same event. For example, one firm in the steel industry may use LIFO and another may use FIFO. Obviously, the financial statements of these two firms as well as key ratios and relationships based on those statements, will be significantly different (Diamond, 2006). This

makes the direct comparison of firms within the same industry difficult.

Careful reading of management's discussion and analysis of operations and the footnotes to the financial statements can partially overcome this problem, ibidi. The notes to the financial statements also provide important information concerning the use of accounting principles.

2.13 Industry Affiliation

Using industry norms as a basis for financial statement analysis presupposed being able to define the industry to which the firm is affiliated for companies such as NUPAS INC and Nigerian Breweries Plc, this is an easy process, because they operate in a well-defined industry. However, many companies are truly conglomerates that operate in a variety of industries for example, in what industry is UAC? This question is difficult to answer because the firm is a diversified company that now operates in many industries.

Early in its existence, the Financial Accounting Standard Boards recognized this problem with the issuance of statement No.14 which requires that firms disclose certain operating and financial data by industry segments and where appropriate by geographical location. Essentially, this statement requires diversified companies to report revenues, income from operations; and identifiable assets for each operating segment as well as similar information by geographical area.

2.14 Accounting Differences Between Countries

Accounting differences that exist between countries accounting to Diamond have made it difficult for users to compare and contrast the information contained in financial statement prepared under the Generally Accepted Accounting Principles (GAAP) of difference countries.

Comparability among financial statements prepared under different GAAP is ongoing and significant problem for financial statement users.

In summary, in making decisions based on the results of your analysis, you must be aware of the limitations inherent in financial statement analysis.

2.15 The Impact of Inflation of Financial Statement Analysis

During a period of inflation, financial statements which are prepared in terms of historical costs do not reflect fully the economic resources or the real income (in terms of purchasing power) of a business enterprise (Meigs and Meigs 2003).

Therefore, inflation affects financial statement analysis to a greater extent. However, there is SEC requirement that large corporations disclose in footnotes the replacement cost of inventories, cost of goods sold, plant and equipment, and depreciation, ibid. Financial analyst should therefore attempt to evaluate the impact of inflation on the financial position and results on operations of the company being studies. Moreover, according to Diamond (2006), analysts would raise such questions as: how much

of the net income can be attributed to the increase in the general price level? Is depreciation expense understated in terms of current price levels? Are profits exaggerated because the replacement cost of inventories is higher than the cost of units charged to cost of goods sold? Will the company be able to keep its “physical capital” intact by paying the higher prices necessary to replace plant assets as they wear out? Therefore, accounting information should be modified to cope with the impact of inflation.

Since inflation affects the financial statements, there is need or a remedy to be done; this will be in the form of modifying the accounting. To Meigs and Meigs (1979:579), two approaches are generally in use. They are:

i) The adjustment of historical cost financial statements for changes in general purchasing power; and
ii) Current value accounting, this approach envisions a series of traditional steps away from historical cost accounting, the first of which would be limited to requiring footnotes disclosures of the current values for inventories, cost of goods sold, plant and equipment, and depreciation. It second step would involve preparing supplementary financial statements expressed in current values for most items, and a final step would call for a set of current value financial statements to become the primary financial statement of a company.

2.16 Features of a Good Management Decision Technique

According to Mabt (2001), investment decisions concern allocation of funds to appropriately select investment opportunities to maximize profit as well as sustain the organization as a gong concern. According to him, investment decision techniques involve sequential stages of opportunity assessment. The stages are as follows:

(i) The review of a firms operating objectives and goals as well as the identification of possible constraints, which can inhibit goal achievement; this can be found in the director's report and the financial statements in the company's annual report or in the form 10-k from Security and Exchange Commission (SEC).

(ii) Identification of various investment opportunities which are likely to enhance corporate goal achievement.

(iii) Estimation of the amount of financial outlay required for each investments opportunity, timing of cash flow requirement and determination of the level of risk associated with each investment opportunity.

(iv) Franking of all investment opportunities assessed in terms of the levels of contribution to goal achievement.

(v) Selection of investment opportunity of opportunities that best enhance the achievement of operational objectives and

(vi) Regularly assessing the detection to identity possible weaknesses in order to adopt corrective measures.

Generally, information from the financial statements can enable the efficiency of the above technique, hence, the great need for financial statement analysis in investment decisions.

2.17 Environment of Management Decision Making

A management decision may be taken under three distinct conditions (Mbat, 2001). The three types of conditions are those of certainty, risk and uncertainty. The first type of decision should not be discussed because the investor knows with certainty a prior what is going to be the return on an investment in corporate stocks. However, not all investment opportunities have the same level of certainty in terms of the rate of returns of outcome. Most investment problems are normally associated with a certain probability density function relative to the outcome, ibid. This means that the outcomes of most investment decisions are at best normally guessed. This brings us to the concept of risk and uncertainty.

Risk may be defined as a situation where there is a variety of possible outcomes which could result from a particular investment decision cannot be predicted with any degree of certainty even though there is a partial information on which to base the decision, this is mostly the case with investment in corporate stocks.

However, according to Mabt (ibid), decision under conditions of uncertainty is a situation in which the determination of the outcome is made impossible because of insufficient data on which to base the decision. Since this is not the case in investment using financial statement, we are going to concentrate on the environment of risk.

Nevertheless, it is important to recognize risk appraisal as an integral part of investment decision making. While appraising risk, an investor should make a fundamental decision between risk evaluation and its calculation, ibid. This would enable him to strike a balance between risk and return.

According to Mbat (2001), risk evaluation is important in the sense that the probability of the different available information are adequately weighed in order to determine their related degree of influence on the outcome, while risk calculation enables the investor to reduce the abstract to numerical dimension, in order to know the extent of the influence of each type of risk on the outcome.

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CHAPTER THREE

3.1 Research Design

A research design is simply the framework or plan for the study, which is used as the modus operandi of collecting pertinent data.

In this study, the quasi-experimental design is adopted with particular concentration on the descriptive method. This is preferred to others given the nature of the study, which is an exposition of selected companies with respect to the effect of financial statement analysis and interpretation as a tool for management decision and corporate performance evaluation.

3.2 Sources and Method of Data Collection

The main sources and methods of data collection used in the study are:

a) Primary source and
b) Secondary source

The primary source of data is the questionnaire and personal interview while the secondary sources include: textbooks, journal and opinions of experts on the subject.

The secondary source provide the theoretical framework for the study.

3.3 Research Instrument

A research instrument is any device constructed for recording of measuring data. It is the means for generating pertinent information to be used for solving the research problems (Olakunori 1997) therefore, in order to obtain valuable data for analysis, interpretations and appreciation of problems aforementioned, a set of questionnaire was designed and administered to employees of NUPAS Ltd.

The choice of questionnaire as research instrument for this study was based on the fact that, it permits the coverage of minimum expenses both in money and effort.

Again, because of greater impersonality attached to questionnaires, more objective data were obtainable in the set of questionnaire structured questions, multiple choice (close-ended) questions and open ended questions were used.

3.4 Reliability/Validity of Research Instrument

In order to forestall measurement errors, which occur when the research instrument is faulty, the reliability of the research instrument was ensured through its careful construction and pretest. Pretest was done by conducting a pilot survey, where in the research instruments (questionnaire) where administered to apart (sample) of the population with a new to finding possible fault and thereafter,

correction than before the full application of main sample for the study.

3.5 Population

Population here refers to the totality of targeted individuals that form the focus of this study. The objectives of the data collection process is to draw conclusions about the population. It is therefore imperative to have a clear picture of what constitutes the research population.

The population for this study consist of employees drawn from some vital departments or section of workers of the NUPAS Ltd.

Department	**Population**
Architecture	10
Accounting	15
Administration	20
Construction	5
Accounts & cleaning	50
Total	**50**

3.6 Sample Size and Technique

According to Egbu (1998), sampling involves the selection of a number of study units from a defined study population.

A sample is therefore, a small representatives of a large population. In drawing a small sample for the study, the researcher

considered how many people that are needed in the sample and their category first to be selected.

A sample size used is forty-four (44) staff selected from NUPAS Ltd using the formular by yaro yemmen method (1967)

$$n = \frac{N}{1+N(e)2}$$

where

n = sample size

N = Population size (50)

e = Level of significance (acceptable error/limit)

I = A constant number

For the purpose of this research works, our level of significance (2) = 5% or 0.05 that is a 95% confidence limit.

Since n = ?

N = 50

e = 0.05 or 5%

substituting the above value into the formular we have that,

$$n = \frac{50}{1 + 50\ (0.05)2}$$

$$n = \frac{50}{1 + 50\ (0.0025)}$$

$$= \frac{50}{1+0.125}$$

$$= \frac{50}{1.125} = 44.44$$

Approximately = 44

n = 44

the sample size of the population is 44 and the researcher issue the same number of questionnaire to the staff of NUPAS Ltd, to the responses in this study.

The sampling technique used in this study is the probability sampling. Probability sampling can be simple random, or stratified random. The simple random sampling allows for generalization to take place.

Bowley's proportional allocation formula was applied thus;

$$nh = \frac{n \times nh'}{N}$$

Where;

nh = Number of questionnaire allocated to staff of NUPAS Ltd.

n = Total sample size

Nh = Number of employee in each section of population.

N = Population

Therefore, the allocation will be as follows:

Selection of Worker/Department	No of Staff	No of Sample Size
Architecture	4	4(44)/50 = 3.52 ≏ 4
Accounting	15	13(44)/50 = 13.2 ≏ 13
Administration	20	20(44)/50=17.6 ≏18
Accounts & Cleaning	6	6(44)/50 = 5.28 ≏ 5
Construction	5	5(44)/50 = 4.4 ≏ 4
	50	44

2.7 Administration of Research Instrument

The questionnaire were administered through hand delivery to the selected respondents with explicit explanation followed where necessary. The researcher make sure that each section gets the complete number of questionnaire allocated in each section were systematically selected.

On questionnaire retrieval method, the researcher either waited for the questionnaire to be given a date to come for the collection of Respondent. All was to ensure appreciable return with reliable information.

3.8 Method of Data Analysis

The researcher used the descriptive statistical tools (Tables, figure and percentages) in preparing and analyzing the data generated from this study.

Again the researcher used the chi-square (X^2) in testing the formulated hypothesis and correlation co-efficient in testing the relationship among variables. The chi-square (X^2) distribution which can be defined as the sum of ratio of difference between observed and expected frequency is used when it wished to compare an actual observed distribution with a hypothesized or expected distribution and to measure the degree of deviation that exist between a calculated value and the critical value (table value).

The responses were represented in table while percentages were used to analyze each question contained in the questionnaire and its responses.

$$\text{Formula} = x^2 = \frac{\sum(Fo-fe)^2}{Fe}$$

Where:

X^2 = Calculated value

$\sum$ = Summation sign

fo = Observed frequency

e = significance sign

Df = Degree of freedom (2)

The level of significance = 0.05 or 5%

Operative Assumptions

a) Level of significant (e) = 5% (0.05)
b) Degree of freedom df = 2

= (Row-1) (column -1)

= (R-1) (2-1)

= (3-1) (2-1)

= 2(1) = 2

:. The critical value = $x^2 = 0.05$

The level of confidence = $x^2.95 = 5.99$

The calculated ratio (value) becomes =

$$\sum \frac{(fo-fe)2}{Fe}$$

This depict the relative importance of the deviation since each square deviation is compared with the expected frequency in its column.

The procedure for chi-square statistics are as follows:

a) The expected frequency (fe) for each cell and ensure that the total of rows, column and the grand total are the same as those of the observed frequency.
b) Compute the difference observed frequency and expected frequency i.e Fo-Fe
c) Square the difference found in (c) and divide it by the expected frequency $\frac{(Fo-fe)}{Fe}$

d) Sum the values in (d) above i.e, $\sum \frac{(fo-fe)^2}{Fe}$

e) Decide on the level of significance.

f) The critical region is for sample x^2 = x2a (r-1) (c-1)

g) Determine the degree of freedom, give as: (Row-1) (Column -1) = (r-1) (c-1)

h) The critical region is for sample $x^2 \geq$ x 2a (r – 1) (c-1)

i) From the degree of freedom in (g) and the value of chi-square in (d) above, determine the probability of association between attributes.

3.9 Decision Criteria for Validation of Hypothesis

In order to decide whether to accept or reject the null hypothesis, a comparison was made between the calculated value of chi-square and the critical value. (value from the table).

The decision rule is therefore;

Accept H_o, if $x2_0 \leq x^2e$

Reject H_0, if $x^2_0 \geq x^2e$

where:

x^20 = Calculated chi-square

x^2e = Chi-square value from the distribution table or the critical value.

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CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

The previous data dealt with research methodology. In this chapter, the researcher present and analyze the data collected through the primary source to enable him read meaning into the responses to the questionnaire. The collected data presented in tables, with frequency of each variables calculated the analysis drawn depends largely on response from the data collected the set of questionnaire.

Furthermore, in this chapter, the formulated hypothesis are subjected to empirical test using the chi-square (x^2) and correlation statistical technique. The essence of this test is to valiolate or otherwise disapprove the hypothesis.

The chapter is divided into two parts with one dealing with data presentation while the other deals with the test of hypothesis.

Table 4.1.1

QUESTIONNAIRE DISTRIBUTIONS AND RETRIEVAL

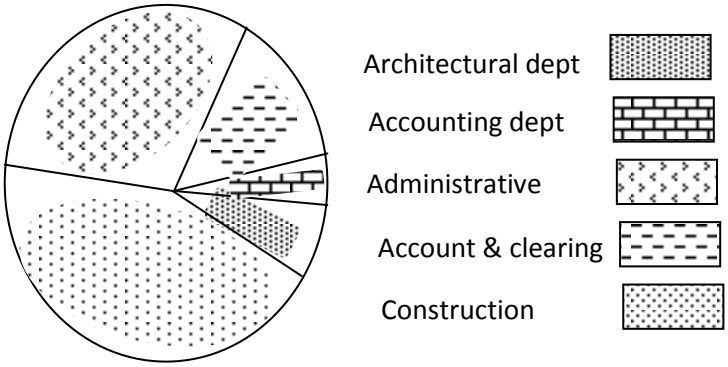
S/N	Department/Section of Worker	Total	Distribution and Returned	Percentage
1	Architecture	4	4	9
2	Accounting	13	13	30
3	Administration	18	18	41

4	Accounts & Clearing	5	5	11
5	Construction	4	4	9
	Total	**44**	**44**	**100**

Source: Field survey 2012

The above table shows that, a total of 44 questionnaire were distributed and returned from all the section of worker/department. 4 questionnaire representing 9% was distributed to Architecture dept and the same number were returned 13 questionnaire represented by 30% was issued to Accounting department and the same number were Returned after Filling them. 18 questionnaire representing 41% to Administration department and the same number were returned after filling them. 5 questionnaire representing 1% to Accounts and clearing dept and the same number were returned. 4 questionnaires representing 9% to construction department and the same number were also returned.

PIE CHART DISTRIBUTION/RETIRVAL OF QUESTIONNAIRES



CALCULATION OF THE PIE CHART

Architectural Dept = $\frac{9}{100}$ x 360^o = $32.4 = 32^o$

Accounting Dept = $\frac{30}{100}$ x 360 = 1.08^0

Administrative Dept = $\frac{41}{100}$ x 360 = 147.8^0

Accounts and clearing = $\frac{11}{100}$ x 360 = 40^o

Construction Dept = $\frac{9}{100}$ x 360 = 32^o

Total = 360^o

4.1 Data Presentation

The researcher makes use of questionnaire for the data presentation. The data collected from the members of staff of NUPAS Ltd. The questionnaire was distributed randomly on all categories or section of workers in the accessible population.

The researcher desire to use only 44 questionnaire the researcher topic from the staffs of NUPAS Ltd. The 44 question were issued to the staff of NUPAS Ltd and the entire question issued were collected successfully for analysis is consequently based on the sample size of 44 which is the producing sample. The method of data analysis used is the sample percentage which is very easy to understand.

ANALYSIS OF QUESTION

This section of research work is aimed at examining the responses filled in the questionnaire and returned

Question No. 1 AGE

Table 4.1.2

S/N	Response Options	No of Responses	Percentage of Responses
a)	Below 20 yrs	20	45
b)	20 – 30yrs	14	32
c)	31-40yrs	6	14
d)	Above 40yrs	4	9
	Total	**44**	**100**

Field survey – 2012

Table 4.1.2 above indicates that 20 respondent representing 45% belong to staff, 14 respondent representing 32% were of the age range of 20-30 years, 6 respondent representing 14% were of the age range of 31-40 years and only 4 respondents representing 9% were above the age of 40 years.

Question No 2: SEX

Table 4.1.3

S/N	Response Options	No of Responses	Percentage of Responses
a)	Male	25	56.82
b)	Female	19	43.18
	Total	**44**	**100**

Source: Field survey 2012

From the above table, male personnel/staff were more than female counterparts. The male were 25 respondents representing 56.82% while the female were 19 representing 43.18%.

Question No. 3. DEPARTMENT/SECTION

Table 4.1.4

S/N	Response Options	No of Responses	Percentage of Responses
a)	Architecture	19	43.18
b)	Accounting	11	25
c)	Administrative	4	9.09
d)	Account & Clearing	4	9.09
e)	Construction	6	13.64
	Total	**44**	**100**

Source: Field Survey – 2012

From the above table shows that 19 respondent representing 43.18% of Architecture department, 11 respondent representing 25% is for Accounting department. 6 respondent representing 13.64% belong to construction department while Administrative and Accounts & Cleanings department share the same number of respondent, 4 representing 9.09% respectively.

Question No. 6: Work Experience:

Table 4.1.7

S/N	Response Options	No of Responses	Percentage of Respondent
a)	Below 4 years	16	36.36
b)	5-9 years	14	31.8
c)	10-14 years	9	20.3
d)	Above 15 years	5	11.4
	Total	**44**	**100**

Source: Field Survey – 2012

The above table shows that 16 respondent representing 36.36% have been in practice for below 4 years. 14 respondents representing 31.8% have been in practice for 5-9 years, 9 respondents representing 20.5% have been in practice from 10-14 years and 5 respondents representing 11.4% have worked above 15 years.

Question 7: Have your company invested in common stock or other securities in another company?

Table 4.1.8

S/N	Response Options	No of Responses	Percentage of Respondents
a)	Yes	35	79.5
b)	No	9	20.5
	Total	**44**	**100**

Source: Field Survey – 2012

From the above analysis, it can be observed that 35 respondents representing 79.5% believes that the company invested in common stock and 9 respondents representing 20.5% believes the company invested securities in another company.

Question 8

Do you analyze financial statement before making investment decision in corporate stocks or other securities?

S/N	Response Options	No of Responses	Percentage of Respondent
a)	Yes	32	72.72
b)	No	12	27.23
	Total	**44**	**100**

Source: Field Survey 2012

From the above analysis, it can be observed that 32 respondent representing 72.72% believes that financial statement is analysed before making investment decision in corporate stocks while 12 respondent representing 27.23% do not analyze financial statement before making investment decisions in cooperate stocks or other securities.

Question 9

If yes to question (8) above, which of the following analytical techniques do you use?

4.1.10

S/N	Response Options	No of Responses	Percentage of Respondent
a)	Ratio analysis	18	56.25
b)	Horizontal analysis	7	21.88
c)	Vertical analysis	7	21.88
	Total	**32**	**100**

Source: Field Survey 2012

From the above analysis, it can be observed that 18 respondent representing 56.25% use ratio analysis, 3 respondent representing 21.88% use Horizontal analysis, 7 respondent representing 21.88% use vertical analysis.

Question 10

How effective has financial statement analysis assisted your company in identifying investment opportunities?

4.1.11

S/N	Response Options	No of Responses	Percentage of Responses
a)	Very effective	20	45.45
b)	Effective	18	40.91
c)	Not effective	6	13.64
	Total	**44**	**100**

Source: Field survey – 2012

From the above table shows that 20 respondent representing 45.45% are very effective. 18 respondent representing 40.91% are effective. 6 respondent representing 13.64% are not effective.

Question 11

Are you familiar with specific analytical tools or ratios for determining investment return?

4.1.12

S/N	Response Options	No of Responses	Percentage of Respondent
a)	Very well	20	45.45

b)	Fairly well	14	31.82
c)	Well	8	18.18
d)	Not at all	2	4.5
	Total	**44**	**100**

Source**:** Field survey – 2012

From the above table shows that 20 respondent representing 45.45% are very well familiar. 14 respondent representing 31.82% are fairly well familiar. 8 respondent representing 18.18% are well familiar with analytic tools or ratios.2 respondent representing 4.5 are not familiar with analytic tools or ratios for determining investment return.

Question 12

What was the aim of your company for investing in another company?

Table 4.1.13

S/N	Response Options	No of Responses	Percentage (%) of Responses
a)	Max short term returns	22	50
b)	Max long term returns	12	27.27
c)	Others	10	22.73
	Total	**44**	**100**

Source: Field survey – 2012

From the above table shows that 22 respondent represent 50% aim maximum short term returns. 12 respondent representing 27.27% aim maximum long term returns. 10 respondent representing 22.73% are for others.

Question 13

Is there relationship between a firms profitability and financial statement analysis based on management decisions?

Table 4.1.14

S/N	Response Options	No of Responses	Percentage (%) of Responses
a)	Yes	30	68.18
b)	No	14	31.82
	Total	**44**	**100**

Source: Field survey – 2012

From the above shows that 30 respondent representing 68.18% shows there is a relationship between a firms profitability and financial statement analysis based management decisions. 14 respondent representing 31.82% shows there is no relationship between a firms profitability and financial statement analysis based management decisions.

Question 14

To what extent does the difference between the returns of a financial statement analysis and interpretation are based on management decisions.

Table 4.1.15

S/N	Response Options	No of Responses	Percentage (%) of Responses
a)	Strongly Agreed	22	50
b)	Agreed	17	38.64
c)	Disagreed	4	9.09
d)	Strongly Disagreed	1	2.27
	Total	**44**	**100**

Source: Field survey – 2012

From the table above 22 respondent representing 50% strongly agree. 17 respondent representing 38.64% agree. 4 respondents representing 9.09 Disagree. 1 respondent representing 2.27 strongly disagree

Question 15

Financial statement analysis does not assist in decreasing investment risk.

Table 4.1.16

S/N	Response Options	No of Responses	Percentage (%) of Responses
a)	Strongly Agree	21	47.73
b)	Agree	16	36.36
c)	Disagree	6	13.64
d)	Strongly Disagree	1	2.27
	Total	**44**	**100**

Source: Field survey – 2012

From the above table 2 respondent representing 47.73 strongly agree.16 respondent representing 36.36% agree. 6 respondent representing 13.64% disagree. 1 respondent representing 2.27% strongly disagree.

Question 16

How does your company make use of “RATIO” in financial analysis?

S/N	Response Option	No of Respondent	Percentage (%) of Respondent
a)	Very well	25	56.82
b)	Fairly well	10	22.73
c)	Well	8	18.18
d)	Not at all	1	2.27
	Total	**44**	**100**

Source: Field survey – 2012

From the above table 25 respondent representing 56.82% use “RATIO” in financial analysis very well. 10 respondents representing 22.73% make use of “RATIO” in financial analysis fairly well. 8 respondent representing 18.18% make use of “RATIO” in financial analysis well. 1 respondent representing 2.27% do not make use of “RATIO” in financial analysis.

TEST OF HYPOTHESIS

This part of the chapter deals with the testing of hypothesis. The statistics formulated to be used in the chi-square test symbolized by x^2

The purpose of the hypothesis is to enable the researcher make definite inference based on the end result of the test.

H_1 is used to represent alternative hypothesis while

H_2 is used to represent Null hypothesis.

HYPOTHESIS 1

H_o: There is no significant difference between the returns of a financial statement analysis and interpretation based on management decisions.

H_1: There is a significant difference between the returns of a financial statement analysis and interpretation based on management decisions.

Table 4.1.15

S/N	Response Option	No of Respondent	Percentage (%) of Respondent
a)	Strongly Agree	22	50
b)	Agree	17	38.64
c)	Disagree	4	9.09
d)	Strongly Disagree	1	2.27
	Total	**44**	**100**

Source: Field survey 2012

Calculated x^2 Value

Option	Fo	Fe	Fo-Fe	$(fo-Fe)^2$	$(fo-Fe)^2/fe$
Strongly Agree	22	11	11	121	11
Agree	17	11	6	36	3.27
Disagree	4	11	-7	49	4.45
Strongly Disagree	1	11	-10	100	9.09
Total	**44**				**27.81**

Source: Field survey 2012

Formular = Chi-square $(x^2) = \sum \frac{(Fo-Fe)^2}{Fe}$

where

Fo = Observed frequency

Fe = Expected frequency

X^2 = Chi-square

$\sum$ = Summation

Fe (expected frequency) = $\frac{\text{Total frequency}}{\text{Total Number}}$

Fe = $\frac{44}{4}$ = 11

Degree of freedom is given as (r-1))c-1)

Where r = Number of rows

c = Number of columns

(4-1) (2-1)

3 x 1 = 3

The critical value is given as 7.815 which is the value in the tabulated Xe^2 distribution at 5% level of significance using 3 degree of freedom.

Decision

Since the calculated value (27.81) is greater than the critical value or tabulated Xe^2, we eject the null hypothesis and accept the alternative hypothesis. We conclude that there is a significant difference between the returns of a financial statement analysis and interpretation based on management decision.

HYPOTHESIS 2

H_o: There is no significant relationship between a firms profitability and financial statement analysis and interpretation based on management decision.

H_1: There is a significant relationship between a firms profitability and financial statement analysis and interpretation based on management decision.

Table 4.1.14

S/N	Response Option	No of Respondent	Percentage (%) of Respondents
a)	Yes	30	68.18
b)	No	14	31.82
	Total	**44**	**100**

Source: Field survey 2012

Calculated X^2 value

Option	Fo	Fe	Fo-Fe	$(fo-Fe)^2$	$(fo-Fe)^2/fe$
Yes	30	22	8	64	2.91
No	14	22	-8	64	2.91
Total	**44**				**27.81**

Source: Field survey 2012

Formular = Chi-square $(X^2) = \sum \frac{(Fo-Fe)^2}{Fe}$

where

Fo = observed frequency

Fe = Expected frequency

X^2 = Chi-square

Fe (Expected frequency) = $\frac{\text{Total frequency}}{\text{Total Number}}$

Fe = $\frac{44}{2}$ = 22

Degree of freedom is given as (r-1) (r-1)

where r = Number of rows

c = Number of columns

(2-1) (2-1)

1 x 1 = 1

The critical value is given as 3.841 which is the value in the tabulated Xe^2 distribution at 5% level of significance using 1 degree of freedom.

Decision

Since the calculated value is greater than the critical value or tabulated Xe^2, we reject the null hypothesis and accept the alternative hypothesis. We conclude that there is significant relationship between a firms profitability and financial statement analysis and interpretation based on management decisions.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Summary of Findings

This research work has identified how companies use financial statement analysis and interpretation in making effective management decisions. Overall organizational profitability and achievement of organizational objectives were discussed. Again the difference between the returns of a financial statement analysis and interpretation based on management decisions were also discussed.

Forty-four questionnaires were distributed to the top and executive level managers of the selected company and the use of percentage and chi-square distribution were also used in testing the formulated hypothesis.

From the results of the hypothesis tested, the null hypothesis was rejected in the first hypothesis and the alternative hypothesis was accepted. In order words, it was observed that there is a significant difference between the returns of a financial statement analysis and interpretation based on management decisions.

From the results of the second hypothesis tested, the null hypothesis was rejected and the alternative hypothesis was accepted. We also got to conclude that there is a significant relationship between a firms profitability and financial statement analysis and interpretation based on management decisions.

5.2 Conclusion

The main objective of this study was to determine how firms could use financial statement analysis to aid investment and management decisions in the selected company.

It is of great importance to note that survey carried out shows that financial statement analysis is valuable in investment decision making of the company.

Consequently, the first and second hypothesis shows a positive result, all from the responses obtained from the questionnaires used in the analysis of the research work. Hence, from this point of view, it is necessary that business organizations should pay more attention to the use of financial statement analysis

5.3 Recommendations

Based on the findings of this study as presented, analysed and interpreted, the following recommendations were deemed necessary by the researcher:

1) Adequate time should always be allowed for collection of financial statement data and preparation for their analysis.
2) Financial statement should be properly interpreted and should be made to reflect current cost accounting to reduce the negative effects of historical cost principle on financial statement decisions.
3) The effects of inflation on financial statement result should be considered to reduce the inflation risk.

4) The adequacy of financial information need to be emphasized on, as it will provide enough and necessary details for investment and management decisions.
5) A combination of different ratios should be used to analyze a company's financial and/or operating performance.
6) Finally, the management of the selected company should make proper use of financial statement analysis in other decision areas of management not only in investment decision.

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QUESTIONNAIRE

Instruction:

Please tick [√] against the appropriate option in the questionnaire design.

1) Age: (a) Below 20 years [ ] (b) 20-30 years [ ]
   (c) 31-40 years [ ] (d) Above 40 years [ ]

2) Sex (a) Male [ ] (b) Female [ ]

3) Department/Section (a) Architecturer Dept [ ]
   (b) Accounting Dept [ ] (c) Administrative Dept [ ]
   (d) Accounts and clearing [ ] (e) Construction Dept [ ]

4) Marital Status (a) Single [ ] (b) Married [ ]

5) Educational Qualification
   (a) Higher Degree [ ]
   (b) University Degree Equivalent [ ]
   (c) OND or equivalent [ ]
   (d) WAEC or equivalent [ ]
   (e) Others [ ]

6) Work Experience (a) Below 4 years [ ] (b) 5-9yrs [ ]
   (c) 10-14 years [ ] (d) Above 15 years [ ]

7) Have your company invested in common stock or other securities in another company?

(a) Yes [ ] (b) No [ ]

8) Do you analyse financial statement before making investment decision in corporate stocks or other securities?

(a) Yes [ ] (b) No [ ]

9) If yes to question (8) above, which of the following analytical techniques do you use? (a) Ratio analysis [ ] (b) Horizontal analysis [ ] (c) Vertical analysis [ ]

10) How effective has financial statement analysis assisted your company in identifying investment opportunities?

(a) Very effective [ ] (b) Effective [ ] (c) Not effective [ ]

11) Are you familiar with specific analytical tools or ratios for determining investment returns?

(a) Very well [ ]

(b) Fairly well [ ]

(c) Well [ ]

(d) Not at all (NA) [ ]

12) What was the aim of your company for investing in another company?

(a) Maximum short term returns [ ]

(b) Maximum long term returns [ ]

(c) Others

13) Is there relationship between a firms profitability and financial statement analysis based on management decisions?

(a) Yes [ ] (b) No [ ]

14) To what extent does the difference between the returns of financial analysis and interpretation are based on management decision.

(a) Strongly Agreed [ ]

(b) Agreed [ ]

(c) Disagreed [ ]

(d) Strongly disagree [ ]

(15) Financial statement analysis does not assist in decreasing investment risk (a) Strongly Agree [ ]

(b) Agreed [ ] (c) Disagreed [ ] (d) Strongly Disagreed [ ]

(16) How does your company make use of “RATIO” in financial analysis? (a) Very well [ ] (b) Fairly well [ ]

(c) Well [ ] (d) Not at all [ ]